Concept note

Monitoring progress towards Universal Health Coverage in Cambodia

Bart Jacobs

(January 2018)

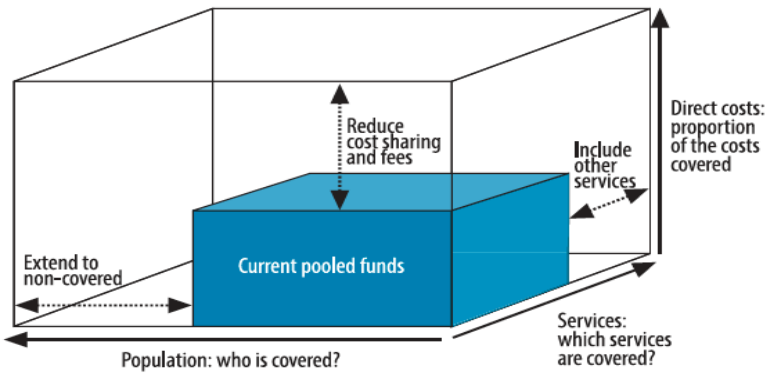
1. Preamble

The Government of Cambodia embarked on Universal Health Coverage (UHC) with the endorsement of the National Social Protection Policy Framework in July 2017. The objective of UHC is to enable all people access to the health services they need of sufficient quality without being exposed to financial hardship as a result of using these services. To oversee implementation of the National Social Protection Policy, the National Social Protection Council and associated structures like the Executive Committee and Secretariat, have been established. To enable the formulation and implementation of evidence-based policies leading to UHC, policymakers require access to reliable and valid health economics and financing information. This requires the availability of a respected institute that can continuously provide such information on a routine basis, as well as ensuring that policymakers can easily make use of relevant information to translate evidence to policy (Li *et al.*, 2017). The primary target audience responsible for developing health economic and health financing policies are the members of the Executive Committee and Secretariat to the National Social Protection Council (hereinafter referred to as 'policy community').

This document provides recommendations for establishing a system for evidence-based policymaking for UHC, using the National Institute of Public Health (NIPH) as resource centre. The first part of the document focuses on the data requirements and suggested indicators for monitoring progress towards UHC, while the next section describes ways that enable the use of this information, by the policy community, for decision-making, based on international experiences. This is followed by a description of key considerations for ensuring that the NIPH can provide a steady source of reliable and digestible information for monitoring. Finally, context specific recommendations are suggested for establishing a sound monitoring system in Cambodia.

2. Measuring progress towards UHC

To achieve the goal of Universal Health Coverage there are three dimensions to consider: population coverage, service coverage, and financial risk protection. These dimensions are depicted in the below figure.



Due to limited resources there is a continuous trade-off between these three dimensions whereby full coverage of one dimension likely occurs at the expense of another one.

The Word Health Organization and Word Bank jointly released a common framework for monitoring progress towards UHC (Boerma *et al.*, 2014, Boerma *et al.*, 2014b, WHO and World Bank 2014) that recommends focusing on coverage with essential health services together with a degree of financial risk protection. These two measures are interrelated and should be measured at the same time, at all levels of the health system.

Table: Framework for monitoring progress towards UHC

Indicators

Health services coverage

- *Prevention*: coverage with a set of tracer interventions for preventive services
    - *Equity*: a measure of prevention service coverage as described above, stratified by wealth quintile, place of residence, and sex.
- *Treatment*
    - *Aggregate**: coverage with a set of tracer interventions for treatment services
    - *Equity*: a measure of treatment service coverage as described above, stratified by wealth quintile, place of residence, and sex.

Financial protection coverage

- *Impoverishing expenditure*
    - *Aggregate*: fraction of the population protected against impoverishment by out-of-pocket health expenditures, comprising two types of household: families already below the poverty line on the basis of their consumption and who incur out-of-pocket health expenditures that push them deeper into poverty; and families for whom out-of-pocket spending pushes them below the poverty line.
    - *Equity*: fraction of households protected against impoverishment or further impoverishment by out-of-pocket health expenditures, stratified by wealth quintile, place of residence, and sex.

- *Catastrophic expenditure*
    - *Aggregate*: fraction of households protected from incurring catastrophic out-of-pocket health expenditure.
    - *Equity*: fraction of households protected from incurring catastrophic out-of-pocket health expenditure stratified by wealth quintile, place of residence, and sex.

