Health Policy and Systems Research

A Methodology Reader

Edited by Lucy Gilson

The Abridged Version

Alliance for Health Policy and Systems Research

World Health Organization

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About the Abridged Version

This is an abridged version of the Reader and includes all parts of the Reader except the full text articles in Part 4.

To access the full text articles, visit the Alliance web site at:
http://www.who.int/alliance-hpsr/resources/reader/en/index.html

Note: The online version of Part 4 includes 32 full text articles and the print version includes 36 articles.

About the Abridged Version

What does this abridged version offer?

Health Policy and Systems Research (HPSR) is often criticized for lacking rigour, providing a weak basis for generalization of its findings and, therefore, offering limited value for policy-makers. The Reader aims to address these concerns through supporting action to strengthen the quality of HPSR. This abridged version makes available only those elements of the reader that were written specifically for it, and so does not include the full set of specially selected articles. These are available in the full versions versions of the reader (printed or downloadable).

This abridged version has been prepared to allow easier distribution of the text written especially for the Reader. However, the central value of the Reader is the collation in one place of good quality HPSR empirical papers, as examples and stimulants for future work. The Reader and its abridged version are primarily for researchers and research users, teachers and students, particularly those working in low- and middle-income countries (LMICs). The Reader and its abridged version provide guidance on the defining features of HPSR and the critical steps in conducting research in this field. The Reader and its abridged version showcase the diverse range of research strategies and methods encompassed by HPSR, and provides examples of good quality and innovative HPSR papers or references of these papers.

The production of the Reader was commissioned by the Alliance for Health Policy and Systems Research (the Alliance) and it will complement its other investments in methodology development and postgraduate training.

Why is the Reader needed?

Health systems are widely recognized to be vital elements of the social fabric of every society. They are not only critical for the treatment and prevention of ill-health but are central strategies for addressing health inequity and wider social injustice (Commission on the Social Determinants of Health, 2008). Health systems also provide the platform from which to launch dedicated efforts to address major diseases and health conditions that burden low-income populations, such as HIV/AIDS, tuberculosis and malaria. Given these roles, the early 2000s saw a significant expansion of international and national interest in health systems as one component of sustainable development in LMICs. Health system strengthening is now seen to be essential for the achievement of the Millennium Development Goals (Travis et al., 2004).

However, the knowledge base to support health system strengthening and policy change in LMICs is surprisingly weak (World Health Organization, 2009). The body of available work is quite limited compared to other areas of health research and suffers from various weaknesses. Thus, HPSR is criticized as being unclear in its scope and nature, lacking rigour in the methods it employs and presenting difficulties in generalizing conclusions from one country context to another (Mills, 2012). Review of health policy analysis work, in particular, also shows that research in this area is often weakly contextualized and quite descriptive, and offers relatively limited insights into its core questions of how and why policies are developed and implemented effectively over time (Gilson & Raphaely, 2008). As HPSR remains a 'cinderella', or marginal, field in health research these weaknesses are not particularly surprising. Within LMICs there are very few national researchers working on health policy and systems issues, and there is a lack of relevant training courses (Bennett et al., 2011). Yet the need is clear – as Julio Frenk, Dean of the Harvard School of Public Health, stated at the First Global Symposium on Health Systems Research held in Montreux, Switzerland, in 2010:

> *we need to mobilise the power of ideas in order to influence the ideas of power, that is to say, the ideas of those with the power to make decisions.*

What does the Reader aim to do?

The Reader aims to support the development of the field of HPSR, particularly in LMICs. It complements the range of relevant texts that are already available (see examples at the end of this section) by providing a particular focus on methodological issues for primary empirical health policy and systems research.

More specifically, the Reader aims to support the practice of, and training in, HPSR by:

- encouraging researchers to value a multidisciplinary approach, recognizing its importance in addressing the complexity of health policy and systems challenges;
- stimulating wider discussion about the field and relevant research questions;
- demonstrating the breadth of the field in terms of study approaches, disciplinary perspectives, analytical approaches and methods;
- highlighting newer or relatively little-used methods and approaches that could be further developed.

The Reader is mainly for use by:

- researchers and health system managers who wish to understand and apply the multidisciplinary approaches of HPSR in order to identify comprehensive strategies that address the complex challenges of health system development;
- teachers and facilitators involved in HPSR training;
- students, from any discipline or background, who are new to the field of HPSR.

How is the Abridged Version structured? (The Reader is structured the same way)

There are four main sections:

Part 1 provides an overview of the field of HPSR in LMICs and some of the key challenges of this kind of research.

Part 2 outlines key steps to follow when conducting HPSR studies.

Part 3 presents some key references of papers which provide overarching conceptual frameworks for understanding health policy and health systems.

Part 4 includes references for a set of empirical papers drawn exclusively from LMICs. The papers were selected because they:

- together demonstrate the breadth and scope of HPSR work
- provide good examples of different forms of research strategy relevant to HPSR
- are high quality and innovative. To access the full text articles visit the Alliance for Health Policy and Systems Research web site at: http://www.who.int/alliance-hpsr/resources/reader/en/index.html

Part 5 presents a set of references for papers that reflect on specific concepts or methods relevant to HPSR as well as some of the particular challenges of working in this field.

Doing HPSR: from research questions to reseach strategy

The defining feature of primary HPSR is that it is problem- or question-driven, rather than, as with epidemiology, method-driven. Therefore, as outlined in Part 2, the first step in doing rigorous and good quality research is to clarify the purpose of the research, what the study is trying to achieve, and to identify and develop relevant and well-framed research questions.

Good quality work then demands an understanding of the research strategy that is appropriate to the questions of focus. The strategy is neither primarily a study design nor a method, but instead represents an overarching approach to conducting the research; it considers the most appropriate methods of data collection and sampling procedure in terms of the research purpose and questions. The art of study design in HPSR, as with all 'real world research', is about turning research questions into valid, feasible and useful projects (Robson, 2002).

The references of the papers in Part 4 are grouped by research strategy in order to encourage critical and creative thinking about the nature and approach of HPSR, and to stimulate research that goes beyond the often quite descriptive cross-sectional analyses that form the bulk of currently published work in the field. The research strategies were chosen to demonstrate the breadth of HPSR work, covering both dominant and emerging approaches in the field.

They are:

1. Cross-sectional perspectives
2. The case study approach
3. The ethnographic lens
4. Advances in impact evaluation
5. Investigating policy and system change over time
6. Cross-national analysis
7. Action research

Each of the sections in Part 4 includes: a brief overview of the relevance of the research strategy to HPSR; critical elements of the strategy that must be considered in conducting rigorous work; and an introduction to the selected papers.

We note that secondary research or synthesis methods are not addressed here, and readers interested in that particular research area are encouraged to use relevant supporting materials. These include, for example, a Handbook developed with the Alliance support and downloadable from:
http://www.who.int/alliance-hpsr/projects/alliancehpsr_handbook systematicreviewschile.pdf

Three broader texts of use to those doing HPSR are:

Fulop N et al., eds (2001). Issues in studying the organisation and delivery of health services. In: Fulop N et al., eds. *Studying the organisation and delivery of health services: research methods.* London, Routledge.

Robson C (2011). *Real world research: a resource for social scientists and practitioner-researchers,* 3rd ed. Oxford, Blackwell Publishing.

Thomas A, Chataway J, Wuyts M, eds (1998). *Finding out fast: investigative skills for policy and development.* London, Sage Publications.

How was the Reader developed?

The Reader was developed through a process of five steps:

1. engagement with relevant researchers across the world to identify potential papers for inclusion and comment on an initial draft of Part 2;
2. development and teaching of a new course, "intoduction to Health Systems Research and Evaluation" as part of the University of Cape Town's Master's in Public Health (health systems) degree programme;
3. review of papers and selection of an initial "long list" for possible inclusion in the full version of the Reader;
4. presentation and discussion of the initial ideas for the Reader and the long list of papers, at the 2010 Montreux, First Global Symposium on Health Systems Research;
5. final selection of papers and finalization of the section introductions.

The team

A multidisciplinary group of researchers, with a range of relevant experience and organizational bases, supported the Reader's development process. The team was led by:

- Lucy Gilson (health policy/health economics, South Africa/United Kingdom of Great Britain and Northern Ireland)

and included:

- Sara Bennett (health policy/health economics, United States of America)
- Kara Hanson (health economics, United Kingdom of Great Britain and Northern Ireland)
- Karina Kielmann (medical anthropology, United Kingdom of Great Britain and Northern Ireland)
- Marsha Orgill (health policy/health systems, South Africa)
- Helen Schneider (public health/health policy, South Africa).

Irene Agyepong (public health manager/health policy, Ghana), Kabir Sheikh (health policy/public health, India) and Freddie Ssengooba (health systems/health policy, Uganda), also contributed greatly to conceptualizing Part 2, in part through their collaboration with Sara Bennett, Lucy Gilson and Kara Hanson in a set of parallel papers published in PLoS Medicine (Bennett et al., 2011; Gilson et al., 2011; Sheikh et al., 2011).

A range of inputs or comments on the Reader's development were also received from a broader group of colleagues who deserve a special note of thanks (see below).

Ultimately, however, the selection of papers in the full version of the Reader reflects the particular perspectives of those most closely involved in its development – both on the nature of the field and on what constitutes a good quality or unusual study and paper. The Reader is, therefore, a starting point for reflection on HPSR, not an end point. It must be seen as a living document that will develop over time.

Please note that the full version of the Reader is available online at: http://www.who.int/alliance-hpsr/resources/reader/en.

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Lydia Bendib managed the overall production of the Reader.

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Grateful acknowledgement is made to the various publishers for permission to reproduce in the full version of the Reader, the full text articles included in Part 4.

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Travis P et al. (2004). Overcoming health-systems constraints to achieve the Millennium Development Goals. *Lancet,* 364:900–906.

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Part 1

Introduction to Health Policy and Systems Research

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1. What is Health Policy and Systems Research?

This part of the Reader provides an overview of Health Policy and Systems Research (HPSR) and the key elements and issues with which it is concerned. It includes an outline of the main knowledge paradigms that are encompassed within this field of research.

Key points from this section

Features that define HPSR are:

- the types of issues it addresses
- the fact that it seeks to address real-world situations and issues
- it is multidisciplinary, drawing on methods and perspectives from a range of disciplines.

HPSR investigates issues such as: how health care is financed, organized, delivered and used; how health policies are prioritized, developed and implemented; and how and why health systems do or do not generate health and wider social goals.

It brings together health policy and health systems work into one integrated field. This combined focus on health policy and health systems issues provides a strong basis for identifying what can be done to:

1. strengthen health systems so they can better achieve their health and broader social goals; and
2. ensure that the related research is applied research that has the potential to support the implementation of health policies and health system development.

Key characteristics of HPSR

Health policy and systems research (HPSR) is defined as a field:

> *… that seeks to understand and improve how societies organize themselves in achieving collective health goals, and how different actors interact in the policy and implementation processes to contribute to policy outcomes. By nature, it is inter-disciplinary, a blend of economics, sociology, anthropology, political science, public health and epidemiology that together draw a comprehensive picture of how health systems respond and adapt to health policies, and how health policies can shape – and be shaped by – health systems and the broader determinants of health. (Alliance for Health Policy and Systems Research, 2011.)*

This definition also highlights its key characteristics (Alliance for Health Policy and Systems Research, 2007; Mills, 2012).

Health Policy and Systems Research:

- is a multidisciplinary research field, distinguished by the issues and questions addressed through the research rather than by a particular disciplinary base or set of methods;
- includes research that focuses on health services as well as on the promotion of health in general;
- includes concern for global and international issues as well as national and sub-national issues, as global forces and agencies have important influences over health systems in low- and middle-income countries;
- encompasses research on or of policy, which means that it is concerned with how policies are developed and implemented and the influence that policy actors have over policy outcomes – it addresses the politics of health systems and health system strengthening;
- promotes work that explicitly seeks to influence policy, that is, research for policy.

An integrated approach

Importantly, HPSR brings together health policy and health systems work into one research field, as there are four linkages between these apparently separate areas of work, as listed below.

1. Health policies can be seen as the purposeful and deliberate actions through which efforts are made to strengthen health systems in order to promote population health.
2. Health policy actions must not only be informed by an understanding of the current dynamics of health system functioning and performance, but are also sustained, or undermined, by whether and how they find expression in the health system.
3. A better understanding of the politics of health policy change, the actors and interests driving the processes through which policies are developed and implemented, contributes to understanding how to influence policy and take action to strengthen health systems.
4. A specific focus on policy implementation allows for and requires a better understanding of the organizational dynamics of health systems, which is a critical and often overlooked element of health system functioning.

In practice, therefore, the two apparently different areas of work – health policy and health systems – overlap. Together they provide the knowledge base relevant to strengthen health systems whilst also showing how knowledge and other forms of power together influence policy decision-making. In these ways, HPSR work always seeks to be policy relevant.

Key areas of HPSR

Each of the four central elements in HPSR are considered in the following sections. Some key definitions, concepts and frameworks are discussed. These provide a foundation for thinking about issues related to HPSR, defining appropriate research questions and analysing the findings of such research.

Key points from the following four sections

Four central elements in HPSR are:

- health systems
- health system development or strengthening
- health policy
- health policy analysis.

The issues related to each of these elements can be understood through a range of definitions, concepts and frameworks, which also help to generate relevant and appropriately framed research questions. Such frameworks allow us to understand the various elements, characteristics and dimensions of a health system; and to identify the different connections and interrelationships within a health system that need to be considered in order to strengthen them.

New health policies represent efforts to introduce deliberate and purposeful change within health systems. Ideas and concepts related to policy and the analysis of such policy are an important part of HPSR. In seeking to support better policy implementation, it is critical that we understand the factors that influence policy outcomes. Through understanding the nature of policy and the processes of policy change, we gain new insights that help to explain how health system actors, and the relationships of power and trust among them, influence health system performance.

2. Health systems

Health systems can be defined either by what they seek to do and achieve, or by the elements of which they are comprised.

Goals

The defining goal of health systems is generally seen as health improvement – achieved not only through the provision of curative and preventive health services but also through the protection and promotion of public health, emergency preparedness and intersectoral action (Mackintosh & Koivusalo, 2005).

However, health systems are also part of the social fabric in any country, offering value beyond health (Gilson, 2003; Mackintosh, 2001). Their wider goals include equity, or fairness, in the distribution of health and the costs of financing the health system as well as protection for households from the catastrophic costs associated with disease; responsiveness to the expectations of the population; and the promotion of respect for the dignity of persons (World Health Organization, 2007). These last two goals specifically require:

- ethical integrity, citizen's rights, participation and involvement of health system users in policy development, planning and accountability and respect of confidentiality as well as dignity in service provision (Mackintosh & Koivsualo, 2005);
- building and maintaining the social relations that support sustained resource redistribution, through strategies and activities that include, rather than exclude, socially marginalized population groups within all decision-making activities (Freedman et al., 2005).

Therefore, health systems, through both their service provision role and their influence over societal relations, are a critical field of action to address the social determinants of health and the related health inequities (Commission on the Social Determinants of Health, 2008; Gilson et al., 2008).

Elements and characteristics

In terms of the elements they comprise, health systems can be understood as:

1. Encompassing the population the system serves, as well as the supply or delivery of services, interventions and activities intended to promote health and wider value. Members of the population play five critical health-related roles. They are:
   - patients with health needs requiring care
   - consumers with expectations of how they will be treated
   - taxpayers who provide the main source of financing for the system
   - citizens who may have access to health care as a right
   - co-producers of health through their healthseeking and health-promoting behaviours (Frenk, 2010).
2. A set of six functions, or building blocks, some of which are clearly represented in the goals outlined above (World Health Organization, 2007):
   - service delivery
   - health workforce
   - information
   - medical products, vaccines and technologies
   - financing
   - leadership/governance.
3. Incorporating, within the service delivery function (Van Damme et al., 2010):
   - general curative and preventive health services and services aimed at specific health problems, including specific disease control programmes and personal and population-based services;
   - a range of modes or channels of service delivery including various levels of facility, other outlets for health goods (such as pharmacies or shops) and other strategies (such as community-based health workers and activities);
   - a complex mixture of service providers – public and private, for profit and not-for-profit, formal and informal, professional or non-professional, allopathic or traditional, remunerated and voluntary – the pluralistic health care system (Bloom, Standing & Lloyd, 2008).

Multi-levels of operation

Health systems operate at, and across, the macro, meso and micro levels (Fulop et al., 2001; Van Damme et al., 2010). This is illustrated in Figure 1.

As Figure 1 suggests, the macro level has traditionally focused mainly on the national, or domestic, health system whilst recognizing that this system is also influenced by a wider national and international context. Key system roles at the national level include:

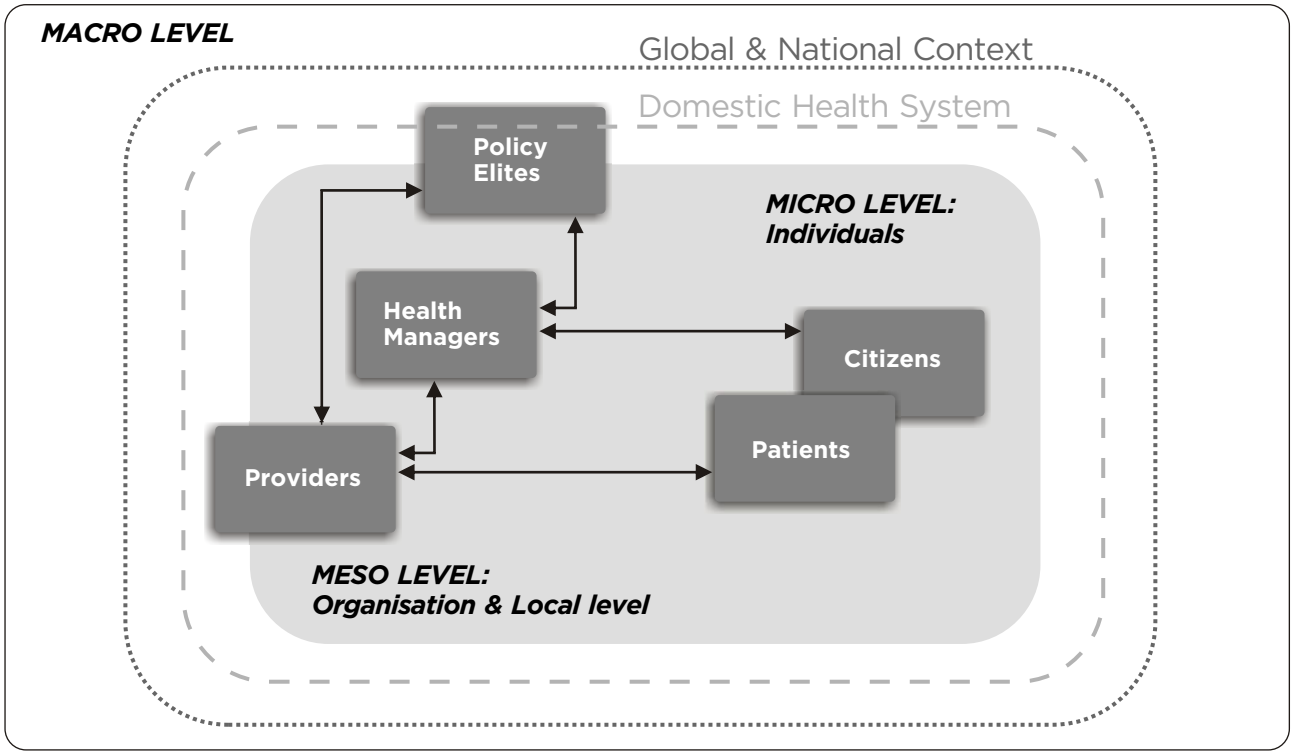
- balancing policies, strategies, resource allocation and health worker reward systems in line with overall system goals;
- coordination across functions and service delivery activities and interventions;
- the development of policy and regulations;
- engaging with health system actors, including citizens;
- interactions with other national agencies that influence health as well as international agencies and processes.

