Published by Oxford University Press in association with The London School of Hygiene and Tropical Medicine *Health Policy and Planning* 2014;**29**:iii35–iii50

doi:10.1093/heapol/czu063

Mapping the existing body of health policy implementation research in lower income settings: what is covered and what are the gaps?

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3

Accepted 9 June 2014

This article uses 85 peer-reviewed articles published between 1994 and 2009 to characterize and synthesize aspects of the health policy analysis literature focusing on policy implementation in low- and middle-income countries (LMICs). It seeks to contribute, first, to strengthening the field of LMIC health policy analysis by highlighting gaps in the literature and generating ideas for a future research agenda and, second, to thinking about the value and applicability of qualitative synthesis approaches to the health policy analysis field. Overall, the article considers the disciplinary perspectives from which LMIC health policy implementation is studied and the extent to which the focus is on systems or programme issues. It then works with the more specific themes of the key thrusts of the reviewed articles, the implementation outcomes studied, implementation improvement recommendations made and the theories used in the reviewed articles. With respect to these more specific themes, the article includes explorations of patterns within the themes themselves, the contributions of specific disciplinary perspectives and differences between systems and programme articles. It concludes, among other things, that the literature remains small, fragmented, of limited depth and quite diverse, reflecting a wide spectrum of health system dimensions studied and many different suggestions for improving policy implementation. However, a range of issues beyond traditional 'hardware' health system concerns, such as funding and organizational structure, are understood to influence policy implementation, including many 'software' issues such as the understandings of policy actors and the need for better communication and actor relationships. Looking to the future, there is a need, given the fragmentation in the literature, to consolidate the existing body of work where possible and, given the often broad nature of the work and its limited depth, to draw more explicitly on theoretical frames and concepts to deepen work by sharpening and focusing concerns and questions.

Keywords Health policy analysis, LMIC, policy implementation, synthesis

KEY MESSAGES

- The main features of the existing body of work adopting a broad policy analysis perspective on health policy implementation in low- and middle-income countries are: small, fragmented, of limited depth and quite diverse, reflecting a wide spectrum of health system dimensions studied and many different suggestions for improving policy implementation.
- Synthesis of the available literature assists in addressing fragmentation by drawing out key themes and highlighting particular contributions.
- This literature highlights as key influences over implementation, various 'software' issues such as the understandings of policy actors, communication practices and actor relationships.
- Strengthening work in this field will require further consolidation of available work under key themes, the use of theory to deepen exploratory and explanatory analysis around focused questions and work that addresses a broader set of theory-informed research questions.

Introduction

International health policy analysts are increasingly concerned with policy implementation problems and the prospects for more effective implementation to achieve intended outcomes. However, this concern is often primarily about how better to operationalize existing, discrete health interventions or programmatic policies. Such an approach risks overemphasizing the notion of health systems as vehicles for delivering technological solutions, and underemphasizing the understanding that health systems are grounded in political and social contexts and therefore inextricably linked to power structures, interests and interdependencies (Sheikh *et al.* 2011). In contrast, from a health policy analysis perspective, theoretical and empirical analysis of public policy implementation incorporates an explicitly contextual understanding of health systems, considers how the implementation process can affect the outcomes of any intervention, and is concerned with the influence of actors, power and contestation over implementation. As Hill and Hupe (2009) note in their seminal book, such implementation research is increasingly seen as an element of the broader terrain of governance research. It could offer important insights for international health policy and, more specifically, for those managing the implementation of interventions and broader national-level processes of health system development.

This article, therefore, presents a mapping of the substantive concerns of the literature adopting a broad policy analysis perspective on health policy implementation in low- and middle-income countries (LMICs). It aims both to contribute to international debates by synthesizing the main areas of present work in this field, and to generate ideas for a future research agenda by highlighting gaps and limitations in the literature. The mapping extends and updates Gilson and Raphaely's (2008) review of the full range of LMIC health policy analysis literature by considering in more detail approaches to, and understanding of, health policy implementation processes. As this literature is multi-disciplinary, the mapping deliberately considers the contributions of different disciplines, exploring their different and combined value for understanding implementation. Recognizing a key distinction in health system understandings (Travis *et al.* 2004), the article also explores differences between articles addressing system-level issues and interventions (such as health care financing, decentralization and donor co-ordination) and articles focused more on health programmes and interventions (such as reproductive health, tuberculosis (TB) and HIV/AIDS).

Finally, the article contributes to a broader project considering the value of qualitative synthesis approaches to the health policy analysis field and seeking to apply different synthesis approaches. For this mapping, we draw, if quite loosely, on the approach of meta-study (Zhao 1991; Dixon-Woods *et al.* 2005). In line with meta-data synthesis, we attempt to synthesize some of the substantive information, findings and recommendations in the reviewed articles, using a thematic technique. As in meta-theory synthesis, the mapping also explores the theoretical frameworks influencing the reported research and how these frameworks have been used by researchers. We do not, however, draw on a meta-method synthesis in this article, nor do we attempt to bring together data, theory and methods to develop mid-range theory out of the reviewed literature, as might be done in a more comprehensive meta-study. Nonetheless, the broad use of meta-study elements is appropriate to our concerns of generating ideas about the future development of the implementation literature, and, through the wider project, the value of synthesis work in advancing the field of health policy analysis. As Zhao (1991, p. 379) argues: 'Meta-study . . . is discipline-oriented: different realms of a discipline are examined not for conducting a particular project but for understanding and advancing the discipline'.

The article begins by describing the mapping methods and offering a brief characterization of the literature, followed by more detailed exploration of: (1) the main intents or key thrusts of the reviewed articles, (2) the implementation outcomes identified within them (3) and the suggestions for improved policy implementation made within them—all of which provide an overview of the substantive concerns of this body of work and (4) the use of theory, recognized to be important in conducting rigorous analysis in this field (Walt *et al.* 2008). The article concludes with thoughts about the nature of the LMIC health policy analysis implementation literature and suggestions for its strengthening.

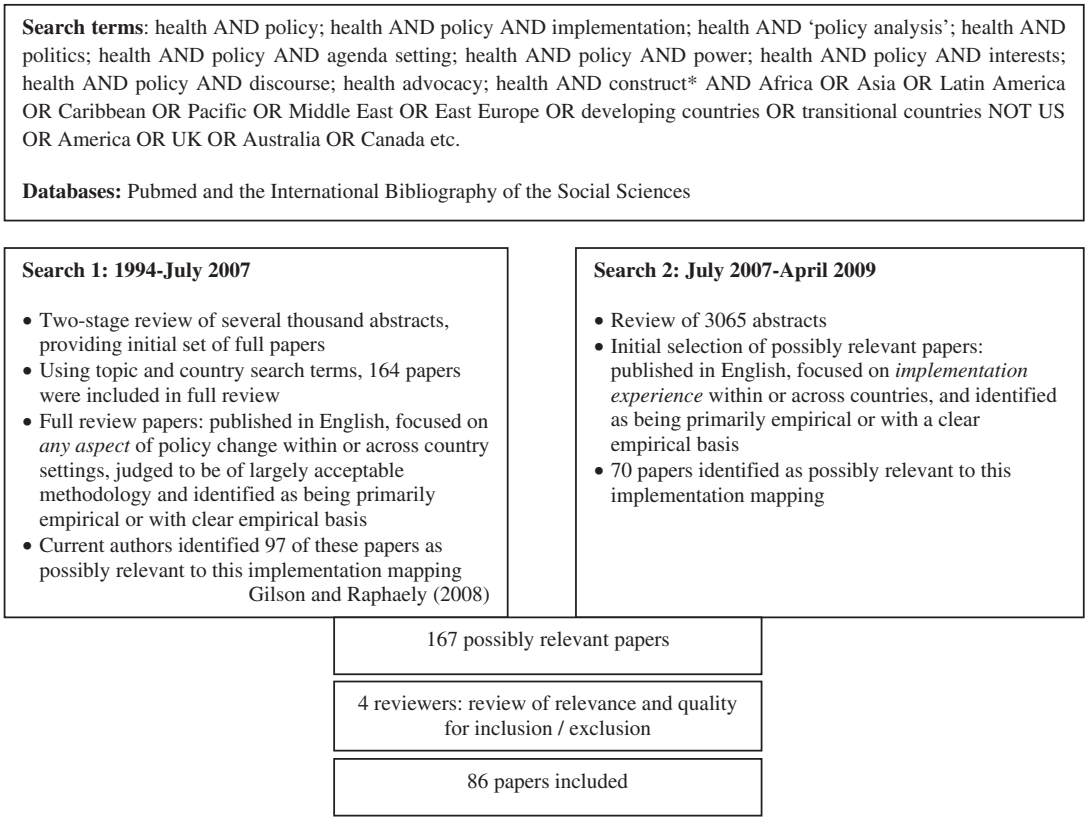

Figure 1 Literature search and article selection processes.

