

特集：持続可能な開発目標（SDGs）に基づく今後のグローバルヘルス

< Review >

Global arguments about monitoring the progress of Universal Health Coverage and health financing measures

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**Abstract**

Universal Health Coverage (UHC) is a key target of Sustainable Development Goal (SDG) 3. UHC is a comprehensive approach to improving access to health without financial burden, which is a fundamental human right and provides the basis for economic and social development, as well as social stability. Three key components of UHC, namely population coverage, service coverage, and financial protection, are inextricably associated with health financing.

In the SDGs, one of two indicators for monitoring UHC progress is financial protection, which helps individuals decrease the risk of catastrophic expenditure in health. Although further discussion is possible on the threshold of catastrophic payment, this is an important, imperative step towards UHC achievement.

This paper presents an overview of trends in strengthening health financing and monitors its progress in the context of UHC.

**keywords:** universal health coverage (UHC), health financing, financial protection, monitoring indicator  
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**I. Sustainable Development Goals and universal health coverage**

Subsequent to the Millennium Development Goals (MDGs), 193 member states of the United Nations adopted the Sustainable Development Goals (SDGs) in September 2015. The SDGs are composed of 17 goals and 169 targets, aiming, by 2030, to address issues such as poverty and hunger, inequalities within and among countries, and protection of the Earth and its natural resources [1]. While the SDGs are not legally binding, all member states are expected to frame their national plans in line with these.

Some notable characteristics of SDGs, compared to MDGs, are universality—not only developing countries but all member states abide by them, more comprehensive targets, shifting from reliance on foreign aid to self-

sustaining funding, and introducing monitoring systems.

From the perspective of public health, health targets are grouped under SDG 3 "Ensure healthy lives and promote well-being for all at all ages," with 13 targets and 26 indicators (Table 1). Other health-related targets, such as nutrition, water and sanitation, air pollution, poverty, education, and inequality are part of other goals.

While some health targets, such as child and maternal mortality (targets 3.1 and 3.2) and HIV/AIDS (target 3.3), have been already included in the MDGs, others, including universal health coverage (UHC) (target 3.8), have been newly specified in the SDGs. The definition of UHC is "all people and communities can use the promotive, preventive, curative, rehabilitative and palliative health services they need, of sufficient quality to be effective, while also ensuring that the use of these services does not expose

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**Table1. Targets and Indicators of Sustainable Development Goal 3**

Target		Indicator	
3.1	By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births	3.1.1	Maternal mortality ratio
		3.1.2	Proportion of births attended by skilled health personnel
3.2	By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births	3.2.1	Under-five mortality rate
		3.2.2	Neonatal mortality rate
3.3	By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases	3.3.1	Number of new HIV infections per 1,000 uninfected population, by sex, age and key populations
		3.3.2	Tuberculosis incidence per 100,000 population
		3.3.3	Malaria incidence per 1,000 population
		3.3.4	Hepatitis B incidence per 100,000 population
		3.3.5	Number of people requiring interventions against neglected tropical diseases
3.4	By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being	3.4.1	Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease
		3.4.2	Suicide mortality rate
3.5	Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol	3.5.1	Coverage of treatment interventions (pharmacological, psychosocial and rehabilitation and aftercare services) for substance use disorders
		3.5.2	Harmful use of alcohol, defined according to the national context as alcohol per capita consumption (aged 15 years and older) within a calendar year in litres of pure alcohol
3.6	By 2020, halve the number of global deaths and injuries from road traffic accidents	3.6.1	Death rate due to road traffic injuries
3.7	By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes	3.7.1	Proportion of women of reproductive age (aged 15-49 years) who have their need for family planning satisfied with modern methods
		3.7.2	Adolescent birth rate (aged 10-14 years; aged 15-19 years) per 1,000 women in that age group
3.8	Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all	3.8.1	Coverage of essential health services (defined as the average coverage of essential services based on tracer interventions that include reproductive, maternal, newborn and child health, infectious diseases, non-communicable diseases and service capacity and access, among the general and the most disadvantaged population)
		3.8.2	Proportion of population with large household expenditures on health as a share of total household expenditure or income
3.9	By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	3.9.1	Mortality rate attributed to household and ambient air pollution
		3.9.2	Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe Water, Sanitation and Hygiene for All (WASH) services)
		3.9.3	Mortality rate attributed to unintentional poisoning
3.a	Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate	3.a.1	Age-standardized prevalence of current tobacco use among persons aged 15 years and older
3.b	Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all	3.b.1	Proportion of the target population covered by all vaccines included in their national programme
		3.b.2	Total net official development assistance to medical research and basic health sectors
		3.b.3	Proportion of health facilities that have a core set of relevant essential medicines available and affordable on a sustainable basis
3.c	Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States	3.c.1	Health worker density and distribution
3.d	Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks	3.d.1	International Health Regulations (IHR) capacity and health emergency preparedness

Source: Economic and Social Council. 2017 [2]

the user to financial hardship," thus making it fundamental among the 13 targets in SDG 3 [3].

