Monitoring process barriers and enables towards universal health coverage within the Sustainable Development Goals

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Abstract

Background

This study builds on previous successes of using tracer indicators in tracking progress towards UHC and complements them by offering a more detailed framework that would allow to identify potential factors that impede or advance such progress. This tool was designed accounting for possibly available data in low and middle income counties.

Methods

A systematic review of relevant studies was carried out using PubMed, ISI Web of Science, Embase, Scopus and ProQuest databases with no time period restriction. The search was complemented by a scoping review of grey literature, using the World Bank and WHO official reports depositories. Next, an inductive content analysis identified determinants influencing the progress towards UHC and its relevant indicators. The conceptual proximity between indicators and categorized themes were explored through three focus group discussion with 18 experts in UHC. Finally, a comprehensive list of indicators was converted into an assessment tool and refined following three consecutive expert panel discussions and two rounds of email surveys.

Results

416 themes (including indicators and determinants factors) were extracted from 170 eligible articles and documents. Based on conceptual proximity, the number of factors was reduced to 119. These were grouped into seven domains: social infrastructure and social sustainability, financial and economic infrastructures, population health status, service delivery, coverage, stewardship/governance and global movements. The final assessment tool included 20 identified subcategories and 88 relevant indicators.

Conclusion

All identified factors in progress towards UHC are interrelated. The developed tool can be adapted and used in whole or in part in any country. Periodical use of the tool to understand progress towards UHC is recommended.

Background
The primary purpose of any healthcare system is to promote, restore and/or maintain health of the population [1, 2]. Universal Health Coverage (UHC) is a means by which a healthcare system can reach this goal [1, 3]. UHC means that all individuals and communities receive the health services they need without suffering financial hardship [4, 5]. UHC ensures financial risk protection and gives everyone access to essential and quality health services [6, 7].

Effort to achieve UHC arises from the World Health Organization (WHO) Constitution of 1948 which declared health a fundamental human right [4, 8]. In 2005, WHO members signed a resolution encouraging countries to plan and pursue the transition of their health systems towards UHC [9, 10]. The 2008 and 2010 WHO reports emphasized population coverage, service coverage and cost coverage as three dimensions of UHC [11-13]. The 2012 United Nations resolution called governments to move towards providing affordable health services [14, 15]. WHO, World Bank and other international agencies recommend UHC as the best strategy to achieve health-related Sustainable Development Goals relevant to all countries [4].

Despite financial and infrastructural challenges [16, 17] (i.e. the unequal distribution of resources [13, 18], fragmented risk pools [19], and economic [20, 21] and political crises [17, 22]), some middle-income countries (e.g. Turkey and Thailand) have managed resources appropriately to achieve UHC [13, 20]. The duration of a transition period starting from a first policy intervention in health insurance and financing sector to a first policy intervention aimed at UHC significantly varies in high-income countries. For example, in Australia, Japan, Germany, and Korea this transition period lasted 79, 36, 127, and 26 years respectively [23]. To achieve UHC, high income countries used different financing strategies and models, as well as various payment mechanisms. For example, the Netherlands [24] and Singapore [25] used a two-tier payment system; Japan [26], Norway [27], and Finland [28] have implemented a single-payer system; while Germany [29], Austria [30], South Korea [31], and Switzerland [32] have established a system of compulsory insurance. In countries such as Turkey [33], China [34, 35], Thailand [36, 37], Mexico [38, 39], and South Korea [34], a number of fundamental reforms were implemented to increase the efficiency of respective healthcare systems on the path to achieve UHC [40, 41]. Some low and middle income countries, such Ghana, China,
Chile, Kyrgyzstan and Tanzania, have made progress in achieving UHC in a number of areas but continue to face certain challenges in others, such as level and expansion coverage, cost escalation including total health expenditures and annual growth of medical expenditures, and lack of comprehensive health planning.

Significant efforts were made by the WHO and the World Bank Group to identify suitable universal UHC tracer indicators to measure progress towards UHC, for example using UHC index [5, 42, 43]. A study conducted in Iran already tested a smaller set of tracer indicators in accordance with national and global goals and priorities, even though it was predominantly focused on monitoring and evaluation framework of the most recent healthcare reform (Health Transformation Plan) [44].

Some other practical applications of tracking progress towards UHC include monitoring equity in UHC with essential services for neglected tropical diseases [5, 43], using health service coverage index [45, 46] or focusing on the effective coverage and delineating of three components of the metrics - need, use, and quality[47].

