

Responding to Requests for Information on Health Systems from Policy Makers in Asian Countries

Responding to Requests for Information on Health Systems from Policy Makers in Asian Countries

Judith Healy¹, John Maxwell¹, Phua Kai Hong², Vivian Lin³ and collaborators

- 1. Australian National University, Canberra, Australia
- 2. National University of Singapore
- 3. La Trobe University, Melbourne, Australia

December 2007

Table of Contents

Executive Summary	1
1 Introduction	6
1.1 Study rationale	6
1.2 Study design	6
2 Health policy challenges in rapidly changing societies	8
2.1 Population health needs in the Asian region	8
2.2 Rapidly changing health sectors	9
2.3 Knowledge management for health policy	10
3 Views on an Asian region information mechanism	15
3.1 Views of policy makers	15
3.2 Functions of an information mechanism	15
3.3 Governance and structure	19
3.4 Views of researchers and regional research capacity	21
4 Health systems information mechanisms: international overview	27
4.1 On-call evidence for policy-makers	28
4.2 Information centres and knowledge networks	33
4.3 Centres for systematic reviews	36
5 Information mechanisms: options for Asia	39
5.1 Functions of information mechanisms	39
5.2 Producing and packaging information	42
5.3 Governance	45
5.4 Regional information mechanism options	48
6 From ideas to action	52
6.1 Challenges in the Asian region	52
6.2 Requirements for an Asian information mechanism	54
6.3 Next steps: planning and implementation	58
Bibliography	60
Annexes	
1. Members of Alliance Steering Group and Terms of Reference	62
2. Researchers and collaborators	63
3. Work Plan	65
4. Guide for interviews with Ministries of Health	67
5. Guide for interviews with Research Institutes	69
6. Statistical profiles of the nine countries	74
7. Additional information and resource bodies	76
8 Profiles of research and nolicy institutes: China Philippines Singapore	97

List of Acronyms

APEC Asia Pacific Economic Cooperation

APHEN Asia Pacific Health Economics Network

ASEAN Association of South-East Asian Nations

CHEEP Costing for Health and Economic Evaluation Programme

EPOC Effective Practice and Organization Care Group

HEN Health Evidence Network
HiTS Health Systems in Transition

IHC International Healthcare Comparisons

LSE London School of Economics

LSHTM London School of Hygiene and Tropical Medicine

NHS National Health Service

NGO Non-government Organization

NSW New South Wales

OECD Organization of Economic Cooperation and Development

RRRM Regional Rapid Response Mechanism
SARS Severe Acute Respiratory Syndrome
SEARO South East Asia Regional Office (WHO)

UN United Nations

WHO World Health Organization

WPRO Western Pacific Regional Office (WHO)

List of Tables

Table 2.1	Types of research and links to policy	12
Table 3.1	Health systems topics identified by policy makers	16
Table 3.2	Preliminary list of research centres	22
Table 4.1	Summary of selected information mechanisms	27
Table 5.1	Purposes, programs and activities of a health systems information body	40
Table 5.2	Information products and formats	42

List of Figures

Figure 5.1	Producing research evidence for policy makers	39
Figure 5.2	Information production process	44
Figure 5.3	Single client model	48
Figure 5.4	Several clients and multiple producers	50
Figure 5.5	Secretariat, several partners and centres, multiple clients, network of information producers	51

Executive Summary

Background and methods

Policy makers in the Asian region, compared to those in Europe and OECD countries, generally have less access to relevant evidence-based information on the workings of their health systems. This study aimed to assess the level of interest in the establishment of an Asian regional mechanism, whether a centre or network, with the capacity to respond to questions from policy makers. The study was commissioned by the Alliance for Health Policy and Systems Research, based in the World Health Organization, Geneva. The purpose of a regional mechanism with the capacity to offer information on health systems would be to promote the take-up of research evidence by policy makers in participating Asian countries, and thus help strengthen their health systems and thereby improve the health of their populations.

Health systems are never static but must respond to internal pressures and to changes in their environments. Health sectors have embarked upon major changes in the diverse Asian region intended to achieve sustainable funding and to improve the delivery of health care. These health systems must also respond to crises, such as infectious disease pandemics and environmental disasters, which do not confine themselves to national borders. Policy makers in Asia, therefore, are looking for information to assist them in making strategic decisions for their health systems.

The terms of reference for a study on the feasibility of a regional rapid response mechanism (RRRM) identified nine countries for inclusion. Collaborators from seven countries agreed to participate: China, Indonesia, Laos, Malaysia, Philippines, Singapore, and Vietnam. Collaborators in each country interviewed informants from health departments and research institutes (around 90 informants were contacted in total), and compiled Country Reports based on these interviews and on their own knowledge. Detailed reports on the views of researchers and research institutes were obtained from three countries: China, Philippines and Singapore. Over 20 established information mechanisms around the world also were reviewed.

Policy makers and researchers overall supported the establishment of some type of regional information mechanism, and many wished to be involved in its governance and activities. This report summarises the study and its conclusions. Additional materials are provided in Annexes 1-10, and the full Country Reports are available upon request from the Alliance (alliance-hpsr@who.int).

Views of policy makers and researchers in Asian countries

The Country Reports concluded that policy makers and researchers supported the establishment of some type of regional information mechanism. A large number of research topics were identified as relevant to strategic health system policies in the region. While common challenges and information needs emerged, policy makers also stressed that each country must select and adapt evidence to suit its own situation. Some countries look internationally for information, while others focus upon the region, or upon the experiences of other low-income countries.

Policy makers suggested a range of functions for a regional mechanism. They particularly emphasised its role, first, as a forum for the exchange of comparative information about health systems in the region and beyond, and second, as a mechanism for building capacity in researching, requesting and using information. They wanted information supplied in a variety of formats including detailed reports and short policy briefings. No agreed model emerged on how such a mechanism might be structured and located, whether as one regional centre, or a secretariat linked to smaller groups. Policy makers and researchers agreed on some common principles, however, including that such a mechanism should be independent, well-resourced, highly credible with strong research links, and responsive to local contexts. Most policy makers wished to be involved in its governance, since they wanted such an entity to be responsive to their information needs.

Collaborators in the seven countries identified active research groups and researchers, especially in the middle and high-income countries, who increasingly engage with international networks. For example, Cochrane Collaboration groups support researchers in Asian countries in undertaking systematic reviews on clinical and health system issues. Many research centres in the region and beyond are interested in producing research for a regional information mechanism.

Different types of information mechanisms

Innovative forms of organisation based on new technology have emerged in order to appraise and channel an avalanche of information. A vast amount of research is published on health and medical issues and a growing amount on health systems issues. Most of this research, and the emerging knowledge networks, however, are found in high-income countries.

Several themes emerged from a review of over 20 information entities, categorised as on-call mechanisms, information centres and knowledge networks, and centres for systematic reviews. First, their structural and functional permutations offer various models for consideration in designing a mechanism for the Asian region. Second, they offer potentially five main functions: they manage information, produce information, disseminate information, build capacity, and

promote the take-up of evidence into policy. Third, greater attention is being paid to presenting products in reader-friendly ways. Fourth, policy dialogues are encouraged, for example, by using "knowledge brokers" able to liaise between policy makers and researchers. Fifth, few mechanisms respond rapidly to requests for information. Finally, these entities offer information and sometimes evidence, but seldom offer direct advice to policy makers.

The overview of information entities suggested three types of structural models although many permutations are possible. One option involves a centre managed by one group with a single client and several information providers. The main strengths of this model are its responsiveness and engagement in producing information for one client, which lends itself to a centre based in one country. A second option involves one regional centre with several partners and clients, and multiple information providers. The strengths of this model lie in pooling resources and developing regional expertise. This type of model could respond to a group of countries, or could develop a network that concentrates upon a limited topic area. A third and more complex model involves a central secretariat with linked centres or satellites, multiple partners, multiple clients, and a network of information providers. Its strengths are its capacity to draw upon a large network of partners and researchers.

Challenges to establishing an Asian regional mechanism

The overview of international mechanisms and the survey of views in Asian countries indicate many possibilities and pitfalls in planning, establishing and operating an information entity. Some of the challenges for the Asian region are summarised below.

Research capacity

Local research capacity needs to be strengthened since much health systems research comes from high-income countries. A related issue is the extent to which an Asian mechanism would undertake regional research or summarise existing international research. Information entities in high-income countries can draw upon research from relatively well-resourced groups and individuals, who contribute their expertise either unpaid or for a small honorarium, but individual researchers and research centres in the Asian region would need funds in order to produce reports and develop their research capacity. Policy makers in the Asian region also need support in requesting and using evidence-based research.

Several countries have expertise in a specific area, such as infectious disease surveillance. While many research groups are keen to participate, few countries have expertise across a range of health policy issues. The fact that specialised expertise is scattered throughout the region suggests a rationale for a regional mechanism.

Resources

Core funding would be needed to manage an Asian regional mechanism, employ staff, commission reviews, and engage with policy makers. Costs are difficult to estimate in the absence of a specific proposal. Also, little information is available on what it costs to run established information entities, partly because many receive substantial in-kind support from their hosts and partners.

Sponsors from among multilateral and bilateral aid agencies are needed provide core funding and subsidise the membership fees of low-income countries. Sponsors and partners could also provide in-kind and technical assistance. Aid agencies already fund information entities based in high-income countries to undertake research reviews relevant to lower and middle-income countries, and have called for evidence-based health policy in order to strengthen health systems.

Diversity

"Asia" is a very diverse region and some groupings of countries may be more culturally and politically compatible than others. The seven countries in this study range from high-income countries, such as Singapore, to low-income countries, such as Laos, and the health needs of their populations and the strengths of their health sectors vary considerably.

Language is a difficulty. The information mechanisms reviewed in this report mainly use English. But of the seven countries in this study, the English language is only strong in three countries: Malaysia, the Philippines and Singapore. If local knowledge networks are to serve the interests of policy makers in all countries, sufficient resources would be needed for translation services.

Information mechanisms depend on modern forms of communication technology. While dramatic changes are underway, the take-up of new technology is uneven across the Asian region. Investment in information technology thus would be necessary for satisfactory communications across the network.

Responsiveness

A broad range of functions and topics and products were proposed for a regional mechanism. A fledgling information mechanism would need to decide initial priorities.

Policy makers stress the country-specific nature of much policy making, while noting that many issues are common to health sectors in the region. This suggests the need for a large regional centre with the capacity to respond to a range of countries, or else a secretariat linked to local research centres or lead researchers. It also suggests a need for local knowledge brokers able to liaise between researchers and policy makers, and who have comparative knowledge of the region and beyond.

Policy relevant information usually is not prescriptive. Given the context-specific and political nature of policy making, information entities offer information not advice to policy makers. This is especially important in the Asian region given the scarcity of evidence-based information.

Information entities offer a timely but not rapid response. They stress the iterative process involved in producing policy-relevant information, and the time required to research issues where evidence is sparse and scattered. Some negotiate a program of policy-relevant research with their clients over a longer time frame.

Conclusions and next steps

The study found strong support among both policy makers and research organisations for a regional mechanism to provide information relevant to strategic policy decisions on health systems. They also pointed out the significant challenges involved in establishing and running an information entity in the Asian region.

Greater clarity is needed about the functions that a regional entity would undertake, the types of information most important to policy makers, and the products that are feasible to produce. Three production strategies might be as follows: produce case studies and comparative studies; analyse the relevance of international research review findings to Asian countries; and invite policy makers and researchers to discuss research reports in policy dialogue forums.

A mechanism could be structured around a regional centre that undertakes much of the work, or a regional secretariat that devolves more functions to associated centres, satellites or lead researchers. The structure would depend in large part upon the functions to be undertaken. This entity would require a location in an independent and well-resourced host with good connections to policy makers and researchers. Three options for a base were suggested: an independent regional centre (an NGO-type structure); a university or research institute, or an international organisation, such as the World Health Organization.

Information mechanisms in developed countries generally grew from small beginnings and long-standing research partnerships. Solid research partnerships are needed to provide a sound base upon which to build an information mechanism. Moving from the broad idea of an Asian regional mechanism to action will require ongoing consultation, detailed planning, and phased implementation.

1 Introduction

1.1 Study rationale

The 2006-08 strategic plan of the Alliance for Health Policy and Systems Research called for exploring the need for a Regional Rapid Response Mechanism (RRRM) in the Asian region, through which policy makers could pose questions on health system issues and receive timely responses. The purposes would be to increase the production of research-based evidence, and its use by policy makers, in order to improve the efficiency and effectiveness of health systems in the region. Evidence for policy making often does not reach decision makers in Asian countries. Although there are exceptions, much health systems research, and hence the established knowledge networks, remain phenomena of the developed world. Few centres in the Asian region have the capacity to identify, appraise and summarise research evidence on a range of health system issues. The proposed regional information mechanism could draw upon expertise throughout and beyond the Asian region in order to produce evidence-based reports relevant to one or more countries.

Policy makers in Ministries of Health in Asian countries were interviewed for this study, as well as researchers in research institutes and universities. The intention was to obtain their views on the need for, and feasibility of, some type of regional information mechanism. Over 20 established health systems information entities around the world also were reviewed in order to gather ideas relevant to an information mechanism in the Asian region.

The Alliance for Health Policy and Systems Research based in the World Health Organization (WHO) Geneva commissioned this study and formed a Steering Group to guide the work (Annex 1). The nine countries of interest were: Cambodia, China, Indonesia, Laos, Malaysia, Philippines, Singapore, Thailand, and Vietnam. The Terms of Reference were agreed (Annex 1) and the survey was undertaken during June to October 2007 (four months). Some results subsequently were presented and discussed at meetings in Beijing and Manila in late 2007.

1.2 Study design

The consortium undertaking the study comprised experts on health systems policy in the Asian region: Associate Professor Judith Healy (Australian National University), Associate Professor Phua Kai Hong (National University of Singapore), Professor Vivian Lin (La Trobe University, Melbourne), and a project manager with experience in the Asian region, Dr John Maxwell (Australian National University). Collaborators were assembled who understood the information needs of Ministries of

Health in their countries (Annex 2). Two potential collaborators subsequently were unable to participate: the Cambodia expert had too many other commitments, as did the Thailand expert who, however, provided comments on the concept.

Interview guides were developed and piloted for use with informants from Ministries of Health (Annex 3) and research institutes (Annex 4). Collaborators interviewed around ten key informants in Ministries of Health and related agencies in their respective countries, as well as informants from research groups. Collaborators summarised the conclusions in their Country Reports under four headings: information needs for policy making, format of advice, structure of policy advice mechanism, and sponsorship and funding arrangements. In total about 90 informants were interviewed (Annex 5). The views obtained from collaborators and informants are personal views and should not necessarily be regarded as the official views of a Ministry of Health or a research institute.

2 Health policy challenges in rapidly changing societies

Health systems policy makers must respond to changes both in the health of their populations and in their policy environments, to advances in scientific knowledge and technology, and to social, economic and political pressures. Policy makers across Asia are struggling to stay informed, however, given rapid changes in population health needs and in health sectors. While there has been an explosion in clinical research evidence, it is more difficult to locate evidence on health system issues, particularly for low and middle-income countries. Policy makers and researchers also recognise that an initiative that works well in one country might not necessarily translate well to another country. Thus an appreciation of context is crucial in producing health systems evidence for policy makers. Policies are not always based on evidence, however, particularly when health systems evidence is shaky or non-existent, but also because many other factors come into play in policy making. For example, the formulation of health policy involves a set of competing rationalities: cultural, political and technical (Lin and Gibson 2003: 14).

The *World Report on Knowledge for Better Health* argued that there is an urgent need to generate better knowledge in order to identify strategies for strengthening health systems. This requires more investment in health systems research. The report also noted the gap between the production of research and its take-up by policy makers:

"Stronger emphasis should be placed on translating knowledge into action to improve public health by bridging the gap between what is known and what is actually being done" (WHO 2004: xv).

2.1 Population health needs in the Asian region

The population health needs among the nine Asian countries are very diverse (see Annex 6). There are profound differences in health needs and health resources between rich and poor countries. For example, average life expectancy in Singapore is 80 years compared to 54 years in Cambodia, and per capita expenditure on health in Singapore is US\$1118 compared to US\$118 in Indonesia. Health policy makers in poor countries face major public health concerns, including endemic diseases, such as malaria, dengue fever, tuberculosis and cholera. Other long-standing problems include high maternal and child mortality rates, and coping with the impact of poor nutrition especially on children in remote areas.

Recent decades also have seen the emergence of new public health challenges, including rises in non-communicable diseases, injury, and mental health problems. New diseases have placed additional pressures upon countries already struggling to deliver basic health services to their populations. For example, HIV/AIDS is a growing problem in some countries. Other challenges include the arrival of new diseases, such as Severe Acute Respiratory Syndrome (SARS), and Avian Influenza, with the attendant threat of pandemics that could devastate countries in the region and beyond. A spate of natural disasters has imposed additional strain, such as the 2004 tsunami, and earthquakes, typhoons and floods. Many governments have found that such events place huge and sudden demands on their health systems.

In addition to environmental disasters, therefore, many countries in the Asia-Pacific Region are experiencing a triple burden of disease: infectious diseases, non-communicable diseases, and new diseases. These challenges mean that health policy makers must respond to current health problems, as well as invest in adaptive health systems for the future.

2.2 Rapidly changing health sectors

The region is undergoing rapid economic and social changes along with parallel developments in health sectors (Phua and Blomqvist 2004). Except for the financial crisis a decade ago, some countries have experienced fast rates of economic growth, and impressive improvements in living standards. But a group of developing countries with relatively weak public health services and low levels of resources still depend on external assistance.

Governments throughout the world are assessing their role in the governance and delivery of health services. Private sector principles and practices have been introduced into the public sector, although some Western governments, after a decade of experience, have drawn back from over-reliance on market model solutions for their health sectors (Harrison 2004). Policy makers in Asia are engaged in a variety of health sector reforms. Some health systems have experimented with devolution and decentralisation, have transformed public agencies into autonomous or corporatised entities, and have a high degree of private sector involvement in the financing and delivery of health services (Phua and Chew 2002).

Many health sector reforms in the 1990s concentrated on financing and shifted the sources of funds to pay for health care from out-of-pocket payments and taxes, to social or voluntary insurance schemes, and to newer forms like medical savings. Different funding sources have different implications for equity and efficiency. As well as different methods for funding health care, different methods for delivering health care are being tried and more attention is being paid to the

performance of health services and health outcomes, including the quality and safety of health care for patients.

2.3 Knowledge management for health policy

Termed the information age, the information explosion has been propelled by technology, such as the World-Wide-Web, which offers instant "on-line" access to immense amounts of material. This explosion of information has created a demand for its management, and the last few decades therefore have seen the emergence of new ways to sift and channel evidence for policy makers. There are two major gaps, however, in this accumulation and synthesis of research. First, most evidence concerns clinical care, given the huge expansion of medical research and push to evidence-based medicine, with much less research on health systems. Second, most research, both on clinical care and health systems, comes from high-income countries not low and middle-income countries. The so-called 10/90 resource gap refers to the fact that 90% of scientific publications in health research are published by researchers in developed countries (WHO 2004: 21).

A recent report, *Strengthening health systems:* the role and promise of policy and systems research (Alliance for Health Policy and Systems Research 2004), suggests several reasons why health systems research, compared to medical research, has been the poor relation. These reasons include its multidisciplinary origins in the "soft" sciences, its lack of an institutional base, the difficulty of carrying out rigorously designed "scientific" studies, and the context-specific nature of many interventions.

Governments and international organisations are now seeking to overcome this neglect and to promote an evidence base upon which to build stronger health systems, particularly in low income countries. The rationale is that a well-functioning health care system provides the foundation for economic and human development, ensures access to health care for the poor, and can deliver on the promise of medical progress.

Evidence for health systems policy making

Health systems research covers a broad area, making it difficult to define and develop a coherent field of research, particularly since policy-relevant research must address not just technical questions, but large societal and political questions. Health systems research is defined as:

"The production of new knowledge and applications to improve the way societies organise themselves to achieve health goals. It includes how societies plan, manage, and finance activities to improve health and takes into consideration the roles, perspectives, and interests of different actors. The health system's functions of regulation, organisation, financing, and delivery of services are the focal subjects. It is often understood to include health policy research" (WHO 2004: 140).

Research on health systems must take a broad scientific perspective. First, health policy makers use evidence that is derived from several research paradigms (see Table 2.1). For example, politicians and public servants tend to see policy making as an art form, while health researchers see it as a science (Lin and Gibson 2003: 6). Second, the nature of evidence is highly contested especially since health systems are less amenable to investigation through a classic scientific approach. For example, while laboratory medical researchers can hope to control the variables, and can randomly assign subjects to experimental and control groups, health systems researchers have far less, if any, control. A range of research methods thus are used to produce evidence for health systems policy making (Lavis et al 2005; Sheldon 2005; Mays et al 2005). While evidence-based medicine takes randomised control trials as the "gold standard", health systems research is more eclectic, and includes observations, opinions on "best practice, trend data on a range of health information, case studies of countries and particular policies, comparative policy analysis across different countries, as well as reviews of published research. Research reviews examine results from many studies in order to improve the accuracy of estimates of effectiveness.

Table 2.1 Types of research and links to policy

Research	Description	Link to policy
Applied	Develop practical use from basic research	Clarify immediate societal problems
Descriptive	In-depth information for fuller understanding	Clarify problems, context, and possible responses
Evaluative	Assess interventions or current practices	Clarify effects of policy
Community	Collaborative research with stakeholders	Better target solutions
Systems	Organisation, governance, staffing, financing, and delivery of programs	Improve quality, performance, efficiency, and effectiveness

Source: Adapted from Potter et al 2006.

A systematic review identifies, describes, appraises and synthesises research evidence from individual studies. Systematic reviews follow a protocol to ensure that as much of the relevant research as possible is considered and that the original studies are appraised in a valid way. For example, the Cochrane Collaboration prepares, maintains and promotes the accessibility of research reviews on clinical issues, and has begun to review the literature on health system issues. A scoping review, or structured review, maps the research literature but does not apply the rigorous criteria involved in a systematic review. Other research methods include economic evaluations and health technology assessments. Economic evaluations compare two or more treatments or care alternatives in which the costs and outcomes of the alternatives are examined. Health technology assessment studies the cost-effectiveness implications of the development and use of technology.

