



# Health Policy and Systems Research: Needs, challenges and opportunities in South Africa – a university perspective

Authors:

Marsha Orgill,<sup>i</sup> Nonhlanhla Nxumalo,<sup>ii</sup>  
Woldekidan Amde,<sup>iii</sup> Ermin Erasmus,<sup>i</sup>  
Uta Lehmann,<sup>iii</sup> Jane Goudge<sup>ii</sup>  
and Lucy Gilson<sup>iv</sup>

The last two decades have seen growing international recognition of the need to strengthen health systems in order to deliver already available, cost-effective health interventions. This chapter describes the parallel global growth of the field of Health Policy and Systems Research (HPSR) and outlines what this field of research is and what it is not. The chapter also clarifies how HPSR can contribute to strengthening health systems. The particular relevance of HPSR in SA is discussed, given the range of health system transformation initiatives in place. Drawing both on an HPSR capacity assessment conducted in three universities and discussions with a wider group of researchers and health system managers, the chapter also considers the existing assets for and challenges facing the development of the field in South Africa. It closes with suggested strategies and priorities for developing and building capacity in this field nationally.

How can HPSR contribute to strengthening health systems given the range of transformation initiatives currently in place?

- i Health Economics Unit, School of Public Health and Family Medicine, University of Cape Town
- ii Centre for Health Policy, School of Public Health, University of the Witwatersrand, Johannesburg
- iii School of Public Health, University of the Western Cape
- iv Health Economics Unit, School of Public Health and Family Medicine, University of Cape Town, London School of Hygiene and Tropical Medicine, UK

## Introduction

In November 2012, approximately 1 600 researchers, managers, and health activists met in Beijing for the second Global Symposium on Health Systems Research. The symposium saw the launch of two landmark activities for this burgeoning community: 'Changing Mindsets', the World Health Organization (WHO) strategy on Health Policy and Systems Research,<sup>1</sup> and the community's new society – Health Systems Global.

These events represent the most recent milestones in the formal development of the field of Health Policy and Systems Research (HPSR), which has slowly emerged since the late 1980s. As Box 1 outlines, critical events include the establishment of the Alliance for Health Policy and Systems Research, the WHO World Health Report of 2000, two Ministerial summits and their related resolutions (2004, Mexico and 2008, Bamako)<sup>2-4</sup> and the first Global Symposium on Health Systems Research, held in 2010 in Montreux, Switzerland.

### Box 1: Milestones in the development of HPSR

1990:	Commission on Health Research for Development
1996:	Ad Hoc Committee on Health Research relating to Future Intervention Options
1999:	Establishment of the Alliance for Health Policy and Systems Research
2000:	WHO World Health Report – Health Systems: Improving Performance
2004:	WHO Task Force on Health Systems Research Priorities for Equity in Health
2004:	WHO Report on Knowledge for Better Health
2004:	Mexico Ministerial Summit on Health Research and Statement on Health Research
2005:	World Health Assembly Resolution A58/22, related to Mexico statement
2008:	High-level Task Force on Scaling up Research and Learning for Health Systems, Global Ministerial Forum on Health Research and the Bamako Call to Action for Research for Health
2009-10:	WHO Strategy on Research for Health
2010:	First Global Symposium on Health Systems Research in Montreux, Switzerland
2012:	WHO Strategy for Health Policy and Systems Research, and Second Global Symposium on Health Systems Research in Beijing, China

Source: Adopted from Hoffman et al., 2012.<sup>5</sup>

Internationally, the importance of this form of research and analysis is based on the dual recognition, first, that stronger health systems are needed to deliver already available and cost-effective healthcare interventions, and so generate health improvement; and, second, that HPSR generates the evidence needed to support interventions to strengthen health systems. The importance of strong health systems has been specifically demonstrated by the challenges of scaling up efforts to tackle HIV, tuberculosis (TB) and malaria, and by the slow progress towards the attainment of the Millennium Development Goals in many settings. In 2007, the Director-General of the WHO, Margaret Chan, noted that weak health systems arise partly from a lack of investment but also from the fact that research on health systems has been so badly neglected and underfunded. The two go together... In the absence of sound evidence, we will have no good way to compel efficient investments in health systems.<sup>5</sup>

HPSR starts, therefore, with concern for the health system, the platform from which health services are delivered, and how that system can be strengthened. (See Box 2) It includes concern for how to promote the intersectoral action needed to address the social determinants of health.<sup>6</sup> Several health system conceptual frameworks provide guidance for such research, as well as for action to strengthen health systems. All emphasise the ways in which different system dimensions or elements interact in generating system outcomes. The WHO framework, for example, specifically highlights six building blocks and stresses that:

[a] health system, like any other system, is a set of inter-connected parts that must function together to be effective. Changes in one area have repercussions for elsewhere. Improvements in one area cannot be achieved without contributions from others. Interaction between building blocks is essential for achieving better health outcomes.<sup>10</sup>

Therefore, while the longer-established field of health services research tends to focus primarily on service delivery issues, HPSR has a strong focus on the system elements that underpin service delivery (such as financing or human resource issues) and requires that all elements, including service delivery, are considered in relation to their place within and their contribution to the whole system. A 2012 paper on access to medicines provides a good example of this approach.<sup>11</sup> HPSR also, for example, encourages consideration of how a specific service (e.g. provision of antiretroviral therapy) influences the system as a whole, or how system interventions, such as management strengthening, influence particular services.

