Monitoring Progress towards Universal Health Coverage at Country and Global Levels: A Framework

Joint WHO / World Bank Group Discussion Paper [1]
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[1] This discussion paper is available at:
http://www.who.int/healthinfo/country_monitoring_evaluation/universal_health_coverage/en/

Introduction

In recent years, there has been a growing movement across the globe for universal health coverage (UHC) – ensuring that everyone who needs health services is able to get them, without undue financial hardship.[2] This has led to a sharp increase in the demand for expertise, evidence, and measures of progress towards UHC and a push for UHC as one of the possible goals of the post-2015 development agenda.[3] This discussion paper proposes a framework for tracking country progress towards UHC, assessing both the aggregate and equitable coverage of health services, as well as financial risk protection.

This paper has been developed jointly by the World Health Organization (WHO) and the World Bank Group (WBG), building upon a series of discussions with country representatives, technical experts, and global health and development partners.[4] WHO and the WBG are seeking feedback on the proposed UHC monitoring framework herein from countries, development partners, civil society, academics, and other interested stakeholders. This feedback[5] will inform the further development and refinement of a common framework for monitoring progress towards UHC at country and global levels.

UHC: Towards a Common Framework for Monitoring Progress

UHC has been defined as a situation where all people who need health services (prevention, promotion, treatment, rehabilitation, and palliative) receive them, without undue financial hardship (World Health Report 2010). UHC consists of three inter-related components: i) the full spectrum of quality health services according to need; ii) financial protection from direct payment for health services when consumed; and iii) coverage for the entire population.

Country Monitoring

This paper proposes a framework for UHC monitoring that is part of a comprehensive framework for monitoring national health system performance.[6] UHC monitoring focuses on two discrete components of health system performance: the levels of coverage for health interventions and financial risk protection, with a focus on equity. Country UHC monitoring, as the basis of the framework, aims to ensure that progress towards UHC reflects a country's unique epidemiological and demographic profile, population demands, health system, and level of economic development. These country-specific dimensions are critical to inform what should be monitored; for example, emerging economies may want to focus on how best to expand essential services to remote areas, whereas high-income countries may want to focus on rationalizing the package of health services for a growing elderly population. While country context will drive the specific measures used, the domains for monitoring – access to essential, quality services; financial protection; and the population covered – will be used across all countries, regardless of their level of income or their specific health needs.

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[2] World Health Organization. The World Health Report - Health systems financing: the path to universal coverage [Internet]. WHO Geneva, 2010. Available from: http://www.who.int/whr/en/index.html

[3] United Nations. A new global partnership: eradicate poverty and transform economies through sustainable development. Report of the High-Level Panel of Eminent Persons on the Post-2015 Development Agenda. New York, May 2013. Available from: http://www.post2015hlp.org/wp-content/uploads/2013/05/UN-Report.pdf

[4] http://www.who.int/healthinfo/country_monitoring_evaluation/universal_health_coverage_meeting_sept2013/en/index.html

[5] Comments on this proposed framework can be sent in writing before February 15, 2014 to uhcmonitoring@who.int or HNPfeedback@worldbank.org.

[6] World Health Organization. Monitoring, evaluation and review of national health strategies: a country-led platform for information and accountability. IHP+ and WHO, 2011. Available from: http://www.who.int/healthinfo/country_monitoring_evaluation/documentation/en/index.html, accessed 21 Sep 2013

Global Monitoring

Given the widespread interest in accelerating progress towards UHC, there is value in standardizing measures so that they are comparable across borders and over time. The global framework outlined in this paper aims to encourage countries to adopt a common approach to UHC monitoring, measuring country data against internationally standardized indicators. Periodic global monitoring permits cross-country comparison of progress towards UHC that enables countries to learn from one another. It should be noted, however, that global monitoring is not a substitute for national monitoring, and that countries are encouraged to tailor measures of UHC drawing on this framework to best reflect their own context.