Source: Boerma et al. 2014a,b, WHO and World Bank 2014; ***aggregate**: implies national average

Indicators for measuring *coverage with essential health services* should comprise health interventions that are curative, promotive, rehabilitative and preventive and their selection should be based on the criteria of:

- *Relevance*: the concerned condition is a priority, the intervention is cost-effective, and the health condition potentially imposes major health expenses.
- *Quality*: information is available about the quality of the services.
- *Availability*: information used to measure the indicators is reliable, regular and available using existing instruments.

Coverage indicators should also encompass quality aspects as well as the cost of services (Jamison *et al.*, 2013). If data allows, the indicators can be further refined as to measure *Effective Coverag*e which is defined as 'the fraction of potential health gain that is actually delivered to the population through the health system' (Ng *et al.*, 2014). It is comprised of three components: need, use and quality.

Examples of coverage indicators include:

- *Preventive health services*: % of infants fully vaccinated; pregnant women with at least 4 antenatal care attendances and supplied with folic acid.
- *Treatment services*: per capita, per annum outpatient consultations in the public health sector; % of persons with hypertension who have their blood pressure under control; % of adults who have had their blood pressure measured in the past year; % of persons with diabetes receiving successful treatment.

Coverage with financial risk protection is measured by the incidence of ''catastrophic'' health expenditures and the incidence of impoverishment because of out-of-pocket health payments. The former indicates the proportion of households that incur health payments that are higher than their available resources whereby they have to forego consumption of essential goods and services (Xu *et al.*, 2003, Saksena *et al.*, 2014). The latter captures health spending that causes families to fall below the poverty line.

The above measures should be disaggregated to allow the assessment of *equity in distribution of health services and financial risk protection*. Stratification should happen along socioeconomic and demographic characteristics such as income or expenditure (socioeconomic quintiles), place of residence (capital, urban, rural), number of dependents, and epidemiological characteristics such as presence of chronic conditions or disabilities (Hosseinpoor *et al.*, 2014)

The government's preferred way to achieve UHC is through social health insurance. The indicators proposed by Carrin and James (2005) to monitor key performance issues, related to the functions of health financing within the context of social health insurance, could therefore also be considered (see Table below).

Table: Performance indicators in the context of social health insurance (SHI)

Function and issues	Performance indicator
Revenue collection	
Population coverage	Percentage of population covered by SHI.
Method of finance	Ratio of prepaid contributions to total health care costs.
Pooling	
Composition of risk pools	Is membership compulsory in all (contributing) population groups? What percentage of each (contributing) group is covered by SHI? Are dependents of contributing groups compulsorily insured?
Fragmentation of risk pools	Multiple risk pools? Risk equalisation measures in place?
Management of risk pools	Are there efficiency incentives for risk pool(s)?
Purchasing	
Benefit package	Is the benefit package based on explicit efficiency and equity criteria? Are monitoring mechanisms – patient appeals mechanism in place?
Provider payment	Do provider incentives encourage the appropriate quality of care?
Administrative costs	Percentage of expenditure on administrative costs.

Source: Carrin and James 2005

The indicators proposed in this framework are illustrative only and can be adjusted to the Cambodian context and expanded upon.

In addition to producing routine monitoring data there is a need for specific research to address pertinent questions. These studies can be commissioned by the NSPC or be identified by other stakeholders to inform on relevant matters.

3. Facilitating the use of information for informed-policy making

A wealth of evidence and documentation is produced within the country and region about health economics and financing, much of which is highly relevant. However, time constraints, especially amongst policymakers, make it challenging to successfully convey the information needed to inform the policymaking processes (Choi *et al.*, 2016; Li *et al.*, 2017).

Identifying the barriers and facilitators to the uptake of information by policymakers is necessary in order to develop effective strategies to aid policymaking processes. Oliver *et al.* (2014) give an overview of the top 5 barriers and facilitators derived from a systematic review across countries and sectors in the table below.

Barriers*	**Facilitators***
Availability and access to information	Availability and access to information
Clarity/relevance/reliability of information	Collaboration between sources of information and policymakers
Timing/opportunity to access data	Clarity/relevance/reliability of information
Policymakers' level of understanding of the topic	Relationship with policymakers
Costs	Relationship with info staff

*In order of frequency; source: Oliver et al. 2017

These barriers and facilitators can be further classified into themes, which can facilitate the development of relevant approaches to foster the uptake and use of information:

- *Contact and collaboration*: collaboration between info sources and policymakers, timing of availability of information, relationship and contact between policymakers and info staff.
- *Organisation and resources*: availability and access to information, costs, managerial support.
- *Information and information characteristics:* clarity/relevance/reliability of information, format of dissemination of information.
- *Policymakers' characteristics:* research skills, willingness to use information, awareness regarding research.

