Towards improved international collaboration for synthesizing health systems research

Alliance for Health Policy and Systems Research: July 2011

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This technical report contains the collective views of an international group of experts and does not necessarily represent the decisions or the policies of the World Health Organization.
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1. Key Messages

- A systematic review (or synthesis) on a health system research (HSR) topic can be of great help to policy-makers as it provides an objective summary of the best available evidence.

- Since 2009, the Alliance for Health Policy and Systems Research (the Alliance) has led a consultative process exploring its potential role in generating and facilitating international collaboration for synthesizing HSR.

- This document describes the steps of this consultative process and summarizes the recommendations for the Alliance that have emerged.

- Recommendations for the Alliance include:
  
  o Play a central role in advancing the science of HSR synthesis by developing and strengthening networks between individuals and institutions, collaborations and groups that have an interest in HSR synthesis and translation.
  o Provide overall support, information sharing and potential coordination related to: setting priorities for HSR synthesis regionally and globally; and increasing the capacity building in HSR synthesis and translation both relevant to, and within low- and middle-income countries (LMICs).
  o Advocate and support a common global database for all types of systematic reviews of HSR.
  o Explore expansion of the range of study designs that can be included in reviews of the effectiveness of HSR interventions.
  o Pilot a system for producing demand-driven syntheses/systematic reviews of HSR addressing questions other than effectiveness.
  o Advocate for and support prospective registration of all protocols for systematic reviews when they are planned.

- An abridged version of this document, with its recommendations, was presented to the Alliance Scientific and Technical Advisory Committee (STAC) and Board in May 2011 and endorsed, conditional on the availability of financial resources.
2. Executive summary

Since 2009 the Alliance has been stimulating and facilitating discussion regarding the development of stronger and better international collaboration for synthesizing health systems evidence. Such collaboration could support the synthesis and translation of health systems knowledge, as well as support the identification of research gaps and the setting of research agendas for both primary and secondary research.

As a first step, the Alliance organized a session in the annual meeting of the Global Forum for Health Research (Cuba, November 2009). A consultation document was developed, in response to which the Alliance received more than 15 submissions. This document fed into the discussions of the Working Group on HSR Synthesis meeting at the UK Department for International Development (DFID; London, October 2010). Representatives of the Working Group summarized the foregoing discussions and preliminary recommendations during a concurrent session at the First Global Symposium on HSR in Montreux on 16 November 2010. As well, the Alliance hosted a breakfast meeting with representatives of the Working Group. Based on discussions at the Montreux Symposium, the recommendations were further refined.

The Working Group made the following set of recommendations for the Alliance:

1. Play a central role in advancing the science of HSR synthesis by developing and strengthening networks between individuals and institutions, collaborations and groups that have an interest in HSR synthesis and translation:
   a) Form an Advisory Group on Health Systems Research Synthesis that brings together different collaborations, groups and institutions.
   b) Coordinate with the Task Force on Evidence for Health Systems Guidance set up by the World Health Organization (WHO) and other relevant initiatives.
   c) Develop a small series of Alliance briefing notes relevant for HSR synthesis and translation and consider coordinating a series of scientific papers on HSR synthesis and translation.
   d) Consider planning a meeting with key experts and stakeholders.
   e) Support discussions to establish a health systems field cross-cutting Cochrane and Campbell Collaborations, towards raising the profile of health systems research syntheses within these organizations and outside.

2. Provide overall support, information sharing and potential coordination related to setting priorities for HSR synthesis regionally and globally and increasing capacity building in HSR synthesis and translation (both relevant to, and within, LMICs):
   a) Utilize Alliance networks and fora to engage policy-makers regarding their needs for synthesized research evidence.
   b) Continue capacity building and supporting systematic review centres.
   c) Collaborate with groups working in this area to develop a Handbook and/or a Reader on HSR synthesis and knowledge translation within health systems.
d) Identify potential funding sources and support mechanisms for systematic reviews -- working with existing collaborations like Cochrane and Campbell -- and support establishing mechanisms for commissioning systematic reviews of HSR.

3. Advocate for and support a common global database for all types of systematic reviews of HSR:
   a) Support the use of Health Systems Evidence (www.healthsystemsevidence.org) as the common database.
   b) In consultation with policy-makers, explore ways of making this database more user-friendly.
   c) Facilitate the inclusion of this database in the Cochrane Library and other relevant portals and repositories.

4. Explore expansion of the range of study designs that can be included in reviews of the effectiveness of HSR interventions. Collaborate with the EPOC group and Non-randomised Studies Methods Group of the Cochrane Collaboration and relevant Campbell methods groups to consider ways in which quasi-experimental methods from econometrics and social evaluation research can be included in Cochrane and Campbell reviews on health systems.

5. Pilot a system for producing demand-driven syntheses/systematic reviews of HSR addressing questions other than effectiveness. Collaborate with the Evidence for Policy and Practice Information and Co-ordinating Centre (EPPI-Centre), one or two LMIC-based institutions, Cochrane and Campbell Collaborations and the International Initiative for Impact Evaluation (3ie) in setting up a consortium to produce, edit and publish diverse and complex systematic reviews for strengthening health systems and that can have an incubator function for exploring new methods and approaches before deciding on longer term structural mechanisms.