There has, however, been growing realization of the strong influence of the broader global context over population health and health care (Smith & Hanson, 2011). Critical influences include international trade, international aid and global changes, such as economic trends or climate change. There are also a range of very influential global organizations and actors, including multilateral and bilateral organizations, and global public-private initiatives. Therefore, the domestic health system must be understood as an open system within the global context, influenced by and influencing global forces.

The meso level comprises both the local health system, often called the district health system, and the organizational level, such as hospitals. System roles at this level include:

- responding to local needs and circumstances, in terms of provision of health services and wider health promoting activities;
- coordination among local actors;
- management of health services, activities and health workers;

Figure 1 The different levels of health systems



- supervision and training of service providers;
- adaptation of national policy and guidelines to local circumstances.

Finally, the micro-level is the level of the individuals in the system. It includes providers and patients as well as citizens, managers and policy elites – and the interactions between them. Critical roles of individuals at this level include:

- the search for care, compliance with health advice and broader health behaviours;
- the provision of health care and health promoting activities;
- the development of new forms of provider–patient interaction, such as the use of patient information for follow-up;
- the development of broader local relationships between health system agents and the population;
- managerial decision-making and leadership across the health system.

Interactions and interrelationships

Health systems encompass not only various elements but also the interactions and interrelationships between those elements and between the various individuals within the system (Frenk, 1994). These relationships not only support service delivery towards health improvement but are also central to the wider social value generated by the health system (Gilson, 2003).

> *The building blocks do not alone constitute a system, any more than a pile of bricks constitutes a functioning building. It is the multiple relationships and interactions among the blocks – how one affects and influences the others, and is in turn affected by them – that converts these blocks into a system (de Savigny & Adam, 2009:31; see Figure 2).*

The relationships are, moreover, shaped and influenced by both the hardware and the software of the health system and, in turn, influence levels of system performance.

Figure 2 The interconnections among the health system building blocks
(Source: de Savigny & Adam, 2009:32.)

Health system hardware includes the particular organizational, policy, legal and financing frameworks that structure any health system, as well as its clinical and service delivery requirements. The software encompasses the institutions (norms, traditions, values, roles and procedures) embedded within the system.

These two health system dimensions are often tied together. For example, financing mechanisms not only influence the level of funding available for the health system, but also indicate what is valued by that system. Here is an example: the taxation-based elements of the system signal the extent to which society is prepared to take collective action to support redistribution; whilst the level of fee for service within the system signals the extent to which society values choice, allowing those who can afford to, to pay for health care to buy more or better services. The set of financing mechanisms, moreover, influence relationships between the state and its citizens as well as between providers and patients, and has a direct influence over levels and patterns of health care utilization, the extent to which the health system offers financial protection in times of health crisis and the contribution of the heath system to generating social solidarity (Gilson et al., 2008).

The recent attention on systems thinking, therefore, encourages a focus on the nature of health system relationships and the synergies emerging from them, recognizing that the sum of the whole is more than the sum of the parts (de Savigny & Adam, 2009).

3. Health system development or strengthening

As explained in the previous section, health systems are shaped by both structural (hardware) components and social (software) elements. Therefore, in order to identify actions to develop or strengthen health systems, researchers need to consider:

- changes in the structures of the system that are likely to generate performance gains; as well as
- what can be done to influence the behaviour and practices of health system agents; and
- how to implement both sets of changes in ways that are most likely to secure intended effects (Roberts et al., 2008).

These system-level interventions sometimes focus on more than one of the building blocks, such as pay-for-performance systems that together address human resource and financing issues.

Alternatively, through the governance or information building blocks, such intervention can encompass processes and strategies that bring about change across the system as a whole – that is, across system building blocks, levels and/or dimensions (de Savigny & Adam, 2009). The hardware and software dimensions of health systems may together be addressed by, for example, new accountability mechanisms, or processes, and monitoring and evaluation strategies. There is also potential for new leadership and management approaches to focus on the deliberate development of the institutional and relational nature of the health system (Gilson, 2012).

Some disease or programme-specific interventions also have system-wide effects, such as scaling up antiretroviral therapy or integrating vouchers for malaria-preventing bednets into ante natal care (de Savigny & Adam, 2009). However, most disease programme or service-specific strategies are unlikely by themselves to bring about improvements across the health system. Such strategies suffer one or more of the following weaknesses (Travis et al., 2004).

They may:

- limit the policy options considered in system improvement by focusing more on actions at the micro level (individual) rather than meso level (local and organizational) or macro levels (national and global);
- crowd-out routine activities (as when a number of training activities occurs at the expense of service delivery);
- achieve short-term goals but prevent the development of long-term strategies to sustain those goals (as when donor-funded financial incentives encourage performance gains in one programme that cannot be sustained over time or do not benefit all services due to resource constraints).

In contrast, Table 1 shows that system-level responses to the common constraints that particular services or programmes may face are broad in focus and aim to tackle the root causes of the problems. However, such responses generally take longer to have effect and their implementation is likely to be more difficult to manage.

Table 1 Typical system constraints and possible disease-specific and health-system responses (Source: Travis et al., 2004)

Constraint	Disease-specific response	Health-system response
Financial inaccessibility: inability to pay, informal fees	Exemptions/reduced prices for focal diseases	Development of risk-pooling strategies
Physical inaccessibility: distance to facility	Outreach for focal diseases	Reconsideration of long-term plan for capital investment and siting of facilities
Inappropriately skilled staff	Continuous education and training workshops to develop skills in focal diseases	Review of basic medical and nursing training curricula to ensure that appropriate skills included in basic training
Poorly motivated staff	Financial incentives to reward delivery of particular priority services	Institution of proper performance review systems, creating greater clarity of roles and expectations regarding performance of roles, review of salary structures and promotion procedures
Weak planning and management	Continuous education and training workshops to develop skills in planning and management	Restructuring ministries of health, recruitment and development of cadre of dedicated managers
Lack of inter sectoral action and partnership	Creation of special disease-focused cross-sectoral committees and task forces at national level	Building systems of local government that incorporate representatives from health, education, agriculture, and promote accountability of local governance structures to the people
Poor quality care amongst private sector providers	Training for private sector providers	Development of accreditation and regulation systems

4. Health policy

Health policy can be understood as the:

> *...courses of action (and inaction) that affect the sets of institutions, organizations, services and funding arrangements of the health system. It includes policy made in the public sector (by government) as well as policies in the private sector. But because health is influenced by many determinants outside the health system, health policy analysts are also interested in the actions and intended actions of organizations external to the health system which has an impact on health (for example, the food, tobacco or pharmaceutical industries (Buse, Mays & Walt, 2005:6)).*

Commonly, health policies are understood as the formal, written documents, rules and guidelines that present policy-makers' decisions about what actions are deemed legitimate and necessary to strengthen the health system and improve health. However, these formal documents are translated through the decision-making of policy actors (such as middle managers, health workers, patients and citizens) into their daily practices (for example, management, service delivery, interactions with others). Ultimately, these daily practices become health policy as it is experienced, which may differ from the intentions of the formal documents (Lipksy, 1980). Therefore, policy can be seen not only as the formal statements of intent but also as the informal, unwritten practices (Buse, Mays & Walt, 2005).

5. Health policy analysis

Health policy analysis is a central strand of HPSR. It is sometimes understood as the technical work that underpins the development of new policies or the central element of their evaluation. It includes, for example, epidemiological analysis that identifies risk factors for particular diseases and the important targets for health interventions; or cost-effectiveness analysis that identifies which of several possible interventions to address a particular health problem provides the best value for money. However, a more political and organizational approach to policy analysis sees policy itself as a process, the process of decision-making, rather than focusing only on policy as the output of that process or as a management input (Harrison, 2001; Thomas, 1998).

Technical analysts often conceive of policy analysis as including several stages, such as getting a problem or issue prioritized for policy action, defining what the problem is and what objectives would represent an improvement to it, identifying the causes of the problem and how they are inter linked, identifying possible interventions that would address the factors causing the problem, considering options for intervention, implementing selected options, evaluation and feedback (Harrison, 2001).

However, analysts adopting a political and organizational approach to policy analysis do not assume that these stages are sequential or that they always occur in every decision-making process. Indeed, these policy analysts often describe the policy process as a mess, a set of incremental decisions:

> *not only is policy designed to change a given situation but the situation is changing anyway and giving rise to changing pressures for changes in policy. The fact that policy is constantly developing in this way makes it useful to think of policy itself as a process. (Thomas, 1998:5.)*

The focus of this form of policy analysis goes beyond the content of particular policies and gives greater attention to the behaviour of health policy actors: their processes of decision-making and the actions they take; their lack of action and unintended actions; the influence of content on those actions; and the context that influences and is influenced by these behaviours (Walt & Gilson, 1994). Such analysis offers insights that can be well combined with those of systems thinking (Gilson, 2012).

For some, health policy is "synonymous with politics and deals explicitly with who influences policy-making, how they exercise that influence, and under what conditions" (Buse, Mays & Walt, 2005:6).

Policy actors

Within national settings, policy actors include those who:

- have specific responsibility for developing formal policies in the public or private sectors, including those outside the health sector working on health-influencing policies, and international agencies and organizations;
- influence how policies are translated into practice (such as middle managers, health workers, patients and citizens);
- seek to influence the formal policy process (such as civil society groups or interest groups at national and international levels).

At global level, policy actors include the range of multilateral and bilateral organizations engaged in activities that are likely to influence health, as well as the newly powerful global public–private initiatives (such as the Gates Foundation), and transnational civil society movements.

The focus and forms of policy analysis

Policy analysis specifically considers: (a) the roles of actors who influence policy change at different levels – from individual, organizational, national to global – and their interests; (b) the influence of power relations, institutions (the rules, laws, norms and customs that shape human behaviour) and ideas (arguments and evidence), over health system operations and policy change within them; and (c) global political economy issues. It also seeks to understand the forces influencing why and how policies are initiated, developed or formulated, negotiated, communicated, implemented and evaluated, including how researchers influence policy-making (Overseas Development Institute, 2007). The latter includes considering whether and why routine practices differ from, and may even contradict, formal policies, and generate an implementation gap between policy intentions and routine practice.

Finally, although policy analysis may be conducted retrospectively, to understand past experience, it can also be used prospectively to support health policy change and health system strengthening. Prospective policy analysis has been proposed as an important support for advocacy efforts (Buse, 2008) and as a key component of health system leadership and governance activities (Gilson, 2012).

A new approach to health system development, global health diplomacy (Smith & Hanson, 2011), also recognizes that health policy actors must increasingly negotiate and engage with a range of actors at national and international levels, and outside the national health system. Examples of global health diplomacy include action to influence the global tobacco trade or to develop the World Health Organization Code on the Ethical Recruitment of Health Personnel; and, at national level, efforts to secure increased health budgets in African countries – in line with the Abuja target of 15% of total government budget.

6. The boundaries of HPSR

This section focuses on the types of issues addressed through HPSR. As HPSR is a new and emerging field, the issues it addresses and how it differs from other related areas of health research are not always understood. The four elements outlined in the previous section – health systems and their development, health policy and policy analysis – provide the basis for the ideas presented in this section. Figure 3 illustrates key elements of the field of HPSR.

Key points from this section

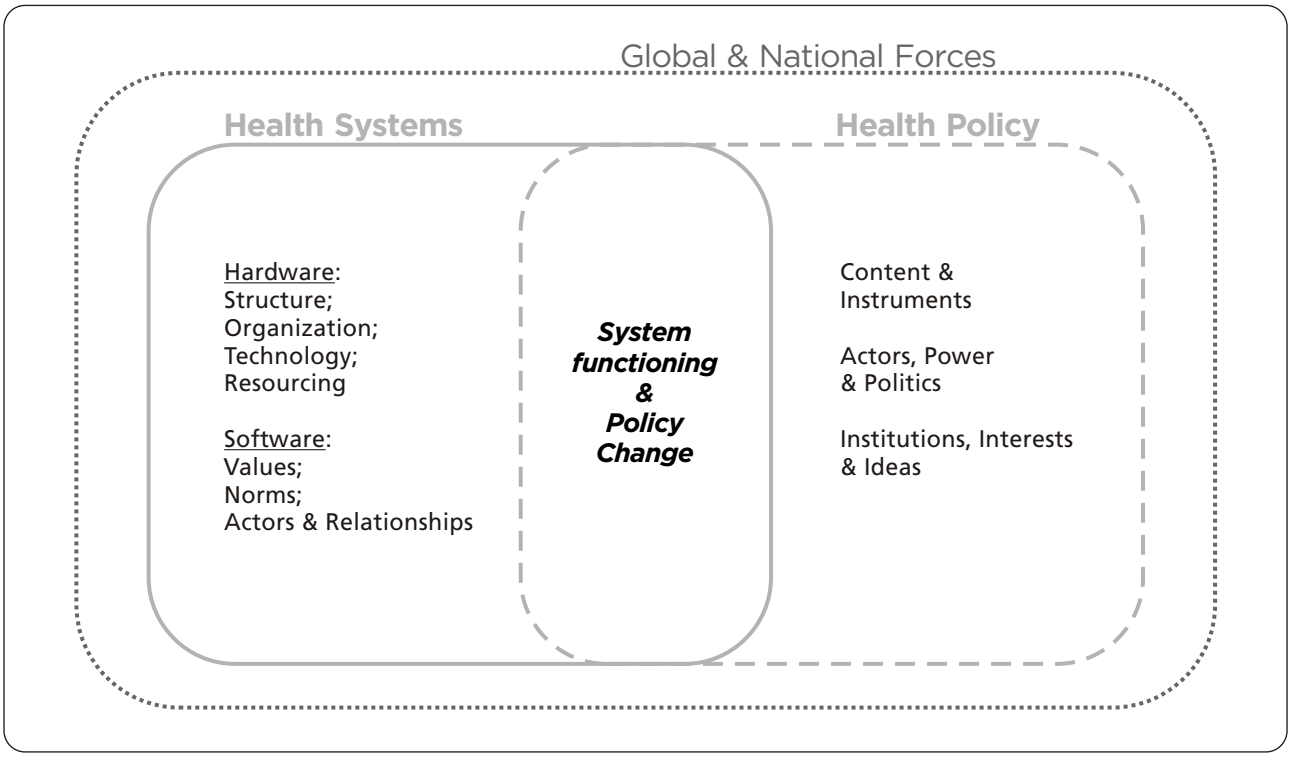
HPSR is an emerging area of health research. It focuses on health policies and health systems – what they are; how policies are implemented; how health systems work; and what can be done to improve policy implementation and the functioning of health systems.

Issues relevant to HPSR are wide ranging, include a variety of actors, and may be studied at local, national and global levels.

HPSR can be distinguished from research focused on specific health programmes, for example those relating to malaria or HIV/AIDS, by its focus on the broader setting in which such programmes are implemented. HPSR includes, for example, work on the financing, human resource or governance elements of the health system that underpin all service provision.

However, HPSR has fuzzy boundaries – it has overlaps with health services research and operational research, and there are some grey areas between HPSR and aspects of management and some discipline-specific research.

Figure 3 The terrain of HPSR



What HPSR is

HPSR encompasses research on the policies, organizations, programmes and people that make up health systems, as well as how the interactions amongst these elements, and the broader influences over decision-making practices within the health system, influence system performance.

HPSR seeks to understand:

- *what* health systems are and how they operate
- *what* needs to be done to strengthen health systems in order to improve performance in terms of health gain and wider social value
- *how* to influence policy agendas to embrace actions to strengthen health systems
- *how* to develop and implement such actions in ways that enhance their chances of achieving performance gains

The scope of HPSR covers work implemented across the various elements and dimensions of the health system (see Figures 1 and 3). An HPSR study may involve considering one or more of the following aspects:

- the wider arena in which policy is made (macro level analysis);
- the processes and institutional arrangements within which policy change is developed and implemented (meso level analysis);
- the impact of specific people on policy change and its impacts (micro level analysis) – the balance of structure (institutional influences) and agency (autonomy) that shapes such actions (Hudson & Lowe, 2004).

HPSR considers the full range of policy actors, not only those with formal policy influence, or in formal policy-making positions at the top or centre of the system. As important are the patients, citizens, front line providers and managers at the bottom or periphery of the system. Their actions and interactions represent the practices that are ultimately experienced not only as health policy but also as the health system (see, for example, Ssengooba et al., 2007; Walker & Gilson, 2004), and through which health improvement and wider social value is achieved.

HPSR may also be undertaken through studies implemented at national or sub-national levels, and through studies implemented in multiple countries.

The variety of issues that are relevant for HPSR is shown in Boxes 1 and 2.

Box 1: Suggested topics for health systems research

Financial and human resources:
- Community-based financing and national health insurance
- Human resources for health at the district level and below
- Human resources for health at the national level

Organization and delivery of health services:
- Community involvement
- Equitable, effective, and efficient health care
- Approaches to the organization of health services
- Drug and diagnostic policies

Governance, stewardship, and knowledge management:
- Governance and accountability
- Health information systems
- Priority-setting and evidence-informed policy-making
- Effective approaches for inter-sectoral engagement in health

Global influences:
- Effects of global initiatives and policies (including trade, donors, and international agencies) on health systems

Source: Sanders & Haines, 2006

Box 2: Topics addressed by existing empirical HPSR studies

HPSR has been undertaken to investigate a wide range of health policy and system issues, such as:

- describing and assessing particular system building blocks (such as decentralization; health financing);
- describing particular experiences of policy change in particular settings;
- explaining how multinational corporations influence transnational and national policies (for example tobacco companies);
- explaining the influences over aspects of particular policy actors' decision-making (such as health-seeking behaviour studies; health worker motivation studies);
- assessing whether new interventions generate performance gains, and of what level (conditional grant assessments), as well as the cost-effectiveness of alternative interventions;
- understanding stakeholder power and positions around specific new policies or actions, and assessing the likely implications for the acceptability of new policies or interventions;
- understanding particular experiences of policy implementation, or explaining variations between settings in the experience of implementing a particular policy;
- explaining overall health system performance impacts and their variation across health systems (for example cross-national analysis of catastrophic health expenditure levels).