Policy-relevant research on health systems thus must be politically and methodologically nimble. A first principle is that the research must be interactive, since inter-disciplinary expertise must be mobilised and informed debate promoted between researchers and policy makers. A second principle is that health systems research is methodologically challenging since it requires searching analysis in order to respond to the complex issues faced by health policy makers. In most countries around the world these issues include ongoing health sector reforms intended to achieve a sustainable and effective health system, including addressing rising demand and rising expenditure, implementing new financing and payment methods intended contain costs, expanding access and equity, training and managing a health workforce, developing better ways to deliver health services, and improving the quality of care and health outcomes.

Knowledge networks

The divide between the producers of knowledge and the potential users has prompted the emergence of "knowledge networks". These are composed of groups of experts who assemble relevant information and knowledge in specialised fields, and who draw in others to transfer knowledge to policy makers and practitioners. Knowledge networks prepare both in-depth research reports and summaries of scientific papers. A key aim is to translate knowledge into a format that is accessible to health policy makers. Knowledge translation is defined as:

"The exchange, synthesis, and effective communication of reliable and relevant research results. The focus is upon promoting interaction among the producers and users of research, removing the barriers to research use, and tailoring information to different target audiences so that effective interventions are used more widely" (WHO 2004: 140).

Knowledge networks in the health sector collect, arrange, and systematise information. Some entities are "on-line" virtual libraries of selected resources freely available to all, while others provide more specialised information, such as networks that undertake systematic reviews. A small number of networks offer an on-call service for policy makers by responding to requests for information about particular issues.

The term "knowledge brokers" has been coined to describe the role played by individuals who act as facilitators and intermediaries between the producers of information, typically researchers, and those who need to understand and apply such information, typically policy makers and managers. The overall aim is to promote evidence-informed decision-making in the health field. Knowledge brokers are needed who can respond to the dynamic nature of health policy-making. Different forms of evidence are required at different points in policy development, and from the viewpoint of the policy maker, evidence is continuously gathered, sifted, and either discarded or used (Hanney et al 2002). Knowledge brokers can also participate in the cyclical process of work undertaken by information mechanisms, which involves producing, organising, summarising, synthesising, disseminating and promoting research.

Knowledge brokers identify vital information needs, and summarise or synthesise complex research findings into more user-friendly forms. They may also play a role in bringing researchers and policy makers together in a two-way dialogue. Knowledge brokers thus are proposed as one solution for better aligning the different perspectives of researchers and policy makers. If knowledge networks want to meet the information needs of policy makers, then a number of critical issues need to be addressed:

How timely is the information?

- How well does it address the policy question?
- Does it take account of the policy context?
- Is it presented in a reader-friendly format?

3 Views on an Asian regional information mechanism

3.1 Views of policy makers

The seven Country Reports concluded that there is general support for some form of regional health systems information mechanism. The Philippines Report, for example notes "an overwhelming concurrence" with the idea. The Malaysia Report suggests that it would be resource-efficient for "a one-stop centre to collate, analyse and provide information required by countries in the region". Laos and Vietnam, as low-income countries, want a regional mechanism that could manage and produce information, build capacity, and promote exchanges with other countries. China is looking for health systems evidence from the rest of the world: "China desperately needs information of health reform experiences and practices of other countries". Singapore policy makers think that "a RRRM would be useful, provided that it can be responsive to common as well as specific needs, relevant to the socio-cultural context and acceptable to the governments of participating countries".

Policy makers identified a large number of health system topics of strategic importance in their country. Many of these topics are of interest across the region. As shown in Table 3.1, policy makers want information on many elements of a health system, including organisational structure, financing, human and physical resources, planning and regulation, population health, and service delivery options. The China, Malaysia, Philippines and Vietnam Reports, in particular, list a comprehensive range of topics, while Indonesia emphasises disaster planning, and in Singapore the threat of pandemics is a motivating factor in seeking to strengthen neighbouring health systems.

3.2 Functions of an information mechanism

Policy makers suggested a range of functions that a regional information mechanism might undertake. For example, five main purposes were identified: to manage information, produce information, disseminate information, build capacity, and promote the uptake of information. Each purpose would be pursued through associated programs and activities. For example, the production of information might involve undertaking systematic and structured reviews of the published literature, summarising and synthesising information into policy reports, exchanging information, and providing concise responses to questions from policy makers. (The potential functions of an information mechanism are discussed further in section 5.1).

Policy makers are interested particularly in country case studies, comparative studies of health systems, and comparative studies of particular policy issues. Many indicated that they lack detailed knowledge about the workings of their own health system let alone the workings of other systems. Pressure for greater cooperation between countries has been building in recent years in response to globalisation, and in response to population health threats that do not confine themselves within national borders. Regional health ministers and senior health bureaucrats therefore are becoming more engaged in regional issues. Case studies and comparative studies could therefore be useful products in the Asian region. For example, the European Observatory on Health Systems and Policies publishes comprehensive reviews on the health systems of European and OECD countries in its *Health Systems in Transition* series. Only a few of these reports are on countries in the Asia-Pacific region, such as Mongolia, New Zealand, and also Australia (Healy et al 2006).

Policy makers also are looking to engage with others facing similar problems. For example, the Indonesia Report suggests that a network would be useful through which policy makers and managers could post and share experiences. Policy makers stress that an important role for a regional information mechanism could be as a forum for the exchange of information between policy makers, and between policy makers and researchers.

Table 3.1 Health systems topics identified by policy makers

Broad area	Topic		
Structure and	Public-private mix in health service delivery		
governance	Decentralisation and public health systems		
	Balance between primary and specialist care		
	Size and scope of public sector health facilities		
	Hospital services: location and distribution criteria		
	Legal issues: health laws and regulations		
	Health system comparisons (in region and beyond).		
Financing	Funding sources: government, private sector, other		
	Health insurance schemes: insurance options, employee-employer contributions, community-based health financing, cost sharing		
	User-pays models		
	Social safety nets, health care benefits packages		
	Budget allocation processes		
	Payment mechanisms: insurance payments, provider incentives, performance-based payments		
Health workforce	Structure of health workforce, ratio of doctors to nurses, skill mix		
and technology	Retention and attrition rates, out-migration		
	Management of staff, quality of performance		

	Basic training, on-the-job training; professional development			
	Incentives, salaries and benefits, working conditions, security and safety issues.			
	Rational use of technology: services, devices, procedures and drugs			
Information	Morbidity and mortality data - patterns, distribution, causes			
planning, regulation,	Performance indicators: population health, health systems, hospital performance			
	Disease surveillance systems: infectious diseases, medical warning systems			
	Patient information: reaching target populations, e-health			
	Health technology assessment: pharmaceuticals, medical devices, procedures			
	National standards for technology, equipment, services			
	Technology protection and transfer: IP rights, patent and copyright laws			
	Marketing issues: prices, competition			
	Regulation of safety and quality: food and drugs, devices and technologies, health services			
	Accreditation of hospitals and health facilities			
	Information technology: database management			
	Guidelines for health providers: clinical protocols, health alerts			
	Rights and responsibilities of providers and patients			
Population health	Health promotion, patient education, consumer advocacy			
	Disaster and emergency management systems			
	Disease prevention and control: infectious diseases, cross-border spread, pandemics			
	Environmental health issues			
	Maternal and child health care interventions			
	Mental health issues.			
	Ageing populations: chronic diseases, long term care, palliative care.			
Health service	Delivering health services to populations: access and equity issues			
delivery	Health needs of the poor			
	Planning levels of care: allocating goods and services, access to specialist care			
	Hospital management issues			
	Evaluating different types of health care			
	Evaluating different methods of health care delivery			
Medical tourism versus needs of local population;				
	Regional and special health needs			
	l			

Policy makers identified several information management functions. For example, the international literature could be reviewed for its relevance to a particular country or group of countries. Policy makers believe that each country must select and adapt evidence to suit its own context, so that generic information must be considered in light of each country. It would be a major challenge for a regional mechanism to regularly supply information tailored to each country. Other alternatives

would be for a country to apply its own research and policy capacity in order to draw lessons from general research evidence, or for a regional mechanism to have satellites in each country with the capacity to adapt generic information to local interests.

The Country Reports identify areas where policy makers and researchers believe that they have useful knowledge and experience to exchange. China stresses that it actively seeks information from outside its borders, but is less sure whether China has lessons to offer other countries given its unique circumstances. Singapore looks at the experiences of other developed countries, but notes that some of Singapore's practices may be transferable to similar socio-cultural settings. Indonesia explains that its Ministry of Health has much crisis management experience to share with other countries on coordinating strategies to address the health effects of disasters. Laos points out its experience in implementing a national drug policy. Vietnam notes that its policy makers have experience in achieving good population health indicators despite a low level of economic development. Malaysia provides health systems advice to countries in the region including Laos, Vietnam and Cambodia. The Philippines notes it looks outward to the international literature but also collaborates with regional countries on a variety of issues: "The country's experience in health development is a rich source of knowledge and information that offers many positive and negative lessons for other countries".

In surveying possible roles for a regional information mechanism, the Philippines Report reflects the views on policy makers in most countries in suggesting the following functions and topics:

- Address supra-national issues
- Address cross-border emergencies
- Address common policy issues
- Compare country experiences on an issue
- Exchange information
- Participate in policy dialogue
- Strengthen local capacity.

Format of information provision

Policy makers want information to be made available in a variety of formats, including long reports accompanied by short summaries. The Laos Report comments that "policy makers have not enough time to read long documents, and therefore policy briefs should be short". The Vietnam Report notes that policy makers prefer a summary with the option to read a fuller report. The Philippines Report comments that while policy makers want short reports, on some issues they also want "structured and in-depth reviews of available evidence". Policy makers and researchers also noted

the desirability of a longer term planned and pro-active program of work, rather than short term and ad hoc and reactive responses to information requests.

Policy makers were asked what length of time would be acceptable for a response to a question. A "rapid" response did not emerge as a major issue, although policy makers want a shorter time frame than do researchers, but appreciated that gathering and analysing the literature for an evidence-based response takes time. "Rapid" in terms of several days or even weeks, therefore appears not to be a high priority. The Philippines Report suggests, somewhat ambitiously, that "the system should allow for a wide range of response to specific requests", with one or two days on very urgent matters, up to one month for less urgent matters where information is available, and a few months for more extensive studies. The Malaysia Report notes that policy makers say that many health policy issues do not require a rapid response.

3.3 Governance and structure

Policy makers were asked whether they would prefer a partnership, membership or customer relationship with an information mechanism. Some policy makers favour a partnership arrangement where they are involved in the governance of a regional mechanism, others a membership arrangement that confers access to information, while Singapore favours a customer relationship in requesting and buying specific pieces of information. The Malaysia Report argues that a membership arrangement would "encourage networking and collaboration between the member countries". The Philippines Report comments that a partnership or membership arrangement is preferable for a long term project:

"There is a need for a strong commitment among the participating countries and institutions if the project is to succeed. This arrangement will also foster unity, trust and sharing of resources among the members".

Governance and location would be key decisions in the establishment of a regional mechanism. Some policy makers would prefer the entity to be steered by governments or ministries of health, while others argue that a regional mechanism should be independent from political pressures and embedded in a research environment. Researchers would prefer a mechanism that operates through research groups rather than through governments. For example, the Philippines Report comments that a regional mechanism should be based upon "scientific rather than ideological foundations".

Some informants suggest that a mechanism should be organised through existing international governmental structures, such as the World Health Organization Western Pacific Regional Office (WPRO) or perhaps the ASEAN Secretariat. Others argue that health systems information is

primarily a WHO responsibility, and that establishing a new mechanism would add another layer of bureaucracy and duplicate existing activities, including potential overlap with EVIPNet.

Information mechanisms internationally rely upon an active network of information producers, usually from universities and government research institutes, who also have a good understanding of the policy process as well as substantive policy knowledge and research expertise. The Country Reports note that the amount of interaction between researchers and policy makers varies greatly in countries in the Asian region. For example, the Laos Report notes little interaction between government and university researchers, while China, the Philippines, Malaysia and Singapore note considerable interaction.

The compatibility of participant countries would be an issue in deciding upon the location of a regional mechanism. For example, Singapore has more in common with well-developed and high technology health care systems and so suggests a base in Singapore, Japan, or Australia. Others suggest Malaysia or the Philippines, given their established research institutes and universities.

The overall view is that a regional mechanism should be politically independent, well resourced, have membership and sponsorship arrangements, have good access to information, and strong links to a wide network of researchers. These criteria suggest a base within a university or research institute, or in an international organisation, and a location in a politically stable middle or high-income country. Financial and political factors also are likely to come into play in governance and location decisions. For example, how much is a host country or a host university willing to contribute? Which country has good links throughout the region and is acceptable to other countries? The Country Reports thus suggest three main options for a secretariat:

- An independent centre (an NGO-type structure);
- A base in a university or independent research institute with linked centres/satellites;
- A base in an international organisation, such as the World Health Organization Western Pacific Regional Office (WPRO).

Funding a regional mechanism

Policy makers suggested various funding arrangements but generally prefer membership to a user-pays arrangement. For example, the Philippines Report suggests that core finances might come from member countries in exchange for a regular stream of policy advice, and that increments or fees might be charged for in-depth information. Non-members could be charged a fee to access resources or for in-depth information provided in response to an inquiry. Member countries also might contribute in-kind technical assistance to a regional mechanism through the work of their policy and research agencies. Membership fees from participating countries should be based on an

income-related funding formula and would need to be substantially or fully subsidised for low-income countries, such as Laos, Cambodia and Vietnam. Donor agencies would be necessary to support an Asian information mechanism, therefore, such as WHO, the World Bank, other United Nations agencies, and/or bilateral aid agencies.

Some research institutes favour technical membership on a funded contractual basis to provide research reports. The advantage would be that the institutes could develop their research capacity over time, including employing staff, if they were assured stability of funding in return for producing regular reports. Others favour a purchasing arrangement with full-cost recovery for specified work undertaken. There is general agreement, however, that research institutes in Asia need to be adequately funded to undertake work. Another option is for work to be commissioned from individual researchers rather than organisations. Asian policy makers appear to assume, however, that work contracts mostly would be with research agencies.

3.4 Views of researchers and regional research capacity

The views of research institutes are summarised below for China, Philippines and Singapore, although other countries in the region and beyond also have important research centres and researchers, and research groups are developing with the capacity to offer a regional and international overview. The full reports are set out in Annex 9 and additional information is provided in the Country Reports (Annex 11). A preliminary list of research centres in the nine countries is set out in Table 3.2.

China (Zhao Hongwen)

The report on China concludes that the six research institutes consulted supported the idea of a regional mechanism. The institutes pointed to the variation in health systems across the region and the language differences, however, and noted that any analysis of health system issues in China should be based on an understanding of China's history and complexities. Common health system issues across the Asian region would need to be identified, but research methodologies could more easily be shared. Many institutes and universities in China provide policy information to national and regional health departments, and the large research centres, such as the China Health Economics Institute, have expert staff who collaborate with international institutions.

China would be an important partner in a regional mechanism considering the size of the country, its research resources, and extensive experience in health sector reform. There would be a language problem in establishing the headquarters in China, but Beijing University or the China Health Economics Institute would be a good liaison point for a network. The research institutes prefer a

secretariat and satellite model, with expert teams funded to work on special subjects. These teams could develop internal networks within China as well as regional links. A regional mechanism should consider the HEN (Health Evidence Network) model, based on a secretariat but with most work carried out in research institutes as technical members of the network. Another option is a regional centre that undertakes substantial work but is supported by several satellites. The funding arrangement could be membership plus donor support, with reports commissioned from research institutes on a full cost recovery plus fees method.

Philippines (Mario Villaverde)

The report indicates that the six informant institutions support the concept of a regional mechanism. The common reasons cited for this interest are that it would enrich their research program, increase their client base, expand the data base, and members of the network would have the opportunity to influence health policies in their own country and in the Asian region. A regional mechanism could complement country-based research centres by providing comparable cross-national data, sharing international knowledge, and publicising the best practices of other countries

Table 3.2 Preliminary list of research centres

Country	Research centres				
Cambodia	National Institute of Public Health, Ministry of Health (MoH) Other information not available				
China	Centre of Human Resources, and Centre of Health Statistics and Information MoH China Health Economics Institute Development Research Centre, State Council National Health Economics Institute				
	Beijing University: Centre for Economics Research, Dept of Health Economics and Management, Guanghua School of Management, Centre of Health Sciences, School of Public Health				
	School of Public Health, Fudan University				
	Centre of Health Policy Research, Shandong University				
	The 2 nd Medical University Shanghai				
Indonesia	MoH: Centre for Research and Development of Health Systems, Centre for Policy and Development				
	School of Public Health, University of Indonesia (and medical faculties in other universities)				
	Centre for Strategic and International Studies, Jakarta				
	The SMERU Research Institute				
Laos	MoH: National Institute of Public Health, Statistics Division, Council of Medical Sciences				

Country	Research centres
	Sciences
	Faculty of Health Sciences,
	National Sciences Council
	National Statistics Centre
Malaysia	Institute for Health Systems Research,
	Institute for Health Management,
	Institute for Public Health, 3 of 7 National Institutes of Health, MoH
	United Nations University, International Institute for Global Health
	Medical faculties in universities (eg. National University of Malaysia, University of Malaya, University Putra Malaysia, University Sains Malaysia)
Philippines	Philippine Council for Health Research and Development, Department of Science and Technology
	Development Academy of the Philippines
	Philippine Institute for Development Studies
	Institute of Health Policy Development Studies, National Institutes of Health, University of the Philippines-Manila
	School of Economics, University of the Philippines-Diliman
	Health Unit, Graduate School of Business, Ateneo de Manila University
	School of Medicine and Public Health, Ateneo de Manila University
Singapore	National University of Singapore:
	Department of Community, Occupational and Family Medicine
	Centre for Health Services Research, in collaboration with Rand Health
	Duke-NUS Medical School
	Lee Kuan Yew School of Public Policy
	Asia Research Institute
	East Asian Institute
	Institute of South Asian Studies
	Institute of Policy Studies
	Institute of South East Asian Studies
	Regional Emerging Disease Intervention Centre
Thailand	Health Systems Research Institute
	International Health Policy Program
	Health care Reform Project
	National Health Foundation
	(Other government research centres, university research groups and NGOs)
Vietnam	Hanoi Medical University
	Health Strategy and Policy Institute

A regional mechanism may not be the best way to address country-specific concerns, but could address supra-national issues, and also common policy issues using comparative country experiences. It would be an appropriate mechanism to respond to international and cross-border

emergencies, facilitate and strengthen joint research initiatives, and pool human and financial resources in addressing common issues among member countries.

Views were divided on the best structural relationships, since some researchers preferred a membership relationship and others a producer relationship. On the location for a regional mechanism, one option would be to base the regional headquarters in one member country, while research groups in other countries could address specific health system concerns. A headquarters in a university in Manila could draw upon a pool of researchers with experience in implementing health policy reforms, or a secretariat based in WPRO could link to member institutions in different countries.

They agreed that local research capacity should be strengthened. The research institutions would want full recovery of the cost of producing information. An annual budgetary allocation would support the continuing research needed to develop new knowledge, alleviate the perennial problem of looking for funds, and shorten the time for generating policy briefs and advice.

Singapore (Phua Kai Hong)

The interviews identified mixed views on the usefulness of a regional mechanism. Researchers agreed that a clearinghouse function could provide prompt and useful information for participating countries. It would fail if dominated by vested interests or lacked quality or credibility. The research institutes would look carefully at the mandate, funds and incentives before getting involved. Most Singaporean research groups favour a producer relationship with work requested and remunerated. Some operate on a non-profit and cost-recovery basis, although there is latitude to cross-subsidise overheads like office space and administration.

Most Singapore research groups said that a regional mechanism should be based in a developed country, or else supported by a well-established international research centre with regional expertise, or based upon a core of leading institutions able to support less-developed research groups throughout the region. A likely model may be something like the European Observatory on Health Systems and Policies that is based upon links to a number of leading research centres as well as to international agencies.

Other research resources in the Asian region

There is considerable variation in research capacity across the Asian region among universities, research institutes and policy advice bodies. Cambodia and Laos each have a National Institute of Public Health under the Ministry of Health, but these organisations possess limited staff and technical resources and would need extra resources to make any major contribution to a regional

information mechanism. Individuals may be able to contribute research, however, and these organisations may contribute as clients and partners. In Vietnam, EVIPNet draws together a local network of researchers and policy makers, including senior research staff from the Hanoi Medical University and the Health Strategy and Policy Institute.

Indonesia (see Annex 8) has research institutes within the Ministry of Health. It also has many medical faculties and schools of public health, several with an established reputation and senior staff with overseas post-graduate education, as well as independent public policy institutes. The Indonesia Report supplies information on a constellation of agencies involved in disaster planning and management.

Malaysia (see Annex 8) has National Institutes of Health within the Ministry of Health, which help strengthen health research and encourage linkages with policy development, such as the Institute for Health Systems Research. Malaysia also possesses several medical faculties with a sound reputation, and local public health researchers are involved in Cochrane collaborations.

Thailand (see Annex 8) has a well developed network of excellent universities and government research institutes (Alliance for Health Policy and Systems Research 2007: Appendix). For example, the Health Systems Research Institute is an independent but government-funded body with a close working relationship with the Ministry of Health. Thai researchers have considerable policy and research expertise in clinical as well as health systems areas and health sector reform. For example, Thai researchers are involved in a range of systematic reviews through the Australasian Cochrane Centre.

Research centres in several countries in the region are developing health systems research, training and consultancy capabilities. The capacity for region-wide expertise is being developed through collaborations between researchers, through regional health forums convened by WHO, and through regular meetings of health ministers under the auspices respectively of WHO, ASEAN and APEC. The series of threatened pandemics, such as SARS and Avian influenza, directed attention to the need to strengthen health systems capacity in the region, as well as prompting specialist networks in infectious disease surveillance.