6. Advocate for and support prospective registration of all protocols for systematic reviews when they are planned:
   a) Support the international prospective register of systematic reviews, PROSPERO, where authors can register reviews of the effectiveness of health and social care interventions (hosted by the Centre for Reviews and Dissemination in York, UK and supported by the National Institutes for Health Research (NIHR, UK), the Canadian Institutes of Health Research (CIHR) and the International Network of Agencies for Health Technology Assessment).
   b) Promote inclusion, in PROSPERO, of non-effectiveness systematic reviews that focus, for example, on policy problems/needs, implementation processes, acceptability of interventions, etc. If this is not possible, then support or initiate another system inclusive of all HSR systematic reviews.
   c) Assist in the development of these databases so that they address the needs of HSR and are compatible with other databases, such as the Cochrane Library
and Health Systems Evidence. Require that all systematic reviews that are supported by the Alliance, or carried out by Alliance partners, be prospectively registered.

3. Summary document

A. Background and objectives

Health system decision-makers and managers routinely face difficult decisions around improving health and promoting equity. A systematic review is a formulated, replicable and current summary that collates, appraises and synthesizes all empirical evidence related to a specific research question (1). Such a review can be of great help to policymakers as it provides an objective summary of the best available evidence. Systematic reviews can provide useful evidence at every step in the policy-making process including: defining the problem; assessing potential policy and programme options; and identifying implementation considerations (2). Recognizing the importance of systematic reviews in the field of health systems research (HSR), and the importance of developing capacity in low- and middle-income countries to perform reviews of relevance to LMIC policymakers, the Alliance has, since 2007, been supporting four systematic review centres, one each in Bangladesh, Chile, China and Uganda.

In follow-up to the 2008 G8 Toyako summit, which focused on strengthening of health systems, Michael Reich and Keizo Takemi proposed establishing a "Cochrane-type process for global health monitoring to generate empirical evidence for health policy" (3). The need to explore this idea was supported by Professor Julio Frenk, Dean of Harvard School of Public Health, and Professor John-Arne Røttingen, Chief Executive of the Norwegian Knowledge Centre for the Health Services and Chair of the Alliance. Since 2009, the Alliance has been exploring the possibility of expanding its past role in HSR synthesizes (i.e. support to the four systematic review centres) to a broader role in generating and facilitating international collaboration for synthesizing HSR.

The purpose of this document is to: (i) describe steps taken since 2009 in this regard; (ii) summarize the discussions and inputs that emerged from each stage in the consultative process; and (iii) summarize the recommendations for the Alliance that have emerged from this process.
**B. Process**

Figure 1 illustrates the steps taken towards exploring and developing an international collaboration for synthesizing HSR.

**Figure 1. Steps taken towards development of international collaboration on HSR synthesis**

1. Session at Global Forum (Nov 2009, Cuba)


4. Panel session with discussion & breakfast meeting with editors of relevant Cochrane review groups at Montreux Symposium (Nov 2010)

5. Next steps

At the Global Forum for Health Research (November, 2009, Havana, Cuba) the Alliance organized a concurrent session (*Appendix 1a* lists presenters at this session). Discussion at this session began to address the questions:

1. What benefits and challenges might be associated with a collaboration in synthesizing and translating health systems evidence?
2. What kinds of knowledge syntheses could usefully inform decisions about strengthening health systems and what methods are appropriate for conducting such syntheses?
3. To what extent do established collaborations already support synthesis and translation for health systems research and, what might an additional collaboration offer?

Based largely on presentations and discussions in Havana, the Alliance developed a consultation document. In May, 2010, this document was sent out to participants in the
Havana session, sent to select individuals and institutions and posted on the Alliance website. Feedback was incorporated into the consultation document.

The Alliance convened an *ad hoc* Working Group on Health Systems Research Synthesis at the UK Department for International Development (DFID), London on 1 October 2010 (Appendix 1b lists participants in this meeting). The Working Group identified a number of problems that need to be addressed on the demand side (i.e. knowledge translation and use, and priority setting) and on the supply side (i.e. knowledge production, synthesis and dissemination).

Representatives of the Working Group summarized the foregoing discussions and preliminary recommendations during a concurrent session at the First Global Symposium on Health Systems Research in Montreux on 16 November 2010 (Appendix 1c lists presenters in this session). As well, the Alliance hosted a breakfast meeting with representatives of the Working Group and members of relevant review groups within the Cochrane Collaboration (17 November 2010; Appendix 1d lists participants in this meeting). Based on discussions at the Montreux Symposium, the recommendations were further refined.
C. Summary of discussions and inputs

Session at the Global Forum for Health Research, 2009

What benefits and challenges might be associated with a collaboration in synthesizing and translating health systems evidence?

Already, there exist a considerable number of initiatives for synthesizing or translating health systems evidence to support the design and implementation of health systems strengthening initiatives and interventions. These initiatives cover different types of evidence on health systems as well as different geographic regions:

Synthesizing:
- One of the Cochrane Collaboration’s review groups, the Effective Practice and Organisation of Care (EPOC) group, is focused on conducting reviews of interventions designed to improve professional practice and the delivery of healthcare services (epoc.cochrane.org). This includes financial, organizational and regulatory interventions that can directly enhance effectiveness, efficiency and equity in health systems. The EPOC group is engaged in a priority setting and mapping process. A policy trials database is being developed by Cochrane EPOC Oslo satellite with WHO and the James Lind Library.
- A team at McMaster University in Canada has developed and now continually update a searchable repository of syntheses of research evidence about health systems arrangements (governance, financial, and delivery arrangements) and implementation strategies within health systems. The database – called Health Systems Evidence and available online at www.healthsystemsevidence.org -- includes: 1) policy briefs that draw on systematic reviews; 2) overviews of systematic reviews; and 3) systematic reviews. Health Systems Evidence currently contains roughly 1150 syntheses of health systems evidence.
- DFID, UK has established a programme called Systematic Reviews in International Development: An Initiative to Strengthen Evidence-Informed Policy Making (www.research4development.info/SystematicReviewFeature.asp) and is considering supporting the creation of an independent and international collaboration to oversee the creation and dissemination of systematic reviews that will focus on creating public good outputs to the highest academic standard.
- Campbell Collaboration (www.campbellcollaboration.org) is planning to establish a Low- and Middle-Income Countries Coordinating Group in collaboration with 3ie (www.3ieimpact.org).
- The Health Evidence in Canada webpage has a list of relevant institutions and projects on health-evidence.ca/additional_resources_links.
- The EPPI centre, Institute of Education (The Evidence for Policy and Practice Information and Co-ordinating Centre) has explored many kinds of systematic reviews like descriptive map, systematic review of qualitative studies, systematic review of both effectiveness and qualitative studies; and has also tried some synthesis methods, such as narrative conceptual synthesis, meta-ethnographic synthesis. They house the UK