Mapping the literature

This mapping relied on two complementary literature searches to identify articles for review (Figure 1). First, we identified 97 potentially relevant articles from the systematic search undertaken by Gilson and Raphaely (2008) for the years 1994–2007. Second, the present research team used the same search terms and databases to update the Gilson and Raphaely search for the period July 2007–April 2009. A further 70 possibly relevant articles were identified from this latter period; generating a total of 167 articles thought to be relevant.

Articles were potentially eligible for inclusion if they were published in English and focused broadly on understanding or explaining, with empirical evidence, *how and why health policies are implemented* in particular ways in LMICs. Such articles would cover not only the content of a policy, but also the actors, processes and/or contexts that influence the experience (Gilson and Raphaely 2008) as well as focus on the experience of putting policy into practice within the health system, as distinct from articles primarily concerned with agenda setting or the processes (including policy formulation) between agenda setting and policy implementation.

The full text of 167 potentially relevant articles was then reviewed by four reviewers, simultaneously considering relevance in terms of the inclusion criteria and quality, based on the method of Wallace *et al.* (2006). Initially, all the reviewers examined the same sub-sample of articles and discussed their judgements to iron-out problems with the approach and to calibrate their judgements. Each reviewer was then allocated approximately a quarter of the articles for individual review, and cross-checked difficult judgements about relevance and/or quality with a second reviewer to reach joint decisions on inclusion or exclusion. Finally, 86 articles were selected for the mapping and then grouped by disciplinary perspective to allow consideration of the influence of such perspectives on the issues examined and on how they are examined.

Identifying disciplinary perspectives was not straightforward as relevant journals rarely have a particular disciplinary base and authors often do not identify their disciplinary starting points. Judgments about each article's disciplinary perspective were, therefore, made using various strategies, including author references, using the reviewers' personal knowledge about authors and assessing article content, e.g. the concepts and frameworks used. The articles were categorized as: policy analysis and political science (24), no clear disciplinary perspective (19), anthropology and sociology (18), general health systems (17), management (7) and history (1 article). The category of no clear disciplinary perspective indicates the challenges faced in this task. The single history article was excluded from further analysis as it alone could not contribute much to the overall consideration of the role of different disciplines.

The more detailed syntheses presented here draw on the following information extracted using a standard template from

each of 85 articles, and then summarized in brief for further analysis:

- The article's main thrust, intent or question;
- The outcomes of policy implementation processes considered in the article;
- Conclusions, recommendations or suggestions around actions that could improve policy implementation; and
- Whether theory was used in the article, which theory was used and for what purpose (to guide data analysis, to frame the discussion, to derive conclusions/a combination of purposes).

For each item, relevant data was extracted from any part of the article and, for some items, complemented by reviewer summaries or judgements to assist synthesis (e.g. summaries of main thrusts, intents or objectives, especially when not stated very clearly, or judgements on the purpose of theory used in the article).

Overview of the literature

All 86 included articles were initially analysed by publication year and disciplinary perspective, and, separately, by year and according to whether they focused predominantly on health systems or health programme issues.

Table 1 demonstrates the breadth of disciplinary perspectives within the articles mapped. Notably, only around 28% (24) of the articles were categorized as policy analysis and political science, although this perspective is particularly relevant to policy implementation as understood here. The small sizes of the management and history groups also belie their potential value in understanding health policy change and health system development (Fulop *et al.* 2001). The relatively large size of the general health systems group might result from the question-focused, rather than discipline-bound, nature of this area of work (Sheikh *et al.* 2011), allowing a breadth of topics to be addressed within it. These range from an exploration of factors affecting the professional development of dieticians who are completing compulsory community service in South Africa (Paterson *et al.* 2007), to community participation in Colombia (Mosquera *et al.* 2001) and the context and processes of aid co-ordination in Cambodia (Lanjouw *et al.* 1999). The category of no clear disciplinary perspective also reflects the broader lack of theoretical specification or grounding within this set of articles. They include an investigation of progress in health policy development and implementation in Croatia (Šogorić *et al.* 2009), exploration of the experiences of nurse educators in the rationalization of nursing education (Makhuvha *et al.* 2007), a study of the factors limiting the implementation of smoking policies in hospitals (Wang *et al.* 2008) and a description of the process of scaling up a reform from pilot studies (Kaufman *et al.* 2006).

Table 2, meanwhile, indicates a fairly balanced focus in the articles between systems (47 articles) and programme (39 articles) concerns. The specific topics organized under the heading of health systems included health financing, donor co-ordination, decentralization, community participation and human resources, whereas focal areas such as HIV/AIDS, TB, malaria, reproductive health and tobacco control were incorporated into health programmes.

The specific focal areas of decentralization, reproductive health and HIV/AIDS have so far been the most enduring concerns in the literature—in that articles on these areas are present in, respectively, 9, 9 and 7 out of the 16 years covered in this mapping. The disciplinary categories of no clear disciplinary perspective (11), anthropology and sociology (9) and general health systems (9) encompassed the most focal areas. One of the clearest concentrations of focal areas is in the discipline of policy analysis and political science where only two topics (reproductive health, 7 articles; health financing, 6 articles) account for 54% of the articles reviewed. This concentration can, to some extent, be explained with reference to specific authors and a common organizational base, the London School of Hygiene and Tropical Medicine. With regard to reproductive health, e.g. the combination of Lush, Walt, Cleland and Mayhew were together or separately authors on four of the seven articles. With respect to health financing, Gilson (as first or second author) appears on three out of the six articles.

Finally, Tables 1–2 show that the health policy implementation literature for LMICs (1994–2009) reviewed here was characterized by peaks and troughs of growth and productivity. The years 2006–2008 accounted for 30 (35%) of the articles included in this mapping; 1999–2001 accounted for 26 (30%); and 2003–2004 for 15 (17%). In contrast, the remaining 8 years accounted for only 15 (17%) of the articles included in this mapping. Although not easy to explain fully, the publication of several articles together in special journal issues is one factor contributing to these patterns. For example, in 2003, three of the six articles included in this mapping were published in the same edition of Reproductive Health Matters (integration of services) and in 2004, three of the nine articles appeared in a supplement of Tobacco Control focusing on the Asian tobacco industry. The publication patterns also seem to be influenced by

Table 1 LMIC health policy implementation literature (1994–2009) reviewed here, by discipline

Discipline	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
Policy analysis and political science				1	2	1	3	2	1	3	3		1	4	3		**24**
No clear disciplinary perspective				1		2	2	1	1		4		1	2	4	1	**19**
Anthropology and sociology	1		1			1	4	3			1	1	2	2	2		**18**
General health systems						4		2		2	1		2	4	2		**17**
Management	1		1		1		1		1	1			1				**7**
History																1	**1**
Total	2	0	2	2	3	8	10	8	3	6	9	1	7	12	11	2	86

the productivity of individual authors or collaborations. In 2000, e.g. Seidel was the first author on 2 out of the 10 articles and Mayhew on another two, thereby together contributing 40% of the articles published in that year.