The lead international agency on health systems is the World Health Organization with its head office in Geneva, and its regional offices, alliances, and collaborating centres. The Western Pacific Regional Office (WPRO) of the World Health Organization based in Manila, and the South East Asian Regional Office (SEARO) based in New Delhi, maintain databases, engage with policy makers in the region, coordinate many health sector programs, and offer considerable health systems information to health policy makers. Seven of the potential nine target countries come within the WPRO area: Cambodia, China, Laos, Malaysia, Philippines, Singapore and Vietnam. The other two

countries, Indonesia and Thailand, are part of the cluster of Asian countries under the area of the SEARO. Some WHO Collaborating Centres in the Western Pacific Region now are undertaking health policy and systems research. WHO Technical Advisory Groups (TAGs) have been established for disease control programs, but health sector topics, such as health economics, quality assurance, and workforce issues could also be addressed through this mechanism.

Several regional networks have developed in response to the growing need for comparative health policy and health systems research and thus offer prospects for participating in a regional information mechanism. DRAGONET is an informal network of health policy advisers and directors of research centres. The Asia-Pacific Health Economics Network (APHEN) is a network of health economists from the Asian region.

4 Health systems information mechanisms: international overview

Over 20 established health systems information mechanisms were reviewed for this study, drawing on their websites and publications, and in some cases personal communications. A growing number of entities offer information for use by health policy makers. Established mechanisms that provide information on health systems are reviewed in this section for the lessons that they might offer a potential Asian mechanism. Additional centres and networks are summarised in Annex 7. The most relevant entities (see Table 4.1) are discussed below under three categories: on-call evidence for policy makers, information centres and knowledge networks, and systematic review centres.

Table 4.1 Summary of selected information mechanisms

	Function and structure	Location	Procedures	Outputs
International Healthcare Comparisons (IHC)	On-call evidence for policy makers. One client (Dept of Health) Core staff and provider network	University base, London	Negotiated research response, about 6 per year, few months timeframe	Short reports, in- depth reports
Health Evidence Network (HEN)	On-call evidence for policy makers. Many clients, core staff, network technical members	WHO Europe	Clarifies questions responds to requests for information	Information clearing house, short reports, in- depth analyses
Sax Institute	On-call evidence for policy makers. NGO, one client (Dept of Health and agencies), member research agencies	Sydney, Australia	Knowledge broker, policy and research dialogues, agreed research programs	Workshops, policy briefs, reviews, brokers research projects
European Observatory on Health Systems and Policies	Information centre. Multiple partners, core staff, provider network	WHO Europe secretariat and university-based centres	Annual program of work	HiTs, policy briefs, policy dialogue workshops, summer school, books, papers

	Function and structure	Location	Procedures	Outputs
EVIPNet	Knowledge network.	Secretariat in WPRO Manila, 7 teams in Asia	Being developed	Decided by teams
Cochrane Effective Practices and Organisation of Care Group (EPOC)	Systematic reviews. Centre and satellites, network of reviewers	Ottawa, Oslo, Melbourne, several Asian review teams	Cochrane systematic reviews by teams of researchers on specific topics	Capacity building in methods workshops, reviews published in Cochrane Library.

4.1 On-call evidence for policy makers

Three mechanisms are discussed below that provide information on health system issues in response to requests from policy makers: the International Healthcare Comparisons group in London, the Health Evidence Network (HEN) based in WHO Europe, and the Sax Institute in Sydney.

International Healthcare Comparisons (IHC)

http://www.lshtm.ac.uk/avps/ihc/index.html

Structure

This "on-call" facility was set up in 2005 to provide timely information to the Department of Health in England on trends in health systems and policies across 13 countries. Based at the London School of Hygiene and Tropical Medicine, it works closely with the European Observatory on Health Systems and Policies. The project team is four people and the project has a four-year contract. The steering committee comprises university researchers, European Observatory research directors, and a member of the National Health Service (NHS) Federation. The IHC engages an expert from each of 13 countries, who mostly work in universities and research institutes.

Programs and outputs

The IHC responds to about six requests per year. It provides both in-depth analyses and short policy briefs. The evidence synthesis seeks to learn from the experiences of many health systems, with material provided by country experts, backed up by structured literature reviews. A response from a country expert generally is based upon his/her own expertise, consultations with informants, plus a short review of the "grey" and published literature. The timeframe is at least six weeks. The country experts cannot necessarily drop other work to give priority to an IHC request, plus it takes time to gather detailed and accurate information. The volatile policy environment of the

Department of Health means that requests are not agreed more than a few months in advance. The request process involves regular meetings with Department of Health staff. The IHC team sends out a questionnaire on the topic to the country experts, collates the responses, and synthesises the information in the light of the literature.

The requests have covered a wide range of health system topics. In-depth reports (30 to 60 pages) generally are published through the European Observatory on Health Systems and Policies, with the agreement of the Department of Health. Outputs over the first two years include work on the following topics: health care access outside hospitals; rational treatment decision-making in hospitals; health care capacity planning; reimbursing highly-specialised hospital services; cost-effectiveness analysis in health technology assessments; and competition between publicly-funded hospitals.

Comment

The IHC has the advantage of being embedded within a well-established research environment with links to health system researchers, and has long standing contacts with the Department of Health. Lessons that can be drawn from IHC experiences so far include the following:

- Agreeing on answerable health systems questions involves considerable discussion.
- The Department of Health is interested in comparative analyses of other health systems.
- Providing evidence-based information on health system issues generally cannot be done rapidly unless a report already exists.
- A good working relationship must be established with the client and this is timeconsuming even with one government department.
- While the country experts find the work interesting and useful, money is not the main incentive. They are under pressure to publish, and want published reports accessible on an IHC website, and articles produced for peer-reviewed journals.

Health Evidence Network (HEN)

http://www.euro.who.int/HEN

Structure

HEN was established in 2003 by the WHO Regional Office for Europe in order to provide policy-relevant information to policy makers in the European Region's Member States. HEN intends to reduce its policy scope in order to focus more directly upon health system issues. WHO/Europe is in the process of grouping HEN, and the European Observatory on Health Care Systems and Policies, within a broader division of information for health policy-making. The offices and staff are located

in the WHO Europe office in Copenhagen, Denmark with three staff listed on the website. The 40 technical members (organisations not individuals) who produce the information are mainly university and government research agencies plus several UN health agencies. The experts who provide the information are sought from technical members and from elsewhere if necessary. HEN responds mainly to government health agencies in about 15 countries, and there is no defined membership, apart from "European health sector decision-makers". The committee and editorial board are appointed by WHO/Europe and comprise WHO staff and external experts, and there is also an internal management committee.

HEN has four sponsors or financial partners: WHO/Europe, the European Commission via the Directorate-General for Health and Consumer Protection (DG SANCO), the French Government via the Ministère de la Santé et des Solidarités, and Pfizer Inc. (Pfizer Inc provides an "unrestricted and unconditional contribution").

Programs and outputs

The website states that: "HEN has been reorganized and its work reoriented towards supporting changes in WHO/Europe's broader health intelligence functions". HEN takes a broad approach to health systems evidence, including case studies, opinions based on experience, statistical trends, comparative policy analysis, in addition to structured and systematic literature reviews.

HEN does not speak for WHO/Europe in providing the answers to policy-related questions, and attaches a disclaimer to all reports making this clear. HEN undertakes to reply to a request within ten days as to whether it can provide a substantive response. Policy makers in health departments and government research institutes submit questions by letter or more usually via email. HEN decides whether to accept a question, sometimes after clarification and advice from its editorial board. When a question is agreed, experts are commissioned to provide evidence-based responses, and are paid a modest honorarium, as are external peer reviewers who review the product.

Depending on the inquiry, the response may vary from a brief email, one-page summary, ten-page or longer evidence-based report, or a joint policy brief. No information is available on the number and type of requests made each year. *Short responses* are confidential and usually not published on the website. *Evidence Reports* are commissioned from technical experts and are reviewed. The 39 reports on the HEN website cover many health system topics; for example, 16 reports on the effectiveness of health care programs, 15 on the impact of various population health programs, eight on health system governance and restructuring issues, and four on funding health systems. *Information clearing house*: Summarised information is organised alphabetically by health topic or agency from many sources. It provides an annotated listing of health policy information available on other websites, with "on-line" links to these sites.

A new series of *Joint Policy Briefs*, with the European Observatory on Health Systems and Policies, to be officially launched in June 2008 at a Ministerial Conference on Health Systems, is aimed at health system policy issues of general relevance to European policy makers. The topics are selected in consultation with Member State stakeholders. The list of working titles includes the following:

- Assessing the health-wealth relationship
- Is prevention better than cure?
- How to steer in decentralized systems?
- What is the optimum balance between institutional, community and home-based care?
- What are the policy implications of the migration of health professionals?
- How can optimum skill-mix be determined and implemented?
- What are effective formulas for resource allocation and risk adjustment?

Comment

- HEN is narrowing its scope to "health systems" but the parameters are not yet clear.
 Information is offered, not advice or guidance, with a disclaimer by WHO.
- HEN seeks agreement on a dozen topics annually of general relevance (the *Joint Policy Briefs*).
- HEN responds rapidly on whether it can answer the question but takes longer to provide information.
- It produces reports relevant to the needs of policy makers in particular countries, but also aims to produce information of general relevance to diverse European countries.
- The European region is relatively research-rich with many agencies willing to produce evidence-based reports.
- No information is available on HEN effectiveness but its restructuring suggests that improvements are being sought, as well as a closer fit within the WHO structure.

The Sax Institute

http://www.saxinstitute.org.au/

Structure

The Sax Institute was set up in 2002 as a not-for-profit company limited by guarantee by the State Government of New South Wales (NSW) in order to support well-informed health policy-making. The Institute has over 15 staff, a board, and over 37 member organisations, covering most public health and health services research groups in NSW. The Sax Institute provides a "bridge" between researchers, policy makers and health services to maximise the value of health research.

Programs and outputs

The Policy Impact Program stimulates research in areas of information priority to NSW Health and related agencies. It offers a brokerage program for policy makers to commission new research and to establish research partnerships. The Sax Institute uses a knowledge broker to negotiate with clients and researchers in defining an answerable research question on which there is some evidence base. A knowledge broker is a credible and experienced researcher, or user of policy relevant research (and preferably both). It provides an "Evidence Check" to help clarify the information needs of policy makers, identify the expertise to undertake a review, and ensure that the review is concise and policy relevant. Reviewers are drawn from a register of experts maintained by Sax Institute, or from elsewhere in the case of highly specialised topics. The policy advice, usually based on a structured literature review, runs to several pages.

Costing for Health and Economic Evaluation Program (CHEEP) is a partnership between NSW Health, the Cancer Institute, and the Sax Institute. The aims are to: increase the relevance to policy makers of the analyses undertaken; increase the quality of the analyses by enabling dialogue between researchers and policy makers; and increase capacity to undertake costing and economic analyses by providing stability of funding. The Sax Institute manages the project with the research supplied by a university health economics group. CHEEP was established to improve upon the process of commissioning one-off costing and economic analyses. This is not a rapid response mechanism but based on substantial research, and considerable effort goes into defining the research questions. An annual work plan is agreed between the partners and the research centre defining the analyses to be undertaken. The clients meet regularly with the research team as the work evolves. Intellectual property issues were negotiated in the contract. The management committee comprises representatives of the partners and an independent health economist.

Comment

- CHEEP focuses on specific health systems research questions, is steered by experienced project managers, and has two or three clients and one information provider.
- Keep it simple: even with limited partners and information providers, some Institute research contracts take many months to negotiate.
- A "knowledge broker" assists clients and researchers to design policy relevant and feasible research.
- Outputs are agreed and feasible and the format is reader-friendly.
- Capacity-building involves investing in the people and skills required to undertake policyrelevant research with stable funding over several years.
- Confidentiality versus transparency: While governments want confidential advice, university researchers and their institutions want publications.

4.2 Information centres and knowledge networks

European Observatory on Health Systems and Policies

http://www.euro.who.int/observatory

Structure

The Observatory was set up in 1998 to support well-informed health policy across the then 51 Member States of the WHO European region. Given rapid changes in health systems, policy makers were struggling to stay informed, and to locate evidence on health system issues. By mid 2007, the Observatory had 14 partners: WHO Europe, the Governments of Belgium, Finland, Greece, Norway, Slovenia, Spain and Sweden, the Veneto Region of Italy, the European Investment Bank, the Open Society Institute, the World Bank, the London School of Economics and Political Science (LSE), and the London School of Hygiene and Tropical Medicine (LSHTM). The Observatory hasa steering committee of partners, a core management team, a research policy group, and employs over 20 people across five Observatory offices. The secretariat is based in the WHO Brussels office and has university-based offices in Berlin, London (LSHTM & LSE), and Atlanta. Individual research collaborators are spread around Europe and OECD countries and mostly are based in universities.

Programs and outputs

The Observatory states that it "supports and promotes evidence-based health policy-making through comprehensive and rigorous analysis of the dynamics of health systems in Europe and by

engaging directly with policy makers". It undertakes several functions: profiles and analyses of national health care systems; analyses of issues (books, articles, policy briefs, newsletters); dissemination of information through its website and publications; training for policy makers (summer schools and workshops); and dialogues with policy makers (workshops). The topics cover a large range of health system issues. The approach is comparative analysis in order to learn from the experiences of many health systems, backed up by in-depth analyses, plus policy dialogues between researchers and policy makers. The Observatory generally does not offer a rapid response but works to an annual plan with strategic directions agreed by its steering committee and research committee.

The Observatory publishes profiles, *Health Systems in Transition* (HiTs), on European and selected OECD countries. The rationale is that policy makers need to understand their own health system, and have some knowledge of others, if they are to make strategic policy decisions. HiTs on 51 countries are lodged on the website (as at 3 July 2007). These substantial reports, usually over 50 pages, overview the health care system of a country: its structure, funding, governance, physical and human resources, provision of services, principal healthcare reforms, and an overall evaluation. A standard format enables cross-national comparisons, and includes comparative tables drawn from international databases. The HiTs pull together textual and quantitative information plus "to the best of our knowledge" views from within a country. HiTs are written by an in-country collaborator and are edited and sometimes co-written by Observatory staff or other experienced health systems researchers. HiTs are available in paper and electronic form, and can be downloaded free from the website.

The Observatory publishes *analyses* of health policy issues, with 25 published books listed on the website, many of them in association with Open University Press. *Policy briefs* are published in paper and electronic form in a concise format, less than 20 pages, with 12 on the website. These summarise key policy lessons from the published books. Examples include policy briefs on day surgery, health care outside hospital, health technology assessment, and funding health care. *Joint policy briefs* are published in conjunction with the Health Evidence Network (HEN). A *summer school* is run most years on particular themes for about 50 participants.

Policy dialogue workshops assist small groups of policy makers to explore strategic options for health system reform. They offer a neutral forum to discuss a policy issue on the basis of comparative evidence and experience. The policy dialogue is constructed around a policy question presented by one of the Observatory partner countries, or sometimes multi-country dialogues are organized around a common issue. The Observatory brings together key documents, and experts present recent evidence, as well as case studies from countries that face similar issues. The

Observatory's role is non-prescriptive: address real policy questions, present the existing evidence, and facilitate discussion on options. Over 16 workshops were run in 2006 and 2007.

Comment

- The Observatory is a new breed of organisation that comprises multiple partners, and uses information technology to enable people to work together in different geographic locations.
- It is a complex model but began from a small base that included the WHO and a small number of experienced university-based health systems researchers.
- Its network of information providers usually are individual researchers not research groups.
- The Observatory publishes standardised profiles of the health systems of countries in the region. the HiTs, and this type of product could be considered for the Asian region.
- The policy dialogue workshops have proved productive and popular among policy makers.

EVIPNet

http://www.who.int/rpc/evipnet/en/

Structure

EVIPNet (Evidence-Informed Policy Networks) is sponsored by WHO. It arose from the WHO Ministerial Summit on Health Research in November 2004 attended by representatives from 52 countries. A resolution of the 58th World Health Assembly in May 2005 later called for "... the development of more effective mechanisms to bridge the divide between ways in which knowledge is generated and ways in which it is used, including the transformation of health-research findings into policy and practice." Funding comes from WHO and bilateral donors. EVIPNet aims to strengthen the links between heath research and policy in low and middle-income countries by promoting the use of health research in policy-making and practice. safest scientific evidence available globally and locally". EVEPNet aims are similar to those of a proposed regional information mechanism:

- Establish teams containing both researchers and policy makers;
- Bring together policy makers, managers and researchers in "strategic alliances";
- Build linkages between producers and users of evidence;
- Apply local and national experiences instead of just developed world solutions;
- Offer training for decision-makers and health system managers;

- Offer "one-stop shopping" for high quality evidence; and
- Consider the role of "knowledge brokers" in the process.

Three regional networks supported by WHO regional offices have been established: in Asia, Africa, and South America. WHO regional offices selected the participating countries and national health ministries nominated the core team members. EVIPNet Asia

(http://www.who.int/rpc/evipnet/asia/en/index.html) was launched in June 2005 as a four-five year program at a workshop in Kuala Lumpur organised by WHO and its WPRO office. The seven members are in the WPRO region: China (represented by Beijing, Sichuan and Shandong Provinces), Laos, Malaysia, Philippines, and Vietnam.

Programs and outputs

In the planning phase, each Country Team, containing both researchers and policy makers, carried out activities, such as workshops, stakeholder meetings and surveys (see Annex 7 for a report on EVIPNet Malaysia). The final proposals for funding were submitted to WHO in June 2006. In the implementation phase, a fulltime EVIPNet Asia Secretariat was established and activities, such as policy briefs and systematic reviews, are discussed in regional workshops. A monitoring and evaluation component of the EVIPNet program is to be established, involving Professor John Lavis (McMaster University). EVIPNet is a recent initiative and its activities are still emerging.

Comment

- Would a new regional mechanism build upon, complement or be additional to EVIPNet?
- Planning and implementation of EVIPNet Asia has taken two years since its launch, which suggests a new regional mechanism would require a long lead time to establish.
- Limited networking so far between members suggests that a regional information mechanism would require time to develop strong working relationships.

4.3 Centres for systematic reviews

Cochrane Effective Practice and Organisation of Care Group (EPOC)

www.epoc.cochrane.org

Structure

EPOC is one of more than fifty review groups within the Cochrane Collaboration. It produces systematic reviews of health care interventions designed to improve professional practice and the delivery of effective health services. The support staff and editorial base are located in the

University of Ottawa, Canada, with Professor Jeremy Grimshaw the co-ordinating editor. An international team of sixteen research staff and editors are based in research institutions in OECD countries, and EPOC has several "satellites" including in Australia and Oslo.

An *Australian EPOC satellite* (www.epoc.nhmrc.gov.au) was established in 2006 with funding from the Australian Government (amount unknown) to support the preparation of systematic reviews in the Australasian region. It is located within the National Institute of Clinical Studies in Melbourne, an institute of the National Health and Medical Research Council, a government statutory authority. Fourteen EPOC reviews prepared by Australasian researchers have been published in the Cochrane Library. An *Oslo EPOC satellite* was established in 2006 attached to the Norwegian Knowledge Centre for the Health Services. Its objectives include supporting the production and updating of Cochrane reviews that address health system questions that are relevant to low and middle-income countries.

Programs and outputs

The EPOC website links to the online Cochrane Library that offers review abstracts and plain language summaries. Free access to the full Cochrane review depends on the enquirer's place of origin. The EPOC team collaborates with over 150 reviewers in 15 countries. Each review protocol and systematic review is subjected to a rigorous editorial and peer review process to ensure quality. The EPOC centres in Oslo and Melbourne both undertake systematic reviews that examine evidence relevant to lower and middle-income countries. For example, reviews have examined the use of lay health workers in improving vaccination up-take, breastfeeding, and TB treatment; and the efficacy of specialist outreach services to community clinics. The EPOC website lists 79 systematic reviews or protocols for future reviews, and completed reviews of health system issues and health care interventions include the following topics:

- Continuing education and quality assurance (16 reviews), eg. educational materials;
- Financial interventions (7 reviews), eg. fee-for-service, user fees;
- Organisational interventions (24 reviews), eg. clinical multidisciplinary teams, skill mix changes;
- Structural interventions (10 reviews), eg. changes in the setting/site/structure of service delivery;
- Reviews of interventions to improve practice (28 reviews), eg. clinical preventive services, test ordering, prescribing.

Comment

- EPOC structure is a secretariat, satellites and local research groups.
- EPOC offers systematic reviews relevant to health service managers and policy makers.
- The Oslo and Melbourne EPOC groups undertake reviews relevant to lower and middle-income countries.
- EPOC builds local capacity to undertake reviews.
- Research literature from developed countries is reviewed for relevance to lower and middle-income countries.

5 Information mechanisms: options for Asia

This section reviews the main elements of health systems information mechanisms around the world (based on a review of over twenty mechanisms), summarises three main types of information models including their strengths and weaknesses, and discusses the relevance of these models to the Asian region.

5.1 Functions of information mechanisms

Many types of health policy information entities are emerging in this rapidly expanding field and a great deal of experimentation is underway. This means that it is often too early to be sure about successes and failures. Also, context is all important, since what works in one area may not in another. The *structure* of a mechanism may vary from an independent organisation, a centre embedded in a larger organisation, to a network of small centres. Their *functions* include capacity-building, information exchange, and the production of evidence for policy making. The *target* of the advice may be policy makers in Ministries of Health as well as researchers and practitioners. The *regional* area may be one country, a part of a country, or several countries. The *content* of health systems information may be broad, or boundaries may be set around specific topics. The *program* of activities may include producing, summarising, synthesising, disseminating, and promoting the use of research (see Figure 5.1). The *product* may be direct communication, published reports, or web-based information. *Dissemination* of information may be confidential to the inquirer or widely distributed.

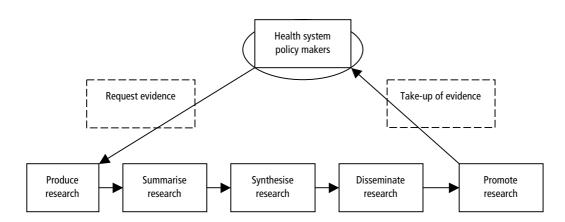


Figure 5.1 Producing research evidence for policy makers

Information bodies dating from the earlier model of an information clearing-house primarily manage information, rather like an enhanced library function. They identify, gather, classify, store and retrieve information. They respond to the supply of research rather than to demand for information by policy makers. There are few interactive relationships between the producers, managers and users of information. The next era of information bodies are more interactive and make greater use of information technology in that they summarise and synthesise information, commission reviews of the evidence, and are more active in disseminating information to policy makers and researchers.