- The Cochrane Qualitative Research Methods Group develops and supports methodological work on the inclusion in systematic reviews of findings from studies using qualitative methods (www.joannabriggs.edu.au/). Cochrane Collaboration also has many other methods groups that are relevant (www.chalmersresearch.com/bmg/methods.html).
- Campbell Collaboration Process & Implementation Methods Group at the School of Health and Related Research (ScHARR) at the University of Sheffield, UK (www.sheffield.ac.uk/scharr).
- At the Department of Health Sciences, University of Leicester, Mary Dixon-Woods’ group work on development of methods for synthesizing diverse forms of evidence (www2.le.ac.uk/departments/health-sciences/research/ships/staff/md11).
- The Rx for Change database (at the Canadian HTA centre CADTH) summarizes current research evidence about the effects of strategies to improve drug prescribing practice and drug use: www.cadth.ca/index.php/en/compus/optimal-ther-resources/interventions.
- The Alliance is providing ongoing support to four systematic review centres in low- and middle-income countries (http://www.who.int/alliance-hpsr/projects/systematic_reviews/en/index.html). This programme of work aims to produce reviews of use to policy-makers across three broad thematic areas -- health systems financing, human resources for health and non-state sector service delivery -- but also to build the capacity to conduct high quality reviews in LMICs. The four review centres have received technical support from collaborating partners in high-income countries. The Alliance is also funding work to explore approaches to synthesizing qualitative policy analysis case studies.
- The SUPPORT Collaboration has developed structured summaries of systematic reviews that highlight key messages as well as equity, local applicability and scaling up considerations (http://www.support-collaboration.org/).
- The International Health Policy Monitor is an international network examining health reform processes (http://hpm.org/index.jsp). Organized by the Bertelsmann Foundation of Germany, the network includes 15 OECD countries. Each partner provides semi-annual reports on health reforms in their country. Eventually, the Foundation would like to develop a tool for monitoring policy ideas as they evolve and travel within and across health systems.
- Health Evidence Network (HEN) at the WHO Euro regional office produces evidence reports and summaries target to public health and health care policy-makers that need a trustworthy source of evidence on which to build health policy (http://www.euro.who.int/en/what-we-do/data-and-evidence/health-evidence-network-hen). In conjunction with the European Observatory on Health Systems and Polices, HEN also produces policy briefs focused on health systems that are of relevance to the WHO European Region’s Member States.
- Other initiatives mostly focusing on high-income countries include the ‘On-call’ Facility for International Healthcare Comparisons coordinated by RAND Europe and
Translation:

- The European Observatory on Health Systems and Policies supports and promotes evidence-informed health policy-making through comprehensive and rigorous analysis of the dynamics of health care systems in Europe and through policy dialogues that convene influential doers and thinkers to address key health system challenges at the national level.
- Knowledge translation platforms and networks – such as EVIPNet (www.evipnet.org/php/index.php) or the Regional East African Community Health (REACH) Policy Initiative Project (www.eac.int/health/index.php?option=com_content&view=article&id=96&Itemid=125) – produce policy briefs that bring together the best available global and local evidence on a pressing health system challenge, convene policy dialogues to engage policy-makers, stakeholders and researchers in working through the underlying problems, options for addressing it, and key implementation considerations, and undertake a variety of other efforts to support evidence-informed policy-making.
- The Use of HSR to inform policy-making – SURE project (www.evipnet.org/sure) is evaluating approaches and supporting the Evidence-Informed Policy Network (EVIPNet) in Africa and the REACH Policy Initiative Project.
- The Swiss Tropical and Public Health Institute is producing a WHO handbook for developing health system guidance with input from the WHO Task Force on Evidence for Health System Guidance. The primary purpose of this handbook is to provide support to WHO staff who are charged with developing guidance for policy-makers on specific health system topics. As part of this process the ‘journey’ between research synthesis and policy is being ‘mapped’ to clarify the steps in-between and the most appropriate methods and tools to address them. This mapping, together with contributions from the plethora of studies addressing this issue, should identify the gaps that a new collaboration could help to fill.
- The WHO Task Force on Evidence for Health Systems Guidance is also preparing articles about why health systems guidance is needed, the types of decisions for which decision-makers may require guidance and how to assess evidence for health systems guidance.