UHC and the Post-2015 Development Framework

Monitoring progress towards UHC is central to achieving the global goals of the WBG and WHO, the Millennium Development Goals (MDGs), and the emerging post-2015 global development framework.[7] The WBG has set a global goal of ending extreme poverty by 2030. This goal can be realized only if hundreds of millions of families no longer risk impoverishment through payment for health services, and their education and work opportunities are not unduly constrained by illness. Similarly, the WBG's global goal to boost shared prosperity for the poorest 40% of the population in every developing country is closely aligned with WHO's focus on equity and the High-Level Panel's recommendation to "hardwire" equity into all post-2015 measures.

There is an emerging consensus that the post-2015 agenda should address the unfinished agenda of the health-related MDGs as well as the emerging burden of chronic conditions and injuries (CCIs). There is already a strong foundation of existing health indicators to build upon, including the intervention coverage indicators[8] of the health-related MDGs, such as immunization and antiretroviral therapy coverage, the recommended priority interventions related to non-communicable diseases (NCDs),[9] and indicators of financial risk protection.[10]

In the context of the post-2015 development agenda, the importance of multisectoral influences on health should be acknowledged, although it is not explicitly addressed in this paper. Further work is needed to firmly link monitoring of progress towards UHC with monitoring the social and environmental determinants of health and sustainable development.

Guiding Principles

The following guiding principles underlie the proposed common approach to monitoring UHC:

1) The framework should comprise two inter-related, but separate, UHC measures: i) essential health services coverage for the population; and ii) financial protection coverage for the population.

2) UHC measures of health service coverage and financial protection coverage should encompass the full population across the life cycle, inclusive of all ages and gender.

3) These measures should capture all levels of the health system. Some service coverage interventions such as tobacco taxes are delivered society-wide, while others, such as emergency obstetric care, are provided in specialized health facilities. Similarly, financial protection measures

[7] United Nations. A new global partnership: eradicate poverty and transform economies through sustainable development. Report of the High-Level Panel of Eminent Persons on the Post-2015 Development Agenda. New York, May 2013. Available from: http://www.post2015hlp.org/wp-content/uploads/2013/05/UN-Report.pdf

[8] World Health Organization. Monitoring maternal, newborn and child health; understanding key progress indicators. A report prepared by Countdown for Maternal, Newborn and Child Health, Health Metrics Network and WHO. Geneva. 2011.

[9] UN General Assembly Resolution 66/2 and World Health Assembly Resolution EB 130/R7 (2012).

[10] Xu, K., D.B. Evans, G. Carrin, A.M. Aguilar-Rivera, P. Musgrove, T.G. Evans. "Protecting households from catastrophic health expenditures". Health Affairs, 26(4):972-983, 2007.

should cover all levels of the health system, recognizing that costs incurred for services may vary widely.

4) All measures should be disaggregated by socioeconomic strata to assess the degree to which service and financial protection coverage are equitably distributed. All health systems have significant stratification in terms of risks to ill-health and access to, and payments for, services according to household income, gender, place of residence, and educational attainment.

Methodological Considerations

To apply these principles to the two proposed UHC measures for service coverage and financial protection coverage, there are a number of important assumptions and methodological considerations.

Service Coverage

The proposed framework includes two measures for service coverage (Figure 1):

1) The set of interventions related to the health MDGs, with a focus on communicable diseases, reproductive health, and nutrition for mothers and children; and

2) The set of interventions related to CCIs, with a focus on addressing NCDs, mental health, and injuries for adolescents, adults, and the elderly.

For both of these measures, the proposed framework covers services provided at all levels of the health system. These include non-personal or population health interventions, community-based delivery, primary health facility services, secondary health facility (hospital) services, and tertiary hospital services. This spectrum of services is simplified into two broad categories: services for i) promotion and prevention; and services for ii) treatment and care (Figure 1).

Within each of these service coverage areas, the proposed framework includes specific indicators of coverage for priority services. Selection criteria for these indicators take into account a wide range of factors related to:

- *Relevance* – Do the indicators measure conditions of priority health needs? Is the service cost-effective? Is the service a source of major health care expenditure?