To achieve UHC, each country should create and adapt an effective framework of measuring and monitoring their progress of UHC. This study builds on previous successes of using tracer indicators in tracking progress towards UHC and complements them by offering a more detailed and easy to use tool that would allow to identify potential factors that impede or advance such progress. This tool is also designed to account for possibly readily available data in low and middle income counties.

Methods

The study was conducted in three phases: (1) systematic literature review of relevant studies supplemented by a review of grey literature; (2) content analysis to identify factors; (3) refining and finalizing the tool through expert panels followed by email surveys.

Phase 1: Systematic literature review:

A systematic literature review was carried out in accordance with Preferred Reporting Items for Systematic Reviews and Meta-analysis (PRISMA).

Search strategy

The following databases were searched: PubMed, ISI Web of Science, EMBASE, Scopus, ProQuest, and
Science Direct. WHO and World Bank databases were also searched, as these hosts all reports related to UHC. The search was updated in July 2018. The key phrases used in the search were ‘universal health coverage’, ‘universal coverage’, ‘universal healthcare coverage’, ‘universal health care coverage’ and ‘UHC’ combined with “OR” Boolean in title or abstract. A detailed search strategy can be found in Appendix 1. Reference tracking was used to extract additional relevant studies based on citations of the eligible articles.

Study inclusion and selection

There were no time period restrictions. The publication language was restricted to English. In addition, references of all final included papers and reports were searched for articles not identified through electronic searches. All types of study reports, including review and original articles, were included in the study. The letters to the editor and perspectives were not considered unless they had addressed a naïve theme relevant to the study objectives. Abstracts of papers presented at seminars and conferences without peer review process were not considered. Studies were included if they explored at least one objective around UHC that was illustrated in the abstract or the summary. All retrieved studies were screened against inclusion criterion by two independent authors (ND and LD). Disagreements were resolved via discussion until mutual agreement was achieved. Whenever it was not possible, a third author (AA) helped with reaching the consensus.

Data extraction and management

Indicators used to monitor progress towards UHC were considered as the main data. The number and date of publication, type of publication, authors’ name and affiliation, country where the study has been conducted and any mentioning of UHC determinants or indicators were considered as well. Extracted information was registered in a pre-designed form for every single study. A list of relevant factors and relevant indicators was arrayed as the output of this phase.

Phase 2: Content analysis

Inductive content analysis was used for identifying conceptually approximate indicators and categorize extracted themes [48, 49]. Coding and categorizing was done by two researchers (ND and LD) using the following steps [50]:
1. Familiarization with data (reading selected studies);
2. Generating themes (identifying and extracting the UHC determinants from selected studies);
3. Classifying extracted effective determinants into sub-categories and categories based on content relationship and conceptual proximity;
4. Reviewing themes and generating a thematic ‘map’;
5. Generating refined and clear definitions for sub-categories and categories.

The result of conceptualization and categorization was refined through research team meetings. The link between determinants (identified themes and indicators) was discussed. Through several research meeting, specified categories of the determinant factors of the progress towards the UHC were arranged. It was used as the draft of a tool for the next phase.

Phase 3: experts’ opinion

The draft version of the tool was shared with 13 international experts in health systems and health policy for feedback. In addition, an expert panel including 14 local Iranian experts in UHC was held to review and discuss the content, as well as the face validity, of the tool. Participants included experts working in Health Care Management (five people), Health Policy (three people) and Health Economics (two people).

Results

Of 5971 retrieved articles, 170 articles had relevant information (Fig. 1 and Appendix 1). 416 factors were identified and grouped into eight categories with 20 subcategories. In total, 88 indicators related to each subcategory (Table 1).

Dimensions and axes of the country’s assessment tool to achieve Universal Health Coverage

Eight dimensions and 88 indicators that assess particular aspects of the healthcare system’s progress towards UHC were identifies through the content analysis of all eligible publications and data extraction. This included possible dimensions, axes, indicators titles, indicators definition, data collection methods, data collection sources and formulae (Appendix 2). Based on experts’ opinion, dimensions and their relevant indicators were finalized as outlined below.
Dimension 1 and 2 - Social infrastructure and Social sustainability

The country’s Social Infrastructure and Sustainability dimensions provide general information about the country. These two dimensions include the following indicators: total population; population growth rate; age groups’ breakdown; as well as population’s literacy, education and poverty levels.