There are, however, a number of needs that existing efforts do not sufficiently address:
- Cochrane reviews address questions about ‘effectiveness’, and they are restricted to experimental and some quasi-experimental research designs, they do not address many of the types of questions asked by health policy-makers and managers, including: whether a problem is getting better or worse, how different stakeholders view and experience a problem, the cost-effectiveness of options for addressing a problem; the political and social feasibility of options, and their adaptability to particular contexts; the options’ acceptability from the perspectives of key stakeholders; the barriers to implementation and how to address them; and how to manage scaling up and innovation (1). This will be discussed more below where the types of syntheses that are needed are explored. The experience of many health systems-focused Cochrane reviewers are that there is a lack of primary research that fulfils the criteria for inclusion and thereby the
Cochrane reviews often end up ‘empty’ or with very limited evidence, whereas there is still relevant research about the feasibility or acceptability of initiatives that may inform policy-makers’ decisions by suggesting what might be effective.

- The presentation of health system reviews rarely includes details that facilitate considerations about equity, local applicability, implementation and scaling up (although this is often because such information is missing from the primary research reports).
- Some of the existing knowledge translation initiatives are probably too small (i.e. limited numbers of teams, working in relatively few countries, and on a limited range of topics) and the impact of existing initiatives has not been evaluated (4).
- Sustained funding for country-level knowledge translation activities is limited, given that it tends to fall through the cracks between research and development (4).
- Across these collaborations and databases, most reviews are done in high-income countries and are based largely on primary studies conducted in high-income countries (5, 6).
- There is insufficient coordination between existing initiatives, particularly at regional and global levels (4).

Many of these problems and challenges are also encountered when evaluating the effectiveness of health promotion or public health interventions, where they have inspired new approaches to synthesis. Also, it is of crucial importance to strengthen research capacity within LMICs to increase the body of evidence. More primary research and research syntheses for LMICs are needed to make such efforts relevant and useful in the longer run.

What kinds of knowledge syntheses could usefully inform decisions about strengthening health systems and what methods are appropriate for conducting such syntheses?

Policy-makers need to address many types of questions, such as:

- defining the problem
- assessing potential policy and program options
- identifying implementation considerations.

An inventory of policy questions and their relationship to the types of questions addressed in systematic reviews provides a starting point for discussions about the types of knowledge syntheses needed by policy-makers (2) (see Appendix 2 for more details).

It is important to stress that even if models for synthesizing research evidence within clinical health sciences can be built upon, the health policy and health systems questions are more context and time dependent and therefore may need their own approaches. There is a need to understand how to synthesize the findings of research addressing questions with non-experimental studies including observational studies and qualitative research like single or comparative case studies, ethnographic studies, mixed- or multiple methods studies, action research, operational research and implementation research.
Moreover, key HSR users, i.e. policy-makers and managers, frequently require different types of information and evidence, including modeling data, cost-effectiveness estimates, the political and social acceptability of the intervention, and an analysis of the likely barriers to implementation and how to tackle them. These types of questions do not lend themselves to experimental designs but are better addressed through modeling studies, economic evaluations, case studies and a variety of qualitative research, and policy analyses. As a result, synthesizing evidence across disciplines, methods and research designs is the subject of much ongoing discussion among HSR researchers and systematic reviewers.

Qualitative and mixed-methods approaches to synthesis have emerged from public health, health promotion and social medicine. These include narrative synthesis, meta-ethnography, realist review/synthesis, scoping reviews, meta-synthesis, meta-narrative review, and thematic synthesis. Several groups have developed these approaches and, among others, the Cochrane qualitative methods group and the Campbell process and implementation methods sub-group are striving to integrate these efforts into effectiveness reviews published by the Collaborations, and individuals involved are contributing to advancing these methods in different settings. However, still far fewer resources are going into these kinds of reviews than effectiveness reviews. In addition, these efforts have also to a little extent been focusing on the needs of LMICs.

Barnet-Page and Thomas have published a critical review of synthesis methods for qualitative research (7), and 3ie is working on an overview on methods for qualitative synthesis.

While understanding and managing this diversity of approaches can be a challenge, many opportunities arise when multiple methodological viewpoints can be understood in relation to each other, researchers working from very different traditions can work together, and the various components of synthesis efforts can be integrated into a comprehensive set of perspectives on a pressing issue. In addition to developing review methods for qualitative studies, there is also a need to explore how to synthesize research that utilize some of the most important “quasi-experimental” methods developed in econometrics and evaluation science such as instrumental variable methods, regression discontinuity, difference-in-difference approaches and fixed-effects panel regressions.

Also, there is a need for the development of rapid review methodologies or rapid methods to do overviews of reviews, given that a typical systematic review takes a long time to perform in the first instance - whilst policy-makers are often faced with problems that require a rapid response.

Altogether, this indicates that a multitude of systematic reviews and approaches to research synthesis is needed to provide policy-makers with relevant health systems

In addition, these reviews need to be translated to local contexts by utilizing mechanisms like policy briefs and policy dialogues where the research evidence is synthesized in a systematic way and where transparent deliberative processes including different stakeholders are set up, respectively.

To what extent do established collaborations already support synthesis and translation for health systems research and, what might an additional collaboration offer?

There was a clear consensus at the session organized by the Alliance during the annual meeting of the Global Forum for Health Research in Havana (2010), that there is a need for increased international collaboration and possibly a new collaboration, but that we should learn from current initiatives rather than "reinventing the wheel" (8). A potential new collaboration could share some of the principles, but not duplicate the work, of existing collaborations, e.g. Cochrane Collaboration with its EPOC group that addresses effectiveness questions about health system interventions. It should also build on the work of and collaborate with the Cochrane and Campbell non-randomized studies, equity, economics, qualitative and agenda setting methods groups that develop methods and approaches that are relevant to HSR. There have been several spin-offs from the Cochrane Collaboration, such as the work on uniform reporting guidelines (i.e. standards for how to report research findings) and summaries of reviews. A potential new collaboration with a complementary mission should be considered as building on and being inspired by existing work within clinical medicine, and not be organized or seen as a competing initiative. At the same time, a new collaboration will need to recognize the research traditions and knowledge needs relevant to support health systems strengthening.