- *Quality* – Do the indicators measure effective or quality-adjusted coverage?

- *Availability* – Are the indicators regularly, reliably, and comparably measured (i.e. numerators/denominators/equity stratification) with existing instruments (e.g. household surveys or health facility information systems)?

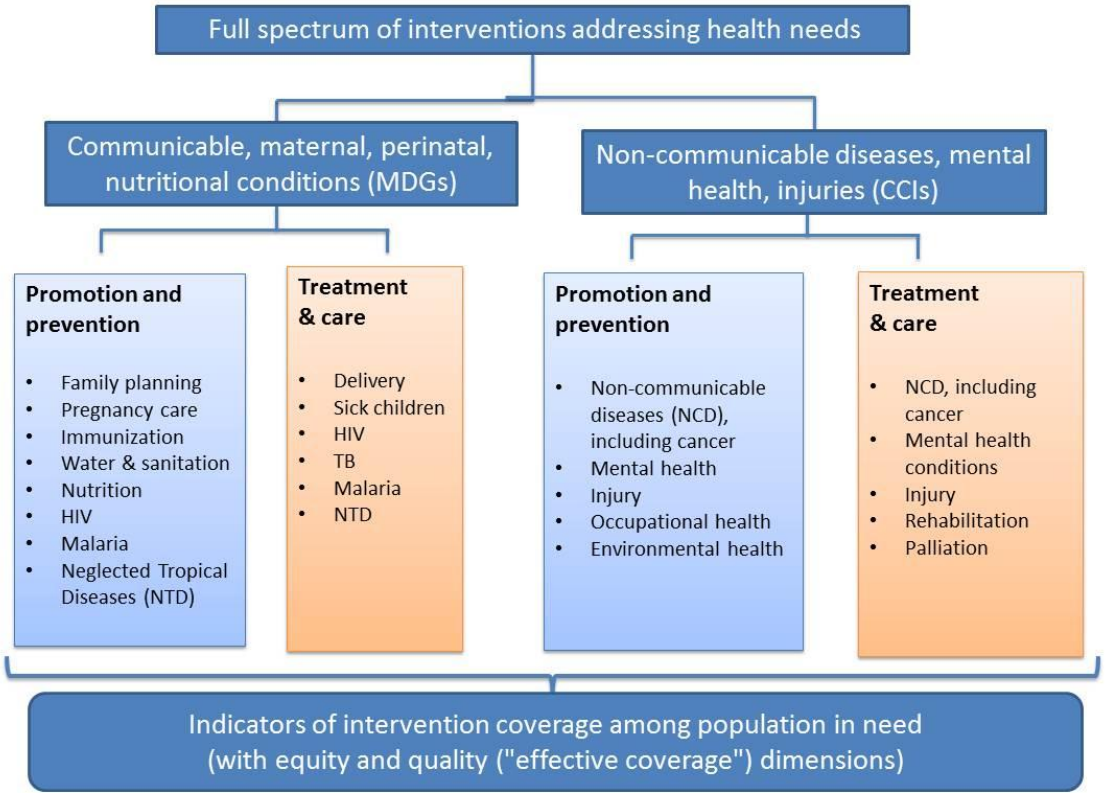
Applying these criteria reveals a relative skew of relevant, quality, and available service coverage indicators towards population and preventive interventions. The relative paucity of good treatment and care coverage indicators reflects the challenges of determining population needs for conditions that require facility-based care. This is an important concern, as illnesses requiring acute or chronic hospitalization are often associated with higher financial risks and many people may forego these services because they cannot afford them.