## II. Importance of strengthening health financing for UHC

### 1. Key components of UHC

Health is a fundamental human right that provides the basis for economic and social development, as well as social stability. There is probably no objection against the idea of UHC as a comprehensive framework to improve people's health. However, the UHC concept is often considered too diffused and, therefore, difficult to transcribe into measurable indicators. In fact, to set indicators for monitoring UHC, several discussions have taken place among stakeholders over time.

Regarding UHC achievements, the World Health Organization (WHO) has stressed developing capacities in three aspects: population coverage, service coverage, and financial protection. Population coverage bears on equity in access to health services, since not all individuals can afford to pay the full cost at the point of service. Service coverage affects quality and volume of health services provided within an establishing/established health system. Financial protection impinges significantly on people's life and household. Thus, to pave the way towards UHC, it is imperative to balance between these three aspects.

Considering the sustainability of UHC, population coverage has a unique status between the three aspects, as it can be fully achievable. In contrast, given the advancements in technology and corresponding rising expenditures, ageing population, changes in disease structures, people's preferences, and others, service coverage and financial protection should continuously evolve in a seemingly endless process.

### 2. Why is strengthening health financing important for UHC?

The reason behind the several discussions on how

to strengthen health financing for UHC is that the aforementioned three aspects of UHC tightly connect with health financing. When a country increases its population coverage rate, the total health budget, whether from public or private funds, or tax-based or health insurance-based schemes, increases. If the covered services are extended, more pooling is needed, as is financial protection. The more people are protected from catastrophic payments that result in bankruptcy, the larger the pooled funds.

Meanwhile, regardless of revenue type, the financial resources that can be dedicated to health are limited. There is no magic number for an appropriate public spending level required for moving towards UHC, but some studies suggest a minimum of 5–6% of the GDP [4,5]. However, the budget for health systems from public sources is competitive with other sectors, and the total revenue of a country fluctuates depending on its economic situation. For countries that adopt health insurance schemes, the premiums are another funding source. Although premiums are less influenced by the economic situation than tax revenue and more flexible to increasing according to the total health expenditure in previous years, it is impossible to simply raise premium rates unlimitedly to respond to the demand of all beneficiaries.

Therefore, every country needs to expand its capacity for population coverage, service coverage, and financial protection considering limited financial resources. As such, the effective and efficient use of these limited financial resources is indispensable for moving towards and sustaining UHC.

## III. Monitoring progress in health financing

### 1. Monitoring UHC indicators

Two indicators monitor the progress towards UHC in SDGs: one indicator is about access to essential services (indicator 3.8.1) and the other is about financial protection (indicator 3.8.2). Given the importance of strengthening health financing on one hand and protecting people against

**Table 2. Changes in Two Indicators for Monitoring the Progress of UHC**

	47th session of the United Nations Statistical Commission (2016)	48th session of the United Nations Statistical Commission (2017)
3.8.1	Coverage of tracer interventions (e.g. child full immunization, antiretroviral therapy, tuberculosis treatment, hypertension treatment, skilled attendant at birth, etc.)	Coverage of essential health services (defined as the average coverage of essential services based on tracer interventions that include reproductive, maternal, newborn and child health, infectious diseases, non-communicable diseases and service capacity and access, among the general and the most disadvantaged population)
3.8.2	Fraction of the population protected against catastrophic/im-poverishing out-of-pocket health expenditure	Proportion of population with large household expenditures on health as a share of total household expenditure or income

Source: Economic and Social Council. 2016, 2017 [2,6]

financial risk on the other; it seems commendable that one of two indicators for UHC is financial protection.

Due to the "diffused" nature of the UHC concept and differences in opinion among stakeholders, both indicators have been under the discussion for a long period of time. In accordance with the discussion after adapting the initial indicators during the 47th session of the United Nations Statistical Commission in 2016, both indicators 3.8.1 and 3.8.2 were further modified at the 48th session of the United Nations Statistical Commission in 2017, as shown in Table 2. Indicator 3.8.1 changed its wording from "tracer interventions" to "essential health services," and defined more clearly the services that should be monitored. Changes in indicator 3.8.2 are described in detail in the next subsection.

**2. Monitoring progress in financial protection**

Prior and parallel to the SDG indicators for UHC, there have been several potential indicators for monitoring the progress of UHC. Table 3 compares health financing indicators in the Global Reference List of 100 Core Health Indicators by WHO [7] and in Tracking Universal Health Coverage, the first global monitoring report by WHO and the World Bank [8].

The initial proposal on indicator 3.8.2 for the 47th session of the UN Statistical Commission in March 2016 of the Inter-Agency and Expert Group on SDG Indicators (IAEG-SDGs), which was set up under the United Nations

Statistical Commission, was "(n)umber of people covered by health insurance or a public health system per 1,000 population" [9]. As the IAEG-SDGs abandoned and changed the previous discussions in the technical meetings by WHO and World Bank to support "(t)he fraction of population experiencing catastrophic health expenditures and the fraction of population experiencing impoverishing health expenditures" [10], the draft received criticism from various experts, academia, and civil society as being an insufficient measure for financial protection [11,12]. The main point of criticism is that availability of insurance does not reduce out-of-pocket payments nor guarantee financial protection.