More and better coordinated work is needed within and among these efforts. One option is to establish a new formal international collaboration. Its main objectives could be (9):

- To contribute to strengthening the use of scientific evidence in decision-making thereby fostering a culture of evidence-informed decision-making. Health (systems) policy-makers still rely largely on logical arguments and personal experiences. Their proposed policies may be strongly influenced by ideological beliefs and external drivers such as donor perspectives, and not on properly evaluated experiences from other jurisdictions.
- To coordinate and support research synthesis work for health systems (the core function of the collaboration) which includes:
  - To further develop methodologies for health systems research synthesis including developing synthesis methodologies and approaches for reviewing observational and qualitative research in collaboration with existing methods groups within Cochrane and Campbell Collaborations and elsewhere.
  - To promote and support the further development of databases of health system systematic reviews and review-derived products such as policy briefs.
  - To consider establishing a database for other kinds of research derived products that can inform health systems policy design and implementation.
To consider establishing an umbrella knowledge repository that can inform health systems strengthening and that maps the array of existing information sources thereby providing a one-stop shop access and a guiding function to all initiatives/sources which will avoid duplication of efforts.

To set up a global international coordination mechanism and an editorial process for these reviews and review-derived products.

- To inform and facilitate the production of relevant high quality primary HSR that can contribute to research syntheses. This can be achieved through the following activities:
  - Identify questions for research and syntheses that are of particular interest to policy-makers and funders, and establish a database for unresolved relevant HSR questions inspired by e.g. the UK NHS DUET database that can be utilized when doing research priority setting. The James Lind Alliance (www.lindalliance.org) started this and has developed methods for patients and clinicians to identify important research questions about the effects of treatment. Their methods could be adapted for policy-makers, clinicians and service users to identify important research questions about health policy and systems.
  - Establish a taxonomy of HSR study designs and develop reporting guidelines for those designs not covered in existing guidelines in order to improve the methodology of primary research and harmonize reporting, which would in turn improve and facilitate the synthesis process, and translation of findings into policy and practice.
  - To consider establishing a register for prospective HSR studies or build on existing ones (e.g. the EPOC specialized register of RCTs, CCTs, CBAs and ITS of interventions and the policy trials register of complex interventions related to healthcare management and policy (NOKC with EPOC, James Lind Library and WHO) to prevent publication bias (and provide useful methodological information to researchers considering similar work in other settings; perhaps to prevent unnecessary duplication of studies in relatively similar settings).
  - To encourage the publication of all relevant findings, e.g. both "negative" and "positive" findings and results on intended and unintended consequences, to facilitate reviews that: (i) identify all relevant primary studies; and (ii) based on these, are able to identify unambiguous findings.
  - To advocate for openly sharing HSR data and health system performance data to allow and foster secondary data analysis.

- To facilitate information sharing of knowledge translation mechanisms for health systems and to evaluate different approaches to knowledge translation by developing indicators for synthesis and translation initiatives, and use these to evaluate existing (and any new) activities.

- To generate an awareness of the need for (and possibly funding for):
  - Collaboration among existing efforts and initiatives at regional and global levels;
  - Country-level knowledge translation activities;
o Increasing capacity for primary HSR and synthesis work in LMICs.
Consultation document: dissemination and inputs

More than 15 submissions were received in this open consultation process, based on which the document was revised. The general consensus after the consultation process was that there is a need for more systematic collaborative work with specific focus on HSR synthesis, and in particular related to reviews on topics other than the effectiveness of interventions. There was, however, a lack of consensus as to whether to do this within existing collaborations, to establish a new collaboration, or to structure this in other ways. There was also a clear call for involving policy-makers in this collaboration and ensuring that it ultimately meet policy-makers' needs. The consultation document was revised based on the comments submitted.

Ad Hoc Working Group meeting, 2010

Participants in this meeting were provided, in advance, with the consultation document. Several key issues emerged, and were discussed, at this meeting.

First, the Working Group argued for understanding the needs and the problems identified by policy-makers (the demand side) as a starting point. This was felt to be crucial for any new stronger collaborative efforts regarding both research synthesis, which needs to be responsive to the needs of policy-makers, and knowledge translation, which needs to be set up in a way that is relevant for the ongoing policy-making processes.

Second, the Working Group made an effort to understand the current landscape of research synthesis, and to compare this with the needs as perceived by the Alliance and the Working Group (Table 1). This mapping of the landscape demonstrates that there are large potential benefits from collaborating with existing collaborations regarding the needs identified. However, it also demonstrates that there are no existing structures that encompass all the areas that this process facilitated by the Alliance has indicated are needed within the health systems domain.

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2 A detailed summary of this feedback is available, upon request, from Kent Ranson (ransonm@who.int).
### Table 1. Areas of interest / activity among organizations involved in research synthesis

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Third, the Working Group devoted a considerable amount of time to discuss problems faced in producing HSR syntheses and ensuring that these are of use to, and accessible by, policy-makers.