These findings are reinforced by Shroff *et al.* (2017) whose literature review indicates that facilitators to evidence-based policy making include engagement of policymakers in research/data gathering as well as their trust in the researchers; dissemination of information in a timely manner and using formats with language appropriate for policymakers (thus shorter than this note); and enabling policymakers to interpret evidence. The lack of such interpretive skills was put forth as a considerable barrier along with the dissemination of information in an untimely manner or in formats difficult to interpret.

Hawkes *et al.* (2016) describe experiences from four countries regarding successful approaches to increase the use of evidence in policymaking. Interventions included increasing access to relevant data, promoting frequent interactions between researchers and members of the policy community, and increasing receptiveness towards data in policymaking. Examples included 3-day workshops/courses with topics such as evaluating evidence, monitoring, health financing, use of data, health policy analysis, health economics; regular seminars between researchers and policymakers, improved communications, policy retreats; and establishing policy units.

A survey in China amongst policymakers and academics indicated that the preferred way to promote the use of evidence for policymaking was to jointly develop research, conducting science-policy forums, and accessing information through succinct policy briefs (Choi *et al.*, 2016).

4. Providing reliable and valid data in a comprehensive and timely manner

4.1. The source of information on health economics and financing

The National Institute of Public Health (NIPH) supports the Ministry of Health (MOH) and has three main components and functions: (1) a National Public Health Laboratory, serving as the national reference laboratory; (2) a School of Public Health, providing training, including master's degrees in public health, epidemiology, hospital administration and nutrition; and (3) the Health Systems Research and Policy Support Unit (HSRPSU) which conducts health systems research and policy support. The HSRPSU has 14 staff members: 10 researchers and 4 librarians.

The Health Systems Research and Policy Support Unit of NIPH would be the preferred entity to provide the required information for monitoring the progress of UHC. A respected researcher, who has played an important role in the development of social health protection schemes, including the National Social Secuirty Fund, and has excellent relations with policymakers of MOH, leads the HSRPSU. Moreover, NIPH has a five-year framework agreement with the Antwerp Institute of Tropical Medicine (ITM) with one of the objectives making the HSRPSU a centre of excellence in Health Systems and Policy Research and Knowledge Translation.

The five-year framework for support by ITM potentially provides an opportunity to align activities and create a robust HSRPSU with the required capacity to generate and communicate evidence for Health Economics and Financing Policy. This note focuses on how support by the GIZ Social Health Protection Program and the Providing for Health network can complement the ITM support, to make HSRPSU a resource centre for Health Economics and Finance for the National Social Protection Council.

Selected development partners do already support the generation of evidence for health financing such as the National Health Accounts by WHO, and econometric analysis of the Cambodian Socioeconomic Surveys by GIZ and WHO. Delegation of such work to the HSRPSU could be considered.

4.2. Ensuring a sustained flow of reliable and valid information

Capacity building can happen at three levels: the individual, organizational, and systems level (Hawkes *et al.*, 2016, Rodríguez *et al.*, 2017). Individual capacity relates to skills to identify, produce and interpret research findings, while systems capacity encompasses issues such as

norms and rules governing decision-making. Addressing individual capacity issues is relatively straightforward and can be done through trainings and coaching. Addressing systems capacity is beyond the scope of this proposal. Therefore the remainder of this document will focus mainly on organizational capacity of the HSRPSU. Organizational capacity has been defined as 'the capacity of (research) institutes to fund, manage and maintain themselves' (Bennett *et al.*, 2012). Bennett *et al.* (2012) assessed factors that enable the development of sustainable health policy analysis institutes[1] in low- and middle-income countries and used three broad categories for their assessment:

- *Resources*: financial resources and staff and sustainability.
- *Governance and management*: external accountability mechanisms and internal management systems.
- *Networks*: relationships with other organizations that assist in achievement of organizational goals.

Bennett *et al's* (2012) recommendations to enhance the capacity of research institutions included:

- Developing a clear *fundraising strategy* with a focus on diversification of funding sources and obtaining long-term program grants to minimize multiple low value short- term contracts that tend to impose high administrative costs.
- Aiming for *flexible and predictable funding* so that the institute can develop its own program of work, pursue institutional development and respond to unfunded government requests. In this respect endowment funding was forwarded as a potential promising strategy.
- Seek *core funding from government*, but avoid excessive reliance on government funding to maintain a degree of independence.
- Develop and make active use of *strong Board structures*.
- Seeking ways to *attract and retain senior staff.*
- Develop *leadership skills* across institute staff.
- Proactively and strategically *expand international and domestic networks*.