What HPSR is not

Falling outside the definition of HPSR are more traditional medical and public health research issues, such as:

- basic scientific research on new pharmaceutical products or medical technologies;
- assessing the clinical efficacy and effectiveness of particular treatments or technologies;
- the measurement of population health profiles and patterns.

The distinction between HPSR and service delivery/ disease programme research

HPSR is concerned with the system-level factors and forces that cut across actions dedicated to tackling particular health problems, as well as those that underpin and shape the performance of health programmes that target specific health conditions. From a service delivery perspective this includes, for example, assessing new organizational models of care or new roles for different types of health-care providers. However, much HPSR broadens the focus, or goes upstream, from particular health conditions, services or programmes to consider their health system and policy context. This context has critical influence over sustained action to tackle particular health conditions and sustained delivery of particular services or programmes (Travis et al., 2004).

HPSR, therefore, addresses the full range of health system building blocks rather than being primarily concerned with aspects of the service delivery block. HPSR has particular concern for the horizontal dimensions of the health system (for example, planning, management, organizational functioning). Nonetheless, it may involve research within certain programme areas (which are often called the vertical elements of the system) in order to understand the systemic challenges of responding to different health conditions and of sustaining different types of health programmes. In HPSR, the health problems or programmes of focus are selected because they have system-wide demands (as with antiretroviral therapy for HIV/AIDS) or because they serve as tracers for understanding and/or influencing health policy and system dynamics (Alliance for Health Policy and Systems Research, 2007).

Fuzzy boundaries

A range of terms are used by different groups of people to address slightly different aspects of HPSR.

The older term 'health services research' is perhaps more commonly used in higher income countries, and its starting point is the service delivery function of health systems, sometimes in relation to other functions. Health services research may, for example, study the patient –provider relationship and interventions to improve uptake of clinical guidelines by health-care practitioners. The term 'health policy and systems research' was introduced by the Alliance for Health Policy and Systems Research to cover a broader terrain of work, and although the Alliance has particular concern for work in low- and middle-income countries, the term HPSR is now being more widely embraced. HPSR may start from any of the health system building blocks, and includes concern for the policy process as well as global influences. Other areas of research related to HPSR include implementation and operational research – and there is some degree of overlap between these particular forms of research and management activities. Rather than trying to establish explicit and clear boundaries between these different areas of work it might be better to see most of them as, essentially, sets of overlapping areas with fuzzy boundaries.

However, the differences between HPSR and the emerging field of *implementation science* illuminate some key differences in perspective (Sheikh et al., 2011). As currently discussed in international health debates, implementation science can be seen to be primarily concerned with improving the delivery of particular services or treatment interventions that have already been proven to be clinically effective. For example:

> *Implementation research is the scientific study of methods to promote the systematic uptake of clinical research findings and other evidence-based practices into routine practice, and hence to improve the quality and effectiveness of health care. It includes the study of influences on health-care professional and organisational behaviour.*
> *(http://www.implementationscience.com/about, accessed 13 January 2011)*

In contrast, HPSR adopts a broader approach to implementation research that is rooted in the decades-old and rich body of policy implementation theory (Hill & Hupe, 2009), among other research traditions. It sees research on implementation as being both central to the study of governance in health systems and focused on understanding how change is driven or shaped. Asking 'What actually happens and why?' rather than 'Why is there an implementation gap?', this approach sees implementation as an organizational, social and political process to be enabled rather than as a centrally controlled and almost mechanical process. It considers, therefore, the practices of management and communication that support the scale-up of a new idea or intervention within a health system, rather than focusing more exclusively on, for example, new ways of shaping provider behaviours. It also acknowledges the practices of power or relationships of trust that shape implementation experience.

As HPSR draws insights from a range of disciplines, a second set of fuzzy boundaries are those between more specialist disciplinary work and HPSR. For example, most epidemiological work would not fall within HPSR, but those analyses which shed light on health system performance and change over time are relevant (see Masanja et al., 2008, in Part 4 of this Reader). Similarly, the anthropological work that sheds light on health system functioning and performance includes, for example, research focused on relationships among health system actors (George, 2009, later) or on policy itself (Behague & Storeng, 2008, see Part 4). More classical anthropological work, perhaps addressing lay perspectives around particular health programmes, is less directly relevant to HPSR. Political science and sociology also have much to offer HPSR (for example, Shiffman et al., 2004 and Murray & Elston, 2005, see Part 4), although not all work from these disciplinary perspectives would fall squarely into the field of HPSR.

Finally, whilst health economics is a central discipline of HPSR, the analyses most centrally falling within HPSR include work focussed on financing (for example O'Donnell et al., 2007, see Part 4), and human resource issues (for example Blaauw et al., 2010, see Part 4), rather than, for example, cost-effectiveness analysis of specific disease technologies.

Ultimately, by definition, studies falling within the field of HPSR must address health policy and systems issues, as defined here, and offer insights that have fairly clear policy relevance.

7. Understanding the nature of social and political reality

This section outlines different ways of understanding researchers' views of the world they investigate, views which influence the type of research they choose to do. Discussion of these issues is a common feature of wider social and development research but is more rare in health research.

Key points from this section

All research is influenced by the researcher's understanding of what reality and knowledge mean.

As a researcher, it is always important to acknowledge the way you understand the world – as this influences the types of question you ask, and the types of research strategy you choose.

Positivism, relativism and critical realism are terms describing three key ways of looking at the world and finding out about it.

Because HPSR draws on a range of disciplinary perspectives it embraces a wider range of understandings of social and political reality than most health research. This also influences the understandings of causality, generalizability and learning accepted within the field. More specifically, HPSR seeks to investigate complex causality; draws on comparative analysis to generate conclusions that are relevant in various settings; and takes a fairly engaged approach to promoting learning from research.

A fundamental difference between HPSR and wider health research lies in their different understandings of the nature of reality, what is out there to know, and how to gather knowledge about that 'reality'. Biomedical and clinical research, and some epidemiological and economics research, is founded on the same positivist understandings as natural and physical sciences.

However, unlike the dominant health research traditions HPSR draws strongly on social science perspectives, embracing not only the critical realist but also the relativist paradigm of knowledge – and related sets of research questions and approaches (see Table 2). The differences between these paradigms underlie some of the common criticisms of HPSR, as well as the different research strategies used compared to biomedical and epidemiological research (Gilson et al., 2011). The following brief overview of these differences draws particularly on Grix, 2004; Harrison, 2001; Robson, 2002.

Table 2 Key elements of knowledge paradigms as applied in HPSR

Knowledge paradigm	◄----------		----------►
	Positivism	**Critical Realism**	**Relativism** (interpretivism / social constructionism)
Types of questions addressed	Is the policy or intervention (cost)-effective?	What works for whom under which conditions?	How do actors experience and understand different types of interventions or policies? What are the social processes, including power relations, influencing actors' understandings and experiences?
Related disciplinary perspectives	Epidemiology Welfare economics Political science (rational choice theory)	Policy analysis Organizational studies	Anthropology Sociology Political science (sociological institutionalism)
Key research approaches and methods	Deductive: Hypothesis driven Measurement through surveys, use of archival and other data records Statistical analysis Qualitative data collected through, for example, semi-structured interviews and interviewing procedures	Deductive and inductive (theory testing and building) Multiple data collection methods including review of documents, range of interviewing methods, observation	Inductive (maybe theory building and/or testing) Multiple data collection methods including in-depth interviewing (individuals and groups), documentary review but also participant observation or life histories, for example.
HPSR articles that illustrate the paradigm (see Part 4)	Björkman & Svensson, 2009	Marchal, Dedzo & Kegels, 2010	Riewpaiboon et al., 2005 Shiffman, 2009 Sheikh & Porter, 2010

Positivism

Positivist research, such as biomedical or epidemiological research, starts from the position that the phenomena or issues of investigation exist independently of how they are understood and seen by people. Research in this tradition works with the understanding that these phenomena comprise a set of facts that can be observed and measured by the researcher, without disturbing them, and that there are patterns and regularities within them, causes and consequences, that can be identified through empirical research. Indeed, the central task of such research is considered to be to detect the laws of cause and effect that operate in reality and that remain 'true' in different contexts and times, by describing them and testing hypotheses (or predictions) against the evidence. HPSR rooted in this paradigm has a central focus on identifying what interventions work best and have most impact.

Relativism

The social sciences, however, encompass the understanding that the phenomena being investigated (such as health policies and systems) are produced through interaction among social actors. Such phenomena do not, therefore, exist independently of these actors but are, in essence, constructed through the way the actors interpret or make meaning of their experience, and these interpretations change over time.

From this perspective, facts are not clearly distinct from the values people hold, and searching for laws of cause and effect is an almost irrelevant task. Instead, research grounded in this tradition focuses on people's intentions, beliefs, values, reasons and how they make meaning. It acknowledges that the researcher also constructs knowledge through how they interpret what they hear and observe. The central task of HPSR in this tradition is, thus, not to explain but rather to understand the meanings given by actors to social phenomena, including the language used to construct reality.

Critical realism

A third perspective, critical realism, can be seen as placed somewhere between the other two perspectives. Like positivism, this perspective understands social reality to exist independently of social actors, although it accepts that actors' interpretations of that reality have influence over the nature of social change. The pre-existing structures and processes of society therefore affect, and are affected by, actors; and human action is influenced by a range of individual, group, organizational and societal processes and structures.

Like positivists, critical realists seek to identify the causal mechanisms underpinning social phenomena (such as health policies and systems), but they also adopt an interpretive understanding. In other words, they do not accept that cause and effect mechanisms hold across context and times, but believe that there are a range of mechanisms mediating between cause and effect, including those linked to actors and to contexts.

For critical realists, therefore, the task of research and evaluation is to generate theories that explain the social world and, in particular, to identify the mechanisms that explain the outcomes of interventions. The dominant HPSR question from this perspective is 'What works for whom in which conditions?' (Pawson & Tilley, 1997).

HPSR perspectives on causality, generalizability and learning

The broader understandings of knowledge and social reality incorporated within HPSR, as compared to positivist research, underpin its recognition of the socio-political and ideological influences over health policies and health systems. It also leads to important differences in perspectives on causality, generalizability and learning between these research fields.

Causality

HPSR embraces complex causality – the understanding that an effect is not linked by a linear and predictable path to a cause, but that there are multiple-interacting causes generating a set of often unpredictable effects. Such complex causality can be seen as a result of the influence of actors and their interpretations over how problems are defined, which form interventions or policies take in implementation, how health systems work and how interventions or policies play out through health systems (Pawson & Tilley, 1997).

Complex causality also results from the open nature of health systems – there are multiple, interacting influences over them and embedded in them. Therefore, interventions and policies often do not generate the same impacts over time and in different places (de Savigny & Adam, 2009). In addition, research takes place within the health system, even as it changes in ways that may have nothing to do with the particular focus of inquiry (Robson, 2002). HPSR must therefore adopt research strategies that allow investigation of complex causality. In particular, systems thinking is increasingly seen to offer insights and perspectives of relevance to HPSR (Atun & Menabde, 2008; de Savigny & Adam, 2009).

Generalization

HPSR recognizes various approaches to generalization. Research from the positivist tradition looks for conclusions that have external validity and that can be statistically generalized beyond the initial study setting and population. In evaluation work, randomized control trials have become the gold standard study design because they allow such generalizations. However, HPSR also embraces analytic or theoretical generalizability, as commonly applied in case study research. General insights derived from one or a few experiences, or cases, through a careful process of analysis, are judged to hold a sufficient degree of universality to be projected to other settings (Robson, 2002).

The process of analysis involves the development of conclusions from detailed findings about context, processes and outcomes in one or more settings; conclusions that are lifted to a sufficient level of abstraction or generality to have resonance in a different context. Comparisons across similar cases also allow such middle range theory ("ideas about how the world works, comprising concepts derived from analysis and ideas about how these concepts are linked together", Gilson et al., 2011:2) to be tested and revised in repeated cycles of theory-building and theory-testing.

In comparative case study analysis, generalization is not grounded in the representativeness of the population sampled but instead in a process of abstracting from the specifics of one case to ideas that encompass several cases. There is, therefore, growing interest in comparative case study analysis among health policy and systems researchers interested in explanation (Gilson & Raphaely, 2008; Marchal, Dedzo and Kegels, 2010). Nonetheless, it should also be noted that HPSR encompasses research that does not seek to generalize (for example about actors and their meaning-making) but works instead with the particular and specific, aiming to illuminate and understand these experiences (for example, George, 2009; Sheikh & Porter, 2010).

Knowledge generation and learning

Finally, HPSR embraces different understandings of knowledge generation and learning to that of biomedical and epidemiological work. Research in the positivist tradition tends to see learning as an act of engineering – the transfer of knowledge from one setting to another – whereas the relativist perspective of social science sees learning as an integral part of the process of policy development and implementation (Freeman, 2006). As Rose (2005), for example, has argued, policy lessons are not just direct copies of interventions implemented in one setting. Instead, they are ideas drawn from observations of interventions in other settings, observations that are abstracted, generalized and then and re-contextualized in a new setting.

In the positivist tradition, the researcher's job is to identify the causal mechanisms that can be transplanted from one setting to another. In the relativist tradition the researcher's job is to assist in the process of understanding and promoting change – including through understanding how social actors interpret and make meaning of their realities and through helping policy actors to negotiate mutually acceptable solutions to problems (Harrison, 2001).

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Part 2

Doing Health Policy and Systems Research: Key steps in the process

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This part of the Reader outlines the four critical steps in developing a primary Health Policy and Systems Research (HPSR) study that should be addressed by all researchers:

1. identify the research focus and questions
2. design the study
3. ensure research quality and rigour
4. apply ethical principles.

When assessing the quality of empirical HPSR work, it is important to consider all steps, not only Step 3.

Step 1: Identify the research focus and questions

The process of developing an HPSR study begins with identifying the topic of focus – the issue or problem you want to investigate – and the related questions. There are two main reasons for this:

1. HPSR is defined by the topics and questions it addresses rather than the disciplinary perspective or the particular approach to data collection and analysis it adopts.
2. HPSR always aims to be policy relevant and to inform the decisions taken by those who influence how health systems evolve and perform – the policy actors, from household to global levels. (Note that policy relevance is a key criterion used to assess the ethical value of HPSR research, Henning, 2004).

As policy relevance is always important to HPSR, those working in the field have paid increasing attention to the process of setting research priorities. A particular concern has been the influence of global actors (conventional multilateral and bilateral research funders as well as global public–private initiatives) over priority-setting within low- and middle-income countries. The priorities of these global actors have often emphasized upstream health research or commodity procurement, rather than systems strengthening questions and initiatives. Even amongst national research communities, HPSR questions may receive less attention than other research questions due to the influence of other health researchers or specific interest groups. National research priority-setting processes are, therefore, important as a means of ensuring dialogue and engagement between researchers and health policy-makers and managers. The aims of such engagement are to turn health system and policy problems into researchable questions, identify priorities among them and, ultimately, support the uptake of research findings. Greater national funding for HPSR may be a further consequence (Green & Bennett, 2007).

Examples of international research priority-setting processes include those convened by the Alliance for Health Policy and Systems Research in 2007-2008 which identified priority topics for research in human resources, financing and the role of the non-state sector (see Table 3). At national level, the Essential National Health Research approach has provided a framework for priority-setting that has been applied in various countries (Green & Bennett, 2007; Alliance for Health Policy and Systems Research, 2009). See also the work of the Council on Health Research for Development at http://www.cohred.org.

Beyond networking with policy actors and other researchers, identifying an HPSR topic and related research questions should involve:

- thinking creatively, for example to identify new areas of work or different approaches to an investigation;
- exploring theory and conceptual understandings relevant to HPSR generally, and the topic of focus;
- conducting a literature search to identify relevant publications and research studies.

Finally, pragmatism is important when identifying a research question. The research needs to be feasible, for example, the scope and size of the study must be considered relative to the resources and time available (Robson, 2002; Varkevisser, Pathmanathan & Brownlee, 2003).

Table 3 Priority research questions in three health policy and systems areas, results of international priority-setting processes (Source: Alliance for Health Policy and Systems Research, 2009)

	Human resources for health	Health system financing	Non-state sector
1st	To what extent do financial and non-financial incentives work in attracting and retaining qualified health workers to under-serviced areas?	How do we develop and implement universal financial protection?	How can the government create a better environment to foster non-state providers in the achievement of health systems outcomes?
2nd	What is the impact of dual practice (i.e. practice by a single health care worker in both the public and the private sectors) and multiple employment? Are regulations on dual practice required, and if so, how should they be designed and implemented?	What are the pros and cons of the different ways of identifying the poor?	What is the quality and/or coverage of health care services provided by the non-state sector for the poor?
3rd	How can financial and non-financial incentives be used to optimize efficiency and quality of health care?	To what extent do health benefits reach the poor?	What types of regulation can improve health systems outcomes, and under what conditions?
4th	What is the optimal mix of financial, regulatory and non-financial policies to improve distribution and retention of health workers?	What are the pros and cons of implementing demand-side subsidies?	How best to capture data and trends about private sector providers on a routine basis?
5th	What are the extent and effects of the out-migration of health workers and what can be done to mitigate problems of out-migration?	What is the equity impact of social health insurance and how can it be improved?	What are the costs and affordability of the non-state sector goods and services relative to the state sector? And to whom?

Networking and creative thinking

Engaging with policy actors and other researchers helps to ensure that the topic and research questions are policy relevant. Both groups, through their experience in different settings, will have insights into the challenges and opportunities that face health systems. The types of questions that may interest national policy-makers are shown in Box 3. Such questions focus on both policy content and policy processes.

Networking can also help to stimulate creative thinking. In addition, exploring conceptual understandings and theory can highlight new areas of work rarely considered in the past, or new ways of understanding how to investigate a topic on which there is already some research.

Box 3: Broad research questions of interest to national policy-makers

Policy formulation

- What is the nature and extent of problem X?
- What happened before in response to problem X, and what were the consequences? What were the unexpected consequences?
- What are cost-effective responses to the problem?
- How long will it be before the impacts of response Y are seen? How can popular and political support be sustained until the impacts are seen?

Policy implementation

- What happens in practice when policy Y is implemented, and why?
- Do policy implementors have the same understanding of the problem that the policy aims to address, and the same policy goals, as the policy-makers? If not, how does that difference affect policy implementation?
- Is the organizational response adequate/sustained?