Overall, however, and perhaps reflecting the underdeveloped nature of the broader terrain of health policy and systems research in LMICs (Gilson and Raphaely 2008; Sheikh *et al.* 2011), this initial characterization indicates that health policy implementation research remains a small field, quite fragmented in its focus and drawing surprisingly little on some of the most relevant disciplinary perspectives. It was, therefore, not easy to discern many patterns in the way in which disciplinary perspectives addressed issues or in comparing the issues addressed in systems and programme papers. Relevant insights are highlighted below.

The substantive concerns of the literature

Main thrust, intent or question

One briefly summarized main intent, thrust or question was distilled for each of the 85 articles analysed and then grouped inductively to support description of this field of work. The grouping was led by one of the authors, and adapted in response to questions and comments from the other authors. Where possible, judgements were based on the questions or objectives explicitly stated in the articles, but interpretive judgements were sometimes needed due to some articles' breadth of focus or lack of clarity—and the act of summarizing inevitably involves such a judgement.

Table 3 lists these categories of main thrusts, intents or questions, including examples selected to illustrate the categories and to include examples from a variety of authors and settings.

The categories of broad descriptive account of the policy process, explaining implementation failure or the non-implementation of policy, and factors that enabled and/or constrained policy implementation represent three of the four largest groupings and suggest these articles take a fairly broad, perhaps descriptive, approach. In contrast, those articles which clearly intended to explore and test theory and assumptions, as is important when conducting analytic work (Walt *et al.* 2008), was one of the smaller groupings. This might be related to authors' varied disciplinary backgrounds and the importance the field as a whole attaches to informing practice. The range of

Table 2. LMIC health policy implementation literature (1994–2009) reviewed here, by focus

Main issue focus:	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
Health systems	2		1	2	2	5	3	6	2	4	3	1	3	6	6	1	**47**
Health programmes			1		1	3	7	2	1	2	6		4	6	5	1	**39**
Total	2	0	2	2	3	8	10	8	3	6	9	1	7	12	11	2	86

Table 3. Categories of main thrusts, intents or questions

Category of main thrust, intent or question	No.	Examples
Broad descriptive account of policy process (framed broadly as understanding, examining, reviewing, exploring, summarising, describing, etc.)	22	Hoodfar and Assadpour 2000: Account of Iranian population policy phases, examining what led leaders to change their views about fertility control and participate in creating a workable family planning programme
		Tolhurst *et al.* 2004: Exploring factors affecting the implementation and impact of China's Maternal and Infant Health Care Law
Relationship between context and policy implementation	19	
Influence of political and social context	9	Hill 2000: Shows the limits of structured strategic planning processes in complex and highly uncertain situations, with little reliable information and fast-changing environments
		Atkinson *et al.* 2000: Explores Brazilian district health systems cases to identify aspects of local social organization and political culture that influence reform implementation and quality of care
Role of discursive context	4	Seidel 2000: Explores, among other things, how reducing mother-to-child transmission (MTCT) in South Africa is being debated using the language of rights, the shaping influence of competing representations of 'woman' and 'motherhood' on MTCT responses, and the messages pregnant women are receiving about transmission through breastfeeding
		Richey 1999: Explores the discourse surrounding the Tanzanian National Population Policy. Ambiguity in this discourse may be strategic because it enables the government to ally itself with certain stakeholders, without alienating others
Role of micro-contexts	3	Evans and Lambert 2008: Argues, based on the experience of an Indian sex worker initiative, that ethnographic research can illuminate the dynamics of context, practice, agency and power that are specific to a project and shape intervention implementation in ways that may be 'hidden' in conventional project reporting techniques. Presents detailed excerpts of 'private contexts of practice'

(continued)

Table 3. Continued

Category of main thrust, intent or question	No.	Examples
		Seidel *et al.* 2000: Reports a support group of HIV-positive mothers' experiences and decisions around breastfeeding. The focus of information-giving and decision-making as to breast or formula feed is concerned with the impact on individual HIV-positive women and their babies
Role of policy in changing the context	3	Penn-Kekana *et al.* 2004: Examines factors shaping midwives' practice in South African district hospitals during the implementation of a reform to improve financial management. The financial management reform had the unintended consequence of causing the quality of maternal health services to deteriorate
		Crook and Ayee 2006: Examines officials in an environmental health department, where privatization and contracting-out of sanitary services have imposed new ways of working on these officials
Factors that enabled and/or constrained policy implementation	9	Harrison *et al.* 2000: Explores primary care nurses and community members' attitudes and beliefs about abortion and the South African Termination of Pregnancy Act to better understand barriers to implementation
		Tendler and Freedheim 1994: Draws lessons from innovative programmes carried out by a Brazilian state government and identifies factors central to high performance
Implementation failure / the non-implementation of policy	8	Kamuzora 1996: Seeks to explain limited success with primary health care (PHC) implementation in Tanzania
		Jeppsson *et al.* 2003: Analyses the restructuring of a Ministry of Health, describes the principles informing this restructuring, and assesses whether the expected outcome was achieved
Exploring theory or assumptions (as influence on policy implementation)	7	Cliff *et al.* 2004: It is often assumed that international health policies are imposed on developing countries. Drawing on analytical frameworks developed to study policy transfer, this article explores to what extent two globally promoted infectious disease policies were voluntarily or coercively transferred in Mozambique
		Atkinson 1997: Refers to certain concepts—veto points within an interaction, feedback model of the policy process and a three-dimensional view of power—and demonstrates their relevance to case studies of health reform in low-income countries
Uptake or scaling up of policy	6	Atun *et al.* 2007: Examines the introduction and diffusion of family-medicine-centred primary health care reforms in Bosnia and Herzegovina
		Kaufman *et al.* 2006: Covers a reform of China's approach to implementing its family planning programme and reviews how a small, innovative pilot project was scaled up into a national reform
Roles and perspectives of health workers in policy implementation	4	Stein *et al.* 2007: Studies the views of health-care professionals, especially nurses, on the anti-retroviral therapy roll-out in a South African province
		Walker and Gilson 2004: Reports the experiences, perceptions and perspectives of nurses in primary care health clinics around the implementation of policies introduced in South Africa. It paid particular attention to the personal and professional consequences of policy change, factors influencing nurses' responses to policy change, and nurses' perceptions of barriers to effective policy implementation
Powers and roles of actors or stakeholders in the implementation process	4	Alonso and Brugha 2006: Describes the process and analyses the roles of the different stakeholders in the establishment of a government-led district health system in East Timor
		Kajula *et al.* 2004: Assesses the dynamics flowing from the rapid change in Ugandan user-fee reforms and the effects on service delivery for malaria control. The feasibility of user-fees in Uganda was undermined by the absence of strong central government leadership and strategies to manage the politics of the reforms
Impact of research or evidence on policy implementation	2	Haaga and Maru 1996: Assesses how and under what circumstances research-based advice and pilot project results contribute to changes in large-scale public programmes
		Amin *et al.* 2007: Reviews the evidence used to change a recommendation for the treatment of malaria in Kenya and the challenges facing the Kenyan government before and during policy implementation

sub-topics within the second largest category, the relationship between context and policy implementation, may suggest a richer consideration of contextual issues within this set of articles. The few articles considering policy actors' roles in implementation is perhaps surprising given the acknowledged role of actors in policy change (Walt and Gilson 1994). There were no clearly significant and interesting differences in the distribution of systems and programme articles across categories.