### Box 2: HPSR – definition and basic questions

HPSR “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 interdisciplinary, 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”.<sup>12</sup>

Its key questions are:

- ❖ What are health systems, how do they currently function and why do they function like that?
- ❖ What needs to be done to strengthen them?
- ❖ How can policy agendas on health system development be influenced?
- ❖ How can policies be developed and implemented in ways that strengthen health systems?

Source: Gilson, 2012.<sup>12</sup>

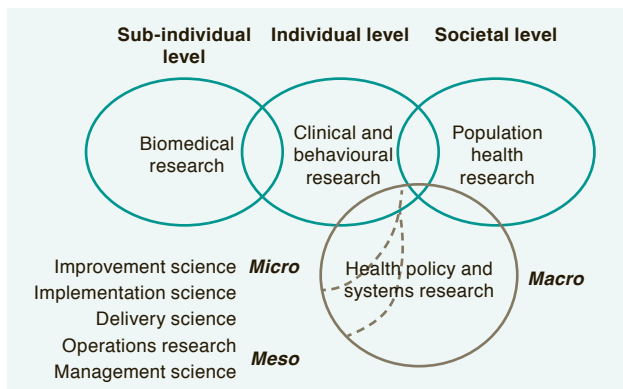
Given the whole system focus of HPSR, there is growing discussion of the value of ‘systems thinking’ approaches drawn from complexity science in understanding and supporting action to strengthen the health system.<sup>13,14</sup> As Box 2 indicates, HPSR also seeks specifically to understand the processes of policy change. Using policy analysis perspectives, it gives specific attention to policy actors and their interests and values as forces that shape not only which ideas become priorities within policy agendas but also the practice of policy and programme implementation.<sup>15</sup> Both systems thinking and policy analysis emphasise the central place of people within health systems, as patients, providers, managers, decision makers,

as individuals and as groups whose values, norms, cultures and identities represent a key facet of every health system. In this way people act to filter, translate and re-shape the system constantly. Drawing on a range of social science theory, they understand health policies and systems to be “artifacts of human creation, embedded in social and political reality and shaped by particular, culturally determined ways of framing problems and solutions”.<sup>8</sup>

Four defining features of HPSR, thus, explain its position relative to the broader field of health research and to the growing body of instrumental ‘implementation science’ (Figure 1). These are:

- > the types of questions it asks (Box 2), which may entail research across individual (micro), organisational (meso) and/or whole system (macro) levels;
- > its focus on supporting action for health system development and policy implementation, whilst acknowledging that such action is always influenced by political and social forces, rather than primarily technical, and is itself an important focus of research;
- > its multi-disciplinary base, which encompasses both social science perspectives and the more traditional health research bases of biomedical, clinical and population health sciences; and
- > its acceptance of a range of quantitative and qualitative data collection and analysis methods as all equally valid, when rigorously applied and appropriate to the question of focus.

**Figure 1: The place of HPSR in the broader terrain of health research**



Source: Adapted from Hoffman et al., 2012.<sup>5</sup>

But what is the relevance of HPSR to South Africa (SA)? What HPSR assets do we have, and what key challenges confront the field’s development in the country?

The remainder of the chapter addresses these questions, drawing partially on work conducted for the Consortium on Health Policy and Systems Analysis in Africa (CHEPSAA), as well as the discussions of a special pre-conference workshop on HPSR organised at the 2012 South African Public Health Association (PHASA) Conference.

## What is the relevance of HPSR to South Africa?

The major current South African health system reform initiatives, both National Health Insurance (NHI) and re-engineering primary health care, as well as other health system strengthening efforts, all address output four of the Negotiated Service Delivery Agreement (NSDA), which seeks to strengthen health system effectiveness. The 10-Point Plan of the National Health Sector Strategic Framework 2010-13 also specifically recognises the need “to generate information for health planning, service delivery and monitoring”<sup>16</sup> and the related research priorities identified in the 2011 National Health Research Summit report are very wide ranging.<sup>17</sup> They include, for example, epidemiological and clinical effectiveness data, assessment of maternal health service quality and economic evaluation studies – and:

- > better understanding of why existing health policies are not being implemented effectively;
- > consideration of how to replicate pockets of health system excellence more widely and of how to improve operational efficiency;
- > monitoring whether reforms are generating gains in terms of improved equity of access to health systems; and
- > reflection on how to translate evidence into policy and practice.