Policy evaluation

- Were the policy, or programme, objectives met?
- What were the unexpected outcomes?
- Did the policy objectives remain the same over time?
- Did the condition being addressed change over time?
- Was the programme[or policy?] implemented effectively?

Source: Rist 1998

Literature search

It is important to find out what relevant research has already been conducted in order to avoid unnecessary duplication and to build on existing research.

Although researchers can draw on their own knowledge of a particular setting, it is always important that they conduct more formal literature reviews of research previously conducted in other settings and not only in the area with which they are familiar. While there is value in *replication studies* (deliberately replicating work previously conducted in one setting in a new setting to generate new insights, for example (Robson, 2002)), the *duplication* of a research study simply because of limited knowledge about existing research is a waste of resources and so unethical (Emanuel et al., 2004).

New studies must always offer value, that is they must build on existing work, for example by addressing a question not previously considered in a particular setting, or developing new ideas on topics that have already been considered.

The growth of interest in systematic reviews and syntheses of existing research reflects, in part, the concern that existing primary research is frequently not used as a basis for changing policy and practice, or for developing new research work. An important resource for health policy and systems researchers is, therefore, the Health Systems Evidence web site at http://www.healthsystemsevidence.org.
This is a continuously updated and searchable repository of syntheses of research evidence about governance, financial and delivery arrangements within health systems, and about implementation strategies that can support change in health systems.

Key challenges

Two key challenges related to identifying appropriate research questions are discussed below.

1. *Framing policy relevant and valuable HPSR questions through networking with research users.*

   A challenge of generating new research ideas through networking with policy actors is that the types of topics and questions identified as important will vary between policy actors, depending on their roles and responsibilities within the health system (as illustrated in Box 4). For example, policy actors working at lower levels of the health system have particular operational needs which, while important, might limit the wider application of the work if other policy actors do not see its relevance to them or if it requires the duplication of research already conducted elsewhere. Similarly, managers of a particular health programme, be it HIV/AIDS, nutrition or school health, tend to be most interested in research about how to strengthen their particular programme and less interested in the systemic support needs across programmes. Yet, as discussed earlier (see Part 1, Section 6), HPSR focuses on such systemic needs rather than on programme-specific needs.

   Therefore, health policy and systems researchers need to think carefully about the fuzzy boundary between HPSR and management (see Part 1, Section 6) and seek either to support managers to conduct their own operational research, or to identify the wider value of the particular research question.

Box 4: The HPSR questions of different health policy and systems actors

National policy-makers might ask:

- How can we prevent the HIV/AIDS programme from draining resources (time and staff) from other equally important programmes?
- How can HIV/AIDS resources be used in ways that strengthen other areas of the health system?
- Should antiretrovirals be prescribed only by doctors or is prescription by nurses more cost-effective?

District managers might ask:

- Why are there more patient complaints about facility X than others in my district?
- Why are patient waiting times at clinics still very long, although we have already tried to reorganize services to address the problem?
- How can we develop an integrated HIV/AIDS and tuberculosis service, in line with national policy?

Hospital managers might ask:

- How can we decrease the pharmacy waiting time?
- How can we reduce the average length of stay for chronically ill patients?
- Are ambulatory services available and adequate?
- Are patients coming late for treatment and why?

Patient groups might ask:

- Why do we have to wait so long to get care?
- Why do health workers treat us so rudely?

2. *Identifying research questions that are relevant to a range of policy actors and that add to the existing knowledge base.*

   The challenge for the health policy and systems researcher is to identify policy-relevant and valuable research questions that not only directly address the concerns of the main group of policy actors with whom they seek to work and influence, but also have relevance to a wider range of actors and add to the existing HPSR knowledge base.

   For example, how can work on reducing a particular hospital's pharmacy waiting time have relevance to other hospitals or to national managers concerned with supporting all hospitals to reduce waiting times? Similarly, how can research linked to a particular disease programme be undertaken in ways that offer policy and systems lessons that benefit other programmes as well? In both cases, it is important to see the specific focus of the research as an entry point for considering an issue of relevance to a broader range of actors and settings.

   In terms of pharmacy waiting times, there could be value in seeing the work in one hospital as a case study of how to tackle such a problem. The case study could generate ideas on processes and strategies that can initially be tested in other hospitals. Then, drawing on several experiences, this can become the basis for compiling general insights into ways to address the common problem of waiting times. This is an example of the process of analytic generalization and it provides the basis for the sort of policy learning in implementation discussed in Part 1, Section 7.

   Another approach would be to see how work in a particular programmatic area offers insights into a broader systems' question of relevance across programmes. For example, work on task shifting within an HIV/AIDS programme offers insights on the types of human resource development and management needs that must be addressed in any new policy initiative that involves an expansion of the scope of work of lower-level cadres; it also highlights the possible challenges to the political feasibility of such an initiative and ways of managing those challenges. Therefore, the health policy and systems researcher can see the particular programme issue as a case study of policy implementation.

   All these approaches show how research around one programme can represent a tracer for understanding and/or influencing health policy and system dynamics, as discussed earlier.

   Overall, compared with research focused on a particular disease programme, service area or clinical treatment, HPSR requires the researcher to consider the system within which the specific service or treatment is nested. This means thinking:

   - broad – beyond the disease or treatment of focus;
   - up – above the programme or service to the facility, district, province etc.; and
   - about the cross-cutting functions that underlie service and programme delivery – the system building blocks and interactions among them (Schneider, 2011).

Identifying the purpose of the research

In developing research questions that will be policy relevant and valuable, it is also important to think about the overall purpose of the research, in particular:

- What is the research trying to achieve? or Why is it being done?
- To whom will it be useful?
- How will it be useful?
- How will it add to the existing knowledge base?

Thinking about such questions will also inform the design of the research study (see Step 2).

As research questions are developed, four dimensions can be considered:

1. Whole field or specific policy: Will the research seek to focus on the field as a whole, and so expand knowledge of the nature and functioning of the key elements of health policy and systems, or will it seek to focus on a particular policy and support its implementation?

2. Normative/evaluative or descriptive/explanatory research questions: Will the research address normative or evaluative questions (which may involve value judgements) or descriptive or explanatory questions?

Table 4 provides some examples of HPSR questions across dimensions 1 and 2.

3. Analysis 'for' or 'of' policy (Parsons, 1995) – where focused on a particular policy:
   - Will the research aim to support policy implementation in real time (*analysis for policy*)? (Whether considering the technical content of the policy or experience of the actors and processes engaged in its implementation.) If so, this may demand shorter time frames and is likely to be focused on narrower research questions; or
   - Will the research aim to generate, from that policy's experience, a broader understanding that can add to our general knowledge of policy development and implementation (*analysis of policy*)? If so, this will generally demand longer time frames, with a focus on the broader research questions through which the complex and dynamic trajectories of policy experience, for example, are more amenable to investigation.
4. Primary research purpose: Will the research primarily seek to explore an issue or phenomena in order to describe it or to explain it? Or will it adopt a more critical stance in generating understanding, perhaps working with other people to bring about change rather than focusing only on generating knowledge? Although these research purposes often overlap in practice, Robson (2002) identifies their different aims, see Box 5.

Table 4 Examples of HPSR questions (Source: Adapted from Potter and Subrahmanian, 1998)

	Normative/evaluative questions	Descriptive/explanatory questions
Questions about the policy itself	*Cell 1* Should this policy be adopted? How does policy X impact on health seeking behaviour? Which actor management strategies are likely to be most useful in supporting implementation of policy x?	*Cell 3* Which agencies are stakeholders in this policy, what positions do they take on the policy and why? How did policy X come about? Is there capacity to implement policy X? How do front line providers understand policy X?
Questions about the field	*Cell 2* Which type of health system performs best? What are the different approaches to actor management that can be considered by those seeking to manage policy change?	*Cell 4* What are patterns of health seeking behaviour and what influences that behaviour? How is the health system organized at present? What if a new provider was available, how would health seeking behaviour change and how would it affect the performance of the system overall? What influences how front line providers understand policies, and how does their understanding influence their implementation of the policy?

Note: The questions in Cell 1 are asked by those responsible for policy implementation, and essentially demand judgements, at least some of which are likely to be informed by work addressing the questions proposed in Cell 4. The questions in Cell 2, meanwhile, address what people should do, and may be informed by the 'what if' questions included in Cell 4. Finally, questions in Cell 3 encompass the areas of interest in health policy analysis, as outlined earlier: the context, history, interests and organizations that shape a particular policy.

Box 5: The purpose of different types of research

Exploratory research seeks to:

- find out what is happening, especially in little-understood situations
- generate new insights and ask questions
- assess phenomena in new light
- generate ideas and hypotheses for future research

Descriptive research seeks to:

- give an accurate profile of people, events, situations

Explanatory research seeks to:

- explain a situation or problem, traditionally, but not necessarily, in the form of a causal relationship (evaluative research)
- explain patterns relating to the phenomenon being researched
- identify and explain relationships between aspects of phenomenon/phenomena

Emancipatory research seeks to:

- create opportunities and the will to engage in social action
  - *Critical research:* Focuses on the lives and experiences of those traditionally marginalized, analysing how and why inequities are reflected in power imbalances and examining how research into inequities leads to political and social action
  - *Action research:* seeks improvements in practices, understandings of practice and situations of practice, and is undertaken by and with those who will take action

Source: Robson, 2002

The purpose of the research should reflect the current state of knowledge about the topic. Exploratory work, for example, is important when little is known about a topic or when theory suggests a new way of examining and understanding it; but descriptive research requires extensive knowledge of the situation in order to identify what is useful to investigate. However, in empirical work researchers often pursue more than one purpose at the same time (see Figure 4).

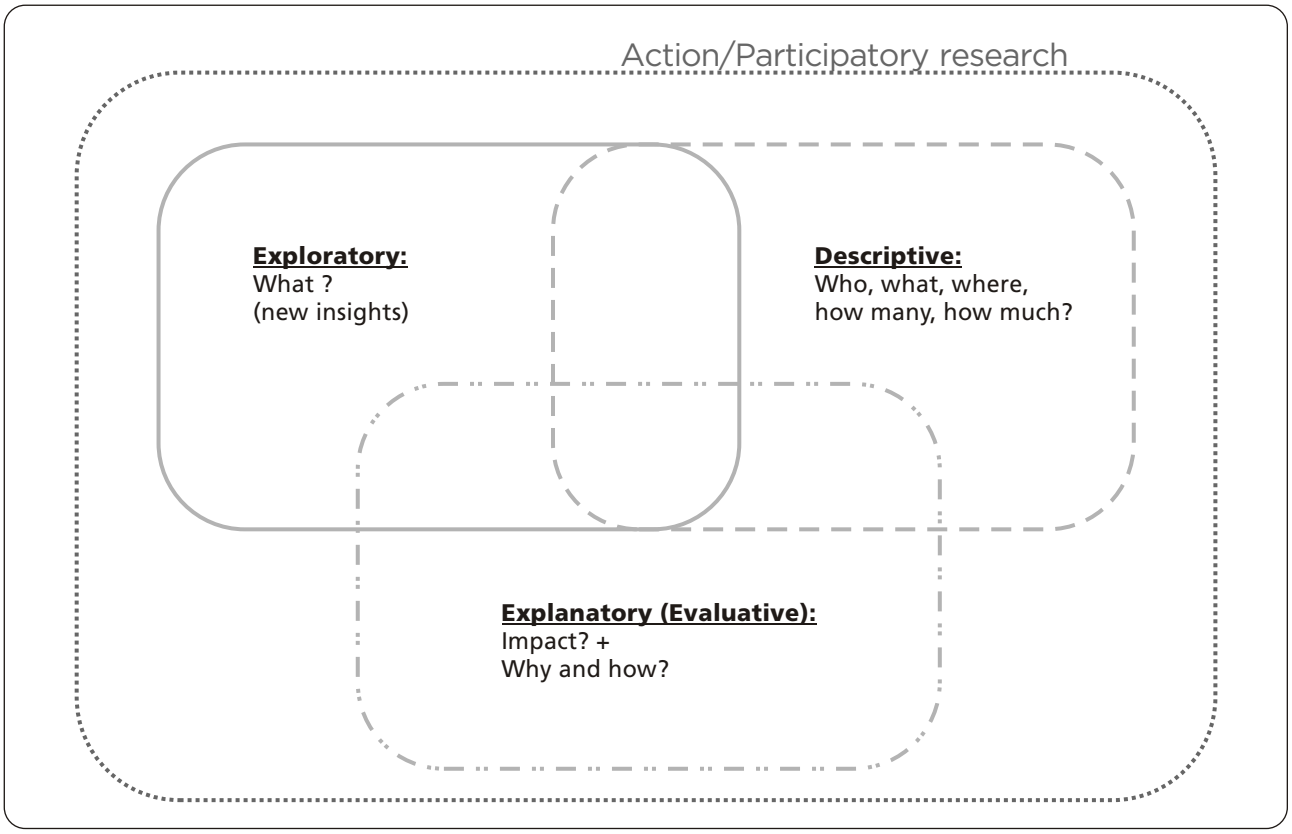
The purpose of the research will also reflect the researcher's understanding of social and political reality (see Part 1, Section 7). Positivists and critical realists tend to focus on evaluating causal relationships, based on particular forms of descriptive work. For them, therefore, explanatory questions are the same, more or less, as the evaluative questions outlined in Table 4, Cell 1; perhaps also entailing forms of descriptive work and preceded by exploratory pilot studies, or accompanied by exploratory work to support explanation.

Relativists, however, are more likely to conduct forms of exploratory, descriptive and/or explanatory research that aim to deepen our understanding of the phenomena of focus and the complex relationships among aspects of those phenomena. Sheikh et al. (2011:5) have specifically suggested that more HPSR work needs to adopt this perspective and address the "fundamental, exploratory and explanatory questions" that shape policy and provide a platform for further research. For relativists, emancipatory research also represents an important form of research – analysis for policy.

Box 6 shows how the different purposes of research translate into different basic forms of research questions.

Finally, across these different research purposes, research might address one or more of the different levels of the system (from micro, meso or macro level) and work with different (conceptual) units of analysis such as individual behaviour, patient–provider relationships, the primary health care system, the district hospital, etc.

Figure 4 Multiple research purposes



Box 6: Links between purpose and broad forms of research questions

Exploratory/descriptive questions
'What' or 'how many/much', or 'who' or 'where' questions

- What is the experience of patients with new programme x?
- What is the experience of health workers in training programme x?
- What is the understanding of patient groups or health workers about a problem or a new programme?
- To what extent are family members involved in the programme?
- Who is exposed to condition x or health risk y?

Explanatory questions
Evaluation questions

- Does programme x lead to reduced health problems from the condition addressed?
- Is programme x more effective than programme y in treating this condition?
- For which group of patients is programme x most effective?

How and why questions:

- How does programme x generate these impacts?
- Why is programme x more effective than programme y?
- Why do health workers act unexpectedly when implementing the programme?
- How do policy actors' values and beliefs influence their decision-making practices?
- Who supports and opposes new policy x, and why and how?

Taking account of multidisciplinarity

Within HPSR, different disciplinary perspectives generate different research questions on the same topic and so generate varied policy-relevant insights on the issue of focus. Therefore, on the one hand, it is important to consider the disciplinary perspective that you as a researcher bring to the topic and the type of research questions you are likely to consider. On the other hand, it may be useful to think about how to draw on other disciplinary perspectives that address the same topic.

Work on human resources, for example, may draw on economics and sociological perspectives to understand motivation; alternatively political science or organizational management perspectives may be applied to understand the decision-making of front line providers; or the work may draw on clinical insights to understand skills needs. All have policy relevance.

Therefore, Part 4 of this Reader includes papers that address particular health system functions, or building blocks, from different disciplinary perspectives (see Part 4: Table 8). Financing issues, for example, are examined using:

- policy analysis and sociological perspectives in order to understand what influences why and how particular financing policies are prioritised, developed and implemented;
- the health economics lens in order to understand what cost burdens households experience in accessing care and how they cope with these costs, and what is the impact on health of community-based health insurance.

The papers addressing leadership and governance issues draw, moreover, on:

- policy analysis to understand the influences over various experiences of policy change;
- anthropology to generate in-depth insights about decentralisation experience and explore global discourses around maternal health care provision;
- management sciences to understand the use of information in district decision-making;
- health economics to understand the impacts achieved by a particular form of community accountability; and
- an historical perspective to track the changing roles of international organizations within global health policy.

Finalizing research questions

Ultimately, good research questions (Robson, 2002), i.e. those that will drive valuable and sound research, are:

- clear – unambiguous and easily understood;
- specific – sufficiently specific to be clear about what constitutes an answer;
- answerable – clearly indicate what type of data are needed to answer the question and how the data will be collected;
- interconnected – a set of questions are related in a meaningful way and form a coherent whole;
- substantively relevant – worthwhile, non-trivial questions, worthy of the effort to be expanded in the research.

Step 2: Design the study

Once you have the research question/s, the next step is to develop the overarching design of the study: to turn the questions into a project. The overarching study design is not just a set of data collection methods. The design is comprised of the:

- purpose of the study (see Step 1)
- particular questions to be addressed (see Step 1)
- strategy for data collection and analysis
- sampling strategy
- theory to be used within the study (Robson, 2002).

The research purpose and question/s shape the research strategy. Table 5 provides examples of the different overarching designs that are relevant for different purposes across the dominant paradigms of knowledge.

Table 5 A summary of broad study designs (Source: Adapted from Klopper, 2008; Potter and Subrahmanian, 1998; Yin, 2009.)

Paradigm of knowledge	Purpose	Research strategy	
		Collection of new data	*Analysis of existing data*
Positivist	Explanatory	Experimental and quasi-experimental design including, for example, before and after studies	Simple and multiple-variable modelling
	Descriptive	Survey designs: questionnaires, interviews and indirect observation; Repeated surveys to allow trend analysis over time	Secondary data analysis (census data, record data) Quantitative content analysis (newspaper reports, speeches, etc.)
	Exploratory	Survey designs (pilot studies)	
Relativist	Explanatory	Case study (theory building, longitudinal) Grounded theory (theory building)	Qualitative content analysis Discourse analysis Historical analysis
	Descriptive	Case study Ethnographic designs with the focus on unstructured direct and indirect observations, for example narrative inquiry, critical ethnography	
	Exploratory	Field designs or ethnographic designs with the emphasis on the use of informants, for example autho-ethnography, autobiography, life histories Case study (such as generating categorizations) Qualitative interviews and panels	

Research strategies can also be grouped into two main sets: fixed designs that are established before data collection and flexible designs that evolve during the study (Robson, 2002). Table 6 summarizes the key characteristics and forms of these two sets of strategies, and links them both to the standard forms of research questions for which they are appropriate and the knowledge paradigms to which they are mostly linked. It also highlights examples of common data collection methods, key principles of sampling and the primary characteristics of analysis. Note that within either strategy set, multiple methods may be used in which qualitative and quantitative data collection approaches are combined.