Implementation outcomes

The reviewers also considered the outcomes of implementation reflected in the articles, focusing on how authors anchored their descriptions of policy implementation processes and their yardsticks for judging policy implementation progress and success or failure. As summarized in Table 4, 147 outcomes were identified from the 85 articles. Table 4 shows both the themes into which the outcomes were grouped and selected examples illustrating each theme.

Table 4. Categories of implementation outcomes

Implementation outcome categories	No.	Examples
Health system processes	44	
Degree of co-ordination and collaboration among, for example, sectors, health professionals, donors and country governments	20	Lanjouw *et al.* 1999: Co-ordinated analysis of problems and resource allocation to them—effective co-ordination
		Lake and Musumali 1999: Effectiveness of co-ordination
Degree of accountability, responsiveness and access to rights	11	David and Zakus 1998: Community co-optation
		Foley 2001: Lack of accountability and responsiveness and lack of responsiveness to women's needs
Extent of diffusion/adoption	6	Gladwin *et al.* 2002: Information system adoption
		Atun *et al.* 2007: PHC uptake
Degree of decentralization	3	Birn 1999: In relation to various functions, where and how much decentralization has really taken place
		Araújo 1997: Extent to which devolution has been achieved in terms, for example, of the power of local authorities
Miscellaneous health system processes	2	Rahman 2007: Inadequate monitoring of private facilities
		Foley 2001: Conflict over resources
Miscellaneous management processes	2	Gomez 2008: Functioning of municipalities—municipal entrepreneurship
Access	35	
Access/utilization	32	Foley 2007: Uptake of contraception
		Paterson *et al.* 2007: Underutilization of services
Access/financial protection	3	Kamuzora and Gilson 2007: Enrolment in a community health fund
		Plaza *et al.* 2001: Enrolment/coverage overall and for the poor
Match between reality and paper/intentions	19	Harper 2006: Unintended consequences and contradictions in practice
		Wang *et al.* 2008: Ignored the policy over the long term
Perceptions of implementers and health service users	18	Seidel *et al.* 2000: Patients feeling devalued or humiliated due to health worker treatment
		Penn-Kekana *et al.* 2004: Misunderstanding of objectives
Impact on the way services are delivered	12	Tolhurst *et al.* 2004: Improvements in service provision, e.g. quality improvements
		Lee *et al.* 1998: Family planning programme strength
Health system inputs	12	
Hardware (drugs, equipment, infrastructure, etc.) availability	6	Cliff *et al.* 2004: Shortage of drugs
		Tolhurst *et al.* 2004: Improvements in service provision, e.g. increased equipment
Human resource availability, motivation and development	6	Paterson *et al.* 2007: Dieticians' level of professional development
		Crook and Ayee 2006: Various reforms' impact on staff motivation
Health indicators	7	Tendler and Freedheim 1994: Reduction in infant deaths
		Atun and Olynik 2008: Rates of TB and HIV infection and mortality

Unsurprisingly, Table 4 reflects a strong overall focus on impacts on, or of, the health system. It also incorporates a wide range of outcomes, the complexity and multi-dimensionality of which highlight that health systems are social systems through which a variety of objectives are pursued. Not only do these outcomes include traditional health system evaluation concerns such as impact on diseases and access to care, but they also extend to other health system processes such as furthering principles of accountability and good governance. The range of outcomes furthermore includes tangibles such as the availability of equipment and drugs, but also intangibles, including the perceptions of implementers and health service users that are intertwined with and that result from policy implementation processes. The category of match between reality and paper/intentions perhaps arises directly from the literature's concern with policy. As policy is, in a certain sense, an expression of objectives and intentions, it invites comparisons of actual implementation practices and outcomes against stated goals and intentions.

Comparisons across systems and programme articles illustrate some differences, perhaps reflecting a distinction between a primary concern for service delivery within specific programme areas compared to a focus on the horizontal processes and concerns of relevance across programmes and services such as planning and management issues (called here, whole system functioning). Programme-focused articles dominated the categories of access/utilization (20/32, 63%), perceptions of implementers and users (11/18, 61%), impact on how services are delivered (8/12, 67%) and health indicators (5/7, 71%). In contrast, systems articles' dominated in the categories of co-ordination and collaboration (14/20, 70%), degree of accountability, responsiveness and access to rights (10/11, 91%) and extent of diffusion or adoption (5/6, 83%).

Table 5 Categories of implementation improvement strategies

Improvement strategies / change mechanisms	No.	Examples
Information, communication, understanding	94	
Change needed in current understandings	43	Aitken 1994: Change cannot be brought about if implicit values are ignored
		Kaler and Watkins 2001: Better understanding of the opportunities, constraints and concerns that agents face can lead to better relations between those who design and oversee programmes and those who implement them
Better communication and information	20	McIntyre and Klugman 2003: Improve communication with health managers and workers
		Plaza *et al.* 2001: Clear, complete regulations disseminated and explained in advance
Training/skills development	13	Schneider *et al.* 2008: Training professionals to better engage with and support community health workers (CHWs)
		Hurtig *et al.* 2002: Time for educational material to be developed and workshops to be conducted
Campaigning/advocacy	6	Usdin *et al.* 2000: Need for continuing advocacy
		Mayhew 2000: Community-based awareness-raising
General references to understandings	4	Penn-Kekana *et al.* 2004: Managing meaning in implementation.
		Paterson *et al.* 2007: System works better where there is an understanding of what a dietician does
Learning methods	4	Khresheh and Barclay 2008: Role of action research and pilots
		Ridde 2008: Related action research
Building on current understandings	3	Atun *et al.* 2007: Build on positive perceptions of benefit
		Gladwin *et al.* 2002: HMIS developers should draw on existing experience and research
Transparency	1	Crook and Ayee 2006: Making contracts more transparent
Actor engagement and relationships	50	
Changing relative actor status and position	32	Hiscock 1995: Strengthening of key actors
		Kabakian-Khasholian *et al.* 2007: Involving the diversity of players and considering their position and power
Implementer consultation and engagement	12	Mogensen and Ngulube 2001: Pay attention to health workers' fears and problems
		Wang *et al.* 2008: Design policies in consultation with employees
Reciprocal community-implementer relations	6	Harrison *et al.* 2000: Community consent prior to implementation
		Palmer *et al.* 1999: Involve beneficiaries in planning
Hardware intervention, e.g. more funding, organizational restructuring, create permanent post, etc.	29	Atun and Olynik 2008: Need for national TB unit
		Kamuzora 1996: Remove PHC committees that duplicate other committees
Implementation flexibility and adaptability	13	Schneider *et al.* 2008: Maintaining an appropriate balance between regulation of the CHWs infrastructure and provincial and local flexibility
		Philbin *et al.* 2008: Recognition of socio-cultural factors specific to the city
Better supervision/support	12	Stein *et al.* 2007: More provincial and managerial support
		Gilson *et al.* 2001: Strengthening management
Better co-ordination	7	Atun and Olynik 2008: Need for multi-sectoral response to TB
		Schneider and Stein 2001: Government should be able to harness energies available outside the government programme
Stronger/different forms of leadership	6	Kajula *et al.* 2004: Political management necessary
		Pavignani and Durão 1999: Ministry of Health (MOH) leadership
Additional policy	3	Duckett 2001: Effective legislation
		Usdin *et al.* 2000: Need amendment to the law

Implementation management

This review also explored the substance of the LMIC health policy analysis implementation literature by examining the articles' ideas on how to improve implementation; extracting 214 conclusions, recommendations or suggestions on this from the articles. We then sought to identify the underlying causal change mechanism implied by each extracted conclusion or recommendation and inductively developed categories organized around these mechanisms. In other words, we developed an interpretive analysis of the articles' underlying ideas about how to improve implementation.

Table 5 lists these categories and examples of the material on implementation improvement underpinning the categories.

