National Health Research Systems

Many countries in the world have national health research organizations—for example, Canada has a national public-sector organization called the “Canadian Institutes for Health Research”. However, these organizations may not necessarily be part of an integrated “system”. Many more countries, particularly low and middle-income countries, have no national health research organizations whatsoever—and no system at all.

This module focuses on two key concepts:

- Each country needs a national health research organization of some kind; and
- This organization (or perhaps several organizations together) need to be part of a “system” of some kind.

LEARNING OBJECTIVES

1. To understand the historical background, including key lessons learned, about efforts to create and strengthen national health research systems.

2. To become familiar with resources (analytic studies, frameworks, assessment tools) that are now available.

3. To apply available resources to country-specific situations.
**KEY MESSAGES**

- There is an important 15 – 20 year story about how countries have tried to create and strengthen national health research systems. For the first 10 years of this story (1990-2000), the key strategy was known by the term: "**Essential National Health Research**" (ENHR).

- Since the International Conference on Health Research for Development, held in Bangkok in October 2000, ENHR is increasingly seen as an important strategy to build and sustain **National Health Research Systems** (NHRS). The importance of NHRS is increasingly being recognized by a wide variety of countries and organizations.

- More recently, analytic studies and assessment tools have become available. These resources can now be used by national working groups to strengthen a given country’s health research system.

**DEFINING SOME TERMS**

**Health Research**

The generation of new knowledge using the scientific method to identify and deal with health problems

Commission on Health Research for Development, 1990

**National Health Research System (NHRS)**

“...the people, institutions and activities whose primary purpose in relation to research is to generate high-quality knowledge that can be used to promote, restore or maintain the health status of populations” (Pang et al. 2003 p.816).

NHRS also include actors and mechanisms involved in knowledge generation, research synthesis, and using research results in the public and private sectors.

**Essential National Health Research**

An integrated strategy for organising and managing health-related research so that it contributes to health and development within a country.
**TOPIC 1: A Brief History of ENHR and NHRS**

1990: *Commission on Health Research for Development*

The Commission report noted a number of key challenges facing African health research systems: building appropriate capacities to undertake research, developing effective national mechanisms, and creating “enabling environments”. The Commission recommended that health research be national in focus and that every country, no matter how poor, should have a health research base from which it can tackle its own national health problems and priorities and increase the impact of limited resources. It recommended an inclusive process of health research priority setting involving researchers, decision-makers and the public as equal partners. This concept was coined Essential National Health Research (ENHR). ENHR is a systematic approach to improving the effectiveness and national relevance of health research. ENHR has the following aims:

- Make health research a valuable tool for decision-making
- Set national and sub-national research priorities
- Broaden the diversity of groups that have a say in setting the national agenda
- Achieve far greater public involvement
- Develop country mechanisms that facilitate effective health research
- Build the capacity of researchers, coordinators and users of research
- Expand interaction between researchers and users of research
- Promote communication and networking
- Extend networks with researchers in other countries
- Mobilise resources for research

*Throughout the 1990s*

The Council on Health Research for Development (COHRED) supported the development of ENHR strategies for a number of countries globally. These can be found on the Council’s website: [http://cohred.org](http://cohred.org)

2000: *National Health Research Systems term first used*

Following the publication of the Commission on Health Research for Development report and the work in the 1990s on ENHR, the term National Health Research Systems was coined at the International Conference on Health Research for Development. The existence of a rational framework for health research in a given country can help ensure that the production and use of research is valued and that there is a platform for more effective interaction between all stakeholders.

**Exercise 1**

Visit the COHRED website to find and read through the ENHR strategy or related documents for your country. Do the documents identify key challenges facing health research? Or key supports to the development of a health research agenda?
**TOPIC 2: Turning Failure into Success in Tanzania – A Case Study**

In response to the Commission on Health Research for Development call for national health priority setting through the ENHR strategy, Tanzania held its first ENHR workshop in 1992. The workshop and the overall ENHR coordination were put in hands of the National Institute for Medical Research (NIMR). The workshop brought together Tanzanian health research institutions, consumers of research, decision and policy makers, donors and relevant professional associations. Though a strategy had been created at the 1992 workshop – by 1998 it was clear that few actors in the country had adopted the research agenda and overall coordination of the strategy had been impeded by lack of support;

"Tanzania currently has four academic and eight dedicated research institutions which undertake basic clinical research. These institutions were created independently and until recently had their own mandates and competed with each other for donor money and other opportunities. In the past any attempt to forge links or propose a common action was rejected for fear of dominance by one centre over another. As a result, repeated attempts by the National Institute for Medical Research (NIMR), the government run institution that was designed to coordinate all medical research in Tanzania, failed...it was evident that the main problem was ‘ownership’. Everyone said they wanted better coordination, but nobody wanted to be coordinated by another institution.” (p. 822 BMJ).

