Monitoring Universal Health Coverage

Summary report of a meeting in Bellagio, 11-13 March 2014

Background

Over the past years several meetings have been conducted on monitoring UHC. For instance, in September 2012, a meeting was held at the Bellagio Center to discuss intervention coverage. In September 2013, a multi-country meeting was held in Singapore with 15 country case studies. Currently, a PLOS Medicine Collection on Monitoring UHC is in production, containing country case studies and cross cutting papers, and will be published in the coming months. The joint WHO/World Bank paper “Monitoring progress towards universal health coverage at country and global levels: a framework” was launched at a meeting on UHC in Tokyo on December 6, 2013 and was available on the web for consultation through mid-February 2014. ¹

In parallel, the political processes related to the development of the post-2015 development agenda are in full swing. UHC has been proposed as a health sector specific goal in several fora and much depends on how well it can be measured.

The meeting aimed to discuss and finalize guidance for monitoring UHC in countries and globally, including a framework, and produce a global plan to enhance the measurement and monitoring of progress towards UHC, including a research agenda.

Approximately seventy comments on the WHO/WB framework were received from UN agencies and World Bank, bilateral development partners, civil society organizations, academics and others. These were used as a starting point for the meeting discussions.

The discussions were organized in five areas:
1. General issues related to the M&E framework
2. Monitoring financial risk protection
3. Monitoring intervention coverage
4. Equity and targets
5. Research and measurement needs; communication.

¹ All documents are available at http://www.who.int/healthinfo/universal_health_coverage/en/.
1 General issues related to the framework

Main comments from the web consultation prior to the meeting

• Generally positive
• Calls for broader approach including indicators for all factors that are relevant to UHC and health systems, including contextual factors and analyses
• The framework should focus more on all levels of the health system performance as they are all important to UHC progress monitoring in countries, including health outcomes, comprehensive set of interventions and system measures;
• Better articulation of the link with health outcome and social determinant measures as part of a post-2015 sustainable development framework
• Be more explicit about the link between the global and country levels in the framework.

Summary of discussions

Country presentations

Six country presentations (Bangladesh, Brazil, Chile, South Africa, Thailand, and Tunisia) provided insights into how UHC monitoring would fit into ongoing national monitoring systems and what would be done differently. Countries applications use a broader framework of monitoring health systems performance assessment, with considerable similarities in terms of indicator use. The presentations also showed how different health systems, epidemiology, levels of development and health expectations affects the ways in which UHC progress is monitored.

The UHC monitoring adds the following elements to current health sector monitoring: (1) Financial risk protection introduced, (2) Equity focus sharpened, (3) Broader array of interventions considered according to country needs, (4) Focus on quality / effective coverage of services.

The global framework needs to do a better job of 1) stressing the importance to monitor the whole array of relevant indicators 2) explaining the rationale for focusing on the coverage box of UHC monitoring, mainly using the arguments of parsimony and preference for direct results in terms of intervention coverage of UHC health sector efforts.

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2 A full summary of the comments with responses will be presented elsewhere.
Financial risk protection (FRP)

Main comments from the web consultation prior to the meeting

- General support for inclusion of FRP and 100% FRP target
- Limitations of the use of ex post FRP measures (impact of the expenses after they have occurred) not well acknowledged in the framework: coping strategies, beneficial versus non beneficial spending, no risk
- Ex post FRP is only for people who use services – link with the service coverage important to make clearer – stressing the need for both coverage with services AND FRP measures
- Indirect indicators such as OOPs/THE; GGHE/THE should also be there (on the grounds there are existing targets for them and highly correlated)
- Inconsistency in proposed measures when target is expressed in terms of impoverishment and then to have catastrophic expenses also as an indicator
- Good understandability to policy makers of incidence of impoverishment indicator compared to more complicated indicators: for post 2015 vs. country monitoring. E.g. comparison of poverty gap with and without OOPs is impossible to explain to policy makers.
- How relevant is lack of impoverishment when it is 95-100% already. Makes it look like we are pretty much there.
- Target zero impoverishment by 2030 too ambitious, may be focus reducing by 50% the gap between the poorest 40% and rest?

Summary of discussions

Measures and targets
Protection against catastrophic expenses should be measured by % not incurring catastrophic expenses, which can be defined as 25% of nonmedical consumption. This measure can be disaggregated by for instance wealth quintile or the poorest 40%; supplementary thresholds can also be used (e.g. 40% cutoff). The target is zero catastrophic by 2030; a possible intermediate target is halving by 2020. The proportion of households incurring catastrophic expenses (25% threshold) using WHS data shows considerable variation between countries. More recent WB data from in seven surveys in Latin America between 2005 and 2011, show that the average percent of households impoverished (below $1.25/day) due to out-of-pocket (OOP) health expenses was about 0.45% ranging from less than 0.1% to 0.7%.