A mechanism for strengthening capacity is by establishing north-south partnerships between research institutes, as demonstrated by the collaboration between Antwerp Institute of Tropical Medicine and the HSRPSU. The assessment by Mayhew *et al.* (2008) on the experiences of north-south partnerships adds some additional considerations for developing sustainable research institutes, namely:

- The need to identify *incentives* and *career structures* for staff members, especially junior staff. One possibility, as in Thailand where researchers are quasi-government staff, is to top up salaries through project grants.
- The need to have a *mix of policy-led research* and *long-term research* that also has an international relevance. The former is considered to have more impact on domestic policy and can assist in guaranteeing core funding from the government, while the latter is often a pre-requisite to attract less administratively demanding grants as it increases credibility amongst donor agencies. Such a combined strategy may allow for more sustainable funding.
- Long term *support secondment* of a staff member to the southern institute to assist in seeking funding, develop joint research proposals, analyse data, write up and disseminate results together.
- To foster *south-south collaborations* amongst institutes to enable development of a more context specific agenda.

[1] Research institute, policy analysis institute all imply these same

5. Suggestions to ensure informed decision making for UHC through monitoring in Cambodia

The above assessment suggests that many issues have to be addressed to establish a robust monitoring system for UHC. Recommendations are presented that could be considered to ensure such a system. The recommendations are not provided in chronological order and all have to be worked out in detailed interventions. Care has to be taken not to duplicate or hamper scheduled activities such as those by ITM, and consideration has to be given to the number of existing staff and their skills at the HSRPSU.

5.1. Selecting indicators

In order to identify data sources, required skills to retrieve data and means to convey the findings, it is necessary agree on indicators required for monitoring progress towards UHC. The policy community, guided by technical experts, should specify their information needs and agree upon indicators to guide them. This should go hand-in-hand with a research agenda for the short- and medium-term to answer specific questions using appropriate research methodologies. Some sources of information, such as the socioeconomic survey and demographic and health survey may need to be refined to enable extraction of valid information for the purpose of monitoring progress towards UHC. If Effective Coverage is to be measured, information on quality of care is required. Mechanisms such as Steering Committees or Working Groups may have to be established to allow smooth access to and use of existing data, including those required for costing exercises and systems.

- Formulate indicators for monitoring progress towards UHC.
- Formulate research agenda for pertinent issues related to health economics and financing, including health systems.
- Determine appropriateness of existing national survey instruments for UHC monitoring purposes and identify required sources of information.
- Identify or establish mechanisms to ensure easy access to, and use of key information.

5.2. Communication with and engagement of policymakers

To ensure policymakers' decisions are evidence-based they should be engaged in the monitoring exercise from the outset and establish good relations with staff members of the HSRPSU. There is a requirement to identify appropriate means to convey relevant information while taking account of time constraints as well as the extent of technical understanding, and how to broaden the latter for members of the policy community. Generally the preference among policymakers is for succinct policy briefs instead of detailed reports.

- Agree on means and timing for dissemination of information.
- Consult policy community about processes for setting the research agenda, including its revision and evaluation.
- Organise appropriate (short) training in basic health economics and financing by HSRPSU and/or other southern institute(s) for policy community.
- Identify means to enable regular interactions between HSRPSU and policy community.

5.3. Ensuring a sustained flow of reliable and valid information by building a sustainable HSRPSU

5.3.1. Individual level

Staff members of the HSRPSU will require a basic understanding of econometrics to conduct analysis of surveys using an appropriate software package or to guide and assess the work of consultants in this field. They should also possess similar skills for health economics and finance. Ideally senior staff members provide policy suggestions to accompany the data. There should be sufficient staff members with the required skills and knowledge to perform the tasks related to information generation and dissemination without hindering other priorities. A human resource plan that looks at current and future human resource needs will have to be developed. This should also consider ways to incentivise staff members as well as potentials for career development. The HSRPSU should be able to engage with a domestic and international research agenda simultaneously.

- Identify the required and available knowledge and skills to successfully generate, and appropriately disseminate, information for monitoring for UHC
- Develop a Human Resource Plan for the HSRPSU to be a resource institute for monitoring for UHC
- Identify southern institutes for training and capacity building of HSRPSU staff members

5.3.2. Organizational level

The Health Systems Research and Policy Support Unit will have to be a viable institute with sufficient and, ideally, predictable funding, to attract and retain competent and capable staff, and compete and cooperate at the international level with other research institutes. The above assessment suggests the need for a fundraising strategy focused on obtaining core government funds complemented by long-term research or other grants. Funding from institutes which are part of the arrangements for social health protection, such as the National Institute of Public Health, could be explored. Research should consist of both domestic policy work and studies with international character. Engagement with international research networks should be fostered. Apart from research skills it may be beneficial to have a look at prevailing leadership skills amongst HSRPSU staff and how these might be optimised, through staff development and/or by strengthening the board. Secondment of an international researcher with a track record of publications to assist in attracting funding, drafting research findings and building the capacity of HSRPSU staff members should also be considered.