Table 6 Key features of fixed and flexible research strategies (Source: adapted from Robson, 2002)

	Fixed strategy	Flexible strategy
Characteristics	Calls for tight pre-specification before data collection Data generally numbers Often called quantitative Rarely collect qualitative data	Design evolves during data collection Data often non-numerical Often called qualitative Quantitative data may also be collected (multi-method study)
Dominant knowledge paradigm	Positivist	Critical realist Interpretivist/Social constructivist
Overarching study design types	Primary data collection methods Experimental Quasi-experimental Non-experimental (for example cross-sectional, before and after studies, trend analyses) Secondary data analysis Modelling	Primary data collection methods Case study Grounded Theory Ethnography Life histories Phenomenological research (qualitative interviewing) Secondary data analysis Historical analysis Archive analysis Discourse analysis
Forms of research question	What is impact of x? How and why? (where investigator has control over events, and existing knowledge about mechanisms involved) What (how many, how much, who, where?)	How and why? (where investigator has little control over events, or limited knowledge about mechanism involved) What (what is going on here)?
Examples of dominant data collection methods	Structured and semi-structured interviews (including open-ended questions) Routine record review	Qualitative individual interviews Focus group discussions Observation Document review
Key sampling principles	Representive of sample population	Purposive sampling guided by theory, to ensure maximum variability across relevant units
Characteristics of data analysis	Statistical analysis following predetermined rules	Iterative Interpretative

There is also a third category of research strategy: mixed-method studies, which deliberately combine elements of fixed and flexible design "to expand the scope of, and deepen the insights from, their studies" (Sandelowski, 2000). This strategy is not linked to a particular knowledge paradigm or set of methods, nor does it reflect a mix of paradigms. Instead it purposefully combines different methods of inquiry in order to capture different dimensions of the central phenomenon of focus. Mixed-method studies, thus, entail various combinations of sampling and/or data collection and/or data analysis techniques in order to:

- allow triangulation across data sets;
- enable the elaboration of results, through complementary data and analyses;
- guide the development of an inquiry by identifying additional sampling, data collection and analysis needs.

Within a study different methods may be used sequentially (at different times) or concurrently (at the same time). Examples of what a mixed-method study could entail in practice are given below.

- The research could entail an initial small-scale intensive study using qualitative methods to develop detailed understanding of a phenomenon. This would be followed by a larger-scale structured survey undertaken to generate more extensive understanding of the same phenomenon, and that uses a tool developed with the detailed understanding generated from the initial study.
- An initial structured survey, using a random sampling approach to gather knowledge around a phenomenon within one population of respondents, could provide the basis for purposeful sampling of respondents within the same population to allow more detailed inquiry and gain a deeper understanding of the results of the initial survey.
- The mixing of methods might only occur in data analysis, perhaps by interpreting different sets of study results or through converting one type of data into the other in order to allow statistical analysis of qualitative data.

However, whichever approach is used, mixed-method studies involve a focus on a particular phenomenon and a purposeful combination of methods to achieve justified goals in the context of the particular inquiry.

Using theory and conceptual frameworks to inform the study

Given the complexity of the phenomena addressed by HPSR, theory should play an important role within every study design and within both fixed and flexible research strategies. In evaluation work, for example, there is increasing acknowledgement of the importance of theory-driven inquiry in adequately addressing complex causality (de Savigny & Adam, 2009) – in both experimental or quasi experimental designs and the case study work linked to critical realist evaluation (see Part 4, 'Advances in impact evaluation'). However, currently, theory is too rarely used in HPSR and as a result policy analysis work, for example, is often quite descriptive. Opportunities for the theory-building and explanatory work that would better inform policy-making and implementation are ignored (Gilson & Raphaely, 2008; Walt et al., 2008).

In broad terms, theory provides a language for describing and explaining the social world being studied and represents a general explanation of what is going on in a situation. It offers the basis for generating hypotheses (predicted answers that can be statistically tested in fixed designs), as well as looser propositions of how different dimensions of a phenomena may be linked, which can be explored or considered in analysis (flexible designs). The 'middle range theory' represented by the latter can be captured in the form of a conceptual framework (a set of concepts and their inter-linkages) that may offer explanations or predictions of behaviour, or outcomes, but may also simply identify relevant elements and relationships.

A conceptual framework to guide study design can be developed from a review of relevant empirical and theoretical literature. The framework can help to identify relevant concepts and variables (fixed strategies) or issues (flexible strategies) for investigation, and to guide the selection of samples or cases (flexible strategies). In addition, a conceptual framework may be revised as the data collected are analysed. Alternatively, it may be generated as a result of the data analysis process.

In either case, the conceptual framework can be put back into the public domain to be questioned and perhaps used to support future research. Such theory building is a process of knowledge generation.

Therefore, HPSR is not solely concerned with generating empirical evidence to inform policy decisions. Rather, HPSR can combine theoretical and empirical work or be primarily theoretical and still maintain its policy relevance.

Combined theoretical and empirical work has, for example, aided understanding of the norms and customs influencing the decision-making of health system actors in particular contexts (such as Riewpaiboon et al., 2005; Sheikh and Porter, 2010). It has also traced the patterns and influences over time of policy change across sub-national, national and global levels (for example Walt, Lush & Ogden, 2004). Theory-driven evaluation, meanwhile, supports research that seeks to explain *how* new policies and interventions influence health system operations (Marchal, Dedzo & Kegels, 2010). Combined theoretical and empirical work can also generate ideas about how to influence policy agendas (for example Shiffman, 2007: advocacy in agenda setting) or manage policy change (for example Walker & Gilson, 2004: managing front line providers acting as street-level bureaucrats). Such ideas have relevance beyond the original settings in which the research was conducted.

Purely theoretical research can also lead to new ways to describe the nature and organization of health systems, or what influences their performance, and to understand what drives particular policy actors in their decision-making (for example Bloom, Standing & Lloyd, 2008 (plural health systems); de Savigny & Adam, 2009 (systems thinking); Gilson, 2003 (trust and health systems); Kutzin, 2001 (financing); Mackian, Bedri & Lovel, 2004 (health seeking behaviour)). Through such work HPSR informs policy by expanding our understanding of what strengthening a health system involves, and identifies research questions for empirical investigation.

Part 3 of the Reader presents references to some conceptual frameworks that are valuable in HPSR.

Step 3: Ensure research quality and rigour

The criteria used to make judgements of research quality and rigour differ between paradigms of knowledge. Whereas positivist research emphasizes validity and reliability – ensured through careful study design, tool development, data collection and appropriate statistical analysis – relativist research considers the trustworthiness of the analysis – whether it is widely recognized to have value beyond the particular examples considered. The different criteria and questions used in assessing the quality of research based on fixed and flexible designs are summarized in Table 7. Table 8 indicates how trustworthiness can be established by providing information on study design, data collection, and the processes of data analysis and interpretation.

Ultimately, good quality HPSR always requires a critical and questioning approach founded on four key processes (Gilson et al., 2011):

- *An active process of questioning and checking during the inquiry* (Thomas, 1998): ask how and why things happened – not only what happened; check answers to questions to identify additional issues that need to be followed up in order to deepen understanding of the experience.
- *A constant process of conceptualizing and reconceptualizing* (Thomas, 1998): Use ideas and theory to develop an initial understanding of the problem, or situation of focus, in order to guide data collection but use the data collected to challenge those ideas and assumptions and, when necessary, to revise your ideas in response to the evidence.
- *Crafting interpretive judgements* (Henning, 2004) based on enough evidence, particularly about context, to justify the conclusions drawn as well as deliberate consideration of contradictory evidence (negative case analysis) and review of initial interpretations by respondents (member checking).
- *Researcher reflexivity*: be explicit about how your own assumptions may influence your interpretation and test the assumptions in analysis (Green & Thorogood, 2009).

Table 7 Criteria and questions for assessing research quality (Source: adapted from Robson, 2002)

Fixed designs	Flexible designs
Reliability: Is your variable measure reliable? Construct validity: Are you measuring what you think you are measuring? Internal validity: Does the study plausibly demonstrate a causal relationship? External validity: Are the findings statistically generalizable?	Confirmability: Do the data confirm the general findings and lead to their implications? Dependability: Was the research process logical and well documented? Credibility: Is there a match between participants' views and the researcher's reconstruction of them? Transferability: Do the findings generate insights that are transferable to other settings?

Table 8 Processes for ensuring rigour in case study and qualitative data collection and analysis (Source: Gilson et al., 2011)

Principle	**Example:** A study of the influence of trust in workplace relationships over health worker motivation and performance, involving in-depth inquiry in four case studies (Gilson et al., 2004)
Prolonged engagement with the subject of inquiry Although ethnographers may spend years in the field, HPSR tends to draw on lengthy and perhaps repeated interviews with respondents, and/or days and weeks of engagement within a case study site	*Case study:* A period of three to four weeks spent in each case study facility *Respondents* Informal engagement & repeated formal interviews
Use of theory To guide sample selection, data collection and analysis, and to draw into interpretive analysis	Conceptual framework derived from previous work (Gilson et al., 2005) Case study selection based on assumptions drawn from framework (see below) Theory used in triangulation and negative case analysis (see below)
Case selection Purposive selection to allow prior theory and initial assumptions to be tested or to examine 'average' or unusual experience	Four primary health care facilities: two pairs of facility types, & in each pair one well and one poorly performing as judged by managers using data on utilization and tacit knowledge (to test assumptions that staff in 'well performing' facilities have higher levels of motivation and workplace trust)
Sampling Of people, places, times etc, initially, to include as many as possible of the factors that might influence the behaviour of those people central to the topic of focus (subsequently extend in the light of early findings) Gather views from wide range of perspectives and respondents rather than letting one viewpoint dominate	In small case study facilities, sampled all available staff; in larger facilities for interviews: sampled staff of all groupings and with a range of staff in each group (considering e.g. age, sex, length of time in facility); random sample of patients visiting each facility; all facility supervisors & area manager
Multiple methods (case studies) Use multiple methods for case studies	*For each case study site:* Two sets of formal interviews with all sampled staff Researcher observation & informal discussion Interviews with patients Interviews with facility supervisors and area managers

Table 8 (Continued) Processes for ensuring rigour in case study and qualitative data collection and analysis (Source: Gilson et al., 2011)

Principle	**Example:** A study of the influence of trust in workplace relationships over health worker motivation and performance, involving in-depth inquiry in four case studies (Gilson et al., 2004)
Triangulation Looking for patterns of convergence by comparing results across multiple sources of evidence (e.g. across interviewees, and between interview and other data), between researchers, across methodological approaches, with theory	*Within cases:* Initial case reports based on triangulation across all data sets for that case (and across analysts in terms of individual staff members' experience), generating overall judgments about facility-wide experience as well as noting variation in individual health worker experience *Cross-cases:* Initial case reports compared with each other to look for common and different experiences across cases, and also compared with theory to look for convergence or divergence
Negative case analysis Looking for evidence that contradicts your explanations and theory, and refining them in response to this evidence	*Within cases:* Triangulation across data identified experiences that contradicted initial assumptions (e.g. about the influence of community interactions over motivation, and about the association between low motivation and poor caring behaviour), and identified unexpected influences (e.g. a general sense of powerlessness among health workers) *Cross-cases:* Cross-site analysis identified facility-level experience that contradicted initial assumptions underpinning study (e.g. about link between high levels of workplace trust, strong health worker motivation and positive caring behaviour), and identified unexpected conclusions (e.g. about the critical importance of facility level management over trust and motivation) Report notes weak evidence to support links between levels of workplace trust and client perceptions, but also stronger evidence of links between levels of workplace trust and motivation
Peer debriefing and support Review of findings and reports by other researchers	Preliminary case study reports initially reviewed by other members of the research team
Respondent validation (Member checking) Review of findings and reports by respondents	Preliminary cross-case analysis fed back for review and comment to study respondents; feedback incorporated into final reports
Clear report of methods of data collection and analysis (Audit trail) Keeping a full record of activities that can be opened to others and presenting a full account of how methods evolved to the research audience	Report provides clear outline of methods and analysis steps as implemented in practice (although more could be fuller and reflexive)

Step 4: Apply ethical principles

As with all research, it is important to take account of ethical issues in conducting HPSR. Although the focus of the research differs from other health research, there are always issues of power at play between those doing the research and those being researched, and so there is real potential for disrespectful and unfair treatment. Robson (2002) suggests that all 'real world researchers' need to watch out for the following ten questionable ethical practices:

- involving people without consent
- coercing them to participate
- withholding information about true nature of the research
- otherwise deceiving participants
- inducing participants to commit acts diminishing of their self-esteem
- violating rights of self-determination
- exposing participants to physical or mental stress
- invading privacy
- withholding benefits from some participants
- not treating participants fairly or with respect.

These are similar to the concerns of all health research. The challenges may be particularly acute in cross-cultural research, such as when HPSR is undertaken in lower-income countries by researchers or others from higher-income settings (Molyneux et al., 2009). Thus, one of the eight ethical principles proposed by Emanuel et al. (2004) for clinical research is collaborative partnership between investigators and research sponsors in higher-income countries and researchers, policy-makers and communities in lower-income countries (see Box 7).

However, as HPSR differs in nature from medical research, there are some particular ethical debates in, and peculiar ethical challenges for, this area of work. From reflection on the experience of conducting household-level HPSR studies in different countries, for example, Molyneux et al. (2009) make the following four sets of proposals on how to implement the principles of Box 7 in this form of research.

Be concerned about safeguarding:

1. the scientific validity and trustworthiness of the data – through careful and deliberate training for all research staff, including fieldworkers, to equip them with the attitudes and communication skills necessary to conduct good quality interviews and get beyond their differences in race, class, nationality, gender or education with respondents; and treatment of field-workers as true partners in the research inquiry, recognizing their essential role in shaping the nature and quality of data.
2. social value and a favourable risk–benefit ratio of the study – by careful consideration of the individual and community-level risks and benefits of participation in the study, through engagement with a range of stakeholders at the start of the study and constant review and reflection during the study.
3. informed consent and respect for participants and communities – by ensuring that all team members are familiar with the study's key messages and can call for assistance when unexpected ethical issues arise; are able to, and do, demonstrate respect for participants in all their engagements with communities; and re-negotiate relationships as and when necessary rather than concentrate efforts only on formal consent procedures (which may be infeasible in an HPSR study or impact negatively on the relationships with study participants that are essential to gathering honest information).
4. independent review – by supporting ethics committees to pay particular attention to the proposed process of research and interactions among different actors within HPSR work, rather than primarily examining study design and tools.

Ultimately, however, "the social relationships established between researchers and field-teams and community members, are critical to fulfilling the moral (as opposed to legal) aspects of ethics guidelines" (Molyneux et al., 2009:324). Such relationships will always be important in HPSR, whether the interviewees are community members or policy elites.

Box 7: Eight ethical principles for clinical research in low- and middle-income countries

- Collaborative partnership
- Scientific validity
- Favourable risk-benefit ratio
- Informed consent
- Social value
- Fair selection of study population
- Independent review
- Respect for recruited participants and study communities

Source: Emanuel et al., 2004

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Part 3

Understanding Health Policy and Systems

As indicated in Part 1 of this Reader, a defining characteristic of Health Policy and Systems Research (HPSR) is that it focuses on issues or problems related to health policy and health systems rather than, for example, exploring particular disciplinary questions or perspectives. In other words, it is the research question, or issue of focus, that guides the research.

This section presents key references to two sets of papers that support HPSR by providing conceptual frameworks that can inform our understanding of issues related to health policy and systems.

Health system frameworks

These references give insight and understanding about the nature of health systems.

Two key references

Bloom G, Standing H, Lloyd R (2008). Markets, information asymmetry and health care: Towards new social contracts. *Social Science & Medicine*, 66(10): 2076–2087

- which recognizes the plurality of health systems (i.e. the variety of providers that comprise health systems) and the importance of understanding their institutional dynamics.

de Savigny D et al. (2009). Systems thinking: What it is and what it means for health systems. In: de Savigny D, Adam T, eds. *Systems thinking for health systems strengthening.* Geneva, World Health Organization: 37–48. Available at: http://www.who.int/alliance-hpsr/resources/ 9789241563895/en/index.html

- which is the most recent and more nuanced version of the World Health Organization's building blocks approach to health systems (which focuses on the six functions of service delivery, health workforce, information, medical products, vaccines and technologies, financing, leadership/governance) - this work also seeks to understand health systems from the perspective of systems thinking.

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- *Rationale for selection:* Draws on system thinking perspectives.

Frenk J (2010). The Global Health System: strengthening national health systems as the next step for global progress. *PLoS Medicine*, 7(1):1–3. Available at: http://www.plosmedicine.org/article/info%3Adoi%2F10.1371%2Fjournal.pmed.1000089

- Rationale for selection: A succinct statement of current thinking by a world leader in the field.

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- *Rationale for selection:* This is the most recent statement of the influential World Health Organization framework.

Conceptual frameworks for HPSR

These references provide a range of conceptual frameworks that can be used to guide careful and systematic investigation of health policy and health systems' issues, and so lead to a deeper understanding of their complexity.

References

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http://dx.doi.org/10.1016/S0277-9536(98)00234-2

- *Rationale for selection:* conceptual framework for understanding and investigating health system from decision-making authority perspective

Brinkerhoff D (2004). Accountability and health systems: toward conceptual clarity and policy relevance. *Health Policy and Planning*, 19(6):371–379.
http://dx.doi.org/10.1093/heapol/czh052

- *Rationale for selection:* conceptual framework for understanding & investigating accountability issues, central to governance

Franco LM, Bennett S, Kanfer R (2002). Health sector reform and public sector health worker motivation: a conceptual framework. *Social Science & Medicine*, 54(8):1255–1266.
http://dx.doi.org/10.1016/S0277-9536(01)00094-6

- *Rationale for selection:* conceptual framework for understanding and investigating HR motivation and performance

Gilson L (2003). Trust and health care as a social institution. *Social Science & Medicine*, 56(67):1452–1468.
http://dx.doi.org/10.1016/S0277-9536(02)00142-9

- *Rationale for selection:* highlights the importance of relationships within health systems and the institutional influences over them, and specifically trust; provides concepts for understanding the nature and role of trust in health systems

Kutzin J (2001). A descriptive framework for country-level analysis of health care financing arrangements. *Health Policy*, 56(3):171–204.
http://dx.doi.org/10.1016/S0168-8510(00)00149-4

- *Rationale for selection:* conceptual framework for understanding and investigating financing issues as part of wider system

Vian T (2007). Review of corruption in the health sector: theory, methods and interventions. *Health Policy and Planning*, 23(2):83–94.
http://dx.doi.org/10.1093/heapol/czm048

- *Rationale for selection:* conceptual framework for understanding and investigating corruption, central to governance

Walt G, Gilson L (1994). Reforming the health sector in developing countries: the central role of policy analysis. *Health Policy and Planning*, 9(4):353–370.
http://dx.doi.org/10.1093/heapol/9.4.353

- *Rationale for selection:* simple heuristic for understanding influences over policy decision-making, that is widely used to guide related research

Part 4

References for Empirical Papers

The references listed here are examples of good quality and innovative research in the field of health policy and systems.