Finally, following a specific request from some UN Statistical Commission members, such as Japan and the United Kingdom, the 47th session of the United Nations Statistical Commission requested IAEG-SDGs to refine indicator 3.8.2. Further revisions have been discussed after the 47th session of the United Nations Statistical Commission and indicator 3.8.2 was refined to "(p)roportion of population with large household expenditures on health as a share of total household expenditure or income," and was adopted during the 48th United Nations Statistical Commission in March 2017.

Now there is ongoing debate on the term "large"—how large is "large" as catastrophic payment? WHO and World Bank are offering examples of thresholds of 10% and 25% of total household expenditure or income [13,14]. However, since the economic status of member states varies, more

**Table 3. Comparison Table of Health Financing Indicators**

WHO (2015) Global Reference List of 100 Core Health Indicators	WHO and World Bank (2015) Tracking universal health coverage: first global monitoring report
<b>Catastrophic health expenditures</b>	
<ul style="list-style-type: none"> <li>• Headcount ratio of catastrophic health expenditure</li> </ul>	<ul style="list-style-type: none"> <li>• Budget share approach</li> <li>• Capacity to pay based on subsistence needs (WHO approach)</li> <li>• Capacity to pay based on food expenditure</li> </ul>
<b>Impoverishing health expenditures</b>	
<ul style="list-style-type: none"> <li>• Headcount ratio of impoverishing health expenditure</li> </ul>	<ul style="list-style-type: none"> <li>• Absolute approach using the international poverty line</li> <li>• WHO approach using subsistence food expenditure</li> <li>• Absolute approach using different international poverty lines</li> </ul>
<b>Others</b>	
<ul style="list-style-type: none"> <li>• Total current expenditure on health (% of gross domestic product)</li> <li>• Current expenditure on health by general government and compulsory schemes (% of current expenditure on health)</li> <li>• Out-of-pocket payment for health (% of current expenditure on health)</li> <li>• Externally sourced funding (% of current expenditure on health)</li> <li>• Total capital expenditure on health (% current + capital expenditure on health)</li> </ul>	

Source: WHO. 2015, WHO and World Bank 2015 [7,8]

discussions are possible on this point.

### 3. Other indicators to monitor progress in health financing

In addition to the indicators for financial protection, WHO suggests other indicators for monitoring progress in health financing (Table 3). To nurture progress towards UHC, indicators to gauge health financing from the input side, such as total current expenditure on health (% of GDP), current expenditure on health by general government and compulsory schemes (% of current expenditure on health), and externally sourced funding (% of current expenditure on health), are also helpful. Along with indicator 3.8.2 of the SDGs, such indicators are expected to be applied by national governments, international NGOs, donors, and others.

### IV. Conclusion

UHC is a key target of SDG 3, offering a comprehensive approach to improve access to health without financial burden, which is a fundamental human right, and providing the basis for economic and social development, as well as social stability. Three key components of UHC, namely population coverage, service coverage, and financial protection are inextricably associated with health financing.

In the SDGs, one of the two indicators for monitoring UHC progress is about financial protection, which helps increase people's access to health services with affordable costs. Although further discussions are needed on the threshold of catastrophic payments, this is a significant, imperative step towards achieving UHC.

To further strengthen health financing, and ultimately promote UHC, utilizing other indicators that gauge health financing from the input side will be helpful. The second Global UHC monitoring report will be released in December 2017. The authors expect that recent discussions on strengthening health financing will continue and movement towards UHC will accelerate.

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## ユニバーサル・ヘルス・カバレッジ (UHC) 達成に向けた保健財政の強化とモニタリング指標についての動向

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### 抄録

ユニバーサル・ヘルス・カバレッジ (universal health coverage: UHC) は国連の持続可能な開発目標 (Sustainable Development Goal: SDG) の目標3において要となるターゲットである。各人が経済的な困難に陥ることなく保健医療へアクセスできることは基本的人権であり、社会の安定と共に経済的、社会的な開発の基礎となるが、UHCはそのようなアクセスを改善するための包括的アプローチである。UHCの3大構成要素である対象となる人口、対象となるサービス、経済的保護は、保健財政と密接に関連している。

SDGsでは、UHCに向けた進捗状況をモニタリングするための2つの指標のうち、1つが経済的保護に関する指標である。この指標は、保健医療における人々の経済的な破綻リスクを低減することに役立つものである。経済的な破綻となる域値については更なる議論の余地があるが、経済的保護に関する指標が採択されたことはUHCの実現に向けた大きく、重要な一歩である。

本稿ではUHCとの関係において、保健財政の強化とその進捗状況のモニタリング指標策定の動向を述べる。

キーワード：ユニバーサル・ヘルス・カバレッジ (universal health coverage: UHC), 保健財政, 経済的保護, モニタリング指標