All the bulleted priority issues fall clearly within the particular terrain of HPSR, as outlined earlier. As noted by Margaret Chan, the Director-General of WHO, – action to improve health system effectiveness demands the sort of research that can guide and evaluate the necessary health system investments.

## What are the HPSR assets of South Africa?

SA is fortunate to have a rich variety of groups working in HPSR. They include the university-based schools of public health as well as other university groups: for example, the Community Health Division, University of Stellenbosch, has recently developed a focus on Health Systems and Services Research (HSSR), and the University of KwaZulu-Natal houses both the Centre for Rural Health and the Health Economics and HIV/AIDS Research Division (HEARD), while the University of the Free State is home to the Centre for Health Systems Research. Outside the university environment, meanwhile, two other key groups are the Health Systems Trust (HST) and the intra-mural Health Systems Research Unit of the Medical Research Council (MRC). Although more commonly focused on programmatic research questions, other health researchers, such as those working on specific issues such as TB or HIV or reproductive health, also sometimes get drawn to HPSR issues. Finally, some specific HPSR projects have been conducted by groups outside the health sector, such as by the Society Work and Development Institute at the University of the Witwatersrand.<sup>18</sup>

To illuminate the situation and work of South African HPSR groups, more details are provided about three groups whose work falls in the HPSR terrain. While these three groups are not the only university-based units working in this area, as part of CHEPSAA 2011 they conducted a capacity assessment of themselves and the broader environment. Some of the findings of this assessment are presented below as a case study.

## Case study

### Brief overview of three CHEPSAA-affiliated HPSR groups

**The School of Public Health, University of the Western Cape (SOPH UWC)** falls within the Faculty of Health Sciences and was established in 1993 with the purpose of supporting the building of a district health system under the country's new democratic dispensation. The SOPH has had a strong health systems focus and currently incorporates three main research areas – social determinants and social systems, health programmes and interventions, and health systems. Its health system work focuses in particular on health information systems, human resources, and health programme strengthening but also, increasingly, on a better understanding of whole systems functioning. It has recently been successfully awarded a National Research Foundation (NRF) South African Research Chairs Initiative (SARChI) research chair in *Health Systems, Complexity and Social Change*, which it has now filled.

**The Centre for Health Policy (CHP), a research group within the School of Public Health, University of the Witwatersrand**, was established in 1987 to support the development of health policy for a post-apartheid South Africa. Its mission as an independent, multi-disciplinary research organisation is to contribute to excellence in health policy and systems research and to be a critical participant in health policy processes. Its primary areas of current focus are health policy analysis, access to health care, health equity and financing, human resources for health and maternal health and health systems. CHP has recently successfully been awarded an NRF SARChI research chair in *Health Policy and Systems Research* which it intends to fill in 2013.

**The Health Policy and Systems Programme (HPSP) and Health Economics Unit (HEU) of the School of Public Health and Family Medicine (SOPH&FM), University of Cape Town (UCT)** – while the HPSP is a very new grouping, established only in 2008 to deepen UCT's work in understanding health policy change and whole system functioning, the HEU was founded in 1990. Together the groups conduct work focused on governance and decision making, healthcare financing, health system equity, access to care, and the economic evaluation of interventions for diseases of public health concern. The HEU is home to the NRF-funded SARChI research chair in *Health and Wealth*, which focuses on healthcare financing reforms to move towards universal coverage and on the social determinants of health in South Africa.

To situate these groups against international experience, Table 1 below presents some organisational profile indicators. It shows that the groups are perhaps a little smaller in size than groups elsewhere but that they have average to relatively good levels of expertise compared to other groups (considering the director's experience, and the proportion of staff with doctorate degrees). All groups have relatively few senior staff and limited administrative support, although CHP and HEU employ dedicated Communications Officers. Finally, the mean value of HPS grants these groups held at the end of 2011 was roughly comparable with one another (although UWC had a higher total number and value of grants), but appeared to be above that of the average for middle-income countries (MIC) (although all figures are quite crudely estimated).

**Table 1: Organisational Profiles of the three CHEPSAA affiliated groups**

	CHP, Wits	HPSP/HEU, UCT	SOPH, UWC (doing HPSR work)	2010 MIC (64 groups surveyed)
<b>Staff profile 2012</b>				
Director has more than 10 years' experience	Yes	Yes	Yes	51% of groups surveyed
Number of academic staff	16	12	13	18 (group mean)
Number of staff with Doctorates	5/16 (31%)	9/12 (75%)	4/13 (30%)	36% (group mean)
Number of senior academic staff (Associate Professor, Professor)	2/16	3/12	4/13	n/a
Number of administrative staff	5 including 1 part-time Communications Officer	5 including 1 full-time Communications Officer	14 for SOPH as a whole, not exclusive to HPSR	n/a
<b>Grant funding (end 2011)</b>				
Number of active HPS grants held	12	10	16	n/a
Total value of grants held	R31.2 million	R34.13 million	R39.6 million	n/a
Mean grant value (2011)	R2.4 million (approx. \$300 000)	R3.41 million (approx. \$426 250)	R2.47 million (approx. \$308 750)	\$137 135 (approx. R1 mill) (2010) (across total of 94 grants)
Number of grant-funded academic posts	15/16	9/12	6/13	n/a
<b>Grant funding sources*</b>				
International bilateral or multilateral	9 (75%)	6 (60%)	8 (50%)	66%
Government	3	2	2	22%
Private/Other (international and national)	1	3	6	16%

\* One grant could be funded by more than one source.