Overview: research strategies and papers

Doing good quality Health Policy and Systems Research (HPSR) demands an understanding of what research strategy is appropriate to the questions of focus. The strategy is neither primarily a study design nor a method, but instead represents an overarching approach to conducting the research that considers the most appropriate methods of data collection and sampling strategy for the research purpose and questions.

The papers provided in the full version of the Reader are grouped by research strategy in order to encourage critical and creative thinking about the nature and approach of HPSR, and to stimulate new research that goes beyond the often quite descriptive cross-sectional analyses that form the bulk of currently published work in the field. The research strategies were chosen to demonstrate the breadth of HPSR work, covering both dominant and emerging approaches in the field. They are:

1. Cross-sectional perspectives
2. The case-study approach
3. The ethnographic lens
4. Advances in impact evaluation
5. Investigating policy and system change over time
6. Cross-national analysis
7. Action research

The introduction to each group of papers includes:

- an overview of the research strategy or approach, its relevance to HPSR and brief clarification about how to ensure rigour when conducting such research;
- a brief description or overview of the selected papers;
- a summary of papers with reference details, focus of the study, the perspective it takes, and the rationale for its selection in the Reader.

A summary of the papers is given in Table 9.

Table 9 Overview of papers presented

Page no	Paper	System function(s) of focus	Policy/System level addressed	Disciplinary perspective (or key approach)	Key features	Country
	1. CROSS-SECTIONAL PERSPECTIVES					
72	Blauuw et al., 2010	Human resources (incentive packages)	Micro: Health workers	Health economics	• Use of discrete choice experiments and economic evaluation • Example of analysis for policy	Multi-country
72	Glassman et al., 1999	Governance and financing (policy change, health systems reform)	Macro: National	Policy analysis	• Application of 'policy-maker' in analysis • Example of analysis for policy	Dominican Republic
72	Morrow et al., 2009	Service delivery (malaria control)	Meso and micro: Primary level/community	Public health	• Mixed-method study • Considers both demand and supply issues	Viet Nam
72	Ramanadhan et al., 2010	Human resources (capacity development)	Micro: Health workers	(*Social network analysis*)	• Use of network analysis and exploration of social capital issues	Ethiopia
72	Ranson, Jayaswal & Mills, 2011	Financing (household expenditures)	Micro: Households	Health economics	• Sequential use of methods in mixed-method study	India
72	Riewpaiboon et al., 2005	Service delivery (provider – patient interactions, obstetric care)	Micro: Hospital and individual	Sociology/Anthropology	• Theory building • Examination of institutions of health system	Thailand
72	Rwashana, Williams & Neema, 2009	Vaccines and service delivery (immunization programme, nested in health system)	Macro: System	(*Systems thinking*)	• Rare example of use of systems thinking	Uganda
72	Sheikh & Porter, 2010	Governance and service delivery (HIV clinical guideline implementation)	Micro: Individual	Policy analysis	• Detailed and theory-driven examination of decision-making	India

Page no	Paper	System function(s) of focus	Policy/System level addressed	Disciplinary perspective (or key approach)	Key features	Country
	2. THE CASE STUDY APPROACH					
77	Atkinson et al., 2000	Governance (decentralization)	Meso: Districts and facilities	Anthropology	• Districts as cases • Theory building • Examination of complex causality	Brazil
77	Murray & Elston, 2005	Financing (private insurance)	Cross-level	Sociology	• Integrated analysis of policy change across system layers	Chile
77	Mutemwa, 2005	Health information and governance (decision-making at district level)	Meso: District	Management	• Exploratory case analysis	Zambia
77	Rolfe et al., 2008	Human resources (private sector)	Meso: District and facility	Sociology	• Strong example of analysis in case study work • Analysis for policy	United Republic of Tanzania
77	Russell & Gilson, 2006	Financing (household expenditure)	Micro: Households	Development economics	• Use of longitudinal household cases • Examination of complex causality	Sri Lanka
77	Shiffman, Stanton & Salazar, 2004	Governance (policy change, Safe Motherhood Initiative)	Macro: National/global	Policy analysis	• Use of theory and generation of questions from analysis	Honduras
	3. THE ETHNOGRAPHIC LENS					
81	Aitken, 1994	Human resources (training programmes)	Micro: Health workers	Anthropology/Sociology	• Theory building	Nepal
81	Behague & Storeng, 2008	Governance and service delivery (debates about approaches to maternal health care provision, and evidence-based policy-making)	Macro: Global debates	Anthropology/Sociology	• Discourse analysis	N/A

Page no	Paper	System function(s) of focus	Policy/System level addressed	Disciplinary perspective (or key approach)	Key features	Country
	3. THE ETHNOGRAPHIC LENS (CONTINUED)					
81	George, 2009	Human resources and governance (management, accountability)	Micro: Health worker–supervisor interactions and influences	Anthropology/Sociology	• Rich analysis of key health system functions	India
81	Lewin & Green, 2009	Service delivery (primary care clinic)	Micro: Clinic, provider–patient interactions	Anthropology/Sociology	• Use of concepts • Programme and facility focus	South Africa
	4. ADVANCES IN IMPACT EVALUATION					
85	Björkman & Svensson, 2009	Governance (community accountability mechanism)	Meso: Facility/community	Health economics	• Quasi experimental evaluation • Unusual focus for this evaluation approach	Uganda
85	Macinko et al., 2007	Service delivery (primary care model)	Macro: National	Epidemiology	• Ecological analysis using available panel data	Brazil
85	Marchal, Dedzo & Kegels, 2010	Human resources (management)	Meso: Facility	(*Policy evaluation/ Critical realism*)	• Rare example of critical realist evaluation	Ghana
85	Wang et al., 2009	Financing (community-based health insurance)	Micro: Household	Health economics	• Unusual quasi-experimental evaluation, using propensity matching scores	China
	5. INVESTIGATING POLICY AND SYSTEM CHANGE OVER TIME					
88	Brown, Cueto & Fee, 2006	Governance (global organizations and discourse)	Macro: Global	History	• Historical analysis • Global organization focus	N/A
88	Crichton, 2008	Governance and service delivery (policy change, family planning)	Macro: National	Policy analysis	• Use of theory	Kenya
88	Masanja et al., 2008	Service delivery (child mortality trends and explanations)	Macro: System	Epidemiology	• Rich trend analysis with explanation around system development	United Republic of Tanzania

Page no	Paper	System function(s) of focus	Policy/System level addressed	Disciplinary perspective (or key approach)	Key features	Country
	5. INVESTIGATING POLICY AND SYSTEM CHANGE OVER TIME (CONTINUED)					
88	Van Ginneken, Lewin & Berridge, 2010	Human resources (community health workers)	Macro: National	History	• Historical analysis • Unusual use of witness seminars	South Africa
	6. CROSS-NATIONAL ANALYSIS					
90	Bryce et al., 2005	Service delivery (Integrated Management of Childhood Illness approach)	Meso: Districts and facilities	Epidemiology	• Seminal paper • Careful system evaluation	Multi-country
90	Gilson et al., 2001	Governance and financing (implementing policy change, Bamako Initiative community financing schemes)	Cross-level	Policy analysis	• Conceptual framework used to guide study • Opportunistic country cases selected • Explanatory focus	Multi-country
90	Lee et al., 1998	Governance and service delivery (sustaining family planning policy implementation)	Macro: National	Policy analysis	• Deliberate country cases selected • Careful analysis • Explanatory focus	Multi-country
90	O'Donnell et al., 2007	Financing (public spending incidence)	Macro: National	Health economics	• Rigorous cross-country analysis, with explanation	Multi-country
	7. ACTION RESEARCH					
92	Khresheh & Barclay, 2007	Health Information (hospital records system)	Meso: Hospital	Action research	• Rare application of research strategy	Jordan
92	Khresheh & Barclay, 2008	Health Information (hospital records system)	Meso: Hospital	Action research	• Account of action research	Jordan

1. Cross-sectional perspectives

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Cross-sectional studies may seek to explore, describe or explain a phenomenon at a particular moment in time (see Part 2: Step 2 of this Reader). This distinguishes them from longitudinal and other studies which describe or analyse change over time, and experimental studies which involve interventions. As cross-sectional studies generally require fewer resources than other research strategies, they are the most frequently performed and reported type of research in HPSR.

Cross-sectional studies encompass a wide universe of disciplinary perspectives and methods from both the fixed and flexible research traditions. They range from single to mixed (quantitative and qualitative) and multi-method forms of data collection (when the phasing of fixed and flexible research designs allows triangulation from one data collection approach to inform the other and epistemiological triangulation, as well as use of secondary data sources). While mixed-method cross-sectional studies may share features of the case study method they do not necessarily follow the same analytic procedures.

As also noted in Part 2: Step 2, HPSR mixed-method studies serve a number of purposes (Pope & Mays, 2009):

- In the process of tool design, qualitative interviews may precede the development of quantitative instruments, in instances where standardized tools may not exist or the context specificity of the phenomenon requires tailored approaches.
- A quantitative survey may be conducted to provide a sampling frame to select cases for qualitative study.
- To extend the analysis and interpretation, different studies may be triangulated to provide different perspectives on the same question or may answer different kinds of questions (for example 'what' versus 'why' questions).

Depending on the purpose, data collection in mixed-method studies can be either concurrent or sequential (Creswell & Plano-Clark, 2007).

The findings of such studies often involve what can be described as a 'bricolage', a "pieced together close-knit set of practices that provide solutions to a problem in a concrete situation" (Denzin & Lincoln, 1998:3). The study components provide different insights into a phenomenon and are combined as pieces in a puzzle to explain the phenomenon of focus.

Rigour in cross-sectional studies

As with other research strategies, research validity/trustworthiness and reliability are important in cross sectional studies, whether from the fixed or flexible traditions. Such concerns are especially important in HPSR seeking to shed light on the complex dynamics and relationships between system actors and dimensions (see Part 2: Step 1).

The validity of cross-sectional studies may be undermined by (Robson, 2002:171):

- inadequate or insufficient description of a phenomenon;
- problematic interpretation through selective use of, or inappropriate meanings imposed on, data;
- explanations drawn without considering alternatives or 'counterfactuals';
- failure to draw on existing concepts and theory in the literature.

The validity of cross-sectional studies can be enhanced by (Pope & Mays, 2009):

- triangulation of data, observers, methodological approaches, and with theory;
- member checking (asking respondents to validate the findings and analysis);

- clear description of methods of data collection and analysis;
- reflexivity by the author (reflecting on how their own personal or intellectual biases may have influenced the study and analysis);
- attention to, and discussion of, negative cases (incidents or experiences that are unusual in terms of the dominant pattern of findings and the possible explanations of which are then specifically discussed in analysis to clarify their implications for the broader set of findings).

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Denzin NK, Lincoln YS (1998). Introduction: Entering the field of qualitative research. In: Denzin NK, Lincoln YS, eds. *Collecting and interpreting qualitative materials*. Thousand Oaks, California, Sage Publications:1–34.

Pope C, Mays N (2009). Critical reflections on the rise of qualitative research (research methods and reporting). *British Medical Journal,* 339(b3425):737–739.

Robson C (2002). Real world research: *A resource for social scientists and practitioner-researchers,* 2nd ed. Oxford, Blackwell Publishing.

Overview of selected papers

For the full version of the Reader we have specifically selected cross-sectional studies which demonstrate data collection or analytic techniques that go beyond the most commonly used approaches of key informant interviews or straight-forward content analysis. The selection includes examples of:

- discrete choice experiments (DCEs), derived from the economic theory of demand, examining nurses' preferences for policy interventions that would attract them to rural areas in three countries (Blaauw et al., 2010) – this innovative study also shows the context specificity of health policy and systems interventions and offers guidance for policy-makers;
- the use of PolicyMaker, a computer-assisted political analysis tool to study health policy reform in the Dominican Republic and draw out guidance for policy-makers (Glassman et al., 1999);
- a multi-method study that includes observations, use of routine data and multi-stakeholder interviews to construct a model of the demand and supply side dimensions of poor malaria control in Viet Nam (Morrow et al., 2009);
- the application of social network analysis, an unusual and interesting analytic approach for HPSR, to evaluate the impact of health management training in Ethiopia (Ramanadhan et al., 2010);
- a mixed-method study in which qualitative and quantitative methods are used sequentially to examine the coping strategies used by households to manage the costs of hospital inpatient care in India (Ranson, Jayaswal & Mills, 2011);
- building explanatory frameworks for the choice of public or private obstetric care provider among women of different socio-economic status in Thailand, informed by trust theory (Riewpaiboon et al., 2005) – this study also illustrates the approach and value of theory building in HPSR;
- the use of systems theory to explain uptake of immunization in Uganda, drawing on causal loop diagram methodology to model the relationships in a complex system (Rwashana, Williams & Neema, 2009);
- the use of detailed interpretive analysis in a study of how policy actors' understandings influence HIV policy implementation in India (Sheikh & Porter, 2010).

Some of the different purposes of mixed or multi-method approaches are highlighted in two of these papers. Ranson, Jayaswal & Mills (2011) report a study in which focus group discussions were conducted to develop a closed-ended survey tool. The survey, in turn, identified a group of poorer patients for further in-depth interview. The study reported by Morrow et al. (2009), meanwhile, involved 17 different forms of data collection, sequenced in a 'formative' stage that assisted in the design of a subsequent 'assessment' phase. The paper draws together data, like pieces of a puzzle, to present an explanatory model of the systems and social (non-biological) factors underlying pockets of poor malaria control.

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2. The case-study approach

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The case-study approach is a research strategy entailing an empirical investigation of a contemporary phenomenon within its real life context using multiple sources of evidence, and is especially valuable when the boundaries between the phenomenon and context are blurred (Yin, 2009). It is widely used in research fields and disciplines of relevance to HPSR, such as political science, public administration, planning studies, organizational and management studies, community psychology and sociology.

There are three main reasons why this research approach is particularly relevant to HPSR. First, health policy and systems experience is strongly influenced by, and is often embedded in, contextual factors that must themselves become part of the focus of inquiry (Gilson et al. 2011). For example, health worker motivation is influenced by a range of personal, organizational and societal factors, as well as relationships with others; and, in turn, many aspects of the provision of health care are influenced by the motivation of health workers (Franco, Bennett & Kanfer, 2002). Similarly, patients' decisions to use services or adhere to treatment advice represent responses to many influences, such as:

- their own understandings of illness, and how best to treat it
- advice received from friends and family
- past experience of health providers
- the availability of cash to cover costs
- the gender dynamics influencing household decision-making.

On any health policy and systems issue there are also multiple interpretations of the same experience as different people bring their own contexts to bear on its interpretation. For example, individual health workers may respond differently to the same set of incentives; and patients vary in their response to treatment advice.

Second, as the examples of motivation and health seeking behaviours show, HPSR questions often require study of the complex behaviours of, and relationships among, actors and agencies; and how those relationships influence change, including change over time. The case-study approach is particularly relevant to such experiences (Thomas, 1998).

Third, as discussed in Part 2, the case-study approach can be used both to support and analyse policy development: it can generate information *for* policy (for example see Rolfe et al., 2008 in this section) or be used to analyse past policy experiences in detail (see, for example, Shiffman, Stanton & Salazar, 2004 in this section).

Case-study work is also very flexible. In terms of overarching research purposes (see Part 2: Step 2), it can:

- support *exploratory* inquiry to gain a better understanding of certain situations or to generate ideas and concepts for use in follow-up work;
- allow detailed *description* of particular experiences;
- enable the investigation of 'how' and 'why' *explanatory* questions, supporting analytic generalization through cross-case analysis (see Part 1: Section 7);
- be used as a study approach in *emancipatory* work, such as action research and participatory inquiry.

Finally, case-study work can involve either single cases (of health policies, for example) or a number of individual cases of the same type (a case-study of different health facilities, for example), or an embedded case approach, where one type of case is nested within a broader case or encompasses other cases. An example of the latter would be the case of a single health policy process that is investigated by examining the overall process and experience at a number of case-study sites within the health system (such as regions, districts, and/or facilities); or the case of a primary health care facility that is recognized as nested in a district health system, requiring investigation of the case at both levels.

The range of 'cases', the unit of focus, relevant to and considered in HPSR, therefore, is quite varied. It includes (Robson, 2002; Thomas, 1998; Gilson & Raphaely, 2008):

- individuals, communities, social groups, organizations;
- events, relationships, roles, processes, decisions, particular policies, specific policy development processes, research studies;
- health system decision-making units, particular healthcare facilities, particular countries.

Rigour in case-study work

In general terms, the rigour of case-study work is secured by full reporting on the methods of data collection and analysis, so that readers can assess whether the analysis and interpretation is credible. As discussed in Part 2: Step 3, the judgement of credibility is, in essence, one of whether the research procedures suggest that the conclusions derived are trustworthy. Table 10 provides an overview of procedures within the different phases of case-study work that help to ensure trustworthiness (see also Gilson et al., 2011).

Given the areas of weakness in the current body of HPSR work (Gilson & Raphaely, 2008), key areas that require attention in future case-study research in the field include:

- the use of theory to support and enable analysis
- case selection to support analysis
- case contextualization, especially in single cases
- in studies with multiple cases, comparative analytical strategies that support analytic generalization.

These issues are discussed further below, in relation to the papers selected for this section.

Readers are also encouraged to review available texts (for example Yin, 2009; Thomas, 1998) on good case-study practice to strengthen HPSR case-study work.

Table 10 Procedures to ensure trustworthiness in case-study research (Source: Yin, 2009)

Criterion of trustworthiness	Case-study tactic	Phase of research
Confirmability	• Conduct literature review, identify key concepts • Use multiple sources of evidence • Establish chain of evidence • Ask key informants to review draft research report (member checking)	Research design Data collection Write up of analysis
Dependability	• Develop case-study protocol (so that others can see the decisions made in developing the study, and why you made them) • Develop case-study database (complete set of data, that others could review)	Data collection
Credibility	• Look for patterns in data and across cases (pattern matching) • Consider explanations for experiences analysed (explanation building) • Consider rival explanations (alternative explanations for the patterns identified) • Use logic models to think through causal mechanisms • Triangulation – compare and contrast data across respondents, data sources, data types and cases • Consider negative cases (explicitly seek out experiences that contradict your main line of argument, to test that argument and refine it)	Data analysis
Transferability	• Use theory in single case studies • Use replication logic in multiple case studies (test ideas from one case against subsequent cases)	Research design

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Overview of selected papers

The papers included in this section of the full version of the Reader were chosen to address a range of issues related to health policy and systems and to show the different cases that can be used in HPSR case-study work, as shown below.