A shortcoming of existing service coverage measures is the difficulty in incorporating quality-adjustments, or what is often referred to as "effective coverage," as opposed to simply measuring "contact" or "access" coverage. While there are some indicators for which "effective coverage" can

be monitored (e.g. tuberculosis treatment, vision correction, diabetes, and hypertension control), additional indicators beyond service coverage are needed to capture quality for many other services.[11]

Notwithstanding these concerns, the full spectrum of single intervention measures of coverage can be aggregated into two *composite* measures of service coverage – one for the MDGs and the other for CCIs. This enables the comparison of service coverage for either the MDGs or CCIs as a group across countries, rather than only being able to compare coverage of single interventions. Aggregation of service coverage measures entails an explicit approach to the criteria for weighting of interventions, which range from "equal" weighting (i.e. all services are equally weighted); to "unequal" weighting, whereby coverage of an intervention that affects the risks of disease in 100% of children (e.g. immunization) might be given a higher weight than an intervention that covers less than 1% of children (e.g. appendectomy).

Figure 1. Framework for Selection of Indicators to Monitor Service Coverage



Financial Risk Protection Coverage

There are two commonly used indicators to track the level of financial risk in health: the incidence of catastrophic health expenditures, and the incidence of impoverishment due to out-of-pocket health payments.[12] The former indicator shows the number of households of all income levels who suffer financial hardship because of relatively large health payments in a given time period, while the latter indicator can capture the fact that even relatively small payments can have severe financial consequences for people living in poverty or close to the poverty line.[13]

[11] http://www.oecd.org/health/health-systems/healthcarequalityindicators.htm
[12] Although authors differ in the way they measure the indicators, there is broad acceptance of the concepts.
[13] Two other indicators sometimes used – although less understandable and accessible to policy makers – include: i) "depth of poverty" – the extent to which out-of-pocket health payments worsen a households' pre-existing level of poverty, and ii) the "mean catastrophic positive overshoot" – the average amount by which households affected by catastrophic expenditures pay more than the threshold used to define catastrophic health spending.

Both financial risk measures can be re-scaled so that 100% coverage represents full financial protection. This "protection from catastrophic spending" indicator would measure the percent of the population that does not experience catastrophic payments, while a "protection from impoverishment" indicator would be the percent of the population that is not impoverished through out-of-pocket spending. The rescaled impoverishment measure would measure the poverty gap in the absence of out-of-pocket payments as a share of the actual (larger) poverty gap. The more out-of-pocket payments push non-poor families into poverty and already-poor households deeper into poverty, the further this rescaled impoverishment indicator will be from 100% coverage.

Equity in Coverage

At the heart of UHC is a commitment to equity. Yet in countries on the path to UHC, there is a risk that the poorer and more disadvantaged segments of the population could be left behind.[14] So in addition to measuring average or aggregate levels of service and financial coverage, it is essential to have measures disaggregated by a range of socioeconomic and demographic stratifiers, such as income/wealth, sex, age, place of residence, minorities and migrants, etc.

A variety of measures are available for capturing differences in coverage across population groups.[15] The simplest is a comparison between the levels of the extreme groups (or one extreme group and the population as a whole). This proposed framework focuses on the poorest 40% of the population as compared to the entire population. This is consistent with the WBG's shared prosperity goal, and permits a way to compare progress at the population level (the aggregate goal) and progress among the poorest 40% of the population (the equity goal).

Thus, this framework includes measures of service coverage for MDGs and CCIs as well as the measure of financial risk protection coverage for catastrophic payments are expressed both for the population as a whole and for the poorest 40%. However, the financial risk protection measure of impoverishment due to expenditure on health is not expressed with respect to the poorest 40% of the population, as the consequence of impoverishment is considered equally important regardless of whether the initial wealth status of the household is rich or poor.

Targets for Assessing Country Progress towards UHC

Setting specific targets can drive progress towards UHC. For essential health services, the ideal coverage target would be 100% across the cluster of priority interventions. However, it might be more realistic, especially with respect to the low levels of coverage amongst the poorest 40% of the wealth distribution, to set a lower target such as at least 80% coverage. This so-called "80:40" target would be associated with both the MDGs and the CCIs intervention groups.