Thus, in 1998, the NIMR convened a meeting to establish a National Health Research Forum. Through a series of meetings and discussions the forum engaged all key national institutions and drafted a set of national research priorities. Input was then sought from districts. The forum was formally launched in 1999 by the Minister for Health.

Reflecting on the progress in 2000, the Forum has successfully unified the multiple member institutions and actors working nationally, created a national research agenda and has begun guideline development for research and partnership, established a mechanism for research translation through the Tanzania Health Research Bulletin as well as engaging research users through the Tanzania Health Research Users Trust Fund.

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**TOPIC 3: Relevant Analytic Studies**

**Identifying Challenges through Case Studies**

Using case studies prepared by COHRED and WHO, D’Souza and Sadana (2006) reviewed the critical challenges and constraints national health research systems encountered in sub-Saharan Africa.

<table>
<thead>
<tr>
<th>Challenge Identified</th>
<th>Points from African Case Studies</th>
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<tbody>
<tr>
<td>Lack of coordination between health research institutions</td>
<td>Zambia: inadequate collaboration between institutions led to disproportionate concentration of malaria behavioural studies in one district (Lundazi) and are practically non-existent in Western and North-Western provinces where malaria is endemic</td>
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<tr>
<td>Inadequate participation of stakeholders in the research, policy and implementation processes</td>
<td>General: lack of involvement of research users in research process as well as lack of involvement of researchers in policy process.</td>
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<tr>
<td>Lack of demand for research from research users</td>
<td>Uganda: lack of participation leads to low demand for research – Uganda demonstrates a few examples of research use in policy making – AIDS Commission report findings used to raise legal minimum age of marriage to reduce risk among youth</td>
</tr>
<tr>
<td>Lack of accessibility of research findings</td>
<td>Zambia: research dissemination and methods for sharing findings are often left out of research budget and therefore research is not made accessible; research that is available is often loaded with technical language not understood by policy makers and the public.</td>
</tr>
</tbody>
</table>

**Constraints Identified**

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<th>Inadequate financial capacity</th>
<th>Ethiopia: small amount of national public funding reflects low priority</th>
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<td>Zambia &amp; Uganda: research funding primarily from international donors who therefore often set the research agenda and fund short term projects</td>
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<td>Inadequate human capacity</td>
<td>Cameroon, Ethiopia, South Africa, Zambia: loss of researchers to other professions, from public to private, rural to urban, and to foreign countries</td>
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<td>Zambia: research results are often analysed in foreign institutions with the result that within-country efforts are limited to data collection or descriptive work</td>
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<tr>
<td>Inadequate institutional capacity</td>
<td>Ethiopia: insufficient computer support to store and analyse data</td>
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<td>Zambia: poor state of laboratory equipment hinders research development.</td>
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<tr>
<td>Lack of data</td>
<td>Cameroon: no reliable morbidity data impeded research priority setting.</td>
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**TOPIC 4: Tool to assess NHRS**

*Health Research System Analysis at WHO*

The World Health Organization has been working to establish a framework for analysis of national health research systems. In preparing the framework, WHO has grounded their work in the assumption that the underlying goal of a national health research system is to advance scientific knowledge and its use in improving health and health equity.

The framework for analysis is structured around the four principal functions of a health research system, which are:

- **Stewardship**
  - Define and articulate a vision for a national health research system
  - Identify appropriate health research priorities and coordinate adherence to them
  - Set and monitor ethical standards for health research and research partnerships
  - Monitor and evaluate the health research system

- **Financing Function**
  - Secure research funds and allocate them accountably

- **Creating & Sustaining Resources**
  - Build, strengthen and sustain the human and physical capacity to conduct and absorb health research

- **Producing & Using Research**
  - Produce scientifically validated research outputs
  - Translate and communicate research to inform health policy, health practice, and public opinion
  - Promote the use of research to develop drugs, vaccines, devices and other applications to improve health

WHO is currently developing detailed indicators for assessment which are based on the framework above.