- Atkinson et al. (2000) examine experiences of Brazilian decentralization in three local settings, seeking to understand the ways in which the contextual features of social organization and political culture influence these experiences.
- Murray & Elston (2005) examine the single case of obstetric care in Chile, to understand the influence of a macro level intervention (privatization in both financing and provision of care) over health system organization (meso level) and clinical practice (micro level).
- Mutemwa (2005) examines multiple cases of district level decision-making in the context of Zambian decentralization and in relation to information systems.
- Rolfe et al. (2008) document and categorise the existing experience of private midwifery care across multiple districts in the United Republic of Tanzania, to generate information to guide future regulatory policy development.
- Russell & Gilson (2006) examine, across multiple households, the consequences of health care seeking behaviour for the economic situation, or livelihoods, of households in a low-income Sri Lankan community and the factors influencing this behaviour.
- Shiffman, Stanton & Salazar (2004) examine the single case of the safe motherhood policy in Honduras to understand how and why this policy became a political priority.

Although most papers primarily draw on qualitative data, Russell & Gilson (2006) report a mixed-method study (see also cross-sectional papers) in which an initial structured cross-sectional household survey, representative of the local community, generated findings that provided an overview of household experiences related to the key concerns of the study and the basis for more detailed qualitative work. The survey was specifically used to inform the selection of a small number of household cases for inclusion in a second phase of work, in which detailed understanding of the households'

experiences was generated through application of multiple data collection methods (a combination of qualitative and quantitative data). The analysis also combines data from both phases of the study.

These papers also offer insights into rigorous practice for case-study work, in relation to the four key current areas of weakness in HPSR case-study work, as outlined below.

The use of theory. Exploratory and descriptive case-study work may build theory as the basis for more detailed, future inquiry into the issue of focus (see Mutemwa, 2005). However, explanatory work should seek to use theory to design the investigation as well as seeing it as a product of research (Atkinson et al., 2000). When designing the investigation and conducting the analysis (Shiffman, Stanton & Salazar, 2004) theory can help to gain a deeper understanding of the issue, as well as to contribute to the longer term process of theory testing and building (see also Part 1: Section 7).

Selecting cases. Unlike survey work, case selection is never based on the logic of representivity. Instead, the choice depends on the main aim of the study and some examples are given below.

- In exploratory work, the aim may be to find as many different types of case as possible to allow limited description of many cases and the generation of categories (see Mutemwa, 2005 and Rolfe et al. 2008).
- In a single case, the aim is to explain how and why something happens by looking in detail at the inner workings of the case. Therefore, the case may be chosen because it is broadly interesting; or is thought to be typical of that type of case (Shiffman, Stanton & Salazar, 2004); or because it is not typical and, indeed, may represent an extreme case that challenges existing ideas or the theory guiding the study (Murray & Elston 2005).
- In multiple cases the aim may be to test theoretical ideas through comparing and contrasting different cases (see Atkinson et al., 2000) or to select different cases to allow analytic generalization on an issue (Russell & Gilson, 2006).

Contextualization. All descriptive and explanatory case study work requires 'thick description', that is, interpretation of the phenomenon of focus by reference to contextual features (see the section on the ethnographic lens; also see Atkinson et al. 2000; Murray & Elston, 2005; Russell & Gilson, 2006; Shiffman, Stanton & Salazar, 2004);

Analysis and generalization. Rich analysis of context, as well as clarification of conflicting perspectives and interpretations of different actors, is particularly important in single-case studies as the value of such work lies in unpicking the complexity of the phenomenon of focus in a detailed narrative of how and why things happen so they can be seen more clearly (Murray & Elston, 2005). Single-case studies can also generate persuasive and rich insights when combined with theory testing (Shiffman, Stanton & Salazar, 2004). Meanwhile, analysis of multiple case studies is based on the principle of replication. Data are *not* pooled across cases and then analysed by issue; instead each case is treated as a unitary whole and comparison and contrast across these cases supports the development of general insights and conclusions that are considered to have sufficient universality to apply to other settings (see Atkinson et al., 2000; Rolfe et al. 2008; Russell & Gilson, 2006). The principle of replication is central to this process of analytic generalization in that the process of analysis is undertaken iteratively, to see if the analysis of the first case is replicated as expected in the second, third, fourth case, etc. (see Rolfe et al. 2008).

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3. The ethnographic lens

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While 'ethnographic' has mistakenly come to be used as a blanket term to refer to various qualitative methods, ethnography is more accurately seen as a particular methodology. The term refers to both a research approach (literally, 'writing about people') as well as the written product of the research (such as a text, report or book). It represents a defining moment in anthropology, the point at which scholars abandoned the 'armchair' in favour of fieldwork to capture the totality of social life in an alien setting. The classical approach to ethnography generally involves lengthy periods of fieldwork, immersion in the 'everyday life' of a chosen setting through observation, interaction, talking to members of the particular social world being studied, and looking at documents or artefacts. The written account is a synthesis of the researcher's impressions recorded as fieldnotes, observations or interview data – sometimes handwritten, but increasingly captured with the help of recording devices. Perhaps because of the tensions involved in being a participant-observer, as well as the open approach to what constitutes 'legitimate knowledge' (Savage, 2000:1401), ethnography has raised more concerns than any other form of social research regarding the problem of 'representation', i.e. the way in which researchers choose to depict the 'reality' of people's lives and give voice to their subjects.

Classical ethnographic approaches are rare in applied health research not only because of the constraints on time, and practical feasibility, but also because they do not resonate with the positivist framing of most health-related study designs. However, the various genres of 'traditional' ethnography that have been conducted by medical anthropologists and sociologists offer important insights for understanding health policy and systems issues.

First, ethnographies that have followed the life, or lives, of individuals and groups affected by a particular health condition have developed our understanding of how and why people are enabled (or hindered) in their efforts to make effective use of services and manage their conditions. For example, recent work has examined how people living with a condition draw on a collective 'biosocial' identity to formulate claims to treatment, compensation, and other social resources. In the case of HIV, some have argued that this form of 'therapeutic citizenship' has directly affected policies around access to treatment as well as the delivery of HIV care (see Nguyen, 2008).

Second, ethnographies that have explicitly focused on practitioners and their professional socialization within health systems provide important insights into the feasibility of health systems interventions that assume (or introduce shifts in) particular professional hierarchies or working arrangements. One focus has been to examine how working environments and workplace dynamics shape provider identities and interprofessional collaboration. For example, attention has been paid to the often complex working relations between nurses and clinicians (Fitzgerald, 2008) as well as to the working 'cultures' of less visible cadres of health staff, such as 'peons' (Justice, 1986).

Third, a number of classical ethnographies have focused on organizations. Stemming from the work of a feminist sociologist (Smith, 1987), such studies aim to examine how work activities shape and maintain the institution, analysing the ideological procedures that make these work processes accountable and exploring how work processes are connected to other social processes. Here, the ethnographic lens allows a nuanced analysis of organizational culture and dynamics, a means of identifying, for example, how "… the organization's formal structure (its rules and decision-making hierarchies) are influenced by an informal system created by individuals or groups within the organization" (Savage, 2000:1402). Examples include hospital ethnographies (for example, Van der Geest & Finkler, 2004) and project ethnographies (for example, Evans & Lambert, 2008) that examine the

contexts within which policies formulated at a national or international level play out in the context of local institutional codes of practice.

Finally, ethnographies have also focused on controversies or debates in order to bring to light the tensions between rhetoric and practice in health systems relationships. Taylor, for example, one of the first to undertake an ethnography of a health system, uses a controversy over resource allocation in a Scottish archipelago to make visible the ways in which "… different groups formulate and pursue their interests both within and outside of the formal structure of the local health care system" (Taylor, 1977:583).

Although there are very few extensive ethnographies of biomedical practice and health systems in low- and middle-income (LMIC) settings, anthropologists have explored 'biomedical' or 'Western' health care ideology and practices within discussions of medical pluralism, for example in South Asia (see, for example, Leslie & Young 1992). Classic ethnographies have also examined the ideas of the 'great' traditions of institutionalized non-allopathic medical traditions (for example Ayurveda and Chinese medicine) or the realm of 'traditional healing', as opposed to everyday 'practiced medicine' (Khare, 1996). Important insights regarding the historical and structural bases of Western medical policies and systems and health care organization in LMIC settings can be gleaned from ethnographies of colonial medical systems (for example see Allen, 2002). Additionally, there are a limited number of ethnographies on global health policies as introduced in local contexts. An excellent early example is provided by Judith Justice's (1986) ethnography on international health bureaucracy in Nepal that examines the context of policy-making and implementation for an initiative known as the Integrated Community Health Programme. Whiteford & Manderson's edited volume (2000) also provides a good range of rich case studies of the gaps between the world of global health policy-making and local implementation within specific social, political and health systems contexts.

Health policy and systems researchers can benefit from reading classical ethnographies to better understand the theoretical framing, social, political and historical contexts of policy formulation and critical assessments of how policies translate in local health systems. At the same time, an ethnographic approach can be used in time-limited studies to allow for a more in-depth, rich, and nuanced analysis of the relationships between power, knowledge, and practice in health systems – and how the introduction of changes (in the form of interventions and initiatives) may "… generate different and often unexpected results in different circumstances [helping to] identify system dynamics and their key outcomes, which may not be apparent at the outset." (Huby et al. 2007:193). An ethnographic lens is, therefore, useful in studies seeking to explore and explain health policy and systems experiences.

Rigour in adopting an ethnographic lens

Three key methodological characteristics underpin the rigour of the ethnographic lens as applied within HPSR studies. First, such studies adopt methods that are open-ended, in-depth and flexible in order to capture multiple dimensions of how things work (or don't work) in 'real time' and with privileged attention given to the perspective and experiences of those being interviewed or studied. Some researchers specifically triangulate methods to improve validity, but also to explore diverse perspectives in the data. Second, their analysis is interpretive, seeking to situate the meaning of particular health policy and systems 'practices' in social, political and/or historical context. Third, to address the challenge of representation, they adopt a reflexive position vis-a-vis their areas of inquiry, that is they explain how their own position as researchers and participant-observers (in some cases) help to shape their areas of interest, the questions they posed and their interpretive lens.

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Overview of selected papers

The selected papers provide examples of work conducted by social researchers who have adopted ethnographic approaches and methods in their work on policy-making, disease control programmes, 'routine' health systems practices and provider dynamics in low-income settings.

- Aitken (1994) examines the implementation of provider training activities in Nepal and shows how the values providers demonstrate in their daily actions (values in use) shape their engagement with these activities and undermine the performance improvements that they are expected to achieve.
- Behague & Storeng (2008) examine global policy debates around vertical and horizontal approaches to maternal health care provision and evidence-based policy-making, teasing out the underlying epistemiological positions and relevance for policy and advocacy.
- George (2009) examines routine human resource management and accountability practices in Koppal state, India, showing how a complex web of social and political relations among different actors in primary health care influences local understandings and channels of accountability.
- Lewin & Green (2009) explore two sets of common rituals in South African primary health care clinics – Directly Observed Therapy for tuberculosis and morning prayers – in both of which nurses and patients participate, showing how these different rituals serve to reinforce traditional power relationships between providers and patients.

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4. Advances in impact evaluation

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Although there is a rich body of literature on health programme evaluation, the work that focuses on system-level interventions is smaller. However, recent years have seen a growth of interest in understanding the 'impact' of development interventions, including health system interventions, in order to guide development practice and investments using evidence about 'what works' and an understanding of why it works (Evaluation Gap Working Group, 2006). New bodies have been established to promote and finance impact evaluations, such as the International Initiative for Impact Evaluation (3IE) (http://www.3ieimpact.org), and bilateral donors and other funders have given renewed emphasis to strengthening their approaches to evaluation and their capacity to use this evidence in their decision-making. At the same time, influenced by trends within social programme evaluation in higher-income countries (Harrison, 2001), there is an emerging interest in critical realist approaches to evaluation (for example see FEMhealth: http://www.abdn.ac.uk/femhealth). Such approaches consider the question: What works for whom in what circumstances? All approaches to impact evaluation, thus, aim to explain health policy and systems changes and interventions.

Rigour in impact evaluation

There are different meanings of 'impact' in the general evaluation literature, but in the contemporary literature, impact is understood to refer to a causal mechanism – the change in an outcome that is caused by a particular programme. This focus on causal mechanisms has meant that a lot of attention is paid to methods for arriving at an unbiased measure of the change that is due to the programme or intervention. A starting point to measure such impacts is to consider what would have happened without the intervention – known as the 'counterfactual' – in order to be able to attribute the observed change to the intervention under study. Methodological development in this field has focused to a substantial degree on different approaches to establishing this counterfactual, and on how best to minimize different forms of selection bias.

This body of work also recognizes the importance of external validity – the extent to which findings can be generalized to other settings. This requires understanding the causal mechanism, looking more closely at its causal pathway and testing the validity of assumptions that are made about the route between intervention and impact, in order to assess whether those assumptions are likely to hold in other contexts. It also means paying careful attention to the implementation setting and how this mediates the effects of the intervention.

Two main types of study design are currently used within impact evaluations:

- *Experimental design*: This involves a random assignment of the programme to an intervention group and a control group, with the effect that potential unobserved confounding factors are also randomly distributed between the two groups, minimizing risks of bias.
- *Quasi-experimental designs:* These can involve 'natural experiments' which take advantage of a policy or other change that generates an appropriate control group. Study designs then compare groups or areas with and without the intervention; make before-and-after comparisons; adopt 'difference-in-difference' approaches (before and after with a control group); or take advantage of a phased implementation that provides variation in the duration of exposure to the programme. Another approach is to use matching methods (such as propensity score matching) in a cross-sectional design to create a control group that is matched on as many observable factors as possible.

Health system interventions have some particular features that influence the choice of evaluation approach. First, they often work through complex causal pathways and are particularly influenced by features of the policy and implementation context. Recent guidance on the

(impact) evaluation of complex public health interventions can also be applied to health system interventions, and emphasizes the need to:

- develop a good theoretical understanding of the change mechanism;
- address explicitly the risk of implementation failure by including a process evaluation;
- recognize the higher level influences on individual behaviour, and design studies that take these into account;
- adopt multiple measures of outcome, including potential unintended consequences of an intervention;
- recognize that strict fidelity to a protocol is unlikely, and allow for local adaptation in the intervention model (Craig et al., 2008).

Writing about interventions from a public health perspective, Victora, Habicht & Bryce (2004) challenge the primacy of the randomized controlled trial as contributing the best evidence for policy-making when causal pathways are complex. They describe the value of 'plausibility designs' in which studies that are non-randomized nonetheless aim at making causal statements using observational designs with a comparison group. This form of causal reasoning can be supported by evidence that implementation has been adequate, demonstrating progress in intermediate steps along the causal pathway, analysing the temporal sequence of events and using 'dose-response' reasoning to link the strength of programme implementation to changes in the outcome. de Savigny & Adam (2009) also identify the need for adaptations to conventional study designs when evaluating health system interventions, emphasizing the need to measure a wide variety of outcomes (intended or unintended) and for a comprehensive analysis of the contextual factors that may help to explain the success or failure of an intervention.

Another feature of evaluation designs for health system interventions is that it is often difficult to use a 'control group' to establish the counterfactual because, for example, a policy change takes place at national level (the 'small n' (sample size) problem). For instance, changes in regulatory or health financing systems often occur across a whole country at one time so there is no other unit to use as a comparison group.

For both reasons – complexity and the need for alternative approaches to establish the counterfactual – it seems appropriate to recommend that to enhance their rigour all evaluations of health system interventions should be based on a strong programme theory (White, 2009).

Indeed, theory-based evaluation approaches represent a third form of study design for impact evaluation. These approaches are based on an explicit programme theory that sets out the links between inputs, outputs and impacts and tests these causal links using a mix of qualitative and quantitative methods. Realist evaluation, meanwhile, focuses attention on the links between context, mechanisms of change and outcomes, given its interest in how the intervention leads to which effects, under what circumstances (Pawson & Tilley, 1997). It requires that middle range theory, the analysts' initial ideas about these links is developed prior to, and then tested through, the evaluation. Realist evaluation tends to rely on mixed-methods, with greater use of qualitative methods than other impact evaluations, and adopts approaches to generalization which rely more on analytic, rather than statistical, generalization. Its rigour is then safeguarded by the adoption of approaches common in case-study practice (see section on the case study approach).

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Evaluation Gap Working Group (2006). *When will we ever learn? Improving lives through impact evaluation.* Washington DC, Center for Global Development.

Harrison S (2001). Policy Analysis. In Fulop et al., eds. *Studying the organisation and delivery of health services: research methods.* London, Routledge:90–106.

Pawson R, Tilley N (1997). *Realistic evaluation.* London, Sage Publications.

Victora C, Habicht JP, Bryce J (2004). Evidence-based public health: moving beyond randomized trials. *American Journal of Public Health,* 94(3):400–405.

White, H (2009). *Theory-based impact evaluation: principles and practice.* International Initiative for Impact Evaluation Working Paper No. 3 (http://www.3ieimpact.org/admin/pdfs_papers/51.pdf, accessed 6 September 2011).

Overview of selected papers

The papers in this section were chosen because they address system-level interventions and reflect a broad range of approaches to impact evaluation.

- Björkman and Svensson (2009) use a randomized study design to evaluate the impact of a report-card approach to improving community accountability. This paper was selected because of its focus on a novel health system intervention and its use of an experimental design to measure impact.
- Macinko et al. (2007) examine a large-scale health system intervention (a national community-based primary care programme in Brazil) using a quasi-experimental design which takes advantage of the gradual expansion of the programme to generate an internal control group to measure impact.
- Marchal, Dedzo & Kegels (2010) use realist evaluation methods to examine the impact of a particular human resource management approach within one hospital in Ghana. It looks at the link between organizational practices and performance, has strong theoretical underpinnings, and uses exclusively qualitative methods to explore the causal links between management practice and behaviour within the organization.
- Wang et al. (2009) look at the impact on health status of a community-based health insurance scheme in China, in which increased financial risk protection was accompanied by service innovations including more selective purchasing, changes to the provider payment mechanism, and changes to the prescription system. They both adopt a quasi-experimental approach (before-and-after with a control group) and employ propensity score matching to construct a comparison group.