Looking across these categories, it is clear that implementation improvement ideas focused on additional policies, training/skills development or hardware interventions such as the restructuring of programmes, the introduction of new structures or the provision of more funding, are relatively unimportant. Instead, the dominant focus is on the process and practice of implementation, including how issues are communicated and understood by policy actors, how policy actors and relationships are managed, and how policy changes are led, supervised and co-ordinated. Finally, various authors highlighted the need to allow for flexibility and adaptability in the implementation process. Although policy actors are not a central focus of the articles' main intents/thrusts (Table 3), they are a clearly important focus of ideas about how to improve the process of policy implementation.

The distinctions between programme and systems articles that seem most clear again seem to reflect the service delivery/whole system functioning distinction. Recommendations about better supervision and support (8/12, 67%) and better co-ordination (7/8, 88%) were dominated by programme articles. Those about better communication and information (13/20, 65%), implementation flexibility and adaptability (9/13, 69%), consultation with implementers (9/12, 75%) and hardware (17/29, 59%) came predominantly from system articles.

What do different disciplines contribute?

In considering different disciplines' contributions to the literature, this section seeks to explore two main questions: Do different disciplinary groupings offer different perspectives on health policy implementation? And what is the contribution of policy analysis and political science, as the discipline of particular focus in this article?

It begins by reflecting on disciplinary groupings' use of theory and then analyses their contributions to the substantive themes analysed above: main intents/thrust/question, policy implementation outcomes and strategies for policy implementation improvement.

The use of theory

We sought to judge whether and what theory or concepts were used in these articles, as well as how they were used. This entailed identifying theories, parts of theories or theoretical concepts and then assessing whether these were used to organize or flesh out material in the article. We did not judge whether a theory was used in full or whether it was explicitly tested or not. However, as argued earlier, our reading of the articles suggests that the latter happens very rarely.

Overall, the analysis suggests significant under-theorization in this literature: 39% (33) of the articles were described as not using theories or theoretical concepts to guide data analysis, frame discussions or derive conclusions. The reviewers were in two minds about whether theory or theoretical concepts were, in any of the senses outlined above, being used in a further 5 (6%) of the articles. The categories of no clear disciplinary perspective and general health systems were particularly weak on this measure, with 68% (13) and 71% (12) of articles in these respective categories classified as *not* using theory or concepts, compared to around 20% of articles in the categories of policy analysis and political science, and anthropology and sociology. Fewer systems (16/47, 34%) than programme (17/39, 44%) papers were judged as *not* using theory or concepts.

Overall, just under a quarter (20/85, 24%) of the articles were judged to have used theories or theoretical concepts in all three ways: guiding data analysis, framing discussion and deriving conclusions. Unsurprisingly, the categories of no clear disciplinary perspective and general health systems made the smallest contribution to this subset, with 16% (3/19) and 12% (2/17), respectively. More system (14/47, 30%) than programme articles (6/39, 15%) drew on theory in these ways.

Table 6, which presents examples organized by disciplinary perspective, shows considerable diversity in the theories and theoretical concepts applied. It distinguishes between theory that addresses implementation processes and process issues (much of it developed out of or closely linked to the study of public policy processes and political phenomena), theory addressing organizational issues, theory addressing social concepts or issues and miscellaneous theories or concepts. These distinctions were made based on our knowledge and interpretation of academic literature and, in some cases, brief consideration of the titles of the publications to which the concepts trace back and the backgrounds of the authors linked to theories or theoretical concepts. The table does not produce an exact count of the number of times an individual theory or theoretical concept was used.

It is not surprising that policy analysis and political science articles drew most on theories and concepts addressing policy implementation processes and process issues. However, these were also used in other disciplines, e.g. anthropology and sociology (street-level bureaucracy) and general health systems (policy analysis triangle). Similarly, theory related to social concepts and issues seems most closely associated with anthropology and sociology, while organizational theory seems most closely linked to the management discipline.

Finally, the miscellaneous category houses varied theories and concepts, including fuzzy-set social science, a methodological construct rather than something applicable to the substance of policy implementation, and the notion of hope, a concept that is available in the general vocabulary, but without strong theoretical or academic content.

Main intent/thrust/question

Table 7 shows an analysis of main intents/thrusts/questions, by discipline.

The small sizes of some of the categories clearly limit the possible conclusions. Nevertheless, focusing on the columns, the disciplines of anthropology and sociology clearly seem to emphasize the exploration of context, with 12 (67%) of its 18 contributions located under this theme. In contrast, large proportions of the policy analysis and political science (8/24, 33%), no clear discipline (6/19, 32%) and general health systems (5/17, 29%) groups are concentrated in the category of broad descriptive account of the policy process. This suggests a fairly general approach to studying health policy

Table 6 Examples of theories and concepts, by discipline

Disciplinary perspective	Theory addressing implementation processes and process issues	Theory addressing organizational issues	Theory addressing social concepts or issues	Miscellaneous theory or concepts
Policy analysis and political science	Broad implementation theory Top-down, bottom-up implementation Street-level bureaucracy Incremental change Requirements for successful implementation Teamwork, leadership Actor mapping Political mapping Stakeholder mapping Policy and process Policy risk analysis Policy characteristics analysis-type concepts Generic approach Policy analysis triangle State-society approach Earlier stages of policy cycle Agenda setting Loops of policy transfer Punctuated equilibrium Power Power Veto points Broad concepts Policy activists Advocacy Policy elites Policy coalitions Political commitment Political will Policy networks Public value Public leadership Political mediation Policy dynamism Other Reference to Barret and Fudge (importance of process in implementation) Broad reference to Grindle and Thomas (process of implementing likely to be fraught with difficulty and risk).	Organizational culture Institutional capacity	Epistemic communities—rights-based frameworks	Edutainment

(continued)

Table 6 Continued

Disciplinary perspective	Theory addressing implementation processes and process issues	Theory addressing organizational issues	Theory addressing social concepts or issues	Miscellaneous theory or concepts
Anthropology and sociology	Broad implementation theory Street-level bureaucracy Models of political behaviour Deliberative democracy Clientelism	Implicit organizational theories Private contexts of practice	Discourse Anthropological notions of community and gifts Context, practice, agency, power Master metaphor of participation Negative and positive theories of freedom Culturally shaped decision making points Mind/body dualism Rights talk Gender Social constructionism	
General health systems	Generic approach Policy analysis triangle			Hope Model of professional development Model for evaluation research Technical and allocative efficiency
Management	Broad implementation theory Actor steering and control in implementation Models of political behaviour Rational choice and rent-seeking Other Research to policy process	Planning fallacies Innovation theory Resource dependency theory Organization theory Contingency theory of power Organization as dynamic equilibrium Industrial performance and workplace transformation framework	Carrying contexts of interaction	
No clear disciplinary perspective		Scaling up and diffusion of innovations Decentralization	Patient and sick roles	Fuzzy-set social science Local public health practice performance matrix Precede-proceed model

implementation. However, looking across the rows shows that the discipline of policy analysis and political science makes majority contributions to the (small) categories of exploration of theory (5/7, 71%) and the powers and roles of actors (3/4, 75%). The latter, combined with a contribution of 2/4 (50%) to the category of the roles and perspectives of health workers, perhaps hints at the policy analysis concern with the role of actors in the policy process.

Implementation outcomes

Table 8 presents a disciplinary analysis of the implementation outcome categories.