The catastrophic expenses measure however does not capture the degree of financial hardship which depends on household levels of income, with poorer households obviously much more likely to be pushed below the poverty line than richer households. The protection against medical impoverishment indicator does capture this: the indicator is proportion not impoverished through OOP. The target is zero impoverishment by 2030. An intermediate target for 2020 could be formulated, such as halving the number or the proportion. The cut-offs using international poverty lines are $1.25 or $2.00. Supplementary poverty lines could be used especially for richer countries. It should be discussed further if the cut-point should be progressive.

To understand the dynamics of the impact of out-of-pocket expenses additional measures have been proposed and are needed to guide country policy making, such as mean positive overshoot of catastrophic expenses and pre- and post-payment poverty gap due to out-of-
pocket expenses. These are not proposed as tracer indicators, but provide critical additional information. Also for poverty gap measures targets could be set: e.g. the poverty gap without OOPs should be equal to the actual poverty gap by 2030. This also measures households already below the poverty lines that are further pushed into poverty (deepening poverty). In fact, this would be a more meaningful measure for policy making, but the impoverishment measure is much easier and more powerful in communication.

OOP over total health expenditure or proportion prepaid out of total health expenditure also provide useful additional information. Furthermore, in the context of UHC it needs to be stressed that the FRP measures must be interpreted alongside service coverage measures. People will forego health services if the needed care is considered unaffordable. If one considers wellbeing as a function of health and other consumption, this is related to maintaining health without overly constraining consumption. Using coping strategies (selling assets, borrowing etc.) to purchase health care may point at a lack of financial protection, but is not a good indicator. Financial protection therefore should refer to the protection of the consumption. An impoverishment target would not capture this: therefore, a catastrophic expenses target is needed as well.

A definition: Financial protection is achieved when the means of financing health care insure that given a household’s resources, financial coverage and health its potential medical needs are affordable without inordinate sacrifice of present and future consumption opportunities. Retrospective refers to burden (ex post), prospective to risk of health payments. In financial risk protection measures we talk about risk but actually measure it through past events (burden).

FRP can be measured at the household level (household payment, resources, threshold) and at the aggregate level (across all household, weighted or unweighted, e.g. looking at the bottom 40%). The impact of earnings losses in case of health problems is potentially much larger than health payments, but should not be considered for UHC here as these are not addressed through health financing.

It is necessary to be careful with the interpretation of financial risk protection measures, and guidance on interpretation should be included in the document. The following points summarize the main discussions:

- FRP measures must be interpreted alongside service coverage measures. (There still was a concern of some that this was not sufficient to capture those who forego services because of financial barriers).
- Data collection instruments are often not comparable.
- These are retrospective measures and cannot be used as measures of future risk. Health insurance, pre-payment schemes or similar measures could be used to assess the risk of future catastrophic expenses.
- Comparisons may be very sensitive to thresholds (cut-offs for catastrophic payment, poverty line).
- The household level of resources / income is not constant and has an impact on the trends.
- Coping strategies influence of the trends and should not be considered ideal financial risk protection but do not mean zero protection either.
- Measures often do not include the premiums. Consistency is desirable.

Data availability and quality

In terms of standard instruments, the LSMS has a long module on health expenses. There is a need for a shorter module to be included in health and other surveys. Issues include the
recall period: e.g. shorter recall period for outpatient care and longer for inpatient care; measuring discretionary and non-discretionary medicines (e.g. personal choice of picking brand name over generic). Previous efforts to standardize have to this point not led to one standard instrument. This complicates the measurement of trends, as there is wide variation in the ways data are collected on medical consumption.

The main data sources are the Luxembourg income survey (63 surveys in 21 countries, mostly OECD), LSMS (101 surveys, 66 countries, all developing), standardized household expenditures (155 surveys, 67 countries, all developing). Over three decades 295 surveys in 110 countries have been identified. This however still implies a very small basis for a baseline estimate for 2015. Since there is no single standardized instrument, there is a need to develop a short instrument that is used across countries.
3 Intervention Coverage

Main comments from the web consultation prior to the meeting

• Mixed opinions about the usefulness of the split between MDG and chronic conditions and injuries (CCI)
• Proposal not to introduce CCI, but stick to NCD and mental health and injuries
• More emphasis on other dimensions: prevention to palliation, level of care, life course instead of type of health condition/burden
• Quality of services and effective coverage do not receive enough attention in coverage indicators
• Indicators do not include rehabilitation (disability) and palliative care, but also metrics related to access and quality of care (surgery, eye care, SRH, health in emergencies etc.)

A set of presentations covered the general issues related to indicator selection, the OECD approach to monitoring UHC related indicators, the WHO surveys on risk factors for NCDs with special attention for hypertension and diabetes treatment coverage, effective coverage measurement, experience with MNCH indicators in the MDG era, and new approaches in household surveys such as continuous surveys.