Table 5.1 summarises five main purposes of a health systems information mechanism and the associated range of potential programs and activities. Not all mechanisms undertake all of these functions, but these are the type of things that an Asian information mechanism may consider undertaking, although not all in the early stages of its establishment.

Table 5.1 Purposes, programs and activities of a health systems information body

Purposes	Programs	Activities
Manage information	Information clearing house	Identify, classify, store, retrieve information
	Link to information	Links to journals, media stories, websites
Produce information	Exchange information	Health system reform updates
	Scan literature for relevance	Add commentary to existing reviews
	Summarise information	Fact sheets
	Synthesise information	Policy briefs
	Review and report evidence	Review "grey" literature, case studies, comparative studies, structured and systematic reviews, consult informants
	Produce research evidence	Commission research studies
	Respond to questions	Confidential or published replies
Disseminate information	Publication strategy	Publish policy briefs & reports
	Presentation strategy	Present at meetings and conferences
	Networking	Meet with policy makers

Purposes	Programs	Activities
Build capacity	Train researchers	Training fellowships Mentoring by research agencies Training workshops Staff exchanges
	Networking	Study tours and exchange visits
	Train policy makers	Dialogues and workshops
	Knowledge brokers	Liaise between producers and users of information
	Policy-research partnerships	Discussions on work programs
Promote policy take- up	Engage with policy makers	Policy dialogues
	Monitor take-up by policy makers	Convene client meetings Conduct satisfaction surveys
	Evaluate policy implementation	Conduct research

The established health systems information entities generally exhibit the following three characteristics. First, they tend to be more client-driven than earlier more researcher-driven entities, and they pay more attention to strategies that promote the take-up of research evidence by policy makers. On-call information bodies, such as the International Healthcare Comparisons group, respond directly to requests by policy makers, while the European Observatory on Health Systems and Policies increasingly engages in dialogues with policy makers. The Canadian Health Service Research Foundation is another example that seeks to close the gap between research and policy. These entities seek to strengthen capacity, both on the part of the information producers (the researchers), and on the part of the users (the policy makers).

The second point is that health systems information mechanisms have become more involved in producing research, such as secondary analyses of data, case studies and cross-national comparative studies, given the dearth of published research studies especially on the health systems of lower and middle-income countries. Much of the information sought by policy makers is not readily available in the grey or published literature. An Asian information mechanism thus may need to undertake substantial research on health systems in the region, in the absence of published research and given the limited research capacity in many countries. The translation of research into evidence for policy makers might involve commissioning or producing the research, summarising already published research, or synthesising a large and scattered body of literature. An information mechanism also must decide how much work to undertake in its central office and how much to devolve to its satellites and external information providers.

A third point that emerges from this overview of health systems information mechanisms is that they produce "information" for policy makers, or in the words of HEN, "health intelligence", rather than "evidence" or "guidance". This is for several reasons. First, the field of health systems research is less developed than the field of medical research and its conclusions less certain. Second, the contexts of health systems vary enormously and what works in one country may not in another. Third, health systems information mechanisms prefer to offer options rather than prescribe policies, since policy decisions are in large part played out within a political context in each country.

5.2 Producing and packaging information

Information bodies now generally aim to package their products in concise reader-friendly formats for busy policy makers (see Table 5.2). The first conclusion from this overview of entities is that a large range of information products are offered. As well as substantial reports (20-30 pages), these bodies produce other material including four-page summaries, fact sheets, and two-page policy briefs. Since the type of evidence produced for health systems decision making is more eclectic than is the evidence for clinical decision making, these reports includes case studies, scoping studies, and comparative studies, in addition to structured and systematic reviews. Policy makers also want updates on health system reforms and innovations in other countries. The information generally is published in paper form and on-line, and might be publicly available, disseminated widely, available only to members, or only in response to requests.

Table 5.2 Information products and formats

Purposes	Products	Formats
Produce information	Response to specific questions	Brief email/letter replies
	Summary of reports and reviews	Two-page summary
	Policy briefs	About four pages
	Case study	Short or substantial report
	Country policy summaries	Short report
	Scanning and interpreting international studies for regional relevance	Summary of research reviews Comments on relevance
	Comparative analysis of systems, policies and programs	Substantial report
	Observational research: before and after	Substantial report

Purposes	Products	Formats
	Scoping/structured literature review	Substantial report
	Systematic literature review	Substantial report
	Statistics databases	Trend tables and graphs
Disseminate information	Publish material	Paper, on-line
	Summaries	Two-page summaries, posters, fact sheets
	Updates by policy makers	Newsletters: paper and online
	Information clearing house	Summaries of published research Links to databases and websites

The second point that emerges is that publication and dissemination is resource intensive and can be expensive. It also requires appropriately trained staff, such as text editors and website managers, who can turn research reports into concise and reader-friendly information in a variety of formats.

The third point is that none of the existing mechanisms offer a rapid response, although they aim to build up a portfolio of reports that can be accessed. The time frame for a response to a question from a policy maker obviously depends upon the depth of information to be researched. If there is no definitive existing review on the topic, the information provider must investigate in some depth and consult other experts. A related reason that emerges from this survey is that clarifying the inquiry and producing the information can be time consuming. Figure 5.2 sets out the iterative process involved in requesting the information and delivering the final report.

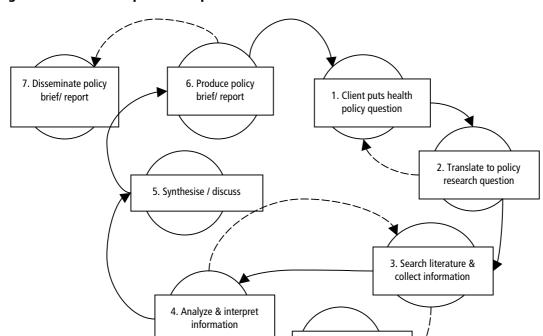


Figure 5.2 Information production process

In the case of the International Healthcare Comparisons (IHC) in England, for example, the Department of Health established an internal advisory group and liaison officer. Using a question template, requesters within the Department make the case for the specific information request (why, what and how to be used etc). The Department advisory group and the IHC team discuss requests, rank them in terms of relevance, urgency and feasibility, and decide on the one or two requests to be answered. Some requests are beyond the capacity or expertise of the IHC, or the evidence base is too shaky, or else there is insufficient experience in the countries concerned. The IHC team develops a draft work plan, sends out a questionnaire on the topic to the country experts, collates the responses, and synthesises the information in the light of the literature. Intermediate findings often are discussed in additional meetings between the IHC team and the Department requesters.

3a. Involve other information providers

A fourth point is that some information mechanisms draw upon a knowledge broker who understands the needs of policy makers, the state of knowledge of the research field, and the capacity of the information providers. This is particularly useful if an agency has little experience in requesting and using evidence. It is also important to understand why an agency wants the information, in order to shape a general inquiry into an answerable research question.

5.3 Governance

The health policy information mechanisms illustrate many permutations in the relationships between their actors: managers, partners, sponsors, clients and information producers. These actors may be individuals or organisations, and belong to government departments, government research institutes, multilateral or bilateral organisations, universities, NGOs or the private forprofit sector.

Governance of the mechanism may involve one or more partners, including sponsors and members, or may be divided among separate managements that collaborate within a loose network. The *partners* may come from governments, multilateral or bilateral organisations, universities, NGOs, and the private sector. There may be one partner, several or multiple partners. Usually, but not always, the partners also are *sponsors*, who may provide funds, in-kind assistance such as free rent and subsidised staff, or technical assistance through specialist staff.

The *clients* who request/access information may, or may not be *members*, involved in governance. A mechanism may have one, several or many clients, membership may be defined or more open, and information may be provided for free, on a membership fee basis, or as a fee for service. The people who request the information include policy makers and managers in national governments, but also regional departments since health systems are decentralised in many countries. University researchers also access information mechanisms since many mechanisms offer open access to their websites and to published work rather than restricting access to partners and members.

The structure of an information mechanism may be one secretariat with several centres or satellites located elsewhere, or much of the work may be undertaken through a regional centre with assistance from external information providers, and there are many other permutations (see section 5.4).

Information producers vary in number and in their relationship to the mechanism. The producer may be an organisation or an individual. A producer organisation may be a technical member or commissioned to undertake a piece of work in a purchasing arrangement. An individual producer may be directly employed by the mechanism, seconded by a partner organisation, have an on-going contractual arrangement, be commissioned to provide information on a regular basis through a contract or retainer, or provide information on a fee for service basis as required. Information producers often are university researchers and thus their ability to provide the information depends upon the time they have available and the incentives for undertaking the task. Information mechanisms can arrange for work from institutes and/or individuals through a membership or producer relationship. HEN has a membership relationship with its technical members, while the European Observatory organises work from its five university-based offices and from a looser

network of individual researchers. The Cochrane networks, including EPOC, promote ties among researchers usually linked to lead research groups.

Costs of information mechanisms

The costs of running an information mechanism are not easy to estimate for several reasons. First, cash grants from partners generally are not made public. Second, the considerable in-kind support from partners usually is not costed. Third, many mechanisms are embedded in institutions, such as universities and WHO offices, and extra operational and staffing assistance is seldom fully costed. Fourth, information providers, such as university academics, contribute substantial unpaid time in producing evidence reviews. Finally, there is enormous variability between low to high cost programs (perhaps from US\$100,000 to over US\$1million per year), while staffing ranges from around three to 60 people.

An estimate on the likely operating costs of an Asian regional mechanism would depend on the type and size of mechanism envisaged, the amount of research that is commissioned, its location, whether it has linked centres or satellites, and the cash and in-kind contributions expected of its partners. The arrangements described below mostly exist in the relatively resource-rich environments of developed countries. For example, the time contributed for free or for little costs by university-based researchers may not be available in the Asian region. Information entities have a range of sponsors, some of whom also act as partners. These include the following: multilateral organisations eg. the WHO, the World Bank; bilateral organisations eg. the UK Department of International Development; governments eg. several European governments; philanthropic organisations eg. the Open Society Institute; and the private sector eg. Pfizer.

The International Healthcare Comparisons (IHC) group based in the London School of Hygiene and Tropical Medicine is an example of a small mechanism. The contract from the Department of Health covers 1.25 FTE research salaries, administrative support, some operating expenses, and US \$4000 per year for each of 13 experts who contribute about three reports each year. The work thus is partly underwritten by academics who undertake work additional to their university work loads.

The Alliance for Health Systems and Policy Research has a total income of about US\$3.3 million a year, in part from the UK Department of International Development (*RealHealthNews* 2007). The Alliance in 2007 funded four centres based in universities and research institutes in Bangladesh, China, Uganda, and Chile to conduct reviews on health systems research relevant to low and middle-income countries. Each centre received a grant of US\$300,000 for a three year period to undertake at least one in-depth systemic review each year plus other material.

The Effective Health Care Research Programme Consortium, based at the University of Liverpool, received around US\$4.5 million for three years from the UK Department for International Development to undertake systematic reviews relevant to health care in low and middle-income countries.

The European Observatory on Health Systems and Policy is a large entity with perhaps 20 staff and a network of researchers. Observatory partners provide both cash and in-kind assistance. The amounts of cash are not publicly available and in-kind support is considerable and largely uncosted. For example, the universities act as land-lords for Observatory offices and subsidise some researcher time, WHO Europe provides substantial support, and other partners, such as the World Bank, also provide considerable technical assistance. Research collaborators also contribute time and expertise beyond a modest honorarium.

Measuring success

None of the information entities provide much information on how they evaluate their own performance. Such information may exist internally, however, since most report regularly to their partners and sponsors. Another reason for the lack of information is that it is early days for some entities and thus any evaluation is premature. The European Observatory on Health Systems and Policies, for example, monitors measures of success such as number of activities, published outputs including papers in peer-reviewed journals, and growing requests for assistance from countries. Its published products are widely down-loaded and read. It provides an annual evaluation of its work and impact to its steering committee but this report is not publicly available.

While data on inputs and outputs can be collected, outcomes and impacts are more difficult to measure and call for a broader research impact framework (Kuruvilla et al 2007). Given the difficulties of outcome measures, a broader score card methodology offers a more achievable approach to evaluating success, and might be evaluated under three main categories:

- Inputs number of information requests; types of requests; membership numbers and trends; sustainability of funding through core funds, donor grants, membership fees and product sales.
- Outputs number of pieces of work produced; number published elsewhere (peer-reviewed journals etc); number of workshops and meetings; well-run operating procedures; organisational growth.
- Outcomes satisfaction on the part of sponsors, partners and clients; the extent of take-up
 of information into policy making.

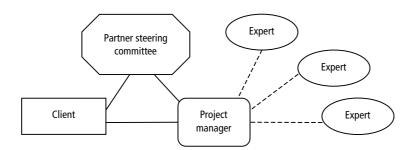
5.4 Regional information mechanism options

Information mechanisms vary considerably in their structure and functions and many permutations are possible. Three broad types of mechanisms are summarised below, including their strengths and weaknesses, which offer useful models to consider when designing an information mechanism for the Asian region.

Option 1: One manager, one client, several producers

Small mechanisms function successfully usually within the context of one country (see Figure 5.3). For example, the International Healthcare Comparisons (IHC) group delivers information in response to requests from a single client, the Department of Health in England; the Sax Institute provides policy-relevant information to the New South Wales health department; the Bertelsmann Foundation reviews health reform issues in OECD countries of interest to Germany; while information mechanisms also operate in Canada and Norway.

Figure 5.3 Single client model



The main strengths of this model are its ability to tailor information to the needs of one client, to develop the capacity of its experts in producing policy-relevant information, and of its client in requesting and using information, and through ongoing dialogue promote the take-up of evidence into policy making. This model also has several weaknesses. It produces specific information for a particular client that may not be generalisable to others. It requires a well-established research network of individual researchers who have the expertise and capacity to respond to requests. It generally does not provide a "rapid response". This is a feasible model for some Asian countries, in that such an information entity employs a core of staff, draws upon outside experts, and responds to one department. Such an entity would be a building block upon which to base a larger network.

The advice from a Thai health policy expert is that the first step in strengthening policy-relevant health systems research in the region should be to build up institutional capacity within a country, and support them in conducting their own research, and in translating this research into policy decisions. Policy take-up depends upon good working relations and trust between researchers and

policy makers. Collaboration between countries would then gradually emerge and develop into more equal partnerships. Policy development needs to come from inside not from outside the country. An Asian regional information mechanism would be premature in the absence of existing collaborations between researchers and policy makers in different countries.

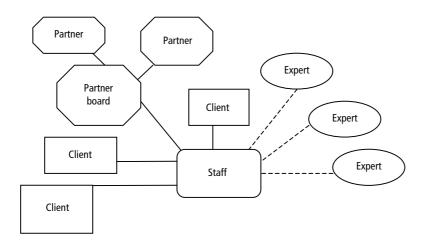
The Country Reports all stress the role of a regional information mechanism in strengthening incountry research capacity. The single client model could work within a country with a link to a regional secretariat. Some Country Reports comment on the lack of information sharing and exchanges within their country between research groups in government departments and universities. Others countries maintain they have interactive environments where several research bodies would join forces in providing information, such as in the Philippines Singapore and China. There is a case, therefore, for strengthening in-country capacity, in order to provide the building blocks towards a regional network. It is not clear that a large network of partnerships can yet operate given limited capacity within many countries in health systems research.

Option 2: One manager, several clients, multiple producers

The Health Evidence Network (HEN) based in WHO/Europe is an example of an entity that is sponsored by several partners, although it has multiple clients rather than a limited membership since it responds to inquiries from "European health policy makers". It has multiple information producers including its staff, technical member organisations and external researchers. HEN's experience suggests that its scope is too ambitious to be feasible in the Asian region. Another example is the Effective Health Care Research Program Consortium based at York University.

This type of model could address a more limited policy area for a small group of countries with some common interests and contexts (see Figure 5.4). The clients might also be partners and thus involved in steering such as entity. It would need to be well resourced, since to be viable in the Asian region it would need in-house staff able to produce, manage or edit a substantial amount of the work, backed up by experts from other research institutions.

Figure 5.4 Several clients and multiple producers



Several groups have been established to address specific topic areas in the Asian region. An example is the South Asia Cochrane Network, linked to the Australasian Cochrane Centre, which concentrates upon systematic reviews that relate to maternal and child health in the region. The countries (India, Bangladesh, Pakistan, and Sri Lanka) share a common second language in English, and share some cultural and historical commonalities, despite some ongoing political tensions on the part of their governments if not their researchers. Other topic-specific examples are the four centres for systematic reviews funded by the WHO Alliance for Health Policy and Systems Research, and the nine Knowledge Networks funded by the Commission on Social Determinants in Health.

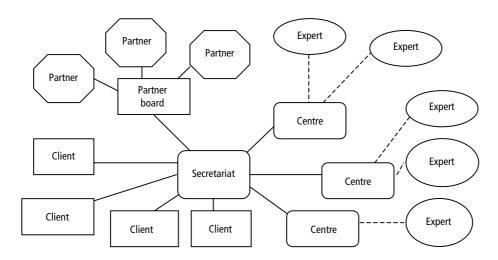
The strengths of this model are that it is efficient in pooling resources and knowledge that are made available to several clients, and can attract several partners and sponsors. This entity could be located in one place, either free-standing, or more likely linked to a university or to an international organisation. The weaknesses are that it is difficult to maintain good working relationships with several clients, especially if an aim is to promote the take-up of evidence into policy. This model needs committed sponsors for the long term, since it takes time to develop good working relationships with clients and with information producers. It is more likely to succeed if embedded in an organisation that already has strong links with governments and researchers.

This may be a feasible way to initiate an Asian regional network and to add other partners once it is established and working well. It could bring together a few countries that have a history of working together. According to the Country Reports, policy dialogues are underway between Indonesia, Malaysia and the Philippines, but there may be other combinations.

Option 3: Secretariat and satellites, several partners, multiple clients, producer network

A regional secretariat linked to centres/satellites based in several countries is an ambitious model for a regional information mechanism (Figure 5.5). The European Observatory on Health Systems and Policies is an example. It has grown from small beginnings over a decade ago to a large and complex entity. EVIPNet Asia is another example, with its seven member groups in five countries, although relationships between its various components are still being worked out.

Figure 5.5 Secretariat, several partners and centres, multiple clients, network of information producers



The strengths of this model are that it combines central expertise in a secretariat, with strategically acceptable and more responsive decentralisation through its centres. The centres/satellites could specialise in particular countries and/or in particular topics. The weaknesses are that this is a demanding model to make work since it needs considerable management capacity and resources, including a strong research environment. It also requires a high level of trust and cooperation between its components.

Centres or lead institutes may be selected with a different focus: country, regional, or topic. If a country focus, one centre might be established to respond to a group of countries, or else a centre might be chosen in each country. If a regional focus, a centre would focus on a region-wide issue, such as issues facing low-income countries, or a more general issue, such as methods for paying doctors. If a specific topic, centres would be selected that reflect the research expertise of the particular research group, such as workforce issues. Given the array of research institutes and their interests in the region, any of these options is theoretically possible. A centre or satellite may also be based around a relationship with a lead researcher rather than with an institute.

6 From ideas to action

6.1 Challenges in the Asian region

The cultural and technical challenges involved in developing an Asian regional knowledge network include the diversity in the region, language differences, and limited access to information technology.

Diversity

"Asia" is an extremely diverse geographic region with striking socio-economic differences, and different historical, cultural, linguistic and religious traditions, while each nation-state has taken different political paths. Some countries look for policy lessons to OECD countries, or to "tiger" economies in the Asian region, such as Japan, South Korea, and Taiwan, rather than to near neighbours. While regional diversity certainly presents a challenge, it does not preclude the establishment and sustainability of a regional information mechanism. For example, the European Observatory on Health Care Systems and Policies manages to engage countries ranging from OECD and European Union members to eastern European and Caucasus countries and the Central Asian Republics. There are more centralising institutions in the European region, however, notably the European Commission, and a much richer range of institutions and individual researchers to draw upon in producing health systems information.

The Asian region lacks a centralising focus, compared to some other regions around the world, given the absence of regional political and economic organisations apart from loose treaties and non-binding inter-governmental forums. Eight of the nine countries of interest in this study (except China) are members of the Association of Southeast Asian Nations (ASEAN), which was established in 1967 and currently has ten member countries. It aims to accelerate economic growth and to promote peace and prosperity, meets regularly to discuss mutual concerns, and has a strong security focus. The Asia-Pacific Economic Cooperation (APEC) was established in 1989 with the aim of facilitating trade and investment and has 21 members, including most countries in this study (except Cambodia and Laos). Both ASEAN and APEC support regular meetings of Health Ministers of the member countries. Health ministers at an ASEAN meeting recently discussed the security threats posed by public health emergencies, and health ministers at an APEC meeting discussed the interface between economic and health issues including the threats posed by pandemics. Health systems policy matters of local and regional significance primarily are addressed by the World

Health Organization, however, and of the nine countries in this study, seven are in the Western Pacific region (WPRO), and Indonesia and Thailand are in the South East Asian region (SEARO).

Language issues

The lack of a common language is problematic. English is one of the most prominent languages of international communication, and is dominant in international digital communications systems. The knowledge networks reviewed in this report use English (although a few have alternative language down-loads for some sections of their websites). Most of the information contained on those websites (reports, publications and systematic reviews) is only available in English. This does not present any difficulty for countries in the Asian region where English language skills are strong, but does for other countries.