**Table 2. Summary of HSR synthesis supply-side issues and possible solutions**

<table>
<thead>
<tr>
<th>Issues</th>
<th>Possible solutions</th>
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</table>
| **1. Methodological issues:**  
There is a lack of agreed upon methods for synthesizing health systems research, for example:  
- need a better balance between reviews drawing on experimental studies vs. observational studies  
- need to understand how to judge whether issues are generalizable (global) or contextual (local/national)?  
- need to understand the role of case studies in synthesis work and in informing decisions  
- need for agreed upon methods for synthesizing research on non-effectiveness issues  
- methods development should be driven by policy-makers needs | - Non-effectiveness reviews should be coordinated with efforts for effectiveness reviews  
- Further develop and agree upon methods and standards  
- Consider harmonizing and coordinating production of research syntheses to avoid duplication of work, but acknowledging the needs for contextual factors/local needs  
- Develop a Handbook of HSR synthesis or compendium on examples of HSR synthesis |
| **2. Capacity issues:**  
- There is a lack of capacity for producing reviews on effectiveness  
- There is no “system”/collective efforts for producing reviews on other questions – and this means duplication of efforts | - Increase capacity through commissioning since this will also align reviews with needs/demand  
- Assess the amount of duplication of efforts in HSR synthesis (review the McMaster database and other sources) |
| **3. Knowledge translation issues:**  
- Decision-makers want a place/structure to obtain the needed evidence – a need for a one-stop shop/portal on the global level  
- There is a mismatch between policy-makers knowledge needs and the knowledge provided and no clear mechanisms for deciding on priorities | - Do a review on the mechanisms for linking policy needs and systematic reviews production  
- Devise mechanisms for responding to policy-makers needs  
- Develop a user-driven system for access to HSR evidence (a portal or extend existing portals) (needs categorization, searching, presentation, marketing) |

The working group also suggested that the Alliance may consider:  
- convening a policy-maker forum to address the demand side issues;
• forming an Alliance Advisory Group on HSR Synthesis that can facilitate further discussions and coordinate efforts in addressing the problems and delivering on the options identified;
• establishing a network of health systems knowledge brokers/translator to facilitate joint learning and exchange among those who utilize research evidence for informing national policy processes.

Panel session and meeting at First Global Symposium on HSR, 2010

Key issues discussed at the meeting between representatives of the Working Group and members of relevant review groups within the Cochrane Collaboration included:
• Issues related to the Cochrane EPOC Centre and other relevant Cochrane entities, including:
  o The possibility of widening the scope of reviews that are covered by Cochrane. There are challenges associated with expanding scope to include non-effectiveness reviews, included limited capacity / expertise within Cochrane;
  o EPOC’s willingness to support and participate in methodological research on the range of designs that might be considered for reviews;
  o The possibility of providing technical support and capacity building for reviews in LMICs;
  o Desire of EPOC to collaborate on supporting the use of reviews by policy-makers.
• The international prospective register of systematic reviews, PROSPERO, which is soon to be launched by York University.
• The need for additional financial resources to support non-effectiveness HSR reviews and methodological development.
• There was agreement that more needs to be done towards exploring the needs of policy-makers with regard to research evidence.

During the concurrent session in Montreux, the topics presented and discussed included: what kind of synthesized knowledge policy-makers need; whether new or improved methods for synthesizing evidence on the impact of health system interventions are needed; what other kind of knowledge than evidence on effectiveness policy-makers do need and how this kind of evidence should be synthesized; and what health systems research could learn from the experiences of the health technology assessment field when it comes to summarizing and presenting research evidence to policy-makers. Preliminary recommendations from the Alliance Working Group on Health Systems Research Synthesis were presented and based on the discussions at the Montreux Symposium, the recommendations were further refined.

3 Detailed minutes of the breakfast meeting are available available, upon request, from Kent Ranson (ransonm@who.int).
D. Recommendations for the Alliance

The Working Group made the following set of recommendations for the Alliance, "which
the Alliance should consider after due processes within the secretariat and with its
Scientific and Technical Advisory Committee (STAC) and Board":

1. Play a central role in advancing the science of HSR synthesis by developing and
strengthening networks between individuals and institutions, collaborations and groups
that have an interest in HSR synthesis and translation:
   a) Form an Advisory Group on Health Systems Research Synthesis that brings
together different collaborations, groups and institutions.
   b) Coordinate with the Task Force on Evidence for Health Systems Guidance set
   up by the World Health Organization and other relevant initiatives.
   c) Develop a small series of Alliance briefing notes relevant for HSR synthesis
   and translation and consider coordinating a series of scientific papers on HSR
   synthesis and translation.
   d) Consider planning a meeting with key experts and stakeholders.
   e) Support discussions to establish a health systems field cross cutting Cochrane
   and Campbell Collaborations, towards raising the profile of health systems
   research syntheses within these organizations and outside.

2. Provide overall support, information sharing and potential coordination related to
setting priorities for HSR synthesis regionally and globally and increasing capacity
building in HSR synthesis and translation (both relevant to, and within, LMICs):
   a) Utilize Alliance networks and fora to engage policy-makers regarding their
   needs for synthesized research evidence.
   b) Continue capacity building and supporting systematic review centres.
   c) Collaborate with groups working in this area to develop a Handbook and/or a
   Reader on HSR synthesis and knowledge translation within health systems.
   d) Identify potential funding sources and support mechanisms for systematic
   reviews -- working with existing collaborations like Cochrane and Campbell -
   - and support establishing mechanisms for commissioning systematic reviews
   of HSR.

3. Advocate for and support a common global database for all types of systematic
reviews of HSR:
   a) Support the use of Health Systems Evidence
   (www.healthsystemsevidence.org) as the common database.
   b) In consultation with policy-makers, explore ways of making this database
   more user-friendly.
   c) Facilitate the inclusion of this database in the Cochrane Library and other
   relevant portals and repositories.