- Develop a short to medium-term fundraising strategy to solicit sustainable funding from domestic sources and long-term research grants
- Conduct a scoping exercise of funding agencies supporting health systems and health financing research
- Map regional and international universities and research institutes with a track record of conducting similar research for eventual partnering
- Proactively establish/reinstate connections with prominent policymaking and research institutes and relevant international networks
- Second a scientist to attract funds, assist in publishing and engage in capacity building
- Asses whether there is a need to strengthen leadership throughout the HSRPSU and the NIPH board and formulate appropriate responses if required
- Promote the HSRPSU as the resource centre for monitoring UHC amongst development partners working on health financing for UHC

ABBREVIATIONS

HSRPSU	Health Systems Research and Policy Support Unit
ITM	Antwerp Institute of Tropical Medicine
NIPH	National Institute of Public Health
NSPC	National Social Protection Council
UHC	Universal Health Coverage
WHO	World Health Organization

REFERENCES

Bennett S, Corluka A, Doherty J, Tangcharoensathien V. 2012. Approaches to developing the capacity of health policy analysis institutes: a comparative case study. *Health Research Policy and Systems* **10**: 7.

Boerma T, AbouZahr C, Evans D, Evans T. 2014a. Monitoring Intervention Coverage in the Context of Universal Health Coverage. *PLoS Medicine* **11**.

Boerma T, Eozenou P, Evans D, Evans T, Kieny MP, Wagstaff A. 2014b. Monitoring Progress towards Universal Health Coverage at Country and Global Levels. *PLoS Medicine* **11**.

Choi BCK, Li L, Lu Y, *et al.* 2016. Bridging the gap between science and policy: an international survey of scientists and policy makers in China and Canada. *Implementation Science* **11**: 16.

Hawkes S, Aulakh BK, Jadeja N, *et al.* 2016. Strengthening capacity to apply health research evidence in policy making: Experience from four countries. *Health Policy and Planning* **31**: 161–70.

Hosseinpoor AR, Bergen N, Koller T, *et al.* 2014. Equity-Oriented Monitoring in the Context of Universal Health Coverage. *PLoS Medicine* **11**.

Jamison DT, Summers LH, Alleyne G, *et al.* 2013. Global health 2035: A world converging within a generation. *The Lancet* **382**: 1898–955.

Li R, Ruiz F, Culyer AJ, Chalkidou K, Hofman KJ. 2017. Evidence-informed capacity building for setting health priorities in low- and middle-income countries: A framework and recommendations for further research. *F1000Research* **6**: 231.

Mayhew SH, Doherty J, Pitayarangsarit S. 2008. Developing health systems research capacities through north-south partnership: An evaluation of collaboration with South Africa and Thailand. *Health Research Policy and Systems* **6**: 8.

Ng M, Fullman N, Dieleman JL, Flaxman AD, Murray CJL, Lim SS. 2014. Effective Coverage: A Metric for Monitoring Universal Health Coverage. *PLoS Medicine* **11**.

Oliver K, Innvar S, Lorenc T, Woodman J, Thomas J. 2014. A systematic review of barriers to and facilitators of the use of evidence by policymakers. *BMC Health Services Research* **14**: 2.

Rodríguez DC, Hoe C, Dale EM, *et al.* 2017. Assessing the capacity of ministries of health to use research in decision-making: conceptual framework and tool. *Health Research Policy and Systems* **15**: 65.

Saksena P, Hsu J, Evans DB. 2014. Financial Risk Protection and Universal Health Coverage: Evidence and Measurement Challenges. *PLoS Medicine* **11**.

Shroff ZC, Javadi D, Gilson L, Kang R, Ghaffar A. 2017. Institutional capacity to generate and use evidence in LMICs: current state and opportunities for HPSR. *Health Research Policy and Systems* **15**: 94.

Xu K, Evans DB, Kawabata K, Zeramdini R, Klavus J, Murray CJL. 2003. Household catastrophic health expenditure: A multicountry analysis. *Lancet* **362**: 111–7.

World Health Organization and World Bank. 2014. *Monitoring progress towards universal health coverage at country and global levels: Framework, measures and targets*. Geneva. World Health Organization.