For financial protection, the target for UHC could be set at 100% protection from both impoverishing and catastrophic health payments for the population as a whole as well as for the poorest 40% of the population.

For both the service and financial risk protection coverage measures, timelines for achieving the UHC targets could be set to correspond with the 2030 timeframe of the emerging post-2015 development framework. The rates of improvement necessary to achieve the targets in coverage over the next 15 years could be easily determined based on the current levels of coverage in 2015.

[14] Gwatkin DR, Ergo A. Universal health coverage: friend or foe of health equity? Lancet 2011; 377: 2160-1 doi: 10.1016/S0140-6736(10)62058-2 pmid: 21084113.
[15] Wagstaff A, Paci P, van Doorslaer E. On the measurement of inequalities in health. Social Science & Medicine 1991; 33(5): 545-57.

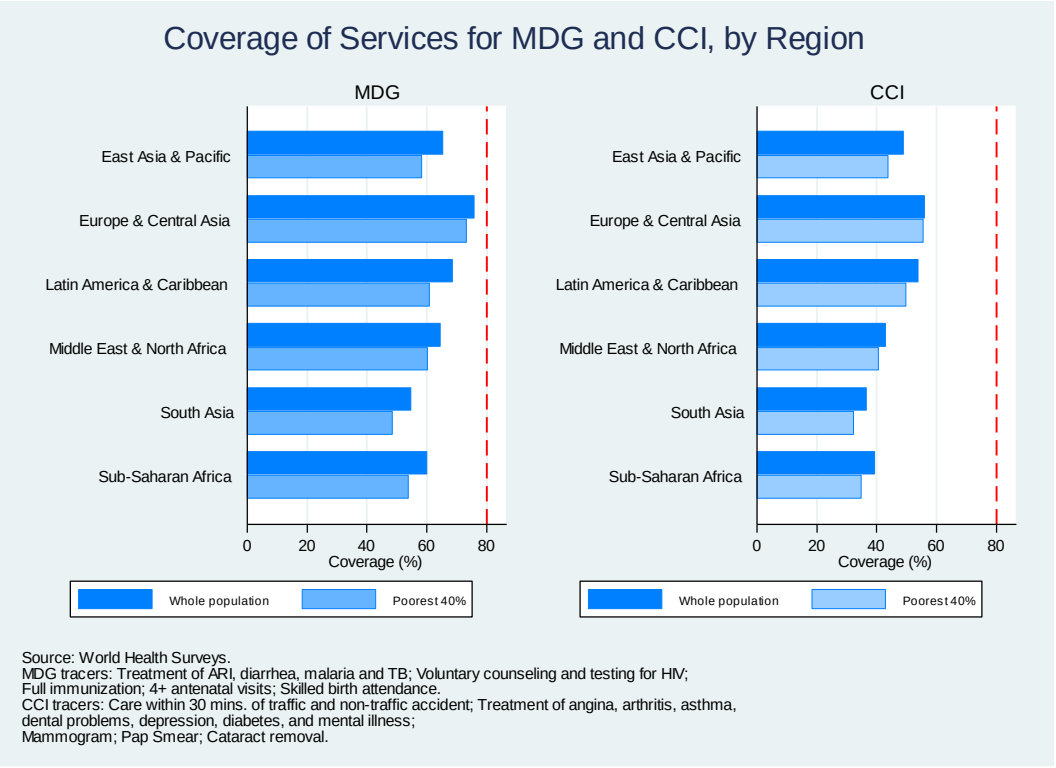
Illustrative Measures of Monitoring UHC

In this section of the paper, UHC measures and targets for service and financial protection coverage are illustrated based on the framework and methodological approaches to measurement described above, using the WBG's regional groupings.[16]

Service Coverage Measures

The first example compares aggregate and equity measures of service coverage for MDG- and CCI-related intervention areas by region using data from household surveys and from the World Health Survey (WHS) 2002-2003[17] (Figure 2). The shortfalls in coverage relative to the 80% coverage target (the red dotted line) are visible with coverage of the MDGs higher than coverage of the CCIs across regions. For both the MDGs and CCIs – related interventions, coverage is lower among the poorest 40% of the population.