Looking down the columns suggests each discipline group identifies a range of outcomes. The management articles' clearest emphases are on co-ordination and collaboration (3/13, 23%) and accountability and responsiveness (3/13, 23%). Anthropology and sociology incorporates focal concerns

Table 7 Main intents/thrusts/questions, by discipline

	Management	Anthropology and sociology	General health systems	No clear discipline	Policy analysis and political science	
Broad descriptive account of policy process	1	2	5	6	8	**22**
Relationship between context and policy implementation	1	12	1	3	2	**19**
Factors that enabled and/or constrained policy implementation	1	1	2	3	2	**9**
Implementation failure or the non-implementation of policy	2	1	1	2	2	**8**
Exploring theory or assumptions	0	1	0	1	5	**7**
Uptake or scaling up of policy	1	1	2	2	0	**6**
Roles and perspectives of health workers in policy implementation	0	0	2	0	2	**4**
Evaluations of policy implementation	0	0	3	1	0	**4**
Powers and roles of actors or stakeholders in the implementation process	0	0	1	0	3	**4**
Impact of research or evidence on policy implementation	1	0	0	1	0	**2**
	7	18	17	19	24	85

Table 8 Implementation outcomes, by discipline

	Management	Anthropology and sociology	General health systems	No clear discipline	Policy analysis and political science	
Health system processes						
Degree of co-ordination and collaboration	3	1	9	1	6	**20**
Degree of accountability, responsiveness and access to rights	3	2	3	2	1	**11**
Extent of diffusion/adoption	2	1	1	2	0	**6**
Degree of decentralization	0	0	0	3	0	**3**
Miscellaneous health system processes	0	1	0	0	1	**2**
Miscellaneous management processes	0	0	0	0	2	**2**
Access						
Access/utilization	0	8	12	4	8	**32**
Access/financial protection	0	0	1	1	1	**3**
Perceptions of implementers and health service users	0	6	9	2	1	**18**
Match between reality and paper/intentions	2	5	4	4	4	**19**
Impact on the way services are delivered	1	0	6	2	3	**12**
Health system inputs						
Hardware	0	0	3	0	3	**6**
Human resources (HR) availability, motivation and development	1	0	3	0	2	**6**
Health indicators	1	1	3	1	1	**7**
	13	25	54	22	33	147

related to access/utilization (8/25, 32%), perceptions of implementers and users (6/25, 24%) and the match between intentions and reality (5/25, 20%). Similarly, general health systems articles reflect a focus on access/utilization (12/54, 22%) and implementers and users' perceptions (9/54, 17%), but also, co-ordination and collaboration (9/54, 17%). The no clear discipline grouping is spread across a wide range of categories, with the clearest emphases on access/utilization (4/22, 18%) and the match of intention and reality (4/22, 18%). The policy analysis and political science group's clearest concentrations are in access/utilization (8/33, 24%) and co-ordination and collaboration (6/33, 18%).

Table 9 Implementation improvement strategies, by discipline

	Management	Anthropology and sociology	General health systems	No clear discipline	Policy analysis and political science	
Information, communication and understanding						
Change needed in current understandings	7	9	11	5	11	**43**
Better communication and information	3	0	7	5	5	**20**
Training/skills development	1	0	5	5	2	**13**
General references to understandings	1	1	1	0	1	**4**
Learning methods	0	0	1	1	2	**4**
Building on current understandings	3	0	0	0	0	**3**
Campaigning/advocacy	2	0	0	2	2	**6**
Transparency	0	0	0	0	1	**1**
Actor engagement and relationships						
Changing relative actor status and position	2	6	7	7	10	**32**
Implementer consultation and engagement	2	2	2	2	4	**12**
Reciprocal community-implementer relations	1	1	0	3	1	**6**
Hardware intervention	0	5	11	3	10	**29**
Implementation flexibility/adaptability	5	1	2	1	4	**13**
Better support/supervision	0	0	7	1	4	**12**
Better co-ordination	0	0	3	0	4	**7**
Stronger/different forms of leadership	0	0	2	1	3	**6**
Additional policy	0	0	1	1	1	**3**
	27	25	60	37	65	214

The data in the rows, meanwhile, emphasize the dominant contribution of general health systems articles to all outcome groups. It provides 54/147 (37%) of all outcome ideas and the majority of contributions in six outcome groups (degree of co-ordination and collaboration, access and utilization, perceptions of implementers and users, impact on the way services are delivered, HR availability, motivation and development and health indicators). Two other majority contributions are: anthropology and sociology's contribution to the category match between reality and paper/intentions and no clear discipline, to degree of decentralization. Management, and policy analysis and political science do not make majority contributions to any category.

Implementation improvement

Table 9 shows the categories of implementation improvement suggestions, by disciplinary group.

The columns show that all the disciplinary groups place a heavy emphasis on the idea that a change in the way issues are currently understood will lead to implementation improvement, with 14–36% of their contributions concentrated in this category, and all but management also focus quite heavily on the idea that improved implementation depends on changing relative actor status and position (12–24% of contributions in this category). Additional areas of emphasis are the hardware intervention focus of anthropology and sociology (5/25, 20%), general health systems (11/60, 18%) and policy analysis and political science (10/65, 15%), as well as the management articles' focus on flexibility and adaptability in implementation (5/27, 19%).

Looking across the rows, meanwhile, highlights the comparatively large contributions of policy analysis and political science (65/214, 30%) and general health systems (60/214, 28%) to the total number of implementation improvement ideas. Policy analysis and political science makes the majority contribution to six categories (changing relative actor status and position, implementer consultation and engagement, better co-ordination, stronger and different forms of leadership, learning methods and transparency) and general health systems, to three categories (better support and supervision, hardware interventions and better information and communication). Management, meanwhile, makes a majority contribution to the categories of building on current understandings and implementation flexibility/adaptation; and no clear discipline, to reciprocal community-implementer relationships. Anthropology and sociology does not contribute a majority contribution to any category.

Conclusion

Building on Gilson and Raphaely's (2008) review, this article has sought to describe the main features of the LMIC health policy implementation work that takes a process perspective through synthesis of existing literature. The mapping confirms, for implementation work specifically, the earlier review's conclusions that the LMIC health policy analysis field as a whole is small, fragmented and of somewhat limited depth. Indeed, across the dimensions used to characterize the

literature, the overall picture is one of diversity, as the papers have a variety of 'flavours', incorporate policy implementation outcomes reflecting a spectrum of health system dimensions, and suggest varied ways of improving policy implementation.

The articles are spread fairly evenly between a focus on systems and programme issues and there appear to be few significant differences in how these two sets of articles address implementation issues. Nonetheless, comparison across articles seems to illuminate the more widely recognized distinction (Travis *et al.* 2004) between a programmatic focus on service delivery (given the emphases, e.g. on access/utilization as an outcome and support and supervision as a recommendation) and the systems focus on whole system functioning (given attention to outcomes such as co-ordination and collaboration, and recommendations such as communication and flexibility).

Some of the largest categories of main intent are framed quite broadly, whilst, as noted by Gilson and Rapahely (2008), many articles do not use theory to sharpen or deepen their analysis. These features of this body of work may, among other things, reflect disciplinary socialization in the field and the nature of policy itself. To the extent that policy is understood as an expression of objectives or intentions, the most obvious question to ask about implementation is whether those objectives have been met or whether intentions have been fulfilled—and providing an account of either experience is not something that requires particular recourse to theory, however desirable such theory use might be.

Notwithstanding these features of the literature, this review demonstrates the value of synthesis work by drawing attention to some key influences over policy implementation. These go beyond a focus on the hardware of health systems (more funding, organizational restructuring, etc.) to encompass many software issues (Sheikh *et al.* 2011)—such as the understandings that influence the direction of implementation, the need for better communication and information, consulting with implementers, building relationships between implementers and the community and managing actors in the implementation process. The synthesis of implementation improvement suggestions, thus, points to the importance of better understanding how to strengthen governance practices, including actor management and relationships among actors (Hill and Hupe 2009), to support improved implementation. The implementation outcomes synthesis shows, moreover, the range of objectives sought through health systems, and their social value.