The grants held by the South African groups support a range of research and capacity development activities and are mostly funded by international agencies, although the South African Government does commission some of this work. Commissioned projects and operational research activities generally have shorter time frames than other projects (12 months or less) and address fairly tightly defined problems or questions. Independently initiated research, in contrast, is of longer duration (two to four years) and tackles broader sets of issues. Given the demands of such work relative to staff available, it is often conducted collaboratively among these groups or, given funding modalities, as part of multi-country projects.

The research activities supported by these grants address a fairly broad set of South African policy and systems issues and lie across the spectrum of HPSR research approaches. The table below shows the range of HPSR research activities that have been undertaken and that typically fall under the rubric of HPSR.

#### Examples of HPSR activities conducted in SA

Type of activity	Examples
Operational research	<ul style="list-style-type: none"> <li>Assessment and intervention to address waiting times and patient flows in health facilities</li> </ul>
Commissioned technical assistance	<ul style="list-style-type: none"> <li>Costing the scaling-up of antiretroviral treatment in 2007 and 2011</li> <li>Developing the 2011 outline of a primary healthcare package</li> <li>Supporting the development of the Office of Health Standards Compliance</li> <li>Developing a community-based services policy framework for the Western Cape</li> </ul>
Analytical studies	<ul style="list-style-type: none"> <li>The distribution of benefits and financing burdens across population groups and in terms of access to care</li> </ul>
In-depth research	<ul style="list-style-type: none"> <li>Investigating the state of nursing policies, practice and management</li> </ul>
Collaborative, qualitative	<ul style="list-style-type: none"> <li>Work conducted with health managers to understand the dynamics of sub-district governance and support action to strengthen management processes at this level</li> </ul>
Tracking and supporting health system reform	<ul style="list-style-type: none"> <li>Work that seeks to track and support the implementation of the current South African efforts to promote universal coverage, through close engagement with national and district managers</li> </ul>

As HPSR projects, these activities all adopt a system rather than service or programme focus, and commonly use social science perspectives in their work.<sup>20-23</sup> All research projects are also generally undertaken in collaboration with South African public health system managers and policy makers, although the extent and nature of this collaboration vary. Beyond research projects, meanwhile, staff from the three groups are also engaged in providing policy and managerial support to government colleagues in various ways. An independent evaluation of HEU, for example, noted "government respondents in SA cite multiple ways in which HEU has contributed to policy; areas frequently cited included health equity, health financing, drug policy, primary health care and district health systems".<sup>24</sup>

Finally, and unlike HPSR groups based outside universities, the three groups are all involved in formal post-graduate education programmes, training future generations of health system managers, analysts and researchers. These activities range from the UWC SOPH Winter and Summer School programmes, which have been attended by over 12 000 mostly South African students since 1992, to UCT's post-graduate Diploma in Health Management (the Oliver Tambo Fellowship programme), which now has over 250 alumni mostly working in the South African public health system, to the three universities' Masters of Public Health (MPH) programmes (including, at UCT, a specialist health economics programme), and growing numbers of HPSR doctorate degrees. The groups also support the more informal apprenticeship of younger staff members by creating spaces for learning within their routine activities. In the past, CHP and HEU both offered formal internship programmes but more recently there has been a strong focus in all groups on supporting younger staff to complete doctorates.

Although training and apprenticeship are offered to individuals, they can be seen as a health system intervention as over time the number of people reached in these ways is considerable. The research projects of masters and doctorate students, for example, represent a potentially important, but currently largely untapped, body of evidence for health system development. Training, meanwhile, shapes the way people understand health policy and systems issues and challenges and how to go about addressing them, as well as supporting skills development for managers, researchers, and health advocates.

Finally, the formal training programmes also play a regional capacity-development role. In 2010, for example, around 70% of UWC's MPH students were, for example, from the region and it is currently supporting a master's programme in health workforce development for the WHO AFRO region. UCT's MPH health economics, meanwhile, is one of only two health economics master's courses on the continent and is highly regarded by its graduates.<sup>25</sup>

## What challenges face the further development of HPSR in South Africa?

Despite the strong foundations that exist, participants in the 2012 PHASA pre-conference HPSR workshop<sup>a</sup> agreed that a range of challenges, at individual, organisational and system level, face the further development of South African HPSR work.