References for selected papers

Björkman M, Svensson J (2009). Power to the people: evidence from a randomized field experiment on community-based monitoring in Uganda. *The Quarterly Journal of Economics*, 124(2) :735–769. http://dx.doi.org/10.1162/qjec.2009.124.2.735

Macinko J et al. (2007). Going to scale with community-based primary care: an analysis of the family health programme and infant mortality in Brazil. *Social Science & Medicine*, 65:2070–2080. http://dx.doi.org/10.1016/j.socscimed.2007.06.028

Marchal B, Dedzo M, Kegels G (2010). A realist evaluation of the management of a well-performing regional hospital in Ghana. *BMC Health Services Research*, 10:24. http://dx.doi.org/10.1186/1472-6963-10-24

Wang H et al. (2009). The impact of rural mutual health care on health status: evaluation of a social experiment in rural China. *Health Economics* 18(S2):S65–S82 http://dx.doi.org/10.1002/hec.1465

5. Investigating policy and system change over time

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A considerable body of HPSR work focuses on experience at one point in time (see Part 4: Cross-sectional perspectives) and studies investigating (describing and explaining) change over time are more rarely conducted.

Yet health policy *change* and health system *development*, around which many HPSR questions revolve, are processes that occur over time. Therefore the contextual influences over health policy and system experience are commonly recognized to include historical factors. Health systems never stop developing or evolving and past experience influences current development – perhaps by limiting or opening possibilities of future change. Indeed, 'path dependency' is a notion widely applied in institutional analysis that suggests that what happened in the past directly influences, and limits, the possibilities of institutional change today (North, 1998). Policy analysis theory, meanwhile, recognizes that policy change is a dynamic process evolving over considerable periods of time. For example, punctuated equilibrium theory seeks to explain how and why policy processes are characterized by largely incremental change for long periods of time, remaining fairly stable, but occasionally producing large-scale departures from this pattern of change (True, Jones & Baumgartner, 2007).

Longitudinal perspectives are also particularly important in understanding the complex causality embedded in processes of health policy and health systems change. At a system level, for example, a recently published volume (Balabanova, McKee and Mills, 2011) demonstrates the value of taking a long-term perspective in examining health system development. The country experiences presented (for example from Thailand, Tamil Nadu and India) clearly demonstrate how a range of different decisions and interventions, taken at different times and sometimes with unexpected consequences, accumulate over time to shape the current state and performance of health systems. At a household level, meanwhile, longitudinal work allows for the assessment of the impacts on livelihoods over time of, for example, health seeking behaviour and the associated cost burdens.

But how can change over time be tracked and investigated? The range of possible approaches include prospective tracking of events, or phenomena, over time and retrospective analysis of past events and experiences.

Historical research, for example, "is unusual in ... asking big questions and in dealing with change" (Berridge, 2001:141) and these include "Why and how do we have our current health systems? How and why do they differ from the past?" or "How and for what reasons have different health professions established their areas of competence, and how have boundaries been established?" (Berridge, 2001:141–2). Drawing on documentary, quantitative and oral sources of data, historical work involves interpretive analysis of past experiences and seeks to open up debates rather than to draw direct lessons. In contrast, fixed longitudinal study designs involve repeated measures on the same variables for the same group, or groups, on an extended series of occasions and may support prospective analysis of trends over time (Robson, 2002).

Rigour in studies of the dynamics of policy change over time

The criteria for assessing the rigour and quality of studies examining the dynamics of policy and system change over time will vary with the disciplinary perspective or research strategy adopted and must be appropriate for the particular discipline and strategy (see also Part 2, and the sections in Part 4 relating to the case-study approach and advances in impact evaluation).

References

Balabanova D, McKee M and Mills A, eds (2011) *'Good health at low cost' 25 years on. What makes a successful health system?* London, London School of Hygiene and Tropical Medicine.

Berridge V (2001). Historical research. In: Fulop N et al., eds. *Studying the organisation and delivery of health services: research methods.* London, Routledge:140–153.

North D (1998). Where have we been and where are we going? In: Ben-Ner A & Putterman L, eds. *Economics, values and organizations.* Cambridge, Cambridge University Press:491–508.

Robson C (2002). *Real world research: a resource for social scientists and practitioner-researchers,* 2nd ed. Oxford, Blackwell Publishing.

Russell S (2005). Illuminating cases: understanding the economic burden of illness through case study household research. *Health Policy and Planning,* 20(5):277–289.

True JL, Jones BD, Baumgartner FR (2007). Punctuated equilibrium theory: explaining stability and change in public policymaking. In: Sabatier P, ed. *Theories of the policy process,* 2nd ed. Cambridge MA, Westview Press:155–188.

Overview of selected papers

The papers in this section were chosen to illustrate some of the different approaches that can be used to investigate change over time in health policy and systems experience.

- Brown, Cueto & Fee (2006) address the changing role of the World Health Organization over time. Using an historical approach based on documentary review, they argue that over time and in response to larger political and historical processes, the World Health Organization has sought to reconstruct itself as the coordinator of global health initiatives, rather than being the undisputed leader in international health.
- Crichton (2008) traces the experience over time of a particular Kenyan health policy, using the theoretical lens of policy analysis and what is in essence a process tracing approach.
- Masanja et al. (2008) use statistical trends, based on epidemiological data, to support consideration of the performance of the Tanzanian health system and how and why its development has impacted positively on child survival.
- Van Ginnekan, Lewin & Berridge (2010) use an historical approach to examine the evolution over time of the South African community health worker programme, drawing on data collected through oral histories and witness seminars.

See also:

Russell & Gilson (2006) in the case-study approach section which reports on prospective studies of Sri Lankan case-study households in which change over time in household livelihoods was tracked and analysed, showing how these impacts were affected by the costs associated with seeking health care.

Wang et al. (2009) in the advances in impact evaluation section which reports a before and after, with control group, evaluation of the impact on health status of a community-based insurance scheme in China.

References for selected papers

Brown TM, Cueto M, Fee E (2006). The World Health Organization and the transition from 'international' to 'global' public health. *American Journal of Public Health.* January; 96(1):62–72.
http://dx.doi.org/10.2105/AJPH.2004.050831

Crichton J (2008). Changing fortunes: analysis of fluctuating policy space for family planning in Kenya. *Health Policy and Planning,* 23(5):339–350.
http://dx.doi.org/10.1093/heapol/czn020

Masanja H et al. (2008).Child survival gains in Tanzania: analysis of data from demographic and health surveys. *The Lancet.* 371:1276–83.
http://dx.doi.org/10.1016/S0140-6736(08)60562-0

Van Ginneken N, Lewin S, Berridge S. (2010). The emergence of community health worker programmes in the late apartheid era in South Africa: an historical analysis. *Social Science & Medicine,* 71:1110–1118.
http://dx.doi.org/10.1016/j.socscimed.2010.06.009

6. Cross-national analysis

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Heath policy and system developments are often country-wide in scope, as in a national policy change or nation-wide implementation of a new health system intervention. Therefore, analysing these experiences to understand the impacts of particular changes or interventions and the pathways of change (i.e. how these impacts are achieved) must be undertaken at country level. However, the transferability of health policy and systems lessons from one country to another is commonly questioned because the long and complex causal pathways underlying their effects allow contextual features to influence their effects in many ways (Mills, 2012). As a result, various analysts have called for studies that identify plausible rather than causal links between health policy and systems interventions and their impacts, and for direct examination of the contextual factors under which particular interventions achieve their impacts (Janovsky & Cassels, 1995; McPake & Mills, 2000; Victora, Habicht & Bryce, 2004).

Cross-national analysis may, therefore, be helpful in not only understanding the forces driving health policy and systems interventions but also influencing their impacts. Such comparative analysis should allow critical contextual features to be identified and their influence over interventions and subsequent impacts to be considered. Recent advances in impact evaluation and, particularly, ideas around theory-based evaluation offer valuable approaches for use in such analyses (see Part 4: 'Advances in impact evaluation'). At the same time, cross-national studies can be seen as, in effect, country-level case studies, with comparative analysis then allowing general conclusions about particular interventions and influences over their effects to be teased out through the approach of analytic generalization (see Part 1: Section 7, and Part 4: 'The case study approach'). However, given the scale, complexity and cost of conducting any form of cross-national HPSR work, there remain relatively few such studies. The criteria for assessing study quality and rigour must clearly be appropriate to the particular overarching research approach adopted (fixed, flexible or mixed-method: see Part 2: Step 3).

A different role for cross-national analysis is in the assessment of various dimensions of health system performance drawing on standardized data and classification systems. Stimulated by the publication of the World Health Organization's World Health Report of 2000 on health systems' performance, the work using National Health Accounts is one example of such analysis. Cross-national health and health systems analysis is now also the subject of wider debate and development, although the development of appropriate databases and rigorous analytic tools remains in its infancy.

References

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McPake B, Mills A (2000). What can we learn from international comparisons of health systems and health system reform? *Bulletin of the World Health Organization,* 78(6):811–820.

Victora CG, Habicht JP, Bryce J (2004). Evidence-based public health: moving beyond randomized control trials. *American Journal of Public Health,* 94(3):400–405.

Overview of selected papers

The papers in this section illustrate the types of questions and approaches that can be analysed in cross-national HPSR.

- Bryce et al. (2005) report a seminal intervention evaluation that drew on a plausibility approach to assessing impact and examined the implementation of one health policy and system intervention (the integrated management of child illness programme) in different national contexts. The aim was to understand what contextual factors were of most influence over the intervention's impacts. Countries were selected for inclusion because they had implemented the Integrated Management of Childhood Illness (IMCI) strategy.
- Gilson et al. (2001) report a study that, using policy analysis theory to guide it, adopted a comparative case study analytical approach to gain insight into how to support implementation of a financing policy (the Bamako Initiative) in any setting. Countries were selected for inclusion because they had implemented some form of the Bamako Initiative in Africa.
- Lee et al. (1998) report an eight-country study that, using policy analysis theory, adopted a comparative case study analytical approach to draw out general conclusions about how to strengthen the implementation of family planning programmes. Countries were selected on the basis of available data and to allow comparison and contrast of experience between strong and weak national family planning programmes in four pairs of contrasting national socio-economic contexts.
- O'Donnell et al. (2007) report a study that uses comparable, quantitative data from household surveys to conduct statistical analyses of the incidence of public health expenditure in 11 Asian countries and provinces. They concluded that pro-poor health care requires limiting the use of user fees, or protecting the poor from them, and building a wide network of health facilities.

References for selected papers

Bryce J et al. (2005). Programmatic pathways to child survival: results of a multi-country evaluation of Integrated Management of Childhood Illness. *Health Policy and Planning,* 20 (supplement 1):i5–i17. http://dx.doi.org/10.1093/heapol/czi055

Gilson et al. (2001). Strategies for promoting equity: experience with community financing in three African countries. *Health Policy,* 58:37–67. http://dx.doi.org/10.1016/S0168-8510(01)00153-1

Lee K et al. (1998). Family planning policies and programmes in eight low income countries: A comparative policy analysis. *Social Science & Medicine,* 47(7):949–959. http://dx.doi.org/10.1016/S0277-9536(98)00168-3

O'Donnell O et al. (2007). The incidence of public spending on healthcare: comparative evidence from Asia. *World Bank Economic Review,* 21:93–123. http://dx.doi.org/10.1093/wber/lhl009

7. Action research

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Action research is one form of emancipatory research. It has a long tradition in community and organizational development work, for example, including work that adopts a systems thinking approach (for example, Luckett & Grossenbacher, 2003). It is also increasingly being used in quality improvement work in low- and middle-income countries (see for example, work supported by the Institute for Health Improvement http://www.ihi.org/IHI/Programs/StrategicInitiatives/DevelopingCountries.htm) and in health policy and systems-related work with communities – such as the work on governance issues supported by the Regional Network on Equity in Health in Southern and Eastern Africa (Loewenson et al., 2010). However, there are still relatively few published action research studies.

Action research is an overarching approach to research. "Essentially action research is concerned with generating knowledge about a social system, while, at the same time, attempting to change it" (Meyer, 2001:173). Sometimes the researchers are those whose practices and actions are the subject of inquiry; sometimes external researchers can support participants to examine their practices and experiences, and also act as facilitators to support the introduction of new practices or interventions. Such research is always flexible in character and responsive to participants' changing needs as findings are repeatedly fed back to them, reflected on and, perhaps, acted on. Action research studies always involve multiple methods, but are mainly qualitative in nature and are often written up as case studies.

Rigour in action research

Given the features of action research and the active role of the researcher in the process, the three key approaches to ensuring rigour, particularly addressing the possibility of researcher bias (Meyer, 2001), are:

- triangulation across data sources and rich contextualization of experience
- researcher reflexivity
- member checking, that is the feedback of findings to participants for their review and reflection.

References

Loewenson R et al. (2010). TARSC/ EQUINET, CEGSS, SATHI-CEHAT, Experiences of participatory action research in building people centred health systems and approaches to universal coverage: Report of the Sessions at the Global Symposium on Health Systems Research, Montreux, Switzerland, TARSC, Harare (http://www.equinetafrica.org/bibl/docs/GSHSR%20PRA%20report%20Dec%202010.pdf, accessed 16 September 2011).

Luckett S, Grossenbacher K (2003). A critical systems intervention to improve the implementation of a District Health System in Kwa Zulu-Natal. *Systems Research and Behavioural Science*, 20:147–162.

Meyer J (2001). Action research. In: Fulop N et al., eds. *Studying the organisation and delivery of health services: research methods.* London, Routledge:172–187.

Overview of selected papers

Two papers were chosen for this section as they together illuminate the approach of action research, based on the same study.

Khresheh & Barclay (2008) report on the findings of their action research study supporting the implementation of a new birth record system in three Jordanian hospitals. Subsequently, they report their reflections on their experience in conducting this study (Khresheh & Barclay, 2007).

References for selected papers

Khresheh R, Barclay L (2007). Practice—research engagement (PRE): Jordanian experience in three Ministry of Health hospitals. *Action Research*, 5:123. http://dx.doi.org/10.1177/1476750307077313

Khresheh R, Barclay L (2008). Implementation of a new birth record in three hospitals in Jordan: a study of health system improvement. *Health Policy and Planning*, 23:76–82. http://dx.doi.org/10.1093/heapol/czm039

Part 5

Reflections on Health Policy and Systems Research

This final section of the Reader aims to stimulate broader thinking about key methodological and other issues when doing Health Policy and Systems Research (HPSR). Some of the papers presented here focus on research strategy issues, including critical papers that address weaker areas of current HPSR practice in low- and middle-income countries. Other papers report researchers' own reflections on their experience.

In addition to this selection of papers, we encourage readers to draw on the 'How to do ...' series of papers in the journal *Health Policy and Planning* as they can inform and guide the use of particular methods in HPSR.

References

de Savigny D et al. (2009). Systems thinking: Applying a systems perspective to design and evaluate health systems interventions. In: de Savigny D, Adam T, eds. *Systems thinking for health systems strengthening.* Geneva, World Health Organization:49–71.
http://www.who.int/alliance-hpsr/resources/9789241563895/en/index.html

- *Rationale for selection:* to stimulate thinking about new approaches to intervention evaluation that allow for systems

English M et al. (2008). Health systems research in a low-income country: easier said than done. *Archives of Diseases in Childhood*, 93:540-544.
http://dx.doi.org/10.1136/adc.2007.126466

- *Rationale for selection:* to provoke critical reflection on the practical and methodological challenges of doing intervention and evaluation work in LMIC health settings

Erasmus E, Gilson L (2008). How to start thinking about investigating power in the organizational settings of policy implementation. *Health Policy and Planning*, 23(5):361–8.
http://dx.doi.org/10.1093/heapol/czn021

- *Rationale for selection:* practical introduction to investigating power in implementation

Hanson K et al. (2008). Vouchers for scaling up insecticide-treated nets in Tanzania: methods for monitoring and evaluation of a national health system intervention. *BMC Public Health* 8:205.
http://dx.doi.org/10.1186/1471-2458-8-205

- *Rationale for selection:* practical guide to development and Monitoring and Evaluation study, with strong focus on feedback to support implementation

Hyder A et al. (2010). Stakeholder analysis for health research: case studies from low- and middle-income countries. *Public Health* 124:159–166.
http://dx.doi.org/10.1016/j.puhe.2009.12.006

- *Rationale for selection:* provides insights into application of stakeholder analysis with conclusions for how to use research to influence policy

Molyneux CS et al. (2009). Conducting health-related social science research in low income settings: ethical dilemmas faced in Kenya and South Africa. *Journal of International Development*, 21(2):309–326.
http://dx.doi.org/10.1002/jid.1548

- *Rationale for selection: To provoke critical reflection on ethical issues for household level HPSR*

Ridde V (2008). Equity and heath policy in Africa: using concept mapping in Moore (Burkina Faso). *BMC Health Services Research*, 8:90.
http://dx.doi.org/10.1186/1472-6963-8-90

- *Rationale for selection:* reports important method for investigating actor understandings and perceptions

Sakyi EK (2008). A retrospective content analysis of studies of factors constraining the implementation of health sector reform in Ghana. *International Journal of Health Planning and Management*, 23:259–285.
http://dx.doi.org/10.1002/hpm.947

- *Rationale for selection: provides an example of a strong document review*

Schneider H, Palmer N (2002). Getting to the truth? Researching user views of primary health care. *Health Policy and Planning*, 17(1):32–41.
http://dx.doi.org/10.1093/heapol/17.1.32

- *Rationale for selection:* to provoke critical reflection on how to assess patient and user perspectives

van der Geest S, Sarkodie S (1998). The fake patient: a research experiment in a Ghanaian hospital. *Social Science & Medicine*, 47(9), 1373–1381.
http://dx.doi.org/10.1016/S0277-9536(98)00179-8

- *Rationale for selection:* reflective paper on research approaches, addressing ethical issues

Walt G et al. (2008). 'Doing' health policy analysis: methodological and conceptual reflections and challenges. *Health Policy and Planning*, 23:308–317.
http://dx.doi.org/10.1093/heapol/czn024

- *Rationale for selection:* to provoke critical reflection on how to do health policy analysis work

Health Policy and Systems Research

A Methodology Reader

The Abridged Version

What does the Reader offer?

Health Policy and Systems Research (HPSR) is often criticized for lacking rigour, providing a weak basis for generalization of its findings and, therefore, offering limited value for policy-makers. This Reader aims to address these concerns through supporting action to strengthen the quality of HPSR.

The Reader as well as this abridged version are primarily for researchers and research users, teachers and students, particularly those working in low- and middle-income countries (LMICs). It provides guidance on the defining features of HPSR and the critical steps in conducting research in this field. It showcases the diverse range of research strategies and methods encompassed by HPSR, and the full version of the Reader provides examples of good quality and innovative HPSR papers.

"Health Policy and Systems Research is a rapidly developing and critically important field of health research, but has lacked any coherent presentation of its nature, scope and methods. This Reader remedies this gap, and will be an indispensable source of guidance for anyone conducting Health Policy and Systems Research or wishing to learn about it," said Anne Mills, Professor of Health Economics and Policy and Vice-Director, London School of Hygiene and Tropical Medicine.

The production of the Reader was commissioned by the Alliance for Health Policy and Systems Research and it will complement its other investments in methodology development and postgraduate training.

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