English is regarded as the language of communication for an Asian regional mechanism, although of the nine countries, the English language is only strong in three (Singapore, Malaysia and the Philippines), but is becoming more common in Thailand. Of the other five countries (Cambodia, China, Indonesia, Laos and Vietnam) many policy makers and researchers do not possess English language skills. For example, some country collaborators found it necessary to translate the material from the questionnaire guides into the relevant local language for distribution to respondents, interviews with these senior officials were conducted in that language, and the draft reports were finally translated into English. If local knowledge networks are to serve the interests of health sector policy makers in these countries, sufficient resources will need to be allocated to provide translation services. Networks using local languages have emerged in some locations, for example, at the China Cochrane Centre at Sichuan University in Chengdu.

The digital divide

The success of any health policy information mechanism depends heavily on modern forms of communication technology, which are taken for granted in developed countries. While many dramatic changes are underway, the take-up of new forms of technology has been uneven across the Asian region. Investment in information technology thus would be necessary for satisfactory communications across the network. The "culture" of Internet use that is now deeply ingrained in developed counties (such as frequent checking and responding to emails) is not possible or not the norm in many government offices and universities in Asia. Mobile telephone use has taken off dramatically, however, sometimes as a substitute for limited and inefficient landlines and public telephone networks.

A few Asian countries have advanced digital telecommunications infrastructures, but others struggle to overcome the "digital divide". For example, data on Internet access and usage show that Singapore is comparable with other developed countries, but Internet usage figures for Cambodia and Laos are below 0.5% of the population. There are no data on Internet usage within government departments, but anecdotal evidence suggests that many bureaucrats have limited access to electronic information and communications tools (Lansang et al 2006). Many government agencies depend upon outdated or lower-performance computer hardware and lower quality services, such as narrow bandwidth and slow dial-up connections. In addition, Internet coverage by independent providers is often patchy, and technical advice and support services are limited. Such technical shortcomings remain a barrier to on-line access to knowledge and information. Some of these problems will no doubt be overcome in the future. For example, China and Vietnam are making rapid progress with the application of digital technology.

6.2 Requirements for an Asian information mechanism

Several factors are likely to be important in successfully establishing and sustaining a regional mechanism. These requirements were identified from the experiences of existing information entities, and from the views expressed by policy makers and researchers in the Asian region. These types of issues would need to be considered in planning a regional mechanism.

Strengthening regional research capacity

Health systems research relevant to low and middle-income countries and to the Asian region is scattered and limited, and reports call for strengthening this capacity (WHO 2004; Alliance for Health Policy and Systems Research 2004, 2007). Research groups in the Asian region are keen to engage in health systems research partnerships. The argument is that the scattered research groups would benefit from a concentration of research capacity through a regional mechanism. Research groups in the wider Asian region and beyond, such as in Australia, also are interested in connecting with an Asian information mechanism.

A regional mechanism could support health systems research by mobilising the research expertise required to inform policy debates, in order to respond to the needs of policy makers in the Asian region who are seeking to make strategic choices for their health systems. A regional mechanism could also sharpen the analysis of local issues by facilitating research that takes account of regional and international trends. It could also draw upon the inter-disciplinary expertise required to analyse the complex and inter-related nature of many health system issues. The Country Reports suggest that several countries have developed specialist expertise that could be tapped, such as Indonesia

on disaster planning, the Philippines on community health services, and Singapore on infectious disease surveillance.

An Asian information mechanism might adopt several strategies to contribute to building an evidence base for health systems policy making, and to closing the gaps between health systems research, policy and practice. Three possible strategies are summarised here. First, a local research strategy would be to fund researchers to produce material relevant to their country, since the informants interviewed all stressed the importance of investing in local capacity. Second, a review strategy would be to ask researchers to analyse the relevance to Asian countries of international research findings, since many reviews of health systems research carried out in developed countries could be re-examined for relevance to low and middle-income countries. Examples include the literature on primary health care, the health workforce, and quality assurance methods. This study has identified an array of reports published by many information mechanisms that could be examined from this perspective. Third, a policy dialogue strategy would be to produce reports based on international and regional research reviews and invite policy makers to judge its relevance to their particular country. This type of material could be discussed in policy forums that engage policy makers and researchers.

Structure and governance

Views were divided on the best type of structure for a regional information mechanism. Two basic types of models were envisaged. First, a regional centre would have core staff able to undertake a substantial amount of work and respond to inquiries from policy makers, as well as commission work from a network of research groups and individuals. Second and alternatively, a secretariat model would focus upon supporting other centres and research groups located in different countries to undertake much of the work. The Philippines Report suggests that rather than a formal local centre, a designated institute in each country could act as "lead responder" in organising inputs from a network of others, either for that country or on a particular topic.

In both types of models, the regional entity should be attached to a highly reputable institution, largely independent of government, and with a well-established research capacity and credibility with policy makers, as well as strong regional and international links. It should be based in a country with good access to information technology, with good links to policy makers in the member countries, and to a wide network of information providers and researchers, whether organisations or individuals.

Views on the governance of a regional information mechanism also varied. Policy makers generally prefer a partnership relationship, rather than a membership or customer relationship. The

advantage of a partnership arrangement is that it would promote local commitment and "ownership". A disadvantage may be that a mechanism may become overly politicised if controlled by country members via government departments. The politicisation of a central location would be reduced if centres/satellites also were funded in other countries. Given the emphasis by policy makers upon the country context, perhaps a group in each country could act as a knowledge broker able to provide country-specific information, and to adapt generic information to the needs of a particular country.

Some policy makers were concerned that external partners and sponsors may dominate the agenda so that the work may not fully reflect the needs of local policy makers. For example, policy makers in aid-dependent countries believe that research often is driven by external donors rather than the country's policy makers. The researchers are another key group of actors in the relationship, and information mechanisms have been criticised in the past for being driven by researchers rather than policy makers.

Resources and sponsors

A regional information mechanism would need to be well-resourced with core staff and funds for running regional activities and for commissioning research reports. As the Philippines Report points out, in the absence of adequate core funding, a regional information mechanism would only be as good as its country partners. For example, it cannot hope to draw upon the significant unpaid contributions from technical members and university researchers that occur in developed countries. The Asian research group informants indicated that they generally would need to provide work upon a full cost recovery basis.

Extra technical resources, such as research reports, may be available from international information mechanisms, as well as the benefit of their experience in managing an information entity and in producing policy-relevant information. Partner arrangements may be possible with international organisations and aid agencies. The Country Reports called for core funding and for membership subsidies for low-income countries from external donors.

Several points emerge from a brief review of potential donor agencies. First, aid agencies already are involved in both sponsorship and partnership arrangements with information mechanisms, examples being the European Observatory, EPOC, and HEN. Second, donor agencies provide substantial in-kind assistance as well as cash assistance. Third, donor agencies state that they wish to promote the evidence base for policy making in order to strengthen health care systems. The policies of multilateral and bilateral donor agencies, as well as those of Asian inter-government forums, potentially align with the purpose of an Asian information mechanism. Finally, a donor

funding eligibility issue for a regional mechanism is that many donor agencies have precise funding criteria, tend to fund country-specific rather than regional initiatives, and prefer to direct funds to low-income countries. Discussions on possible sponsorship and/or partnership by donor agencies, of course, would require the development of a detailed proposal for a regional information mechanism accompanied by ongoing negotiations.

Responsiveness to policy makers

Policy makers want the agenda of a regional mechanism to be driven by their information needs. The Country Reports suggested several functions for an Asian information mechanism and identified a long list of health systems topics for research. Such a broad scope of functions and policy topics may be too ambitious in the early stages of an entity, especially given the scarcity of research on health systems in the region. An Asian regional information mechanism would need to set priorities, particularly in the early stages, especially since the wide scope of health policy has prompted established entities to set priorities. For example, HEN intends to draw boundaries around topic areas; the European Observatory on Health Systems and Policies decides upon some topics in a yearly work plan; some EVIPNet country teams focus on a particular topic; and the WHO Knowledge Networks divide information tasks between groups. An information mechanism therefore must define its scope if the task of responding to information requests is to be manageable.

Many existing information mechanisms now seek to engage directly with policy makers in order to provide more responsive information and to improve the take-up of policy advice. Dialogues between researchers and policy makers thus are being organised. The European Observatory, for example, is building on a decade of engagement with governments in the region.

Policy makers want country-specific knowledge relevant to the policy context of a country. Health systems researchers agree that to be relevant information must be grounded in the conditions of health systems in particular countries. Research capacity must be developed within each country, therefore, to assess the applicability of generic information and evidence. Many information mechanisms are struggling to close the evidence-practice gap by improving the production of relevant and timely evidence to policy makers that is more likely to be translated into feasible practice. This enters the realm of implementation and a consideration of the many factors involved: fiscal, institutional, professional and political.

Knowledge brokers have emerged as part of the responsiveness shift. These are people who understand the perspectives of both policy makers and researchers in a particular country and who can manage the process of delivering the required information. A centre or lead agency in each

country could undertake the role of knowledge broker in developing requests for information, gathering country informant responses, and adapting generic information to the local context. A regional mechanism also may need to engage knowledge brokers within each of the countries. These should be "local champions" who have worked both in research institutions and in government. This suggests that country centres or lead agencies may be a necessary part of a network linked to a regional centre or secretariat. Researchers and knowledge brokers with a good comparative knowledge of the region and beyond could engage in issues of regional and global significance.

Information mechanisms also stress that they offer information and evidence: they do not offer advice. For example, the European Observatory and HEN offer "health systems intelligence" but do not presume to offer advice. Policy makers in the Asian region are particularly wary, given decades of experience, of "advice" offered by international consultants. Policy makers must evaluate the relevance of generic information to their own health system, which might involve an iterative dialogue with the information mechanism, and with researchers in their own country.

Rapid response may not be feasible

There appears to be no information mechanism, outside government policy "think tanks", that provides a "rapid response" within a few days or weeks, unless a pre-existing report fortuitously answers the particular inquiry. The requirement for a "rapid response" may be more appropriate to disaster planning and infectious disease management than to health systems policy. Evidence for health system policy making requires careful and considered assessment and planning within different contexts and within highly political environments.

There are several other reasons for this slower response time. First, there is a limited supply of available and specific information about health systems. Second, clarifying the question and shaping the answer is an iterative process. Third, the information has to be tailored to a particular health system context. Finally, the provision of information often depends on external information providers who cannot necessarily drop other commitments to give priority to a request.

6.3 Next steps: planning and implementation

The experiences of the information mechanisms reviewed in this study suggest the importance of careful planning and consultation in the design and establishment phases. Several of the information mechanisms in developed countries grew from small beginnings and long-standing research partnerships. Solid research partnerships are needed to provide a sound base upon which to build an information mechanism.

A delicate balance clearly has to be negotiated between the many vested interests: policy makers, sponsors, country members and researchers, and between region-wide and country-specific information needs. Moving from the generally popular idea of an Asian regional information mechanism to actual agreement on its funding, governance, location, functions and topics is likely to require ongoing consultation.

Bibliography

Alliance for Health Policy and Systems Research (2004) *Strengthening Health Systems: The Role and Promise of Policy and Systems Research*. Geneva, Alliance for Health Policy and Systems Research, World Health Organization.

Alliance for Health Policy and Systems Research (2007) *Sound Choices: Enhancing Capacity for Evidence-Informed Health Policy*. Geneva, Alliance for Health Policy and Systems Research, World Health Organization.

Asian Development Bank (1999) Policy for the Health Sector. Manila, Asian Development Bank.

Barber S (2007) "Health system strengthening interventions: Making the case for impact evaluation." *Briefing Note 2*. Geneva, Alliance for Health Policy and Systems Research, World Health Organization, http://www.who.int/alliance-hpsr/en/

Bennett S (2007) "What is health policy and systems research and why does it matter?" *Briefing Note 1*, Alliance for Health Policy and Systems Research, World Health Organization. http://www.who.int/alliance-hpsr/en/

Burns A (2005) "Recognizing the needs and roles of the key actors." *Journal of Health Services Research & Policy* 10(1): 2.

DFID (2007) *Working Together for Better Health*. London, Department for International Development.

Doherty L et al. (2007) *Challenging Inequity Through Health Systems*. Geneva, World Health Organization.

Hanney S R et al. (2002) *The Utilisation of Health Research in Policy-Making: Concepts, Examples, and Methods of Assessment*. Middlesex, Health Economics Research Group.

Harrison MI (2004) *Implementing Change in Health Systems: Market Reforms in the United Kingdom, Sweden and The Netherlands.* London, Sage Publications.

Healy J et al (2006) "Australia: Health System Review." *Health Systems in Transition* 8(5): 1-155. European Observatory on Health Systems and Policies.

Kuruvilla S et al (2007) "Describing the impact of health services and policy research." *Journal of Health Services Research & Policy* 12 (S1): S23-31.

Lansang MA et al. (2006) *A Rapid Situational Analysis of Health Policy and Systems Research in the Western Pacific Region*. Manila, World Health Organization Western Pacific Regional Office.

Lavis J et al. (2005) "Towards systematic reviews that inform health care management and policy-making." *Journal of Health Services Research & Policy* 10(1): 14

Lin V and Gibson B eds. (2003) *Evidence-based Health Policy: Problems and Possibilities*. South Melbourne, Oxford University Press.

Martin M (2005) "The need for an overall strategy." *Journal of Health Services Research & Policy* 10(1): 2.

Mays N et al. (2005) "Systematically reviewing qualitative and quantitative evidence to inform management and policy-making in the health field." *Journal of Health Services Research & Policy* 10(1): 15.

Potter M et al. (2006) "Demonstrating excellence in practice-based research for public health." *Public Health Report* 121:1-16.

Phua KH and Chew AH (2002) "Towards a comparative analysis of health systems in the Asia-Pacific Region." *Asia-Pacific Journal of Public Health* 14(1):9-16

Phua KH and Blomqvist A (2004) Proceedings of the International Conference on Comparative Health Systems and Policies in Asian Countries, November 2004, Singapore.

RealHealthNews (2007). "Let's make health systems work" RealHealthNews 7:19-22.

Sheldon T (2005) "Making evidence synthesis more useful for management and policy-making." Journal of Health Services Research & Policy 10(1): 5.

UNDP (2006) *Beyond Scarcity: Power, Poverty and the Global Water Crisis*. New York, United Nations Development Programme.

WHO (2004) World Report on Knowledge for Better Health: Strengthening Health Systems. Geneva, World Health Organization.

WHO (2007) Informal Consultation on National Health Research Systems Analysis in the WHO Western Pacific Region. Manila, World Health Organization Regional Office for the Western Pacific and Council on Health Research for Development.

WHO (2007) World Health Statistics 2007. Geneva, World Health Organization.

World Bank (2007) *Healthy Development: The World Bank Strategy for Health, Nutrition, and Population Results.* Washington, World Bank.

Yeates G (2005) "A journey into unfamiliar terrain" *Journal of Health Services Research & Policy* 10(1): 2.

Annex 1

Alliance Steering Group and TOR

Steering group members

Sara Bennett, Alliance for Health Policy and Systems Research, World Health Organization, Geneva

Jacques Jeugman, Asian Development Bank

Reijo Salmela, World Health Organization Western Pacific Regional Office

Maylene Beltran, Department of Health, Philippines

Maimunah Hamid, Ministry of Health, Malaysia

George Gotsadze, Curatorio Foundation.

Terms of Reference

- Review models for health system policy advice, in the region and outside of the region, and lessons learned, with particular emphasis on models closest to the envisaged RRRM (Task 1).
- Survey senior managers and advisers in Ministries of Health (MoH) and related agencies in the Asian countries, by questionnaire or interviews (Task 2).
- Identify resources for health policy advice in and outside of the region (Task 3).
- Describe a limited number of alternative modalities for the proposed RRRM (Task 4).
- Estimate costs for operating an RRRM over the first three years (Task 5). (It was noted that this task depends on obtaining information from existing RRRMs).
- Assess the likely sources of financing for an RRRM (Task 6). (This task would require follow up by the Steering Group).
- Recommend indicators by which the success of an RRRM could be measured (Task 7).

Annex 2

Researchers and Collaborators

Researchers

Associate Professor Judith HEALY, Regulatory Institutions Network, Research School of Pacific and Asian Studies, Australian National University, Canberra, Australia

Professor Vivian LIN, School of Public Health, La Trobe University, Melbourne, Australia

Associate Professor PHUA Kai Hong, School of Medicine and Lee Kuan Yew School of Public Policy, National University of Singapore.

Dr John MAXWELL, Australian National University, Canberra.

Collaborators

China

Dr ZHAO HONGWEN, Director International Health Research Office, China Health Economics Institute, Ministry of Health, Beijing.

Indonesia

Professor Hasbullah THABRANY, Dean of the University of Indonesia School of Public Health.

Dewi MAYANTI

Laos

Dr Kongsap AKKHAVONG, Deputy Director, National Institute of Public Health, Vientiane.

Malaysia

Professor Syed ALJUNID, Senior Research Fellow and Professor of Health Economics, United Nation University, International Institute for Global Health, Kuala Lumpur, Malaysia

Philippines

Dr Mario VILLAVERDE, Assistant Secretary, Department of Health, Manila.

Singapore

Dr PHUA Kai Hong, National University of Singapore

Vietnam

Dr LE Van Hoi (MD, MSc), Hanoi Medical University

Advisory Group:

Professor Truong Viet Dung, Director Dept of Science and Training, Ministry of Health;

Asso. Prof. Le Quang Cuong, MD, PhD, Director of Health Strategy and Policy Institute;

Dr Luu Ngoc Hoat, Vice Rector of Hanoi Medical University.

Assessment Team:

Le Van Hoi (MD, MSc) Vice-Head, HMU Unit of Teaching and Consulting Health Research;

Nguyen Van Huy (MD, MPH), Lecturer of Hanoi Medical University;

Phan Hong Van (MD, MPH), Researcher of Health Strategy and Policy Institute;

Do Thanh Toan (MD), Lecturer of Hanoi Medical University;

Nguyen Thi Ngoc Hoa (MD, BSc), Officer, Dept of Social Affairs, National Assembly Office;

Tuong Duy Trinh (BSc), Researcher of Health Strategy and Policy Institute;

Vu Van Chinh (MD, MPH), MOH Dept. of Planning and Finance.

Annex 3

Guide for Interviews with Ministries of Health

(Interview guide to use in emails, telephone calls or personal interviews)

Regional Rapid Response Mechanism: a regional centre/network that could respond to requests for timely advice on health system policies from policy-makers in Asian countries: Cambodia, China, Indonesia, Laos, Malaysia, Philippines, Singapore, Thailand, and Vietnam.

Health system policies: health system structure (eg. public/private balance, central/local administration), financing mechanisms (eg. health insurance, paying providers), human resources (eg. staff training), technology assessment (eg. pharmaceuticals, medical devices), evidence-based information (eg. clinical protocols for doctors, information for patients), population health (eg. infectious disease control), and health service delivery (eg. primary care/hospital balance).

Information needs for policy-making

- 1. Do you think that it would be useful to establish a **Regional Rapid Response Mechanism**, that is, a research centre/centres or network, in the Asian region? Its job would be to respond to requests for advice from policy-makers, to gather information and analyse the evidence, and then to provide a written report. Please provide reasons for your views on this matter.
- 2. What sort of **information requests** might your Ministry put to such a body to help policy-makers develop health system policies for your country? Can you provide some specific examples on the following?

Structure

Funding

Human resources

Technology assessment

Information for providers, professionals and patients

Population health

Health service delivery

3. Do you look to the **experiences of other countries, or to international sources**, to provide lessons for health system policy-making in your country? Can you provide some examples of where advice has been sought from individuals or organizations outside your country?

4. Do you think that the **knowledge and experience gained in your country** offers lessons for health policy-makers in other countries in the Asian region?

Format of advice

- 5. What form of evidence would your department want? For example: information summaries, overviews of experiences in other countries, structured or systematic reviews of available evidence, in-depth analyses, options for action, or specific policy recommendations?
- 6. In general, should **policy advice** be provided as a short summary (several pages), or be a longer and fully documented report? Explain the reasons for your preferences.
- 7. What **length of time** would be desirable between making and receiving a request? Should this be days, weeks, a few months or several months?

Structure of a policy advice mechanism

- 8. If a Regional Rapid Response Mechanism is established in the region, would your Ministry be likely to prefer a **membership relationship** and be involved in the funding and management of such a body? Or would your Ministry be likely to prefer only a **customer relationship** and request or buy specific pieces of advice? Why would this be your preferred option?
- 9. What are the information resources and **research capacity** in your country that others might find useful? Why would this be the case? Which other countries in the region, and which institutions, do you think have the research capacity to provide this type of policy analysis and advice?

Sponsorship and funding arrangements

10. What type of **funding arrangements** would you suggest as the most appropriate for a policy advice mechanism (a RRRM)? A charge for each policy brief? A country membership fee? Each country contributing work from their national research institutes? Funding from external donors? Some other sources? Please explain your views on this matter.

Annex 4

Guide for Interviews with Research Institutes

(Interview guide to use in emails, telephone calls or personal interviews).

Regional Rapid Response Mechanism: a regional centre/network that could respond to requests for timely advice on health system policies from policy-makers in Asian countries: Cambodia, China, Indonesia, Laos, Malaysia, Philippines, Singapore, Thailand, and Vietnam.

Health system policies: health system structure (eg. public/private balance, central/local administration), financing mechanisms (eg. health insurance, paying providers), human resources (eg. staff training), technology assessment (eg. pharmaceuticals, medical devices), evidence-based information (eg. clinical protocols for doctors, information for patients), population health (eg. infectious disease control), and health service delivery (eg. primary care/hospital balance).

Information and advice for policy-making: current practices

- 1. What **type of information and advice**, and on what topics, does your organization provide to health policy-makers in your country? Please provide some examples.
- 2. What are the **main sources** of this information? For example, views of departmental officials, government statistics, census and survey data, research reports? To what extent is your organization's advice to health policy-makers based on evidence, such as structured or systematic reviews of the research literature?
- 3. In what form is this information or advice usually given?

In confidential discussions and brief memoranda?

Confidential reports?

Published reports?

Seminars and workshops?

- 4. Is this advice part of the **function of your organization**, or does the Ministry of Health or some other agency make a special request or pay for this advice? Is it based on a competitive or tendering process?
- 5. What **other individuals/organizations** are providing information and advice at the present time to health policy-makers in your country?

Other public or private organizations within your country?

Organizations elsewhere in the Asian region?

International organizations

Information and advice for policy-making: the role of an RRRM?