4. Explore expansion of the range of study designs that can be included in reviews of
the effectiveness of HSR interventions. Collaborate with the EPOC group and Non-
randomised Studies Methods Group of the Cochrane Collaboration and relevant Campbell methods groups to consider ways in which quasi-experimental methods from econometrics and social evaluation research can be included in Cochrane and Campbell reviews on health systems.

5. Pilot a system for producing demand-driven syntheses/systematic reviews of HSR addressing questions other than effectiveness. Collaborate with the Evidence for Policy and Practice Information and Co-ordinating Centre (EPPI-Centre), one or two LMIC-based institutions, Cochrane and Campbell Collaborations and 3ie in setting up a consortium to produce, edit and publish diverse and complex systematic reviews for strengthening health systems and that can have an incubator function for exploring new methods and approaches before deciding on longer term structural mechanisms.

6. Advocate for and support prospective registration of all protocols for systematic reviews when they are planned:
   a) Support the international prospective register of systematic reviews, PROSPERO, where authors can register reviews of the effectiveness of health and social care interventions (hosted by the Centre for Reviews and Dissemination in York, UK and supported by the National Institutes for Health Research (NIHR, UK), the Canadian Institutes of Health Research (CIHR) and the International Network of Agencies for Health Technology Assessment).
   b) Promote inclusion, in PROSPERO, of non-effectiveness systematic reviews that focus, for example, on policy problems/needs, implementation processes, acceptability of interventions, etc. If this is not possible, then support or initiate another system inclusive of all HSR systematic reviews.
   c) Assist in the development of these databases so that they address the needs of HSR and are compatible with other databases, such as the Cochrane Library and Health Systems Evidence. Require that all systematic reviews that are supported by the Alliance, or carried out by Alliance partners, be prospectively registered.

An abridged version of this document, with its recommendations, was presented to the Alliance Scientific and Technical Advisory Committee (STAC) and Board in May 2011 and endorsed, conditional on the availability of financial resources.
4. Acknowledgements

The Alliance HPSR wishes to acknowledge the many people who have provided inputs into this process and paper. In particular we would like to thank:

- Those listed in Appendix 1 who presented at, or participated in the meetings that fed into this work.
- John-Arne Røttingen for providing leadership throughout the process.
- Simon Lewin for contributing substantively to earlier drafts of this document and commenting on the final draft.
- Participants from the session at the Global Forum for Health Research who provided written comments on an earlier draft.
- Andy Haines and Sandy Oliver for comments on an earlier draft.
- The Cochrane Collaboration, and Steering Group Co-Chair Jeremy Grimshaw in particular, for assistance and engagement in this process.
- The UK Department for International Development for its support, and for hosting the meeting of October, 2010.
5. References


5. Kwon S. What are the needs of policymakers for synthesized evidence? Global Forum for Health Research; 2009; Havana, Cuba (16-20 December); 2009.

6. Koehlmoos TP. What are the merits and limitations of cochrane reviews for health policy and systems research? Global Forum for Health Research; 2009; Havana, Cuba (16-20 December); 2009.


### 6. Appendices

**Appendix 1. Working Group on HSR Synthesis**

<table>
<thead>
<tr>
<th>Name</th>
<th>Title &amp; institution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a. Presenters in session at the Global Forum for Health Research, Havana, 2009</strong></td>
<td></td>
</tr>
<tr>
<td>Elizabeth Ashbourne (Chair)</td>
<td>World Bank eHealth Activity Coordinator, Health, Nutrition, and Population Human Development Network, The World Bank</td>
</tr>
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<td>Assistant Professor, Department of Family Medicine, School of Medicine, Pontificia Universidad Catolica de Chile</td>
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<td>John-Arne Røttingen</td>
<td>Chief Executive, Norwegian Knowledge Centre for the Health Services &amp; Chair of the Board, Alliance for Health Policy and System Research</td>
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<tr>
<td>Jessica Shearer</td>
<td>Doctoral Student and Research Coordinator, Program in Policy Decision-Making, McMaster University</td>
</tr>
<tr>
<td><strong>b. Participants in ad hoc working group meeting, London, 2010</strong></td>
<td></td>
</tr>
<tr>
<td>Tracey Koehlmoos, Tomas Pantoja, John-Arne Røttingen (Co-host)</td>
<td>(see above)</td>
</tr>
<tr>
<td>Till Baernighausen</td>
<td>Assistant Professor of Global Health, Harvard School of Public Health (HSPH)</td>
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<tr>
<td>Xavier Bosch-Capblanch</td>
<td>Specialist in Public Health, Swiss Tropical and Public Health Institute</td>
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<tr>
<td>Derek Cutler</td>
<td>Coordinator, NICE International, UK</td>
</tr>
<tr>
<td>Philip Davies</td>
<td>Executive Director, Oxford Evidentia Limited</td>
</tr>
<tr>
<td>David de Ferranti</td>
<td>Principal and President, Results for Development Institute</td>
</tr>
<tr>
<td>Maxime Gasteen (Co-host)</td>
<td>Policy Analyst; Research and Evidence Division, UK Department for International Development (DFID)</td>
</tr>
<tr>
<td>Abdul Ghaffar</td>
<td>Executive Director, Alliance for Health Policy and Systems Research</td>
</tr>
<tr>
<td>Andy Haines</td>
<td>Director, London School of Hygiene and Tropical Medicine (LSHTM)</td>
</tr>
<tr>
<td>Chris Henshall</td>
<td>President, Health Technology Assessment International (HTAi)</td>
</tr>
<tr>
<td>Simon Lewin</td>
<td>Senior Researcher, Norwegian Knowledge Centre for the Health Services (attending on behalf of Campbell Collaboration)</td>
</tr>
<tr>
<td>Name</td>
<td>Title &amp; institution</td>
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</tr>
<tr>
<td>Nickolas Mays</td>
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<td>Sandy Oliver</td>
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<td>Duncan Ross</td>
<td>Director of International Programmes, University of Leeds</td>
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<td>Francis Ruiz</td>
<td>Senior Adviser, NICE International, UK</td>
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<td>Editor in Chief, The Cochrane Library</td>
</tr>
<tr>
<td>Hugh Waddington</td>
<td>Evaluation Adviser, International Initiative for Impact Evaluation (3IE)</td>
</tr>
</tbody>
</table>