Dimension 3 - Financial and Economic infrastructure

This dimension assesses country’s financial and economic infrastructures and has three subcategorizes: country’s GDP per capita growth rate, trends, and adjusted GDP examined in the past years; currency exchange rates (comparison of monetary unit of the country with the international monetary units to assess the purchasing power); and trends for health expenditure and other health costs (such as General Government Health Expenditure as percentage of General Government Expenditure (GGE), General Government Health Expenditure as percentage of Total Health Expenditure (THE) and General Government Health Expenditure per capita (current US$)). These dimensions also include indicators on financial protection within UHC and assesses the fair financing, out-of-pocket expenditure, and related impoverishing and catastrophic effects.

Dimension 4 - Population health status

This dimension includes indicators of mortality and morbidity, as well as trends of the population health status in recent years, as well as projections of future trends.

Dimension 5 - Service delivery

There are four subcategorizes in this dimension: the basic benefits package content, geographic access to health care services, quality of care, and human resources available in the country’s healthcare sector.

Dimension 6 - Coverage

This dimension relates to financial, service and population coverage. Indicators for this dimension include: existing and available types of health insurance; population level membership coverage and utilization for each type of the health insurance.

Dimension 7 - Governance and Leadership

This dimension has two subcategories: political will and commitment of the country, as well as
political leadership and government’s responsibility. The dimension assesses the country’s commitment and responsibility to UHC by its six descriptive and multiple choice questions on strategies and programs of the UHC development, evaluation of the impact of UHC national planning purposes, integration of the public and private organizations, and educational and information policies.

Dimension 8 - Global Movements

This dimension has two subcategories: existing international goals and international commitments towards achieving UHC.

Discussion

Each country has its own path to achieve UHC, which depends on existing structures, resources, political will and many other factors [41]; however, a tool designed in this study can be potentially used to track progress towards UHC irrespective of these differences.

As mentioned in the introduction, WHO and the World Bank had previously suggested tracer indicators that allow tracking progress towards UHC in any country. However, these indicators focus on achieving certain metrics of outputs and outcomes of the health system [5, 42, 43]. We aimed to complement this great work by developing a broader and more detailed framework that could provide additional insights into the process of such progress towards UHC, specifically by identifying potential factors that are impeding or advancing such progress. In comparison to other studies, the suggested tool is focused on the national health system as a whole and can incorporate ready available country specific data. Our framework incorporates tracer indicators suggested by the WHO, World Bank and the scientists and researchers, but contains additional dimensions, totally to eight: (1–2) social infrastructure and social sustainability; (3) financial and economic infrastructures; (4) population health status; (5) service delivery; (6) coverage; (7) stewardship/governance; and (8) global movements.

Social infrastructure and social sustainability (dimensions 1–2) seem to be influential factors in progress towards UHC: society literacy, community income, poverty, age group and population [201]. To reach social sustainability and providing social infrastructure, as well as providing sustainable development, political will and determination, technical skills and expertise and administrative cooperation are required. Political commitment can be a pivotal
issue in progress to achieve UHC [79].

Economic conditions in a particular country (dimension 3) were identified as an important dimension of the tool and it is one of the main determinants of progress towards UHC. According to the studies conducted in Latin American countries, economic crises, high inflation and socio-economic inequalities can lead to a failure in progress towards UHC [61, 79]. To achieve UHC, some countries have adopted important policies and measures that led to integration of education and health policies in order to eliminate the barriers to achieving UHC [61, 79]. Social, economic, and political sustainability were already regarded as essential bases for health systems to achieve UHC [68]. The same studies have identified economic crisis and the inflation as the main causes of socio-economic problems [61, 79]. Countries can ease the work of achieving UHC by mitigating the consequences of the economic crisis [119], concentrating on achieving economic growth [61, 138, 161], and by increasing the GDP share of THE [121, 141].

A fundamental dimension that challenges any country in achieving UHC is financing [111, 138]. Financing includes three functions, such as revenue collection, pooling, and strategic purchasing [1]. Brazil [202], South Korea [203] and Thailand [4] have used strategic purchasing as a key policy instrument to achieve UHC goals of improved and equitable access and financial risk protection [40, 41]. Insurance agencies can alleviate unnecessary expenditures and out-of-pocket payments if they manage the strategic purchasing function well [204–207]. A fragmented pooling system may lead to disorders and is an obstacle in achieving UHC [121].