- 6. Do you think that it would be useful to establish a **Regional Rapid Response Mechanism**, that is, a research centre/centres or network, within the Asian region? Its job would be to respond to requests for advice from policy-makers within the region, to gather information and analyse the evidence, and then to provide a written report. Please provide reasons for your views on this matter.
- 7. Would your organization be interested in producing information/advice for health policy-makers in the Asian region as part of such a **Regional Rapid Response Mechanism**?
- 8. What are the **main areas of expertise** in your organization that could be drawn upon in producing policy advice reports? Does your organization currently have the **staff capacity** to produce such policy advice reports? Please explain (range of disciplinary expertise, size of staff, etc).
- 9. What **length of time** would be feasible between receiving a request and producing a brief weeks, a few months or several months? Can you provide some justification for your answer?

Structure of a regional policy advice mechanism

- 10. If a Regional Rapid Response Mechanism is established in the region, would your organization be likely to prefer a membership relationship and be involved in the funding and management of such a body? Or would your organization be likely to prefer only a producer relationship and be requested or paid for specific pieces of advice? Why would this be your preferred option?
- 11. Where do you think that a RRRM might best be **located**, either in one or more locations, and why would this be the best option?

Funding arrangements

12. Would your organization want **funding** to produce such policy briefs For example, an annual budgetary amount, full cost recovery, full cost recovery plus fee?

Annex 5

List of study informants

China

Ministry of Health and other government agencies:

Deputy Director General, Department of Rural Health Management

Deputy Director General, Department of Policy and Legislation

Deputy Director General, Department of Planning and Finance

Deputy Director General, Department of International Cooperation

Director General, Department of Medical Administration

Deputy Director General, Foreign Loan Office

Project Manager, Health Policy Support Project (HPSP)

Assistant to Director General, Center of Human Resources. HPSP Project Manager for Rapid Policy Response Component

Director, Medical Insurance System Division. Medical Insurance Department, Ministry of Labour and Social Security

Research Institutes:

Director General, Social Development Department, Development and Research Centre (DRC), State Council

Deputy Director, National Health Economics Institute, Project Manager of health policy research, HPSP

Professor, Centre for Economics Research, Beijing University,

Chair, Department of Health Economics and Management, Guanghua School of Management, Beijing University

Professor, School of Public Health, Fudan University

Vice Dean of School of Public Health, Fudan University

Deputy Director General, Centre of Health Statistics and Information, MOH, Project manager of knowledge management component, HPSP

Indonesia

Ministry of Health and other government agencies:

Crisis Centre of the Ministry of Health,

Centre for Health Policy Development, Ministry of Health

Bureau of Planning, Ministry of Health

Ministry of People's Welfare

Provincial Health Office in Jakarta

District Health Offices in Jakarta, West Java and Banten

Centre for Disaster Management, University of Indonesia.

Laos PDR

Ministry of Health:

Director of Curative Medicine

Director of National Institute of Public Health

Deputy Director of the Cabinet

Acting Director of Planning and Budgeting

Deputy Director of Food and Drug Department

Deputy Director of Hygiene and Prevention Department.

Malaysia

Ministry of Health:

Deputy Director General of Health (Public Health)

Deputy DirectorGeneral of Health (Technical Support and Planning)

Deputy Director of Planning and Development

Director of Disease Control Division

Deputy Directorof Disease Control Division (Non-Communicable Disease)

Deputy Director of DiseaseControl Division (Communicable Disease)

Director of Institute of Health Management

Philippines

Department of Health

Secretary of Health

Former Secretary of Health

Undersecretary of Health

Senior Adviser and Consultant, Department of Health (also Former Undersecretary of Health)

Executive Director Lung Center of the Philippines (also Former Assistant Secretary of Health)

Director Health Policy Development and Planning Bureau, Department of Health

Director National Center for Disease Prevention and Control, Department of Health

Director Information Management Service, Department of Health

Director Center for Health Development for Davao Region, Department of Health

Vice President Philippine Health Insurance Corporation

Policy and Research Institutes:

President, Philippine Institute for Development Studies (PIDS)

President and Chief Executive Officer, Development Academy of the Philippines (DAP)

Executive Director, Philippine Council for Health Research and Development (PCHRD), Department of Science and Technology

Director, Institute of Health Policy Development Studies, National Institutes of Health University of the Philippines-Manila (also Professor and Former Dean, UP College of Public Health)

Professor School of Economics University of the Philippines-Diliman (also Chief of Party, Health Policy Development Project-USAID)

Director Health Unit, Graduate School of Business, Ateneo de Manila University (ADMU) (also Associate Dean, ADMU School of Medicine and Public Health)

Singapore

Ministry of Health and other government agencies

Ministry of Health Headquarters:

Director of Medical Services' Office

Policy and Corporate Group

Healthcare Finance Division

Industry Development and International Cooperation Division

Strategic Planning and Development Division

Infocomm Division

Professional Group

Epidemiology and Disease Control Division

Health Regulation Division

Manpower Standards and Development Division

Healthcare Performance Group

Health Services Research and Evaluation Division

Health Information Branch

Health Services Group

Health Services Integration Division

Health Services Management Division

National Healthcare Group

Health Services and Outcomes Research

Singapore Health Services (SingHealth)

SingHealth Policy and Research

Health Promotion Board

Research and Strategic Planning Division

Health Sciences Authority

Crisis and Emergency Response Office

Economic Development Board

Biomedical Sciences Cluster

Singapore Tourism Board

Healthcare Services

Research Institutes

National University of Singapore

Department of Community, Occupational and Family Medicine

Centre for Health Services Research (in collaboration with Rand Health)

Duke-NUS Medical School

Lee Kuan Yew School of Public Policy

Asia Research Institute (ARI)

East Asian Institute (EAI)

Institute of South Asian Studies (ISAS)

Institute of Policy Studies (IPS)

Institute of South East Asian Studies (ISEAS)

Regional Emerging Disease Intervention (REDI) Centre

Vietnam

Ministry of Health and other government agencies:

Director of the Department of Science and Training, Ministry of Health

Director of the Department of Planning and Finance, Ministry of Health

Vice Director of the Department of Health Legislation, Ministry of Health

Vice Director of the Department of Social Affairs, the National Assembly's Office

Director of the Health Department, the Central Committee for Science and Education

Director of the Department of Justice Development, Governmental Office

Annex 6

Statistical profiles of the nine countries

Table 1 Demographic and social indicators

	Total Population (1000's) 2005	Population Annual Growth Rate % 1995-2005	GNP Per Capita (PPP \$US) 2005	Adult Literacy (% age 15+) 2004)	Infant Mortality per 1000 live births 2005	Life Expectancy (at birth in years) 2005
Cambodia	14, 071	2.2%	2, 490	73.6	98	51 males/ 57 females
China	1, 323, 350	0.8%	6, 600	90.9	23	71/74
Indonesia	222, 781	1.3%	3, 720	90.4	28	66/69
Laos	5, 924	2.4%	2, 020	68.7	62	59/61
Malaysia	25, 347	2.2%	10, 320	88.7	10	69/74
Philippines	83, 054	2.0%	5, 300	92.6	25	64/71
Singapore	4, 326	2.2%	29, 780	92.5	2	78/82
Thailand	64, 233	1.0%	8, 440	92.6	18	67/73
Vietnam	84, 238	1.4%	3, 010	90.3	16	69/74

Table 2 Health and economic indicators

	Population w/o Access to Safe Water 2004	Doctors (per 100,000 Population)	Births Attended by Skilled Health Personnel (%)	Total Per Capita Expenditure on Health (\$US) 2004	Population Living Below Poverty Line (% on <\$US1 per day)*	Human Development Index ranking UNDP 2004
Cambodia	64% urban/ 35% rural	16 (2000)	44% (2005-6)	140	34.1%	129
China	93%/67%	106 (2001)	83% (2004)	277	16.6%	81
Indonesia	87%/69%	13 (2003)	66% (2002-3)	118	7.5%	108
Laos	79%/43%	23 (2005 WPRO data)	19% (2001)	74	27%	133
Malaysia	100%/96%	70 (2000)	100% (2005)	402	2%	61
Philippines	87%/82%	58 (2000)	60% (2003)	203	15.5%	84
Singapore	100%	140 (2001)	100% (2004)	1, 118	n.a.	25
Thailand	98%/100%	37 (2000)	99% (2000)	293	2%	74
Vietnam	99%/80%	53 (2001)	85% (2002)	184	n.a. (19.5% estimate 2004)	109

Note: * UNDP data, 1990-2004

Sources: World Health Statistics, WHO 2007; Human Development Report, UNDP 2007

Annex 7

Additional information and resource bodies

(i) Bertelsmann Foundation

http://www.bertelsmann-stiftung.de/

Structure and programs

A charitable foundation set up by the Bertelsmann company in Germany in the late 1970s, it operates on income from a large parcel of endowed shares, and maintains its independence from the company. The Foundation carries out its own projects that it conceives, initiates and implements. Its 2005 operating budget was 56.7 million (US\$77.4 million), with over 300 staff engaged in over 60 projects. It set up the International Network on Health Policy and Reform in 2002 that engages experts in 20 countries on retainers to report on current health system reforms. The emphasis is upon developed countries, but these include Japan, Singapore and South Korea. The experts report every six months (in English) on health reform issues in a range of countries, and with the Bertelsmann staff, produce reports on substantive issues, as well as reader-friendly summaries. The Health Policy Monitor website offers a search on published material by country and by topic. For example, popular key words include quality improvement, care coordination, human resources, pharmaceuticals, and hospitals. It also maintains a register of experts on various topics. The Foundation works closely with the European Observatory on Health Systems and Policies.

Comment

First, this model suggests the idea of private sector funds for a health systems information mechanism. Many Asian countries, especially the developed countries, have charitable foundations set up originally with private money. The public sector banking industry may also be a potential sponsor; for example, the European Investment Bank is one of the sponsors of the European Observatory on Health Care Systems and Policies, partly because it invests in building hospitals. Second, the Bertelsmann Foundation pays its country experts to produce the work — and payment for work may be an important prerequisite for experts in developing countries in the Asian region. Third, this material is worth scanning for its relevance to countries in the Asian region. The Bertelsmann contact in Singapore (one of the countries included in this feasibility study) is Professor Lim Meng Kin at the National University of Singapore.

(ii) Eldis

http://www.eldis.org/

Structure

Eldis (ELctronic Development Information Source) is an on-line information database for development issues, based in the Institute of Development Studies (IDS), Sussex University, UK. IDS is a leading centre for research, teaching and communications on international development issues. Eldis is one part of the Institute's efforts to support more informed decision-making, by providing timely and relevant information to researchers, policy-makers and others in the developing world in a position to influence change. Its sphere of interest in development studies also covers some health systems issues for developing countries.

Core funding for Eldis comes from several national aid organizations: SIDA (the Swedish International Development Cooperation Agency), NORAD (the Norwegian Agency for Development Cooperation), SDC (the Swiss Agency for Development and Cooperation), and DFID (the UK Department for International Development).

Program

Eldis aims to support the dissemination of evidence-based development knowledge using the Internet. It offers on-line over 22,000 full text documents selected by Eldis staff and available free of charge. The Eldis site arranges and presents material in several ways. The entire Eldis website can be accessed and searched via a free text search. Information in *Resource Guides* and *Dossiers* provide immediate access to documents, topic summaries, and to other relevant organizations and their websites. There are also *Regional and Country Profiles* that can be searched for specific information of relevance to a particular location. Users of each *Resources Guide* can search for information and documents using either a list of key *topic areas*, or a more comprehensive A-Z index. The guides also contain a section with *key issues* that provide introductions to important areas of research and policy. The *Dossiers* provide a general introduction to a particular policy area with links to recommended readings and case studies.

In the area of *health policy and health systems*, Eldis offers several Resource Guides: Health, Health systems, HIV & AIDS, and a Dossier on Human Resources for Health. There is some duplication of documentation across these locations.

The Health Resource Guides are produced by the IDS Health and Development Information team, in collaboration with Eldis and the *Health Resource Centre*, a consortium funded by DFID that provides advice and expertise in public health and health systems in low and middle income

countries. All material in the guides is selected and prepared by the IDS team, but contributions are invited from individuals and organizations.

The Eldis website also provides links to other knowledge services that are part of the IDS development knowledge hub. These include the *British Library for Development Studies* which has sections devoted to health. In addition, there is a link to the *IDS Health & Development Team* and its research and publications.

Outputs

The *Health Resource Guide* contains 2626 documents arranged mainly under eleven topic areas, for example, Child Health, Communicable Diseases, and Health Promotion. The *Health Systems**Resource Guide* contains 1312 documents arranged under nine topic areas:

- Access to medicines and international issues
- Gender
- Global initiatives and public private partnerships
- Governance and health
- Health, poverty and vulnerability
- Health sector financing; Health service delivery
- Performance measurement
- Priority diseases.

There are also three *key issues* currently available as part of this guide: Health Management Information Systems, Market Development Approaches, and User Fees. In addition, three other key issues are listed as under preparation: Service Delivery in Difficult Environments, Drug Regulation, and Social Health Insurance.

The *Dossier on Human Resources for Health* presents summaries on selected human resource problems and issues, drawing upon evidence about what works, and identifying innovations in approaches, policy and practice. The dossier also contains links to other relevant websites and to key readings. The dossier covers the following areas:

- Planning for human resources
- Strengthening capacity
- Migration; Management issues
- HIV and AIDS
- International initiatives
- Africa.

Comment

A rich mine of information is available on the Eldis website, but more as a background resource, rather than as a means to answer specific policy queries. Eldis does not provide an answering facility for any questions about health policy issues. Nor does it respond to general enquiries from policy makers or members of the public. It is also questionable how useful this site may be for busy senior officials and policy makers in the Asian region. Further, only those with sound English language skills will be able to negotiate the site and spend the time required to search out relevant information.

(iii) EVIPNet Malaysia

Dr Mainunah Hamid, the Malaysian team leader, provided some details of Malaysian plans (in a telephone discussion). Broad guidelines were provided by WHO but each member of the network is responsible for deciding the details of their own country program. The Malaysia Country Team decided to focus on a specific issue (patient safety), which was a major concern for policy makers and a decision endorsed at the highest level within the Ministry of Health, despite some criticism of focus as too narrow during the external review process. (Some other Country Teams also have begun to narrow the scope of their programs.)

The composition of the Malaysian EVIPNet team reflects the chosen focus on patient safety. The team (about 12 members) consists of both policy makers and researchers. The policy makers include the Deputy Director General Medical Care, representatives from the Office for Quality of Care, Health Technology Assessment, Public Health/Primary Care, Dental Care, Pharmaceuticals, as well as an NGO member from a body representing patient primary care. Several technical advisors are also included: e.g. from the Patient Safety Council (an inter-sectoral agency), and the Committee for Medical Error. From the research community, Dr Maimunah's Institute for Health Research is the lead agency, supplemented by representatives from universities and other research institutions.

One challenge is to find ways to promote interaction between policy makers and researchers. Researchers need to understand more about the policy-making process. They must learn how to package and present information, how to synthesize research evidence into policy briefs, and how to make systematic reviews more relevant to policy. Policy makers need to be able to communicate their problems more effectively with researchers and to interpret research evidence. One of the specific strategies being adopted to integrate research into the policy-making arena is the appointment of researchers as members of departmental committees and task forces.

Although funding arrangements have not been finalized by WHO, Malaysia has proceeded with the implementation of the program. Many activities are low cost or can be achieved through the realignment of existing programs and activities, but additional technical support is required to overcome existing weaknesses and strengthen capacity.

(iv) Australasian Cochrane Centre

http://www.cochrane.org.au/

Structure

The Australasian Cochrane Centre (ACC) is part of the Cochrane Collaboration, and was established in Australia in 1994, and is now located in the Institute of Health Services Research at Monash University in Melbourne. The purpose of the ACC is "to promote the equitable provision of effective health care in Australasia by facilitating the preparation and maintenance of systematic reviews and their dissemination and application to influence service provision and clinical practice". The ACC has about 14 research and support staff. A Steering Committee with an advisory role meets annually, with members from the National Health and Medical Research Council (NHMRC), the New Zealand and Australian Governments, the health departments, the Cochrane Collaboration, universities, and consumer interests.

The ACC serves as a reference centre for 35 countries in the Asia-Pacific region, including eight of the nine countries included in this study (all except China). ACC regional branches have been established in four locations: New Zealand, South Asia, Thailand, and Singapore. In addition, "nodes" have been established in Malaysia and the Philippines. Details of the programs underway (including staffing, advisory boards, regional links, activity schedules and publications) are available on the respective websites. The staff of the ACC and its regional branches and nodes work with other knowledge networks in the region, such as INCLEN and EVIPNet.

The South Asia Cochrane Network was established in 2004 based in India at the Christian Medical College, Vellore, Tamil Nadu. The network extends to another ten sites across the South Asian region: six in India, two in Pakistan, and one each in Bangladesh and Sri Lanka. http://www.cochrane-sacn.org/

The Thai Cochrane Network, originally a branch of the UK Cochrane Centre, became a branch of the ACC in 2006. The convenor of the Network, Professor Pisake Lumbiganon, and the secretariat are based in the Faculty of Obstetrics and Gynaecology, Faculty of Medicine, Khon Kaen University. The Network has well-established links with several other medical research centres in Thailand, and

also acts as a reference centre for Laos. The Network has received funding from several sources, including the WHO, Ford Foundation and the British Council. http://www.tcn.cochrane.org

The Singapore Branch was established in 2005 at the Clinical Trials and Epidemiology Research Unit (CTERU), directed by Dr Edwin Chan Shih-Yen, and the Singapore Health Services and the National Healthcare Group. Funding was provided by the Singapore Ministry of Health through the National Medical Research Council. http://www.cteru.com.sg/cochrane/

ACC activity in Malaysia is underway through regular Cochrane review workshops and an increasing number of local authors of systematic reviews. Professor Jackie Ho of the Penang Medical Collage acts as the local coordinator.

ACC activity in the Philippines supports local contributors to Cochrane Collaboration reviews through workshops and training. The Liverpool School of Tropical Medicine also provides parallel support through the Effective Health Care Research Programme Consortium (EHCRPC). The Philippines contact for ACC activity is Dr Mario Festin, Deputy Director for Health Operations, Philippines General Hospital in Manila, and Department of Obstetrics and Gynaecology, College of Medicine, University of the Philippines.

Funding

Core funding for ACC is provided by the Australian Government's Department of Health and Aging. Specific projects also receive financial assistance from funding agencies including the NHMRC, the Wellcome Trust, Monash University, the Victorian State Government Department of Human Services, and the Australian National Heart Foundation. Funding for the Asian branches and nodes comes from their governments and a variety of sources.

Program

ACC activities revolve around the following aims:

- Promoting the involvement of Australasians in the Cochrane Collaboration;
- Relating to government, health professionals and consumer groups in Australasia about the activities, scope and value of the Collaboration;
- Fostering the development of new review groups and fields, particularly in areas of inequitable provision of health care;
- Supporting efforts to identify evidence about the effects of health care;
- Training for review authors and users of reviews in facilitating the dissemination and application of information about the effects of health care;
- Promoting research into the science of systematic reviews.

The ACC research program concentrates on projects "investigating the synthesis, interpretation, dissemination and implementation of research evidence for clinical practice and policy". The focus is on chronic conditions and areas where the healthcare burden is large, including musculoskeletal health and diabetes.

Maternal and child health is of particular relevance in Asia. For example, SEA-ORCHID (South East Asia - Optimising Reproductive and Child Health in Developing Countries)
(http://www.seaorchid.org/) is a five-year project (2004-08) involving centres in Thailand, Malaysia, Philippines and Indonesia. The Thailand centre is at the Faculty of Obstetrics and Gynaecology, Faculty of Medicine, Khon Kaen University. The Malaysian centre is at the Department of Paediatrics, Royal College of Medicine Perak in Ipoh. The Philippines centre is at the Department of Obstetrics and Gynaecology, College of Medicine, University of the Philippines. The Indonesian centre is in Obstetrics and Gynaecology, Faculty of Medicine, Gadjah Mada University in Yogyakarta. These centres are supported by researchers and educators in three Australian universities: University of Adelaide, University of Sydney and Monash University. About 25 clinicians from the four countries over the last two years have come on short fellowships (a few weeks) to Australian hospitals

The Policy Liaison Initiative aims to support evidence-based approaches to policy making by addressing barriers to using research evidence, particularly Cochrane reviews, through the establishment of an Evidence-Based Policy Network (EBPN) within the Australian Government's Department of Health and Aging with a website to disseminate project outputs. http://www.cochrane.org.au/ebpnetwork/.

The ACC programs in each of the Asian branches include:

Support in writing Cochrane reviews by local clinical researchers;

Training workshops on the preparation and writing of systematic reviews (held several times annually with support from ACC staff);

Networking and promotion of the Cochrane Collaboration with regional universities, medical research bodies, local researchers and health policy makers.

Outputs

As well as publishing systematic reviews using the Cochrane methodology, the ACC website lists the following intended outputs of its research program:

- a contribution to reliable methods for conducting systematic reviews;
- a contribution to informing researchers and disseminators of evidence about framing their research in ways which increases its relevance to those making decisions about health care

(consumers, practitioners and policy makers);

- a contribution to effective methods of bringing about improved clinical practice and health policy through interventions to increase the uptake of evidence;
- the production of tools to promote global access to reliable health care information.

Comment

The regional activity of the ACC suggests a potential resource and mentoring partner. The advantages are that, first, the ACC already has experience in supporting Asia region "knowledge networks"; second, it trains and mentors regional researchers in undertaking systematic reviews using Cochrane methodologies; and third, although the ACC concentrates upon clinical issues, it also reviews research findings on structural and service delivery interventions. The caveats are that the ACC engages with clinicians researchers and not directly with policy makers; its expertise is in EBM, and is not a rapid response mechanism.

(v) Effective Health Care Research Programme Consortium (EHCRPC)

http://www.liv.ac.uk/evidence

The structure

An independent non-profit consortium based at the Liverpool School of Medicine, University of Liverpool (UK), EHCRPC aims to assist low and middle-income countries to apply reliable up-to-date evidence for decision making in the health sector. This information mostly addresses clinical and service delivery issues, with an emphasis on interventions in infectious diseases. Liverpool School of Medicine has decades of experience in working with developing countries. The EHCRPC is directed by Professor Paul Garner.