### Individual level

A key challenge for the individuals involved in HPSR is that this work requires multiple perspectives. On the one hand, it is important to have some understanding of how health programmes, facilities and systems work in practice and of their challenges. On the other hand, an appreciation of the contribution of different social science disciplines to HPSR inquiry as well as a broader population health perspective is useful, as is a recognition of and sensitivity to the differing value of quantitative and qualitative methodological approaches to data collection and analysis. This breadth of perspectives requires, in turn, the confidence and ability to engage with people who sometimes have quite different experiences. Those working in HPSR have to be what are called “boundary spanners” – working across the boundaries of experience and approaches to knowledge and across sets of people and organisational environments.

However, students and young academics generally come to this field either primarily with health service experience and a very limited familiarity with social science perspectives, or with more of a social science base and a limited understanding of health programmes, services and systems. In either case, they need time and opportunity to broaden their horizons, with the best learning coming through active engagement and dialogue. It is also important to be able both to conduct analytical and research work and to make public presentations and write clearly, and for different audiences. Those working in academic environments must, in addition, be able to teach and facilitate, and to develop, run and manage courses and programmes intended to provide learning opportunities for others. Not surprisingly, therefore, younger staff working in the CHEPSAA-affiliated groups identified a range of current knowledge and skills gaps. These included conceptual limitations in relation to HPSR, needs in writing and presentation skills, a range of teaching and supervision skills, inter-personal confidence and skills for networking and mentoring, and research management competencies (such as grant writing and project and financial management).

### Organisational level

Simply attracting younger academics into the field of HPSR and retaining them within the groups represents a first, key organisational challenge. Although public health and public policy, for example, are elements of other courses, HPSR is not itself taught at undergraduate level and so it is not widely known as a potential career option. Those who come to the field with some experience, meanwhile, can find the challenge of developing new skills and competencies tiresome, and may have unrealistic expectations of salary or career possibilities (particularly in academic organisations).

<sup>a</sup> This workshop was attended by around 30 participants drawn from government, universities and other research groups and sought to discuss both current South African HPSR work and future possibilities for strengthening it.

As Table 1 highlights, a sizeable proportion of posts in all three South African HPSR groups is grant funded. Not surprisingly, the relatively short-term and time-bound nature of such funding can generate contract instability. At an individual level, this makes planning the sort of long-term apprenticeship needed to develop HPSR capabilities very difficult; at an organisational level it can result in personnel turnover and instability. The pressure on senior staff in such groups is particularly intense. Beyond their own research, teaching activities and policy support work are the tasks of mentoring and coaching younger colleagues in their HPSR apprenticeship periods, as well as research, grant and teaching administration, including fund raising. Finally, as senior staff, they must also respond to broader organisational needs. Succession planning can be a real challenge in these situations.

The constant need of most groups to source and renew grants and to fulfil the very different, and sometimes demanding, reporting needs of different funders is a particular organisational demand. To support these activities, and lessen the burden on senior staff, some units have resorted to hiring extra staff to manage various operational and project management processes. However, such positions only add to the funding challenges, given limits on the level of overhead costs that can be included within research or other grants. A further funding issue is that some units do not hold any or many university-funded teaching posts, and so effectively cross-subsidise much of their teaching time from research grants (i.e. by allowing staff funded through research grants to spend some time teaching).

A final factor that commonly underpins resourcing challenges is the limited extent of organisational understanding and appreciation of HPSR. While all three CHEPSAA-affiliated HPSR groups are located within supportive schools of public health, for two, the broader environment remains primarily driven by the imperatives of clinical service provision and undergraduate health professional training. The multi-disciplinary knowledge base and trans-disciplinary approach of HPSR are just not always well understood or accepted by the biomedical paradigms of knowledge that dominate health research in the country.

### System level

As already noted, HPSR can play an important role in supporting current South African health system reform efforts. Indeed, health systems research has been established as a South African priority since the Essential National Health Research Strategy of 2001. Yet various system-level challenges remain to the consolidation and development of such work in South Africa.

There are, for example, practical disjunctures. While policy makers seek fairly quick inputs to immediate needs, HPSR groups may find it difficult to respond quickly. Given their grant-funded basis, they have to take on projects to fund their staff and so are bound to particular activities and timeframes. As a senior researcher in one of the units noted:

I think the critical question for units like ours is how you find the balance between responding to the immediate short-term needs of politicians and civil servants versus some of the longer term issues.

University-based groups' particular commitment to capacity development also brings the need to respect teaching timetables

and respond to student needs. They often simply do not have the spare person power or flexibility in person use to take on commissioned work or to respond to calls for advice and assistance from government colleagues.