Figure 2. Coverage of Services for MDGs and CCIs – Related Interventions



Source: World Health Surveys.
MDG tracers: Treatment of ARI, diarrhea, malaria and TB; Voluntary counseling and testing for HIV; Full immunization; 4+ antenatal visits; Skilled birth attendance.
CCI tracers: Care within 30 mins. of traffic and non-traffic accident; Treatment of angina, arthritis, asthma, dental problems, depression, diabetes, and mental illness; Mammogram; Pap Smear; Cataract removal.

[16] The WBG regions are broadly but not exactly comparable to the WHO regions as follows: WB/EAP and WHO/WPRO; WB/SAR and WHO/SEARO; WB/MENA and WHO/EMRO; WB/AFR and WHO/AFRO; WB/ECA and WHO/EURO; and WB/EAC and WHO/PAHO.

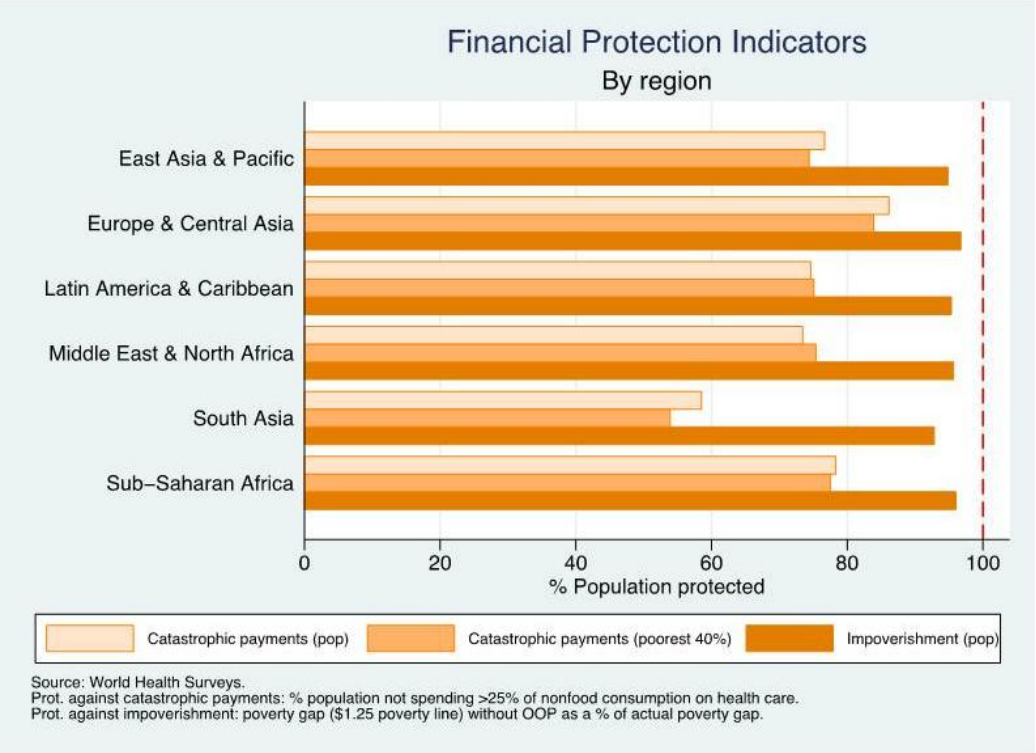
[17] The WHS, conducted in 70 countries in 2002-03, deployed a household questionnaire that covers the need for, and receipt of, a large number of interventions for the MDGs and CCIs, as well as health and non-health (including food) spending at the household level. Drawing on the household "wealth index," the poorest 40% of households were identified, providing the stratification necessary for equity measures of both service and financial protection coverage.