Only a few distinctive disciplinary contributions were identified in the review, perhaps because of difficulties in categorizing articles in this way or due to the nature of the broader field of health policy and systems research. Hints about the emphases and contributions of disciplinary perspectives can, e.g., be seen in the contribution of anthropology and sociology to the main intents around context and the outcome of the match between reality and paper/intentions. Although only a small group the management articles highlighted the outcomes of degree of co-ordination and collaboration and the degree of accountability and responsiveness, and the implementation improvement ideas of implementation flexibility/adaptation, building on current understandings and changes needed in current understandings. The policy analysis and political science articles, meanwhile, showed some distinctive emphases and majority contributions across the main intents, implementation outcomes and implementation improvement ideas focused broadly on the influence of actors and the need to manage them in implementation, and on various ways of strengthening implementation processes. This disciplinary group also provided most of the articles explicitly seeking to explore theory and assumptions, drawing, as noted in the additional analysis, on a fairly wide range of theory—but only to a fairly limited extent. Finally, the set of articles categorized as general health systems demonstrated specific emphases and majority contributions with respect to the main intent of broad descriptive account of the policy process and various aspects of implementation outcomes and improvement recommendations.

Looking ahead, this mapping suggests three key approaches for extending policy analysis research on implementation. First, given fragmentation, there is a need to consolidate the existing work where possible—and in our sister articles on implementation issues (the practice of power in implementation and the insights of street-level bureaucracy) we use qualitative synthesis approaches to review the existing literature and consider more specific lines of future analysis in these areas.

Second, there is a need to draw more explicitly on theoretical frames and concepts to deepen work in the field by sharpening and focusing concerns and questions. Table 6 illustrates some of the available theory that could be more extensively applied, also showing the potential relevance of theory beyond policy analysis and political science. Such theory could, in particular, deepen analysis of some of the ways of strengthening implementation already identified in the literature. Drawing theory into analysis of implementation is also essential to build the rigour of the field. Theory can help researchers better to contextualize their work in relation to other relevant bodies of literature, as well as to be more reflexive, that is, to think more critically about the questions they ask, the ways in which they analyse their data and the recommendations they make (Walt *et al.* 2008).

Third, policy implementation theory also points to research questions that could be addressed in future—such as better understanding of implementation opportunities and challenges under different governing structures (e.g. centralized vs federal), the nature and role of actor networks in implementation, and the influences over their functioning, to considering why and how implementation varies across policy types (Hill and Hupe 2009). Current work tends to focus on describing processes of policy implementation change and, sometimes, considering influences over those processes, but rarely starts with a question derived from theory that is then tested in analysis. Yet for this area of health research there is clear need for theory-driven exploratory (Sheikh *et al.* 2011) and explanatory (Gilson and Raphaely 2008) research.

Funding

This work received funding from The Alliance for Health Policy and Systems Research.

Conflict of interest statement: None declared

References

Aitken J-M. 1994. Voices from the inside: managing district health services in Nepal. *International Journal of Health Planning and Management* **9**: 309–40.

Alonso A, Brugha R. 2006. Rehabilitating the health system after conflict in East Timor: a shift from NGO to government leadership. *Health Policy and Planning* **21**: 206–16.

Amin AA, Zurovac D, Kangwana BB *et al.* 2007. The challenges of changing national malaria drug policy to artemisinin-based combinations in Kenya. *Malaria Journal* **6**: 72.

Araújo JLAC. 1997. Attempts to decentralise in recent Brazilian health policy: issues and problems, 1988–1994. *International Journal of Health Services* **27**: 109–24.

Atkinson S. 1997. From vision to reality: implementing health reforms in Lusaka, Zambia. *Journal of International Development* **9**: 631–9.

Atkinson S, Medeiros RLR, Oliveira PHL, De Almeida RD. 2000. Going down to the local: incorporating social organisation and political culture into assessments of decentralised health care. *Social Science and Medicine* **51**: 619–36.

Atun RA, Kyratsis I, Jelic G, Rados-Malicbegovic D, Gurol-Urganci I. 2007. Diffusion of complex health innovations - implementation of primary health care reforms in Bosnia and Herzegovina. *Health Policy and Planning* **22**: 28–39.

Atun R, Olynik I. 2008. Resistance to implementing policy change: the case of Ukraine. *Bulletin of the World Health Organisation* **86**: 147–54.

Birn A-E. 1999. Federalist flirtations: the politics and execution of health services decentralisation for the uninsured population in Mexico, 1985–1995. *Journal of Public Health Policy* **20**: 81–108.

Cliff J, Walt G, Nhatave I. 2004. What's in a name? Policy transfer in Mozambique: DOTS for tuberculosis and syndromic management for sexually transmitted infections. *Journal of Public Health Policy* **25**: 38–55.

Crook R, Ayee J. 2006. Urban service partnerships, 'street-level bureaucrats' and environmental sanitation in Kumasi and Accra, Ghana: coping with organisational change in the public bureaucracy. *Development Policy Review* **24**: 51–73.

David J, Zakus L. 1998. Resource dependency and community participation in primary health care. *Social Science and Medicine* **46**: 475–94.

Dixon-Woods M, Agarwal S, Jones D, Young B, Sutton A. 2005. Synthesising qualitative and quantitative evidence: a review of possible methods. *Journal of Health Services Research and Policy* **10**: 45–53.

Duckett J. 2001. Political interests and the implementation of China's urban health insurance reform. *Social Policy and Administration* **35**: 290–306.

Evans C, Lambert H. 2008. Implementing community interventions for HIV prevention: insights from project ethnography. *Social Science and Medicine* **66**: 467–78.

Foley EE. 2001. No money, no care: women and health sector reform in Senegal. *Urban Anthropology and Studies of Cultural Systems and Word Economic Development* **30**: 1–50.

Foley EE. 2007. Overlaps and disconnects in reproductive health care: global policies, national programs, and the micropolitics of reproduction in Northern Senegal. *Medical Anthropology* **26**: 323–54.

Fulop N, Allen P, Clarke A, Black N (eds). 2001. *Studying the Organisation and Delivery of Health Services: Research Methods*. London: Routledge.

Gilson L, Kalyalya D, Kuchler F *et al.* 2001. Strategies for promoting equity: experience with community financing in three African countries. *Health Policy* **58**: 37–67.

Gilson L, Raphaely N. 2008. The terrain of health policy analysis in low and middle income countries: a review of published literature 1994-2007. *Health Policy and Planning* **23**: 294–307.

Gladwin J, Dixon RA, Wilson TD. 2002. Rejection of an innovation: health information management training materials in east Africa. *Health Policy and Planning* **17**: 354–61.

Gomez EJ. 2008. A temporal analytical approach to decentralization: lessons from Brazil's health sector. *Journal of Health Politics, Policy and Law* **33**: 53–90.

Haaga JG, Maru RM. 1996. The effect of operations research on program changes in Bangladesh. *Studies in Family Planning* **27**: 76–87.

Harper I. 2006. Anthropology, DOTS and understanding tuberculosis control in Nepal. *Journal of Biosocial Science* **38**: 57–67.

Harrison A, Montgomery ET, Lurie M, Wilkinson D. 2000. Barriers to implementing South Africa's Termination of Pregnancy Act in rural KwaZulu/Natal. *Health Policy and Planning* **15**: 424–31.

Hill PS. 2000. Planning and Change: a Cambodian public health case study. *Social Science and Medicine* **51**: 1711–22.

Hill M, Hupe P. 2009. *Implementing Public Policy: Governance in Theory and Practice*. London: Sage Publications.

Hiscock J. 1995. Looking a gift horse in the mouth: the shifting power balance between the Ministry of Health and donors in Ghana. *Health Policy and Planning* **10**: 28–39.

Hoodfar H, Assadpour S. 2000. The politics of population policy in the Islamic Republic of Iran. *Studies in Family Planning* **31**: 19–34.

Hurtig AK, Pande SB, Baral SC *et al.* 2002. Linking private and public sectors in tuberculosis treatment in Kathmandu Valley, Nepal. *Health Policy and Planning* **17**: 78–89.