There is also some scepticism about 'the other group' on both sides. Although some individual researchers are held in high esteem by those in the policy world, there seems to be a broader suspicion among policy practitioners and managers about researchers. This seems to combine a sense that those working in HPSR, in particular, are not sufficiently engaged with real world experience, and a concern that all academics think first of publications for their own benefit and only second about engaging with health service needs or reporting back. Certainly, researchers do not always have appreciation of the daily realities of health service provision or the urgency and pressures of policy making. Their reliance on international funding (see Table 1) may also divert them from domestic research priorities, including engagement with health system practice. But, from the researchers' perspective, governmental research leadership is not very strong and the pressures of health management make it difficult for government colleagues to engage with researchers or draw the available research into decision making. As a provincial government respondent noted:

I don't really feel there's anyone in the department that offers research leadership and if my unit is seen to be obstructive and bureaucratic and irritating, why would you even want to have a relationship within a unit like that? I think we haven't helped. I think we have the image of being the typical bureaucratic slow inefficient unit.

For HPSR, research scepticism also seems to be linked to conceptual disconnects. In the wider health community the dominant clinical, biomedical, and epidemiological health service<sup>12</sup> perspectives tend to focus on service rather than system issues, and particular forms of research. The issues identified as health systems research priorities at the 2011 National Health Research Summit,<sup>17</sup> for example, tend to focus on specific service delivery issues, rather than the widely acknowledged system challenges of, say, health worker motivation, priority setting and planning or management. It appears these wider issues are somehow not seen to be researchable questions, or that the related research approaches are not well understood or appreciated. Indeed, in drawing on social science perspectives, HPSR may challenge the understandings of the world and of research that underpin the dominant perspectives of health and health research in South Africa.

These types of disjunctures are, in turn, underlain, first, by the quite limited regular engagement among those with shared concern for health system development, who both do and could use HPSR – whether based in universities, NGOs, or government. There are few opportunities simply to pool different types of knowledge and experience of existing challenges and possible approaches to tackling them, and so to develop shared, and richer, understandings of research priorities and relevant research approaches. Competition for funding and multiple workplace demands seem sometimes even to limit engagement among the research community. Yet such engagement is really critical because of the complexity of health systems and their development – no group has a monopoly on good insights and ideas; indeed, if the challenges were simple, they would have already been addressed. Provinces are responding to this challenge differently.

The second underlying problem is the lack of deliberate national action to develop this area of work. There has been, for example, no large-scale domestic scholarship support for post-graduate training in the field, at either master's or PhD level. Until recently, few South Africans applied for the HEU Health Economics MPH, for example, and most of the three CHEPSAA-associated groups' South African doctorate candidates are its own staff. At the same time, there are very few established positions within government for those with health system analytic skills – such as health economists, policy analysts, or process analysts. As one university respondent stated:

if you are someone who comes out with a degree there is nowhere for you to go to deploy your skills; you either do something else or you go to the private sector or you go to stay in the university.

Yet much of the analytic work that is currently commissioned and demanded by government would probably be better done in-house. There is a clear need for analysts working within government who have the range of skills necessary to support the translation of available evidence and research into decision making, as well as to commission research that cannot be done in house.

Funding remains the final challenge. The 2011 National Health Research Summit report notes that in 2011/12 the Department of Health invested only 0.37% of its budget in all forms of health research,<sup>17</sup> falling well short of its commitment to meet the 2% of budget target set in the Mexico and Bamako ministerial meetings. Whilst it is not known what proportion of the national health research budget is directed specifically to HPSR, it can be estimated as very little. Only HST has any form of structured and limited funded relationship for research with government, and the MRC also allocates relatively little of its total budget to HPSR. In contrast, however, the NRF has made a significant contribution in approving three HPSR chairs within the SARCHI. This funding has the added value of being linked to broad programmes of work, rather than very tightly defined projects over five-year periods and includes some scholarship funding at master's, doctoral and post-doctoral levels.

### Strengthening the capacity to generate and use evidence for health system development

As SA looks to the future – and pursues its goal of health system transformation, it is essential that it also takes action to develop the engine room of transformation – i.e. the knowledge and evidence base to support change, and the capacity to draw it into decision making. HPSR is vital to that effort as it addresses the systemic challenges that must be tackled to improve service delivery, support implementation of public health priority programmes, and so contribute to improved population health. The 2012 WHO HPSR strategy<sup>1</sup> affirms that: "At its best, HPSR should function as the GPS of health decision-making, providing navigational support to the decision-maker, locating the starting point for the journey (the health problem), the desired destination (the health outcome) and options for getting there (health solutions)."

This strategy, and the wider literature, also confirms that the South African challenges to HPSR development are not unusual. However, the examples of middle-income countries that have successfully implemented large-scale health system transformation offer lessons from which SA can learn. Drawing on such experiences, the WHO

calls for “HPSR to become embedded in the ecosystem in which the decision makers operate”<sup>1</sup> and identifies six broad areas of action (Box 3). Both researchers and decision makers must take action. Demand-driven research, for example, requires the transparent and collaborative identification of research priorities and decision makers who support evaluation of large-scale reforms and who are personally ready to use evidence in their decision making.