The discussion covered the following issues:

Classification of coverage indicators: There are different dimensions of the coverage indicators, which can be classified according to the type of condition (MDG, NCD, injuries), type of intervention (promotion, prevention, treatment, rehabilitation, palliation), stage of the life course (from preconception to old age) and level of delivery of the intervention (non-personal or public services, primary, secondary and tertiary level). It was agreed that the MDG – NCD /mental health / injury division was useful, also based on the country presentations at the meeting, but that the distinction may disappear over time. Distinguishing between levels of service delivery was also considered a useful classification.

Selection of core set for global monitoring: Global core set useful from country perspective – a broader set of standardized tracer indicators also useful. There are at least 60 candidate intervention or service coverage indicators for measurement of progress towards UHC. Many, however, have critical measurement problems especially treatment indicators which require adequate determination of the population in need. For instance, the OECD indicators of more surgical interventions such as cardiac revascularization procedures and hip replacement are not related to population need, as this cannot be measured objectively at the moment, but simply present the occurrence of the intervention. The collection of data on biomarkers, such as blood pressure or blood glucose markers, in household surveys has great potential for better measurement of population need for treatment (STEPS). But such health examination surveys are not conducted in a majority of countries, and often not on a regular basis, given their cost.

The pros and cons of tracer indicators versus composite measures are well-known. The resonance with policy makers is critical. Transparency in the computation and presentation of composite measures is essential but may not be enough to make them acceptable to policy makers.

Effective coverage (adapted from the report of the first Bellagio meeting Sep 2012)
There are several ways in which the quality of care dimension can be brought into the monitoring of UHC. Ideally, the quality of care dimension is captured in the coverage indicator itself. Effective coverage has been defined as the fraction of maximum possible health gain an individual with a health care need can expect to receive from the health. This implies that simply receiving an intervention is not sufficient – the intervention needs to be delivered with quality. The measurement of effective coverage is difficult but can be approximated for some indicators. This can best be done through health examination surveys. A good example is hypertension and vision problems.

<table>
<thead>
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<th>“Treatment”</th>
<th>yes</th>
<th>no</th>
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<tbody>
<tr>
<td>Test</td>
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<tr>
<td>Positive (e.g. high BP)</td>
<td>a</td>
<td>c</td>
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<tr>
<td>Negative</td>
<td>b</td>
<td>d</td>
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Prevalence: \((a+b+c) / (a+b+c+d)\) (STEPS definition)
Coverage intervention = \((a+b) / (a+b+c)\)
Effective coverage = \(b / (a+b+c)\)

**Quality dimension of coverage indicators – effective coverage:** Different approaches are in use to measure quality. OECD uses a set of separate indicators to measure health care quality in countries, e.g. cancer screening + survival rates on treatment; acute care in hospital for cardiovascular disease (CFR following AMI and stroke), mental health care (excess mortality for people with mental disorders) etc. The WHO STEPS surveys include biological and clinical data collection and can be used to compute effective coverage for hypertension and diabetes control (defined as those with normal blood pressure at the time of the survey and on treatment divided by all with hypertension or on treatment). The coverage estimates for hypertension and diabetes were on average 50-60% lower, relatively, than the coverage estimates. IHME focuses on a global project to track treatment coverage by disease, using data from all surveys and health facility contact data sets, with health system and other covariates to fill data gaps, and estimate effective coverage based on literature on efficacy.

Effective coverage does not necessarily need to be defined at the individual level but can be defined a measure of the fraction of potential health gain that is actually delivered to the population through the health system. Need, utilization and quality are important, but one really needs to know the burden.

UHC monitoring needs to be explicit about quality of services. This can be done at different levels. Ideally, the effective coverage indicators use objective measurements of status and need (e.g. diabetes). In other cases, additional indicators are needed to describe health gains (e.g. survival rates), or service quality indicators (service provision (adherence to protocols) or service readiness).

**Gaps in the measurement of coverage:** there are multiple gaps including access/use of primary care services, mental health, injuries, nutrition, chronic disease treatment, acute illness in children, treatment of stroke, surgical care, rare conditions, dementia etc. In some cases a proxy measure will have to be selected until better coverage measures are found.

### 4 Equity and disaggregation

**Main comments from the web consultation prior to the meeting**
• Be more explicit about the link between global and country targets, as in the overall framework.
• Different points of view about absolute and relative targets
• Targets for the non-health sectors need to be included; set targets for strengthening health systems
• How to capture progressive realization?
• More explicit recognition of the need to reach both targets in parallel: FRP and coverage
• Considerable opposition to the 80% coverage target for the bottom 40%; dislike of the bottom 40%
• Emphasis on a range of other determinants and the multidimensional nature of poverty and vulnerability critical.
• Propositions to focus on the gap within countries in monitoring rather than absolute progress

Social determinants of health are important, and some have argued for explicit inclusion (Vega J, Frenz P. Integrating social determinants of health in the universal health coverage monitoring framework. Rev Panam Salud Publica. 2013;34(6):468–72.) While social and environmental determinants of health are clearly very important, the meeting felt that it was not appropriate to include these indicators as UHC indicators, but rather ensure that these are included elsewhere (especially the post-2015 development agenda), as these are not directly related to coverage of health services. (Universal coverage of health services is designed in fact to mitigate as much as possible any health inequalities arising from such broader social determinants of health).