EHCRPC works closely with the Cochrane Infectious Diseases Group (CIDG), part of the Cochrane Collaboration. Since 1994, CIDG has been assisting with the preparation and updating of systematic reviews on the benefits and harms of healthcare interventions for infectious diseases, particularly malaria and tuberculosis. Professor Garner is the Coordinating Editor of CIDG, which is also based at the Liverpool School of Tropical Medicine.

The program operates as a consortium through active collaboration with a number of partner agencies in several developing countries. In relation to this feasibility study, note that these countries include China, the Philippines, and Thailand.

• Africa: South African Cochrane Centre, Medical Research Council, Cape Town; Nigeria Effective Health Care Alliance, College of Medical Sciences, University of Calabar.

- India: South Asian Cochrane Network, Christian Medical College, Vellore.
- China: China Effective Health Care Network, School of Public Health, Chongqing University of Medical Science.

Partnerships also are being developed with the following research groups:

- Russia: Kazan State Medical Academy,
- Philippines: University of the Philippines,
- Thailand: Thai Cochrane Network at Chiang Mai University.

Funding

The UK Department for International Development (DFID) provided around US\$4.5 million over three years for the current phase of the program.

Program

Activities include the production, dissemination and promotion of evidence-based reports. It undertakes Cochrane Reviews about health care issues that directly affect low and middle-income countries. The consortium also develops strategies to ensure the dissemination and use of findings from systematic reviews in health policy decision-making, through dialogue with researchers, policy makers and practitioners in both the public and private sector.

Capacity building in Cochrane methodologies: A series of on-line links assist prospective authors of Cochrane Reviews, including researchers in the Consortium's partner agencies. A 12-page guide *Understanding Evidence Update* (available on-line) assists users to read and interpret an Evidence Update. This contains succinct explanations of what a Cochrane Review contains, randomized controlled trials, the interpretation of the results summarized in an Evidence Update, and how to apply the findings in practice. Seminars, workshops and training are also conducted in each of the participating partner countries to further promote the use of the evidence-based materials produced by the program.

Production of systematic reviews: EHCRPC is actively engaged in writing and publishing Cochrane Reviews and Cochrane Protocols (as well as other peer-reviewed publications) in collaboration with researchers in its partner agencies in Africa and Asia. The topics are selected for their relevance to the partner countries; and the outputs are targeted at the relevant policy makers, researchers and clinicians in these developing countries.

Clinical intervention topics: The Consortium directs most of its attention to the clinical aspects of public health as follows: child health, diarrhoea, filariasis, HIV/AIDS, malaria, maternal health,

other infectious diseases, respiratory tract infections, trauma, tuberculosis. It also considers health sector development.

Outputs

Cochrane systematic reviews are produced on the above topics and are published on the EHCRPC website and the website of the Cochrane Database of Systematic Reviews.

Evidence Updates are two-page summaries of a Cochrane Review strategically selected for their relevance to low and middle-income countries. Each Update is prepared by a staff member of EHCRPC in collaboration with the Australasian Cochrane Centre (http://www.cochrane.org.au/). These are further updated every time a review update is published in the Cochrane Database of Systematic Reviews. Currently, fifty Evidence Updates have been produced under the eleven categories listed above. Under the category of Health sector development, the following are examples of available titles:

- Do lay health workers improve health care delivery and healthcare outcomes?
- Do specialist outreach clinics improve health care?
- Does teaching critical appraisal to health professionals improve practice or patient outcomes?
- Is patient care improved by integrating different types of primary care service in low- and middle-income countries?

Dissemination: English-language versions of each *Evidence Update* are available free on-line, while Consortium collaborators in China, Nigeria, and Russia translate each *Evidence Update* into local languages to aid wider dissemination.

Comment

The purpose of EHCRPC is to develop Cochrane systematic review methodology for use in low and middle-income countries. Its *Evidence Update* series offers a model for communicating cutting-edge research to policy makers and practitioners in developing countries by producing easy-to-read short summaries and translations into national languages. The two-page summaries are designed to be user-friendly for busy health bureaucrats and policy makers. The emphasis here is on clinical areas but the same principle could be applied to health systems and wider health policy issues.

(vi) National Institute of Clinical Studies

http://www.nhmrc.gov.au/nics

Structure

The National Institute of Clinical Studies (NICS) was established by the Australian Government in 2000 with the aim of improving the take-up in clinical practice of the best available evidence. In April 2007, NICS became an institute under the statutory authority of the National Health and Medical Research Council (NHMRC). NICS aims (i) to lead and support clinicians in finding and applying evidence to close gaps, (ii) to develop the knowledge base for the science and practice of evidence implementation, (iii) to advocate for systemic change to improve the use of evidence in clinical practice. It aims to provide a national focus to champion continuous improvement in the quality and delivery of clinical practice. NICS has a full time equivalent staff of about 24 persons.

Funding

NICS receives funds of \$3.5m per year (about US\$2.9 million) from the Australian government for its basic work programs. Additional funding is obtained from consultancy and contract work.

Programs

As a national agency, NICS leads programs of work specifically aimed at identifying and closing evidence-practice gaps in Australian healthcare. To do this, NICS has forged partnerships with peak bodies, clinical groups and health care organisations to improve evidence uptake in priority clinical areas where there are important evidence-practice gaps. For example, under the slogan "Stop the Clot", NICS has developed a venous thromboembolism (VTE) prevention program to increase the use of best practice preventive measures in hospitalised patients at risk of VTE. Another current NICS implementation initiative aims to improve pain management in emergency departments, which clinicians have identified as a priority. NICS FightFlu program aims to increase influenza vaccination in at-risk groups under 65 years and healthcare professionals. Through its Fellowships and Scholarships, NICS supports talented potential leaders in evidence implementation within Australia. NICS' Visiting Experts initiative plays an integral part in the program, and each year attracts many leaders in implementation science to Australia.

It does not direct but rather informs by commissioning reviews on clinical practice ranging from small scale surveys to systematic reviews, eg. on increasing appropriate prescribing of ACE inhibitors and beta-blockers.

It runs workshops, provides a portal to the Cochrane Library, is a partner in the EPOC Cochrane Collaboration that undertakes systematic reviews to improve health care delivery and health care

systems, runs networks to identify evidence-practice gaps in particular areas of clinical practice, runs action-research programs involving clinicians and convenes working groups in specific areas to develop strategies to improve the uptake of evidence. NICS is completing a project assessing the usefulness for Australian GPs of the BMJ on-line version of *Clinical Evidence*.

NICS detects and improves sub-optimal practice through research collaborations with clinicians, for example, by monitoring key indicators on evidence uptake by clinicians in two clinical networks: the ANZ Neonatal Network, and the Diabetes Collaborative Network.

Outputs

While NICS itself does not issue authoritative clinical directives, it disseminates guidelines based on expert systematic reviews of the research evidence. It thus avoids conflict with professional groups and drug companies, as occurs in the UK with NICE and in the US with the AHRQ. It is not yet clear to what extent NICS will become the main portal for clinical guidelines, as is the case with similar bodies in the UK and US.

NICS publishes reports of systematic reviews on evidence-practice gaps, which summarise what is known from the best available research evidence, and what actually happens in current practice. For example, some cancer patients in Australian hospitals continue to suffer unnecessarily, despite evidence that post-operative and cancer pain can be well controlled in 80-90% of patients.

Each month NICS publishes an update on its activities in an emailed newsletter; and every three months it produces a newsletter publicising the latest issue of relevant Cochrane reviews.

Comment

The gap between the production of evidence by researchers and its take-up by professionals and policy makers is well known. NICS is an example of an agency that seeks to improve the take-up by clinicians and policy makers of findings based on rigorous evidence. While its focus is upon clinical evidence, some of its activities may be of interest to health systems advice mechanism in Asia. There are two important lessons for a potential Asian mechanism. First, NICS stresses the importance of packaging information in a reader-friendly way and disseminating information through implementation campaigns. The second lesson is that NICS potentially could be a mentor or partner in relation to promoting the dissemination of evidence.

(vii) Canadian Health Services Research Foundation (CHSRF)

http://www.chsrf.ca/about/index_e.php

Structure

This independent non-profit corporation was established in 1996, at "arms-length" from government, with endowed funds from the Canadian federal government and its agencies, and was incorporated as a charitable foundation in 1997. The Foundation is based in Ottawa, and has over 50 staff. It promotes and funds research on health systems, and works with decision makers to support and enhance their use of research evidence. The Foundation thus emphasises strategic alliances. Its mission is "To support evidence-informed decision-making in the organization, management and delivery of health services through funding research, building capacity and transferring knowledge".

Funding

Since its formation the Foundation has received \$151.5 million from federal sources in three separate endowments.

Programs

Foundation activities always involve researchers, managers, and policy makers from academia and Canada's health system. The Foundation does the following:

- Funds research, eg the production of structures and systematic reviews;
- Provides training;
- Knowledge transfer and exchange, for example, it packages and disseminates research results, plus descriptions of ongoing projects;
- Implementation: it promotes the translation of research into policy and programs;
- Networking: it supports communication and networking among both decision makers and researchers.

Outputs

The *Mythbusters* initiative, in particular, offers a useful model, being a concise (two-page) synthesis of evidence on a particular health system issue. Another initiative is the *Promising Practices in Research Use* inventory of stories that presents vignettes from organizations. These recount their experience in using research findings in relation to identifying an area to improve, developing a strategy to do so, and monitoring the impact.

Comment

The Foundation is not a mechanism for rapid response policy advice. It would be a useful source of ideas and resources for an Asian information mechanism.

(viii) Centre for Reviews and Dissemination (CRD)

http://www.york.ac.uk/inst/crd

Structure

The CRD was established as an independent non-profit group in January 1994 based at the University of York in the UK. It now employs about 50 staff. The CRD promotes the practice of evidence-based health care by undertaking and disseminating systematic reviews of health care interventions. It works closely with other research organizations, as well as with international networks, such as the Cochrane and Campbell Collaborations. It is also a member of the International Network of Agencies for Health Technology Assessment (INAHTA) (http://www.inahta.org) that has 45 member countries and a secretariat located in Sweden.

Funding

Core funding comes from the NHS National Institute for Health Research, plus funding from several agencies for specific projects. Its annual budget is not stated on its website, but is substantial given its large number of staff.

Program

The CRD provides research-based information about the effects of interventions used in health and social care. It promotes the use of research-based knowledge by providing reliable evidence to assist informed decision making. *Research reviews* on selected topics examine results from many studies. The format includes both systematic reviews and structured reviews of the research literature. *Economic evaluations* apply a range of techniques to compare two or more treatments or care alternatives in which both the costs and outcomes of the alternatives are examined. *Health care technology assessments* (HTA) study the use of health technology in order to inform policy decisions. An *information and enquiry service* is available free of charge. It provides information on CRD reviews and assessments, or directs inquirers to another relevant source of information. It will undertake more substantial information retrieval for a fee.

Outputs and dissemination

Four databases are offered:

- Database of Abstracts of Reviews of Effects (*DARE*) lists abstracts of all the studies included in CRD systematic reviews.
- NHS Economic Evaluation Database (NHS EED) lists abstracts of all the studies included in CRD economic reviews.
- Health Technology Assessment Database (*HTA*) lists abstracts of all the studies included in CRD HTA reviews.
- Ongoing Reviews Database is a register of reviews currently being undertaken in the UK and by some International HTA agencies. The idea is to prevent duplication of efforts and to encourage collaboration.

The *Effective Health Care Bulletins* published from 1992 to 2004 in 53 issues, each on a specific topic, are widely read and influential, but have been superseded by the National Institute of Clinical Excellence (NICE) publications (back copies are available on the website). While mostly addressing clinical interventions, a few address health system issues, eg. "Hospital volume and health care outcomes, costs and patient access" (Vol. 2:8).

CRD Reports discuss the results of systematic reviews with 37 reports listed as at July 2007. Some reports address population health issues, eg. No.18 "Systematic review of the efficacy and safety of the fluoridation of drinking water". A few reports address health system issues, eg. No. 8 "Concentration and choice in the provision of hospital services"; and No. 2 "Relationship between volume and quality of health care: a review of the literature".

'Hitting the Headlines' analyses the evidence behind selected health stories reported in national newspapers, eg. "Statins and the risk of cancer".

Information is published in paper and electronic form, such as CRD Reports and the Databases, through posters and leaflets, by providing training materials on how to undertake reviews and assessments, and through workshop and conference presentations.

Comment

The CRD concentrates upon the UK National Health Service (NHS) and is not involved in work with developing countries. The CRD is not a rapid response mechanism, although it does have an Information and Enquiry Service. It is a potentially useful resource, however, and potentially a mentor or partner agency. While its reviews mainly deal with health care interventions, some are relevant to population health and health systems issues. Its dissemination activities offer a useful model.

(ix) Service Delivery and Organisation Program (SDO) UK

http://www.sdo.lshtm.ac.uk/background.html

The Service Delivery and Organisation Programme (SDO), funded by the UK National Health Service (NHS) National Institute for Health Research, was established in 1999 to consolidate and develop the evidence base on the organisation, management and delivery of health services, and to promote the uptake and application of that evidence in policy and practice. Based at the London School of Hygiene and Tropical Medicine, it is managed by a board that includes NHS managers, health professionals and health researchers. It commissions research with the aim of developing coherent 'bodies of knowledge' around six themes: Change management, e-Health, Evaluating models of service delivery; Patient and carer centred services; Public health; Studying health care organizations; and Workforce. Final reports for all SDO commissioned projects are published online, and printed publications includingresearch summaries are produced.

Synthesizing and communicating research for policy makers is a high priority. It pays particular attention to the question of how to combine different sorts of evidence and extract recommendations. For example, it partnered with the Canadian Health Services Research Foundation (CHSRF) in an initiative to advance the 'science of synthesis'. Three research teams addressed issues in synthesizing or bundling evidence in a way that is useful for decision makers. The findings were presented in a special supplement of the July 2005 issue of the *Journal of Health Services Research & Policy*.

Comment

The SDO is one of several health systems research mechanisms in developed countries that could offer lessons for health systems researchers in the Asian region. Its methodologies for synthesising and communicating research are of particular interest. While the research is carried out within the National Health Service of a developed country, SDO publications are worth exploring with comments on the relevance of some of the findings for the health systems of some Asian countries.

(x) Centres for Systematic Reviews on Health Systems and Policies in Low and Middle Income Countries

The Alliance for Health Policy and Systems Research mounted a competitive grant round (receiving 62 proposals), and in 2007 funded four centres to conduct reviews on health policy and systems research relevant to low and middle-income countries. Each received a grant of US\$300,000 for a three year period. The Alliance ran a methodology training workshop in early 2007. The centres are supported by the EPOC Satellite in Oslo, the EPPI Centre from London, and the Effective Health Care Research Consortium at the Liverpool School of Tropical Medicine. For the first year, each

centre will produce a systematic review on one specific topic, as well as other materials, and will start producing plain language summaries of health system issues relevant to low and middle-income countries. These centres thus offer the promise of producing material that would be highly relevant for a health systems policy information mechanism in Asia.

- The Centre for Systematic Reviews on the Non-State Sector in Health is located in the International Centre for Diarrhoeal Disease Research (ICDDR) in Bangladesh. The grantee is Dr Tracey Koehlmoos.
- The China Centre for Systematic Reviews on Health Financing is based in the Centre for Health Management and Policy at Shandong University. The grantee is Professor Qingyue Meng.
- The Centre for Systematic Reviews on the Health Workforce is based at the Institute of Public Health, Makerere University, Uganda. The grantee is Dr George Pariyo.
- The Chile Methodology Centre for Systematic Reviews of Health Policy and Systems
 Research is based in the Escuela de Medicina, Pontificia Universidad Católica de Chile. The
 grantee is Dr Tomas Pantoja.

(xi) Knowledge Networks: Commission on Social Determinants of Health

http://www.int/social_determinants/knowledge_networks/en/index.html

The Commission established nine knowledge networks on different topics in 2005 that are spread around the world and are coordinated from WHO Geneva. Each of these is managed by an organizational hub that manages the budget and organizes the activities and its network of members, who include both researchers and policy makers. The Networks are funded for four year and each have schedule of publications and progress reports. The Networks success has been dependent upon the research strength of their hubs and network of members. The hub for the Health Systems Knowledge Network is based in the Centre for Health Policy, University of Witwatersrand, South Africa . It commissions and publishes systematic literature reviews and case studies, which are particularly relevant to low and middle-income countries.

(xii) WHO Collaborating Centres

http://www.who.int/collaboratingcentres/en/

http://www.who.int/whocc/

WHO obtains expert advice and technical assistance from over 900 institutions in over 100 countries with whom it has formal collaboration arrangements. Such collaborations generally arise in the context of successful joint activities and plans for future advice and activities. These centres cover a huge range of topics, but only a small number address health systems issues, apart from primary health care delivery, laboratory standards, and staff training. Centres that address health systems issues include the Nuffield Centre for International Health and Development at the University of Leeds in the UK (Director: Professor Andrew Green) works in developing countries, including countries in the Asian region (http://www.nuffield.leeds.ac.uk). In January 2000, the Executive Board of WHO urged the Member States to make better use of WHO collaborating centres as sources of information, services and expertise. The Board also encouraged the centres to network with each other, and some Networks of Collaborating Centres have been established.

(xiii) HINARI (Health Internet Access to Research Initiative)

http://www.who.int/hinari/en/

This WHO program was established in 2002 to provide free or low-cost access to biomedical and health literature for developing countries. Over 2000 journals and other sources have been made available through agreements with over 70 leading publishers. The eligibility of participating countries is determined by GNP per capita (World Bank figures, 2001). Institutions in countries with GNP per capita below \$1000 are eligible for free access, while institutions in countries with GNP per capita between \$1000-\$3000 pay a fee of \$1000 per year / institution. Eligible categories of participants are those not-for-profit institutions, including national universities, research institutes, professional schools (medicine, nursing, pharmacy, public health, dentistry), teaching hospitals, government offices and national medical libraries. Cambodia, Laos and Vietnam are registered as participating countries in the first category. If the HINARI facility is to be widely used in the poorest countries in the region (such as those already registered), two problems remain: the need to have access to high-speed Internet facilities, and staff with excellent English language skills to be able to use the available journals and source materials.

(xiv) HMN (Health Metrics Network)

http://www.who.int/healthmetrics/en/

Health Metrics Network (HMN) is a global partnership initiated by WHO that aims to promote the important place of accurate health information as an essential tool for sound public health policy making in developing countries. The network includes developing countries, multilateral and bilateral agencies, private foundations, other global health partnerships and technical experts.

HMN aims to increase the availability and use of timely, reliable health information by building capacity and expertise to develop sound health information systems in developing countries. The essential tasks include the collection and analysis of timely and accurate data in a health information system framework, as well as the dissemination of information to policy makers and appropriate application. Five of the countries in this feasibility study have been include in the first round of the HMN program: Cambodia, China, Indonesia, Lao PDR, Philippines, and Vietnam. Details of the specific program activities in each country are available on the HMN website.

(xv) United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)

http://www.unescap.org/

ESCAP is the regional development arm of the UN in the Asia-Pacific region, with its headquarters in Bangkok. All countries in this study are members of the Commission. It works in three main thematic areas: poverty reduction, managing globalization, and tackling emerging social issues. As part of the third work area, ESCAP has established a Health and Development Section within the Emerging Social Issues Division that focuses on promoting health for all as a critical condition for economic growth and social stability in the region. Strengthening health systems and promoting investment in health are among the priority areas for the section, which works in close consultation with other UN bodies operating in the health sector. Activities include policy analysis, analysis of regional health trends, curriculum development and training of health and social service providers, and exchange of good practices in health and development. The Health and Development Section have many publications on ESCAP's website as free downloads. These include official documents and resolutions arising from Commission meetings, specials reports and information briefs. For example, health systems publications included "Health system of China: overview of challenges and reforms".

(xvi) United Nations Development Program (UNDP)

http://www.undp.org/

Although UNDP does not focus specifically on the health sector, health is an important element in many of the five focal areas of its development work: democratic governance, poverty reduction, crisis prevention and recovery, energy and environment and HIV/AIDS. Women's empowerment is also central to UNDP programs. UNDP is also active in campaigning and advocacy, monitoring and analysis of progress towards the achievement of the UN's Millennium Development Goals, where health sector issues are an important element to several. UNDP is a major source of information

and statistical data about development issues. This material is available through its publications program and facility. Its annual global compendium, the Human Development Report, with special reports for individual countries — including most of those in the Asian region — provide a wealth of data on key development indicators including health sector indicators. Other publications, background papers and statistical information can also be downloaded from the website free of charge.

(xvii) UNICEF (United Nations Children's Fund)

http://www.unicef.org/

(xviii) UNFPA (United Nations Population Fund)

http://www.unfpa.org/

Health issues are an important element in the programs of these UN bodies. UNICEF is primarily concerned with improving the health of children through programs on maternal and child health, child protection, and active immunization campaigns. UNFPA works in the area of population and reproductive health and the nexus between population issues and development. The Fund supports programs that are directed at improving reproductive health, making motherhood safer, adolescents and youth issues, and the prevention of HIV/AIDS. Both organizations work closely with national governments through their network of country offices and field staff throughout the Asian region. Both organizations have a range of source materials available through their respective websites that include articles on health-related issues, including reports and articles and statistics.

(xix) Australian Government Department of Health and Ageing (DoHA)

http://www.health.gov.au/

While international aid is the province of AusAID, the Department provides the representatives to the boards of WHO Geneva and WPRO. It engages in technical assistance and exchange programs with health systems in the Asia-Pacific. For example, recent visiting delegations came from China on health insurance schemes, Malaysia on workforce training, Vietnam on pathology laboratories, and Thailand on pharmaceuticals. The Department works with WHO on regional health issues, such as the surveillance and control of avian influenza, pandemic preparedness, and tobacco control. It is also engaged in bilateral relationships on specific health issues with countries in the region. The Department has access to considerable information on health system issues. It draws on in-house

expertise, health statistics databases, commissioned research from public and private sector researchers, and published research. It also consults experts informally for rapid advice. Research is funded mainly through the National Health and Medical Research Council (NHMRC). Australian technical expertise is drawn upon by many countries in the region. There is a diverse array of WHO collaborating centres in Australia (47), several international health research centres are attached to universities and research institutes, and many Australian health consultants work in countries throughout Asia. Professional colleges, such as obstetrics and gynaecology, also have longstanding relationships with institutions in the region.