### Box 3: WHO HPSR strategy actions

- 1 Embed research within decision-making processes
- 2 Support demand-driven research
- 3 Strengthen capacity for research and use of evidence
- 4 Establish repositories of knowledge
- 5 Improve the efficiency of investments in research
- 6 Increase accountability for actions

The lessons of experience suggest that a key step towards embedding HPSR in decision making is greater and more regular engagement among decision makers and researchers. It was timely, therefore, that the 2012 PHASA pre-conference workshop discussed the value of establishing a national network or community of practice for HPSR in South Africa. Bringing together researchers inside and outside government, with practitioners in all spheres of government and in NGOs, such a network would give the field a stronger voice and a credible presence.

Concretely, participants felt that such a network could:

- > develop a common language for the field;
- > synthesise experiences and research results;
- > develop joint research agendas, and so avoid duplication; and
- > better respond to government needs.

Its value would, however, lie very strongly in building relationships among interested groups – allowing different forms of experience and knowledge to be shared (from the tacit knowledge of managers and advocates to the theoretical knowledge and awareness of wider experience of researchers); generating more rounded and in-depth understanding of current challenges and opportunities for health system development; and allowing a greater appreciation of the range of research available and of the value of different types of evidence.

Greater recognition of HPSR could also be a key first step towards securing more funding for it. The importance of funding to sustaining HPSR worldwide led the WHO to identify three areas of action by funding bodies:<sup>1</sup>

- > “Minimum targets for HPSR funding, as a proportion of all health research funding, could be established by donors and governments in order to ensure sufficient resources for the conduct of research.
- > Allocate resources for HPSR as part of programme activities (planning, implementation, and evaluation) ... to ensure adequate funding for relevant research to inform these processes.
- > To facilitate the generation of evidence that responds to complex health system challenges that can only be understood over an extended period of time, efforts should be made to establish flexible funding mechanisms that are not restricted

to individual projects. Institutional endowments and/or cooperative agreements could be used by funders of research to support a range of trans-disciplinary research activities to address multi-faceted health system problems.”

In South Africa, the funding needs are not only for research but also, critically, for capacity development. Those engaged in teaching and capacity development must, therefore, be fully funded for their capacity-development roles. However, the restriction of the recently announced health scholars programme to health professionals eligible to register with health statutory councils only demonstrates the current system-bias against the broader perspectives of HPSR.

Beyond funding, moreover, SA must also consider how to attract a wider range of, and younger, people into HPSR – to work as researchers, analysts and managers and to sustain capacity development efforts. The necessary actions include efforts to develop the skills, knowledge and networks that enable boundary spanning, with clear training and apprenticeship opportunities. Supportive environments are also important – including retention incentives and career trajectories within the field that span organisational boundaries. Government posts must be established for those doing HPSR and more secure funding must be found for those groups working outside government. An HPSR community of practice could also both itself help to give value to this area of work, and develop practical recommendations on this range of issues.

Looking to the future, Box 4, finally, outlines the priority HPSR issues and methodological needs that the budding South African HPSR community itself identified at the PHASA pre-conference workshop.

### Box 4: South African priorities for HPSR development

- ❖ Substantially more research with a systems rather than an intervention focus should be carried out.
- ❖ In relation to the NHI there is a great need to understand what the policy will mean and how it will impact on and reshape health systems functioning. There is also a need to track and monitor implementation and to learn from implementation continuously.
- ❖ More research needs to focus on the meso- and micro levels of systems’ development, rather than primarily the macro level.
- ❖ There is a need for research that investigates why implementation fails, what guides implementation at the level of service delivery, and that understands the role of power and politics in the development of health systems. Research should also investigate the role of actors and what guides people’s action. The factors that influence what people do are very important questions in this regard.
- ❖ We need to develop methods and approaches that recognise and provide insight into the complexity of health systems functioning, understanding that such research often takes time and defies single tools and quick solutions.
- ❖ There is a need for collaborative research approaches and initiatives, strengthening the applied research skills of all involved. This includes action-oriented research that covers the continuum from policy formulation to implementation. And it includes attention to user-friendly, participatory approaches that strengthen the researcher-practitioner link: researchers need to be informed by implementers’ needs and implementers need to see research results.
- ❖ We need to synthesise and share what we are learning across projects. At present there is too much fragmentation and research is disparate and uncoordinated. There is a need to create fora for such sharing and engagement across projects, institutions and research approaches.



## Acknowledgements

The work presented in this chapter was funded by the European Commission FP7-Africa-2010 (EC Grant Number: 265482). We thank all those who were involved in the capacity assessments presented here. We also thank our colleagues in the CHEPSAA consortium and, in particular, Tolib Mirzoev and the team at the Nuffield Centre for International Health and Development, University of Leeds, for their development of the assessment approach.