Financial Risk Protection Measures

The same WHS data are used to generate three measures of financial protection coverage: i) the incidence of catastrophic expenditure, ii) the incidence of catastrophic expenditure amongst the poorest 40%, and iii) impoverishing expenditure as measured by the "depth" – or 'poverty gap" – version of the indicator.[18]

Figure 3 shows that the rates of protection against catastrophic spending are much lower than rates of protection against impoverishment. As such, the shortfalls in coverage relative to the target of 100% coverage in financial risk protection are much lower for protection against impoverishment expenditures than for protection against catastrophic expenditures. Figure 3 also compares the equity dimension of catastrophic expenditures showing that the poorest 40% have slightly lower protection against catastrophic expenditures in four of the six regions.

Figure 3. Financial Protection Coverage Measures by Region



Recommendations

This discussion paper illustrates how the concept of UHC can be translated into measures that are valid and comparable across countries. Together, these measures can provide a snapshot of health system performance with respect to coverage for essential health services and financial risk protection both in the population as a whole and in the poorest 40% of the population. Using the "80:40" target for service coverage and the zero impoverishment target, countries can identify their coverage gaps and ascertain how far and fast they will need to improve performance of their health system. The proposed UHC measures can thus provide a valuable contribution to the assessment of health systems performance related to equitable coverage of services and fair financing, as a complement to other measures of performance.

[18] In computing catastrophic spending, ability-to-pay was measured as non-food consumption. The threshold for catastrophic spending was set at 25%. The international $1.25-a-day poverty line was used in computing impoverishment. The poverty gap version of the "protection against impoverishment" was used.

Global-Level Monitoring

Building on the above framework and approaches to measuring progress towards UHC, we propose the following goal, targets, and indicators for UHC be considered for inclusion in the post-2015 development agenda:

Goal: Achieve UHC – All people should have access to the quality, essential health services they need without enduring financial hardship.

Targets:

- By 2030, at least 80% of the poorest 40% of the population have coverage to ensure access to essential health services.

- By 2030, everyone (100%) has coverage to protect them from financial risk, so that no one is pushed into poverty or kept in poverty because of expenditure on health services.

Indicators:

1. **Health Services Coverage:**
    a. **MDGs:**
        i. *Aggregate:* A measure of MDG-related service coverage that is an aggregate of single intervention coverage measures.

        ii. *Equity:* A measure of MDG-related service coverage as described in 1a.i for the poorest 40% of the population.
    b. **CCIs:**
        i. *Aggregate:* A measure of CCIs-related service coverage that is an aggregate of single priority interventions to address the burden of NCDs, including mental health and injuries.

        ii. *Equity:* A measure of CCI service coverage as described in 1b.i for the poorest 40% of the population.

2. **Financial Risk Protection Coverage:**
    a. **Impoverishing Expenditure:**
        i. *Aggregate:* A measure of the level of household impoverishment arising from out-of-pocket expenditures on health, equal to the ratio of the poverty gap in a world without out-of-pocket payments to the actual (larger) poverty gap.

    b. **Catastrophic Expenditure:**
        i. Aggregate: The fraction of households incurring catastrophic out-of-pocket health expenditures.

        ii. *Equity:* The fraction of households among the poorest 40% of the population incurring catastrophic out-of-pocket health expenditures.

Country-Level Monitoring

Beyond the proposed global UHC goal, targets and indicators, most countries will want to tailor UHC monitoring to suit their own contexts. For example, countries with a low burden of communicable diseases could include a broader range of indicators for CCIs. Moreover, the tracking of progress towards UHC outcomes should be part of a more comprehensive monitoring of health sector performance that is inclusive of critical inputs, outputs, and health outcomes.

Investing in Better UHC Monitoring

Global- and country-level UHC monitoring is currently constrained by the limited number of indicators of service coverage that are relevant, of reasonable quality, and available through existing measurement instruments. Investing in the development of a more comprehensive set of indicators and survey instruments for assessing coverage of services and financial protection is an important global public good and a good value for money in the pursuit of the goal of UHC.