**EXERCISE 2**

Using the material you collected for Exercise 1, review the principal functions listed above as they relate to the Essential National Health Research strategy and National Health Research System in your country. Detailed indicators can be found at [http://www.who.int/rpc/health_research/concepts/indicators/en/index1.html](http://www.who.int/rpc/health_research/concepts/indicators/en/index1.html).

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In their work, D’Souza and Sadana highlight the role case studies can play in health research system analysis. In particular, case studies may be used to explore and illustrate the challenges within the national health research system. Moreover, case studies may be used to help establish priorities and areas needing strengthening. In using a case study, D’Souza and Sadana make five suggestions:

1. Provide the methods used to construct the case study; which reports were used, were people interviewed, which websites were visited, how were materials integrated?
2. Incorporate quantitative data to support qualitative data in order to strengthen the case study;
3. View health research from a broad perspective incorporating analysis on the context surrounding the health research system;
4. Give details so that others are able to learn from and adapt from the stories presented;
5. Present recommendations (if the aim of the case study is to provide a framework for action).

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Using your work for exercise 1 and 2, come together with your team members to write the story of ENHR-NHRS in your country. Consider what has worked? What hasn’t worked? Why? Highlight the key actors who have facilitated the process as well as those who have acted as barriers.

The Challenge

Now that you have outlined the story – develop a hypothetical (or actual) plan to create or strengthen a National Health Research System.

Which actors are fundamental to the success of this plan?
How can you best support the involvement of these critical actors?
Are there parallels you can draw from other experiences you have read about?
**Annotated Readings**


- The Commission reports on the gap between burden of illness and health investment. It proposes that ENHR should be prioritized, that financing for health research should be sought from international sources, that international partnerships should be created and that a mechanism for monitoring should be established.


- The paper proposes a conceptual framework for health research systems (HRSs) that defines their boundaries, components, goals, and functions. The framework adopts a systems perspective towards HRSs and serves as a foundation for constructing a practical approach to describe and analyse HRSs.


- Highlights the experience of Tanzania in establishing the National Health Research Forum


- An analysis of country case studies highlighting the key constraints and challenges facing national health research systems.

**Tools and Resources**

1. COHRED e-library
   The Council on Health Research for Development (COHRED) is an international organisation established in 1993, based in Switzerland with a strong global network. COHRED has established an extensive on line library at: [http://cohred.org](http://cohred.org)

Documents on Benin include:

- Mission to West Africa (Benin, Mali, Guinea, Burkina Faso) on Health Research September 11 - October 6, 1995
- Five Year ENHR Plan 1993-97. Decentralised Unit of ENHR in Benin. 1993

Documents on Mali include:
- Premier symposium national sur la recherche en santé. Definition des priorités nationales de recherche en santé au Mali. 2001
- Mission to West Africa (Benin, Mali, Guinea, Burkina Faso) on Health Research September 11 - October 6, 1995

Documents on Uganda include:
- A report of the workshop on Role of Health Research in the implementation of Health Sector Strategic Plan (HSSP) 26-27 March, 2002
- Data for health research planning and development in Uganda. Learning brief 2002/2
- Essential National Health Research in Uganda. A case study of progress and challenges in implementing the ENHR strategy 2000
- Guidelines for conducting health research involving human subjects in Uganda 2000
- Community Participation in Essential National Health Research Process - Uganda's experience 1999
- Identifying capacities: country analysis Ghana and Uganda 1999
- An Analysis of Uganda's Capacity for Essential National Health Research May 1998

Documents on Zambia include:

2. World Health Organisation – Health Research Systems Analysis Initiative
   An initiative coordinated by the WHO in an aim to describe and analyse health research systems around the world. The initiative falls within the Department for Research Policy & Cooperation. The initiative is developing indicators as well as case studies.

   Website: [http://www.who.int/rpc/health_research/en/](http://www.who.int/rpc/health_research/en/)
**What did you think of the module?**

Evaluation and Feedback

Please send us your comments on this module as well as suggestions and ideas.

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