## References

- 1 World Health Organization. Changing mindsets. Strategy on Health Policy and Systems Research. Geneva, Switzerland: World Health Organization; 2012.
- 2 World Health Organization. The World Health Report 2000 – Health systems: Improving performance. Geneva, Switzerland: World Health Organization; 2000.
- 3 World Health Organization. Global Ministerial Forum on Research for Health; Bamako, Mali. 17-19 November 2008.
- 4 World Health Organization. Ministerial Summit on Health Research; Mexico City, Mexico. 16-20 November 2004.
- 5 Hoffman SJ, Røttingen J, Bennett S, Lavis JN, Edge JS, Frenk J. Background paper on conceptual issues related to health systems research to inform a WHO Global Strategy on Health Systems Research. Geneva, Switzerland: Alliance for Health Policy and Systems Research; 2012.
- 6 World Health Organization. Closing the gap in one generation. Health equity through action on the Social Determinants of Health. Geneva, Switzerland: World Health Organization; 2008.
- 7 Gilson L, Hanson K, Sheikh K, Agyepong IA, Ssengooba F. Building the field of health policy and systems research: Social science matters. *PLoS Medicine*. 2011;8(8):e1001079.
- 8 Sheikh K, Gilson L, Agyepong IA, Hanson K, Ssengooba F. Building the field of health policy and systems research: Framing the questions. *PLoS Medicine*. 2011;8(8):1-6.
- 9 Van Olmen J, Marchal B, Damme W, Kegels G, Hill P. Health systems frameworks in their political context: Framing divergent agendas. *BMC Public Health* 2012;12(1):774.
- 10 World Health Organization. Scaling up research and learning for health systems: Now is the time. Geneva, Switzerland: World Health Organization; 2008.
- 11 Bigdeli M, Jacobs B, Tomson G, Laing R, Ghaffar A, Dujardin B, et al. Access to medicines from a health system perspective. *Health Policy Plan*. 2012 (Unpublished. Accepted 2012).
- 12 Gilson L, editor. Health policy and systems research. A methodology reader. Geneva, Switzerland: Alliance for Health Policy and Systems Research; 2012.
- 13 De Savigny D, Adam T, editors. Systems thinking for health systems strengthening. Geneva, Switzerland: Alliance for Health Policy and Systems Research; 2009.
- 14 Swanson RC, Cattaneo A, Bradley E, Chunharas S, Atun R, Abbas KM, et al. Rethinking health systems strengthening: Key systems thinking tools and strategies for transformational change. *Health Policy Plan*. 2012;27(Suppl 4):iv54-iv61.
- 15 Harrison S. Health Policy. In: Fulop N, Allen P, Clarke A, Black N, editors. Studying the organisation and delivery of health services: Research methods. London: Routledge; 2001.
- 16 National Department of Health. Strategic Plan 2010/11-2012/13. Pretoria: National Department of Health; 2010.
- 17 Mayosi BM, Mekwa NN, Blackburn J, Coovadia H, Friedman IB, Jeenah M, et al. 2011 National Health Research Summit Report. Pretoria: National Department of Health; 2011.
- 18 Von Holdt K. Nationalism, bureaucracy and the developmental state: The South African case. *S Afr Rev Soc*. 2010;41(1):4-27.
- 19 Penn-Kekana L, Blaauw D, Schneider H. "It makes me want to run away to Saudi Arabia": Management and implementation challenges for public financing reforms from a maternity ward perspective. *Health Policy Plan*. 2004;19 Suppl 1:i71-i77.
- 20 Lehmann U, Gilson L. Actor interfaces and practices of power in a community health worker programme: A South African study of unintended policy outcomes. *Health Policy Plan*. (Unpublished, accepted 2012).
- 21 Schneider H, Blaauw D, Gilson L, Chabikuli N, Goudge J. Health systems and access to antiretroviral drugs for HIV in Southern Africa: Service delivery and human resources challenges. *Reproductive Health Matters*. 2006;14(27):12-23.
- 22 Ditlopo P, Blaauw D, Bidwell P, Thomas S. Analyzing the implementation of the rural allowance in hospitals in North West Province, South Africa. *J Public Health Policy*. 2011;32 Suppl 1:S80-S93.
- 23 Bennett S, Agyepong IA, Sheikh K, Hanson K, Ssengooba F, Gilson L. Building the field of health policy and systems research: An agenda for action. *PLoS Medicine*. 2011;8(8):e1001081.
- 24 Gilson L, Doherty J. South African managers speak out. Lessons for innovative health management. Innovative health management in the public sector. University of Cape Town: Oliver Tambo Fellowship Programme; 2010.
- 25 Mayosi BM, Lawn JE, Van Niekerk A, Bradshaw D, Abdool Karim SS, Coovadia HM. Health in South Africa: Changes and challenges since 2009. *The Lancet*. 2012;380(9858):2029-43.