Jeppsson A, Östergren P-O, Hagström B. 2003. Restructuring a ministry of health - an issue of structure and process: a case study from Uganda. *Health Policy and Planning* **18**: 68–73.

Kabakian-Khasholian T, Kaddour A, DeJong J, Shayboub R, Nassar A. 2007. The policy environment encouraging C-section in Lebanon. *Health Policy* **83**: 37–49.

Kajula PW, Kintu F, Barugahare J, Neema S. 2004. Political analysis of rapid change in Uganda's health financing policy and consequences on service delivery for malaria control. *International Journal of Health Planning and Management* **19**: S133–53.

Kaler A, Watkins SC. 2001. Disobedient distributors: street-level bureaucrats and would-be patrons in community-based family planning programs in rural Kenya. *Studies in Family Planning* **32**: 254–69.

Kamuzora P. 1996. The politics of implementing intersectoral policies for primary health care development: experience and lessons from Tanzania. *World Hospitals and Health Services* **32**: 22–9.

Kamuzora P, Gilson L. 2007. Factors influencing implementation of the Community Health Fund in Tanzania. *Health Policy and Planning* **22**: 95–102.

Kaufman J, Erli Z, Zhenming X. 2006. Quality of care in China: scaling up a pilot project into a national reform program. *Studies in Family Planning* **37**: 17–28.

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.

Lake S, Musumali C. 1999. Zambia: the role of aid management in sustaining visionary reform. *Health Policy and Planning* **14**: 254–63.

Lanjouw S, Macrae J, Zwi AB. 1999. Rehabilitating health services in Cambodia: the challenge of coordination in chronic political emergencies. *Health Policy and Planning* **14**: 229–42.

Lee K, Lush L, Walt G, Cleland J. 1998. Family planning policies and programmes in eight low income countries: a comparative policy analysis. *Social Science and Medicine* **47**: 949–59.

Makhuvha TR, Davhana-Maselesele M, Netshandama VO. 2007. Rationalisation of nursing education in Limpopo province: Nurse educators' perspectives. *Curationis* **30**: 61–72.

Mayhew SH. 2000. Integration of STI services into FP/MCH services: health service and social contexts in rural Ghana. *Reproductive Health Matters* **8**: 112–24.

McIntyre D, Klugman B. 2003. The human face of decentralisation and integration of health services: experience from South Africa. *Reproductive Health Matters* **11**: 108–19.

Mogensen HO, Ngulube TJ. 2001. Whose ownership? Which stakes? Communities and health workers participating in the Zambian health reform. *Urban Anthropology and Studies of Cultural Systems and World Economic Development* **30**: 71–104.

Mosquera M, Zapata Y, Arango C, Varela A. 2001. Strengthening user participation through health sector reform in Colombia: a study of institutional change and social representation. *Health Policy and Planning* **16**: 52–60.

Palmer CA, Lush L, Zwi AB. 1999. The emerging international policy agenda for reproductive health services in conflict settings. *Social Science and Medicine* **49**: 1689–703.

Paterson M, Green M, Maunder EMW. 2007. Running before we walk: how can we maximise the benefits from community service dietitians in KwaZulu-Natal, South Africa? *Health Policy* **82**: 288–301.

Pavignani E, Durão JR. 1999. Managing external resources in Mozambique: building new aid relationships on shifting sands? *Health Policy and Planning* **14**: 243–53.

Penn-Kekana L, Blaauw D, Schneider H. 2004. 'It makes me want to run away to Saudi Arabia': management and implementation challenges from a maternity ward perspective. *Health Policy and Planning* **19**: i71–7.

Philbin MM, Lozada R, Zúñiga ML *et al.* 2008. A qualitative assessment of stakeholder perceptions and socio-cultural influences on the acceptability of harm reduction programs in Tijuana, Mexico. *Harm Reduction Journal* **5**: 36.

Plaza B, Barona AB, Hearst N. 2001. Managed competition for the poor or poorly managed competition? Lessons from the Colombian health reform experience. *Health Policy and Planning* **16**: 44–51.

Rahman R. 2007. The state, the private health care sector and regulation in Bangladesh. *The Asia Pacific Journal of Public Administration* **29**: 191–206.

Richey L. 1999. Family planning and the politics of population in Tanzania: international to local discourse. *The Journal of Modern African Studies* **37**: 457–87.

Ridde V. 2008. ''The problem of the worst-off is dealt with after all other issues'': the equity and health policy implementation gap in Burkina Faso. *Social Science and Medicine* **66**: 1368–78.

Schneider H, Stein J. 2001. Implementing AIDS policy in post-apartheid South Africa. *Social Science and Medicine* **52**: 723–31.

Schneider H, Hlope H, Van Rensburg D. 2008. Community health workers and the response to HIV/AIDS in South Africa: tensions and prospects. *Health Policy and Planning* **23**: 179–87.

Seidel G. 2000. Reconceptualising issues around HIV & breastfeeding advice: findings from KwaZulu-Natal, South Africa. *Review of African Political Economy* **27**: 501–18.

Seidel G, Sewpaul V, Dano B. 2000. Experiences of breastfeeding and vulnerability among a group of HIV-positive women in Durban, South Africa. *Health Policy and Planning* **15**: 24–33.

Sheikh K, Gilson L, Agyepong IA *et al.* 2011. Building the field of health policy and systems research: framing the questions. *PLoS Med* **8**: e1001073.

Šogorić S, Džakula A, Rukavina TV *et al.* 2009. Evaluation of Croatian model of polycentric health planning and decision making. *Health Policy* **89**: 271–78.

Stein J, Lewin S, Fairall L. 2007. Hope is the pillar of the universe: health care providers' experiences of delivering anti-retroviral therapy in primary health-care clinics in the Free State province of South Africa. *Social Science and Medicine* **64**: 954–64.

Tendler J, Freedheim S. 1994. Trust in a rent-seeking world: health and government transformed in Northeast Brazil. *World Development* **22**: 1771–91.

Tolhurst R, Zhang T, Yang H, Gao J, Tang S. 2004. Factors affecting the implementation of health legislation and its impact on the rural poor in China: a case study of implementation of the maternal and infant health care law in two poor counties. *International Journal of Health Planning and Management* **19**: 247–65.

Travis P, Bennett S, Haines A, Pang T, Bhutta Z, Hyder A, Pielemeier NR, Mills A, Evans T. 2004. Overcoming health-systems constraints to achieve the Millennium Development Goals. *The Lancet* **364**: 900–6.

Usdin S, Christofides N, Malepe L, Maker A. 2000. The value of advocacy in promoting social change: implementing the new Domestic Violence Act in South Africa. *Reproductive Health Matters* **8**: 55–65.

Walker L, Gilson L. 2004. 'We are bitter but we are satisfied': nurses as street-level bureaucrats in South Africa. *Social Science and Medicine* **59**: 1251–61.

Wallace A, Croucher K, Bevan M *et al.* 2006. Evidence for policy making: some reflections on the application of systematic reviews to housing research. *Housing Studies* **21**: 297–314.

Walt G, Gilson L. 1994. Reforming the health sector: the central role of policy analysis. *Health Policy and Planning* **9**: 353–70.

Walt G, Shiffman J, Schneider H, Murray SF, Brugha R, Gilson L. 2008. 'Doing' health policy analysis: methodological and conceptual reflections and challenges. *Health Policy and Planning* **23**: 308–17.

Wang J-F, Ma S-J, Mei C-Z *et al.* 2008. Exploring barriers to implementation of smoking policies: a qualitative study on health professionals from three county-level hospitals. *Biomedical and Environmental Sciences* **21**: 257–63.

Zhao S. 1991. Metatheory, metamethod, meta-data-analysis: what, why and how? *Sociological Perspectives* **34**: 377–90.