Annex 8

Profiles of policy and research institutes: China, Philippines, Singapore

China

Key Agencies and Individuals for Health Policy Advice at National Level

Compiled by Zhao Hongwen

Peking University

The leading university of social sciences in China; it has two institutions for health research and teaching. One is the Department of Health Economics and Management of Guanghua School of Management, and the other is the Centre of China Economics Research.

Professor Gordon G. Liu is the Chair of the Department of Health Economics and Management, also the Director for Pharmacoecnomics and Outcomes Research. Professor Liu has obtained his Ph.D. in U.S. Since his return to China, he is taking the leading role in Pharmacoeconomics research, and leading academics from around the world are invited to lecture on regular seminars. Professor Liu is an active advocator of market-oriented health reform in China. He has been invited by China Health Reform Coordination Task Force to write health reform plan for China.

Professor Li Ling is a researcher of the Centre of China Economics Research. She has also obtained his Ph. D. in U.S. In China, She is famous for her research on investigation of Suqian County health reform where privatization of health facilities is actively conducted by the county government. Professor Li has emphasized the role of government for health reform. She has been invited by China Ministry of Health (MOH) to leading the collective study session of the Political Bureau of China Communist Party for health reform in China. She has been invited by China Health Reform Coordination Task Force to write health reform plan for China.

Centre of Medical Sciences of Peking University

The previous Beijing Medical University, now affiliated to Peking University after the institution of university reform program in later 1990s. It has two institutions for health research and teaching. One is the School of Public Health, and the other is the Centre of Health Executives Training.

Professor Wu Ming is the Dean of the School of Public Health. She has obtained her PhD in China Renmin University. Professor Wu has conducted her researches in many areas in her long time academic life. Recently she has involved in rural health and health administration and management research. Professor Wu is an expert of China MOH Expert Committee.

Professor Guo Yan is a renowned expert at the School of Public Health and in the Centre of Health Executives Training. She once held a very senior position at the Centre of Medical Sciences of Peking University. Professor Guo has worked in a range of healthcare areas including work for WHO and UNCEF health programs. Recently, she has been appointed as health commissioner of social determinants and health by WHO. Professor Guo is an expert of China MOH Expert Committee.

Fudan University

A leading university in Shanghai. The Shanghai No. 1 Medical University has been integrated into Fudan University with university reform in later 1990s. The School of Public Health and the Centre of Health Executives Training are two institutions of the Shanghai No. 1 Medical University, now also a part of the Fudan University.

Professor Shanlian Hu is a very senior and renowned expert at the School of Public Health. In the early 1980s – 1990s, Professor Hu was very active to introduce research and front line issues in health development and reform. He has been for the long time serving as MOH expert. Recently, his research has focused on drug policy, rural health and health reform. Professor Hu is now the Director of the Centre of Health Executives Training and he has maintained good relations with many international donors and a very qualified consultant.

Professor Chen Wen is Vice Dean of School of Public Health. As a young professor, Professor Chen has conducted researches in many areas including health service, drug policy, insurance and health reform and development. He has been invited by MOH Health Reform Coordination Task Force to write health reform plan for China. Professor Chen is a member of MOH Expert Committee. Professor Chen and his group including Professor Hu have been invited by MOH to write health reform plan for China.

The 2nd Medical University in Shanghai

A Shanghai Municipal Government affiliated university. There are a couple of policy researchers in health with the leading one as Professor Cai Renhua.

 Professor Cai Renhua was once a teacher at the 2nd Medical University, later he worked in MOH as the Director-General of the Department of Health Policy and Regulation. After retirement, he has been appointed as the Director of the National Health Economics Institute. He has also been the Director of State Government Insurance Reform Office. Professor Cai is an active social activist for health reform and development, and a renowned advisor for senior government officials.

Shandong University

One of the key universities in China. The Shandong Medical University has been integrated into Shandong University with university reform in late 1990s. The School of Public Health is a college of the Shandong Medical University.

Professor Meng Qinyue is the Director of the Centre for Health Management and Policy
affiliated to the Shandong University. Previously, the Centre was part of the School of
Public Health, and it served as the centre of medical cost estimate for MOH. Therefore, the
Centre for Health Management and Policy is strong in cost analysis for medical care.
Professor Meng has obtained a Ph.D. in Sweden. He is now an active discussant in health
reform related forum, and also a member of MOH Expert Committee.

Development and Research Centre (DRC) of the State Council

Established in the 1990s for the purpose of research on China reform and development policies. It is a policy think tank directly affiliated to the State Council. It is a comprehensive policy body with researcher and policy practitioners from all different disciplines. Policies on reform are proposed to the State Council, which could be possibly translated into the State Council policies. The virtue of DRC is that it can keep close dialogue with ministries to formulate operational polices which also need multi-ministry involvement especially the finance and planning bodies in China.

Mr. Gen Yanfeng is the Director-General of the Department of Social Development. He is
now a renowned advocator for health reform in China – mainly due to his report on China
health reform assessment in 2005. With the report, a nation wide debate on health reform
follows. It has triggered the 2007 health reform. Mr. Gen has been invited by MOH for
write health reform plan for China.

Mr. Gong Sen is the Director of the Department of Social Development. His research area
includes insurance and health reform etc.

Centre of Health Statistics and Information (CHSI) of MOH

A national institution for collecting and publishing healthcare information. Since its establishment in the late 1980s, the role of CHSI has been gradually developing. In the last decade, as CHSI has possessed the national healthcare data bank, it role as policy advisor is increasingly used MOH officials. So far, CHSI has conducted three National Health Surveys in 1993, 1998 and 2004 respectively. These data are widely cited by professionals.

- Dr. Rao Keqin is the Director-General of CHSI, and has been working in MOH for more than
 two decades. He has actively involved in health reform policy development and research in
 both 1997 and 2007 health reform. On the technical front, CHSI has rich raw data for
 analysis of national policies, and Dr. Rao has therefore published several important papers
 evidenced with numerical data. Dr. Rao is a member of MOH Expert Committee.
- Dr. Gao Jun is the Deputy Director-General of CHSI. His area of research now is aging.
 Previously, he has published several papers internationally in the ear of health equity.

China Health Economics Institute (CHEI)

Established in 1991 with the support of MOH and the World Bank. Initially, its main area of work is national health accounts, now the so-called total health expenditures analysis. A decade later, it is now serving as a de factual policy think tank of MOH with research area including medical technology assessment, hospital management, public finance policy, international health and health policy analysis. CHEI has coordinated a Health Economics Network with more than a dozen of medical universities from the countries. This network is supported by the World Bank previously and now it is supported by MOH.

Professor Li Weiping is the Director of Hospital Management Research Office. Her research also includes public finance policy, rural cooperative medical scheme and remuneration studies for health workers. Professor Li is a member of MOH Expert Committee.

Professor Shi Guang is the Director of Health Policy Analysis Office. Professor Shi is very active on health reform and policy analysis in recent years. He has been appointed as the office secretariat for Health Reform Coordination Task Force. Professor Shi's research area includes provider behaviour analysis, healthcare program evaluation, and health administration system reform.

China Hospital Management Institute

A research body for hospital management and training. It is a business-oriented institute. Therefore, it is not so significant in health policy forum overall.

Philippines

Profiles of the policy and research institutes

Compiled by Mario Villaverde

Philippine Institute for Development Studies (PIDS)

This non-stock, nonprofit government corporation created by virtue of Presidential Decree 1201 on September 26, 1977. It was established to respond to the critical and growing need for research, planning and policy formulation. In general, PIDS research is envisioned to help government planners and policy-makers in the executive and legislative branches of government. Its primary clientele consists of the network of agencies under the National Economic and Development Authority.

The major fields of specialization of PIDS are economics and related social sciences, such as econometric modeling, public finance and fiscal policy, banking and monetary policy, international trade, demographic economics, housing and urban development, and social sciences, among others. The core senior research staff consists of a dozen experts, all of them with PhD in economics or social sciences and other post-doctoral courses. These experts are assisted by several research associates, all of them with master's degree in related fields.

Development Academy of the Philippines (DAP)

This was founded in June 1973 through Presidential Decree 205, is a government-owned and controlled corporation whose mandate is to assist in the country's development efforts in two ways: as change catalyst and as capacity builder. For almost three decades now, the Academy has been enabling people and institutions, especially those in the public and community service, to carry out their tasks more efficiently.

Since its creation in 1972, DAP has taken a think tank and catalyst role for the government and, since then, has expanded its role to the private sector. Its expertise consists of research, consultancy and training in the area of productivity and quality management, governance, human

resource development, knowledge management and education, to name a few. The staff consists of regular academic and research staff working on full time basis. The Academy also has a roster of eminent fellows consisting of former Cabinet members or top government officials and corporate executives working as advisers, consultants or part-time faculty members.

Philippine Council for Health Research and Development (PCHRD)

This was created through Executive Order 784 under the National Science and Technology Authority, now the Department of Science and Technology. As lead agency for health research in the Philippines, it pursues health development in the country by creating and sustaining an enabling environment for health research. It is also responsible for monitoring research and development projects within the Philippines.

The PCHRD is the lead coordinating body of the government for health research in the Philippines. It generally produces or finances biomedical, clinical and health technology researches and provides advice for specific health issues through a network of research institutions. The agency provides secretariat support to the Governing Council on health research and development under the Department of Science and Technology, and also to the Philippine National Health Research System in joint coordination with the Department of Health.

National Institutes of Health (NIH)

A specialized unit of the University of the Philippines-Manila, it consists of several institutes conducting research and policy development in various fields of health. Created in 1994, the NIH is envisioned to accelerate health sciences research in the Philippines. It coordinates closely with its collaborators, the Department of Health and the Philippine Council for Health Research and Development of the Department of Science and Technology.

The National Institutes of Health consists of several research institutes involved in different areas of health. It draws expertise from the various faculties of the entire University of the Philippines system. It also invites faculty members from other universities and experts from different agencies. The fields of expertise consist of medicine, nursing, pharmacy, dentistry, public health, epidemiology, health policy and administration, and social sciences. Most of the staff work on part-time basis since, in addition to conducting research, they are also involved in teaching and extension services. Research assistants are hired on per project basis.

University of the Philippines School of Economics (UPSE

Located at the UP campus in Diliman, it was established in 1965 and offers academic instruction leading to baccalaureate and master's degrees and PhD in economics. It is the only institution in the country with an active and internationally recognized PhD program in economics; a high ratio of full-time faculty with PhDs; and a nationally unparalleled record of international publications in the discipline. In 1999, the Commission on Higher Education designated the UPSE as the sole Center of Excellence in Economics in the Philippines.

UPSE's corporate arm, the UP-Econ Foundation, has provided consultancy services and technical assistance to the Department of Health in several projects related to health policy and program development. Most of these projects are related to health financing and social health insurance, health sector reform, local health systems development, health planning, monitoring and evaluation, health standards and regulation, and other health policy-related expertise. Under these projects, the UP-Econ Foundation has provided full-time and short-term consultants and technical assistants to the Department of Health.

Ateneo de Manila University (ADMU

It is a premier Catholic university established by the Spanish Jesuits in 1859. As one of the leading private academic institutions in the Philippines, it offers courses ranging from grade school up to graduate degree programs. As a Filipino university, it aims to contribute to the development goals of the nation through teaching, research and service to the community.

The Health Unit of the Ateneo Graduate School of Business has developed expertise on health system structure and governance, health economics and health care financing, health communication, health technology assessment, and health service delivery. Experts in these fields are also members of the faculty and are also engaged in teaching and in other health-related projects. However, the school draws from a pool of experts who are assembled or organized to produce information and develop policy advice when needed.

Singapore

Brief description of newly established centres

Compiled by Phua Kai Hong

Regional Emerging Diseases Intervention (REDI) Center

The centre was founded by the Governments of the United States and Singapore on November 22, 2005 through an agreement renewing their joint commitment to work together to prevent and respond to pandemic influenza and other emerging diseases in Southeast Asia. The document provides for the operation of the Regional Emerging Diseases Intervention (REDI) Centre, and follows an earlier Memorandum of Understanding between the Singapore Ministry of Health and the U.S. Department of Health and Human Services (HHS) pledging to cooperate on a range of health issues, in particular emerging infectious diseases such as Severe Acute Respiratory Syndrome (SARS) and avian influenza.

President George W. Bush and Prime Minister Goh Chok Tong initially announced their joint commitment at the 2003 APEC Leaders' Meeting. The REDI Centre was officially opened on May 24, 2004 at Singapore's Biopolis hub for biomedical research.

The agreement establishes the REDI Centre as an international organization with a Governing Board and Scientific Advisory Group to accomplish the following:

- 1) Extend the perimeter of defence for emerging infectious diseases and health security threats
- 2) Widen the international network for research in emerging infectious diseases
- 3) Translate the findings of research into improved public health

In the near future, the REDI Centre will be working with neighbouring countries to provide advice and consultation to address the avian influenza situation in Southeast Asia, specifically responding to requests for assistance from Indonesia and Vietnam, and addressing concerns about infection control in hospitals in Vietnam, Cambodia, and Laos.

Some of the projects include collaboration with Argonne National Laboratory and other US and Singapore agencies to conduct a 5-day workshop on public health emergency preparedness. The programme endorsed by the APEC Health Task Force, is aimed at promoting integrated emergency preparedness for communicable disease outbreaks within and among participant economies to enhance security. In addition, the REDI Centre and MOH are working on three technical assistance

training courses offered to Indonesia on infection control, outbreak response and laboratory techniques.

NUS Centre for Health Services Research

The Centre aims to promote academic expertise in health services research and serve as a central resource centre in Singapore and the region; assist healthcare policy makers through robust research and scientific data collection; and develop research projects in collaboration with various stakeholders including the Ministry of Health and the public healthcare clusters to address the challenges that they face.

Researchers from the Yong Loo Lin School of Medicine and RAND Health will be examining several topics including quality of care; cost-effectiveness and healthcare-related costs; patient experiences with the healthcare system; health policy research; and behavioral interventions and health promotions. One of the Centre's first projects launched in 2006 will be a systematic assessment of the research needs and health care issues that are of concern to Singapore. The Ministry of Health, National Healthcare Group and Singapore Health Services will be taking part in this project.

Resources in other countries

There is considerable variation in research capacity across the Asian region among universities, research institutes and policy advice bodies. Cambodia and Laos have limited capacity. Both countries possess a National Institute of Public Health directly under the Ministry of Health, but these organisations possess limited staff and limited technical resources. They would need extra resources to make any major contribution to a regional information mechanism, although individuals may be able to contribute research, and these organisations may contribute as clients and partners.

In Indonesia, the Centre for Research and Development of Health Systems and Policy is located within the Ministry of Health's Research and Development section. Although such government R&D bodies have been under-funded and poorly resourced in the past, the Country Report indicates that another centre within the Ministry, the Centre for Policy and Development of Health (directly under the Minister), receives financial support from the German aid agency GTZ, and is actively involved in policy development at the national level. Indonesia has many medical faculties and schools of public health, several with an established reputation and senior staff with overseas post-graduate education, e.g. the University of Indonesia in Jakarta, Gajah Mada University in Yogyakarta, and Airlangga University in Surabaya. There are also many independent public policy institutes. At least two have a sound track record for high quality applied research and policy

development, the Centre for Strategic and International Studies (CSIS), and the SMERU Research Institute, although health systems policy is not a major part of their agenda. The Indonesia Report supplies information on a constellation of agencies involved in disaster planning and management.

Malaysia has National Institutes of Health within the Ministry of Health, which were established in 1996 to strengthen health research and encourage linkages with policy development. For example, the Institute for Health Systems Research has five research divisions, covering health care systems, quality in health care, health outcomes, health economics and financing, and health policy studies and analysis. The Institute is a WHO Collaborating Centre and is involved in the EVIPNet initiative that is linking up researchers and policy makers in Malaysia. In addition, Malaysia possesses several medical faculties with a sound reputation, and local public health researchers are involved in the Australasian Cochrane Centre through its "node" at the Penang Medical College. The Institute for Global Health at the United Nations University was established in May 2006 in Kuala Lumpur, funded through an endowment fund contributed by the Government of Malaysia to the United Nations, its mission being to undertake research, develop capacity, and disseminate knowledge related to key issues of human health, particularly for people in developing countries.

Thailand has a well developed network of excellent universities and government research institutes. The Health Systems Research Institute was established in 1991 as an independent but government-funded body. It has a close working relationship with the Ministry of Health and is involved in health systems reform. Its work has been enhanced since 1998 by the establishment of the International Health Policy Program, which has supported the training and mentoring of Thai researchers working in the public health field. In the area of systematic reviews, a branch of the Australasian Cochrane Centre is based in Khon Kaen University, and draws in researchers from several medical centres in Thailand, as well as linking with researchers in neighbouring Laos. There is a sound base of expertise in Thailand to contribute to the sharing of clinical expertise across the Asian region, as well as health systems expertise.

In Vietnam, EVIPNet has drawn together a local network of researchers and policy makers. From the research side, senior research staff play an active role from the Hanoi Medical University and the Health Strategy and Policy Institute.

Other regional resources

Several networks have developed in response to the growing need for comparative health policy and health systems research. DRAGONET is an informal network of health policy advisers and directors of research centres, initially from Japan, Korea, Taiwan, Hong Kong and Singapore, and now also Thailand, Malaysia and China. The Asia-Pacific Health Economics Network (APHEN) was

launched in 1998 by health economists from Thailand, Singapore, Malaysia, China, India, Sri Lanka, Bangladesh, with some support from WHO SEARO and later from WPRO. The Asia-Pacific Academic Consortium for Public Health (APACH) is associated with university-based schools of public health, and has connections with international networks, such as the Federation for International Cooperation for Centres of Health Systems and Health Services Research (FICOSSER).

DRAGONET and APHEN offer prospects to support health systems research and information. Their loose memberships allow individuals from different countries to share common interests, without the bureaucratic restrictions imposed by government. Some members are advisers to governments in the region. DRAGONET members are experts in aspects of health policy and management, or health economics and financing, and are heads of centres or programs in health systems/health services research in their respective countries. DRAGONET has convened on several occasions and often contributes to on-going health reform debates. The next meeting is scheduled for Hong Kong in November 2007.

APHEN was set up to link researchers and policy makers concerned with health economics in the Asia-Pacific region. Following an inaugural conference in 1998 organized by the WHO Collaborating Centre for Health Economics in Bangkok, regional meetings have been held in most years. Meetings have been supported by WHO SEARO and WPRO. APHEN is seeking to affiliate with the International Health Economics Association (iHEA), and APHEN regional meetings may then alternate with the iHEA World Congress.

WHO Collaborating Centres, Centres of Excellence, and Technical Advisory Groups

Some WHO Collaborating Centres in the Western Pacific Region are involved in health systems research. Centres are involved in drug quality control (one each in Australia, China, Malaysia and Singapore), district health systems and primary health care (five in China), information support to primary heath care (one in China), health development and related technical cooperation (one in Japan), and health systems research, quality improvement and health technology assessment (two centres in Korea and one in Malaysia).

Other centres are developing training, research and consultancy capabilities, and are involved in collaborative activities outside the region. Examples are the Health Systems Research Institute in Thailand, the Public Health Institute in Malaysia, a new Centre for Health Services Research at the National University of Singapore, and several centres at universities in Australia with strong outreach activities in Asia. Some countries have national centres for health policy and management, health policy think-tanks, or centres for health services and systems research. These

include the National Institute of Health Services Management in Japan, the Korean Institute of Health Services Management, the Institute of Policy Studies in Singapore, the Institute of Health Policy and Systems Research in Hong Kong, the China Network of Training and Research in Health Economics and Financing, and the Health Economics Institute in China. They have great potential to contribute to health systems research.

There are also regular regional health forums, convened by WHO, and regular meetings of health ministers under the auspices of ASEAN and APEC. A series of threatened pandemics, such as SARS and Avian influenza, also have prompted specialist networks in infectious disease surveillance.

WHO Technical Advisory Groups (TAGs) are an existing arrangement that could be drawn upon by a regional mechanism. An earlier WPRO report, *A Framework for Action* (1999), stated that more use would be made of experts to assist the Regional Director in monitoring and evaluating programs. Certain criteria would be applied: members should be multidisciplinary, competent and respected experts; membership should respect balanced geographical and socioeconomic distribution; membership would be for a fixed term with possible but not automatic renewal; and approval of candidates would be sought from the Members States.

TAGS are established for disease control programs with clear targets, but more health sector topics could addressed, such as health care financing, health economics, quality assurance, and human resource development and training. TAGs might also be set up for country-specific programs, consisting of international consultants working with local experts. This model was adopted by the Ministry of Health, Thailand, through its Health Systems Research Institute (HSRI) in introducing reforms in health care financing, human resource development, and hospital corporatisation. The TAGs provide international experiences and innovations that could be tried and tested under local conditions. Since health policy and systems research activities require an understanding of local systems, it is crucial to involve local expertise.

The Alliance for Health Policy and Systems Research is an international collaboration, based within WHO, Geneva, aiming to promote the generation and use of health policy and systems research as a means to improve the health systems of developing countries. Specifically, the Alliance aims to:

- stimulate the generation and synthesis of policy-relevant health systems knowledge, encompassing evidence, tools and methods;
- promote the dissemination and use of health policy and systems knowledge to improve the performance of health systems;
- facilitate the development of capacity for the generation, dissemination and use of health policy and systems research knowledge among researchers, policy-makers and other stakeholders.



World Health Organization Avenue Appia 20 CH-1211 Genève 27 Switzerland

Tel.: +41 22 791 29 73 Fax: +41 22 791 48 17

E-mail: alliance-hpsr@who.int

Alliance HPSR Website: http://www.who.int/alliance-hpsr