Equity stratifiers should be expanded to include wealth, urban-rural/subnational, and/or gender, while encouraging countries to stratify further by relevant criteria such as ethnicity. The choice between bottom 40% or bottom 20% was discussed. There are pros and cons for both, no agreement. It was also noted that even the bottom 20% may miss out the poorest poor. Tracking the distribution across all quintiles needs to be done by countries.

Bottom 40%: there are different opinions about the advantages and disadvantages of a focus on an absolute target for the poorest 40%. The advantages are that it is a large population group, easy to communicate, and can be measured well in household surveys. The disadvantages are that it is not sensitive to the poorest of the poor and may miss the point. It also disregards the shape of inequality across an entire population, which is important in considering policy changes to increase coverage. It is a presentation / communication issue and not a measurement issue. What is the best way to frame the pro-poor approach? What will resonate best politically? Have a target for reducing the gap between the rich and poor may not be as ambitious as at least 80% coverage for the bottom 40%.

Global target: universal means 100% (by 2030), but, based on analyses of past trends, is unlikely to be achieved in any society, especially if it concerns effective coverage. The efficacy of treatments, user compliance and misclassification in measurement of the coverage numerator and denominator are all critical factors.

Intermediate target: is important and there are several options: e.g. at least 80% coverage among bottom 40% or 20% by 2025 (or 2020 but that seems too ambitious and too early); at least 80% coverage among 10-20 main interventions by 2020/2025; relative reduction of the coverage gap (100 minus coverage) by year X.

It was noted that those that do not specify gap reductions or progress for certain groups are not necessarily going to promote progressive universalism so equity interim targets have a
particular appeal, e.g. 5 year interim targets to appeal to political leaders. A question of whether these targets should be globally set or is there added value to country-level targets.3

Country-specific target setting is critical. The gap between the poorest and best off quintile is proposed by some as an additional measure of progress. There are however many indicators that are also low for the better off, and therefore it may not be useful to focus on the gap.

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DHS surveys are conducted every five years, MICS are now every three years. Continuous surveys have been a successful experiment in Peru and Senegal has now initiated a small continuous survey.

Managing the demand for survey data is critical. The driver should be the likelihood of change over time. Coverage indicators may change considerably if major efforts are made. Risk factors are probably less likely to rapidly change. Economic surveys for health data collection are underutilized.

Improvement of facility information to obtain information in the interim period between surveys is critical. Facility data do not routinely provide socioeconomic stratifiers. There are however research studies that have shown that through exit surveys or by including socioeconomic data collection for hospital admissions such data could be included (and linked to other sources with population data).

On communication, there are multiple objectives. The monitoring framework should be a compelling narrative for non-technical audiences, useable for advocacy. On the other hand countries need to track – technical guidance is required.

It is useful to distinguish three levels – country monitoring, global UHC monitoring, post-2015 agenda. The paper needs to explicitly refer to those segments. It would also be useful to describe the pros and cons better. This would help the messaging. What are the outcomes of interest and how can we pick a set of tracers that can work best to achieve this? A composite measure presents a set of additional challenges for the communication.

Accountability: make UHC integral part of national health sector strategic plan monitoring with regular reporting and intermediate targets. This can also benefit from processes for establishing differentiated and interim targets (if they are established) such as the Country Countdown or IHP Joint Assessment of National Strategies models.

Targets: what is the best language around targets? Zero, universal, 100%? There may be a distinction between a communication target and a measurement target (as is done for HIV for instance with zero targets, but relative reductions in measurement targets). There are many targets, often they have been set without thorough analyses underpinning it, stressing the aspirational aspect of it, but leaving many issues around the plausibility. Relative targets have been successful for the MDG, even though these were focused on the national achievements.

Composite measures: there are several examples of indexes that have become well-established such as the Human development index. Benefits include the added value of
reducing the emphasis on diseases silos, with less emphasis on long lists of indicators to satisfy all interest groups. Some challenges are the selectivity of indicators for inclusion and resulting competition between interest groups, overcoming communication challenges to have it as an accepted concept/measure, and transparency. The disadvantages are the need to recognize specific interests and the opaqueness as well as communication. There is also resistance to possible rankings based on the aggregate results. For UHC the approach has been cautious, it would take too much consensus building and little chance of agreement.