**c. Presenters in session at First Global Symposium on HSR, Montreux, 2010**

<table>
<thead>
<tr>
<th>Name</th>
<th>Title &amp; institution</th>
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<tbody>
<tr>
<td>John-Arne Rottingen, Till Bärnighausen, Tracey Koehlmoos, Chris Henshall</td>
<td>(see above)</td>
</tr>
<tr>
<td>Fatimata Moussa</td>
<td>Conseiller Technique, Programme National de Lutte Contre la Tuberculose, Ministère de la Santé Publique, Niger</td>
</tr>
</tbody>
</table>

**d. Participants in breakfast meeting, Montreux, 2010**

<table>
<thead>
<tr>
<th>Name</th>
<th>Title &amp; institution</th>
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</thead>
<tbody>
<tr>
<td>David de Ferranti (chair), Tracey Koehlmoes, Simon Lewin, Tomas Pantoja, John-Arne Rottingen, Sandy Oliver</td>
<td>(see above)</td>
</tr>
<tr>
<td>Atle Fretheim</td>
<td>Research Director, Preventive and International Health Care Unit, Norwegian Knowledge Centre for the Health Services</td>
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<td>Senior Scientist, Global Health and Welfare, SINTEF Group, Norway</td>
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<tr>
<td>Jeremy Grimshaw</td>
<td>Senior Scientist, Clinical Epidemiology Programme, Ottawa Hospital Research Institute</td>
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<tr>
<td>John Lavis</td>
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</tr>
<tr>
<td>Susan Munabi-Babigumira</td>
<td>Researcher, Prevention and International Health, Norwegian Knowledge Centre for the Health Services</td>
</tr>
<tr>
<td>Peter Tugwell</td>
<td>Director, Centre for Global Health, University of Ottawa</td>
</tr>
<tr>
<td>Merrick Zwarenstein</td>
<td>Senior Scientist, Knowledge Translation Unit, University of Cape Town</td>
</tr>
</tbody>
</table>
## Appendix 2. Types of systematic reviews needed in different steps in the policy-making process

<table>
<thead>
<tr>
<th>Steps in a Policy-making Process</th>
<th>Sub-Steps that Involve Acquiring Data and/or Research Evidence</th>
<th>Examples of the Types of Systematic Reviews That Can Be Acquired</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Defining the problem</strong></td>
<td>Identifying indicators to establish the magnitude of the problem (or the factors that contribute to it)</td>
<td>Reviews of observational studies (e.g., administrative database studies, community surveys)</td>
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<tr>
<td></td>
<td>Making comparisons (over time, across settings or against plans) to establish the magnitude of the problem (or the factors that contribute to it)</td>
<td>Reviews of observational studies (e.g., administrative database studies, community surveys)</td>
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<td></td>
<td>Highlighting alternative framings of the problem to assist with mobilizing support among different groups to address the problem</td>
<td>Reviews of qualitative studies that examine stakeholders’ views about and experiences with the problem (e.g., studies in which narrative data are collected from individual or groups of “informants” through interviews, focus groups, participant observation, or from documents)</td>
</tr>
<tr>
<td><strong>Assessing potential policy and program options</strong></td>
<td>Identifying policy and program options that could affect the problem (or the factors that contribute to it)</td>
<td>(Frameworks embedded in) Reviews or overviews of systematic reviews of any type if frameworks were used to organize the search for, and presentation of, research evidence (as well as theories and frameworks that are the focus of articles/reports in their own right)</td>
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<tr>
<td></td>
<td>Characterizing the positive effects (benefits) of each policy option</td>
<td>Reviews of effectiveness studies (e.g., randomized controlled trials, interrupted time series)</td>
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<tr>
<td></td>
<td>Characterizing the negative effects (harms) of each policy option</td>
<td>Reviews of effectiveness and/or observational studies</td>
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<td></td>
<td>Characterizing the cost-effectiveness of policy options</td>
<td>Reviews of economic evaluations</td>
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<tr>
<td></td>
<td>Identifying the key elements of complex policy options (to facilitate local adaptation if necessary)</td>
<td>Reviews of qualitative studies that examine how or why interventions work and/or reviews of observational studies</td>
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<tr>
<td></td>
<td>Characterizing stakeholders’ views about and experiences with the policy options</td>
<td>Reviews of qualitative studies that examine stakeholders’ views about and experiences with particular options</td>
</tr>
<tr>
<td><strong>Identifying implementation considerations</strong></td>
<td>Identifying potential barriers to implementation at the level of patients/consumers, health workers, organizations, and systems</td>
<td>Reviews of observational studies and/or reviews of qualitative studies</td>
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<tr>
<td></td>
<td>Characterizing the effects of appropriately targeted implementation strategies</td>
<td>Reviews of effectiveness studies</td>
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</tbody>
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*Source: Lavis, JN (2009) (2)*
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