Previous studies have stated that the use of financial mechanisms such as pooling can reduce many of the financial problems of the health systems and thus are effective for progress towards UHC [4, 10, 208, 209]. According to Savadoff (2012), all countries that have achieved UHC have done so with significant involvement of the government in health care financing, regulation, and sometimes direct provision of health care services [4]. The most tangible and clear aspect of assessing the country’s progress towards UHC is the population’s current health status (dimension 4). Understanding the population’s health status of the country, epidemiologic and demographic transitions, correct assessment of the population’s health needs, can help resources prioritization and allocation according to the needs, as well as provision of necessary quality health services [56, 67, 158, 210, 211].

Service delivery (dimension 5) is another dimension of the suggested tool with four axes: basic benefit package,
geographical access, quality of care and human resources for health. In regards to the benefit package axes, developing an affordable, sustainable, and equitable basic package of health care services that can serve various population needs is a challenge [212]. Studies have shown that people are more interested in the basic benefit package that covers inpatient and outpatient services with heavy costs [212–214]. By covering the basic healthcare needs and resulting into increased people’s satisfaction from healthcare system, it could be possible to narrow the health gap in the country [215].

Access to health care services is another axes of service delivery dimension to progress towards UHC that has been long neglected by many countries [15, 56, 216, 217], with only a few implementing appropriate interventions aimed to improve services provisions. This gap in access to health care services can be narrowed by removing the geographical barriers [57], assuring proper geographical distribution of the services [41], and by providing the necessary drugs [218].

Also, the efficiency of the health system is considered as an important fundamental function to providing health services and transitioning to UHC. In countries Brazil, Russia, India, China, South Africa and Laos that together account for approximately 40% of the world’s population, political and economic constraints, lack of trained and experienced human resources, large and powerful unofficial sectors, inefficient political leadership and government in planning, implementation, and management, and lack of sufficient resources related to the efficiency of the health system, are among the key underlying challenges in transition towards UHC [41, 120].

The sixth dimension of the designed tool focuses on population coverage, financial coverage, and service coverage. According to this dimension, adequate financial risk protection of the citizens that become ill is a major step in achieving UHC [92, 98, 113]. For this purpose, the fair financial contribution [117] and contributions in the form of prepayment mechanisms [110, 118] can be helpful. The insurance coverage of the country’s population is highly important in achieving UHC. Some studies have previously identified adequate insurance coverage as a primary condition necessary to guarantee achieving UHC [78, 94, 100, 219]. The insurance coverage has direct and indirect effects on other dimensions of UHC (e.g. quality of health care provision, catastrophic risk protection). Adequate health insurance system can prevent the catastrophic and impoverishing effects of the out-of-pocket payments and thus protect people from the financial burden of a disease [94, 220]. Different countries use different types of health insurance such as national health insurance [101, 221] and social health insurance
that covers and protects the population against financial risks [69, 110, 116].

In Southeast Asian countries, reductions of out-of-pocket payments, increasing accumulation of funding for health, tax-based health care sector financing, ensuring equitable distribution of human resources, and focusing on reduction of unnecessary health expenditure were identified as key mechanisms and tools in achieving UHC [63].

Increasing in the share of health spending that is pooled rather than paid out-of-pocket by households, prepayment options, and prepaid health care services have been shown to greatly influential on progress towards UHC [4, 90, 94, 100, 209, 222, 223]. In wealthy nations, such as Germany and the United Kingdom, almost 90% of health care sector financing is done through finance pooling. In middle-income countries such as South Korea and Malaysia that have achieved UHC and in countries like Brazil and Mexico that are about to achieve UHC, more than 65% of health funding is also raised through finance pooling [4]. Studies conducted in different countries have demonstrated that out-of-pocket payments and inaccessible or inadequate health services are the main barriers to achieving UHC [83, 84, 87, 90, 92, 94, 100, 152, 224, 225]. Our findings from the systematic literature review indicate that the social and economic sustainability are also main determinants of the progress towards UHC and affect the path and time of achieving UHC [13, 68, 148].

The dimensions of Stewardship & Governance (dimension 7) introduced in the tool have been raised with regard to the country's power of execution and political commitment both inside and outside the country. For this reason, the role of politics in effective movement towards UHC is a pivotal issue. Political support and legitimacy to create public plans and polices that expand access to health care services, improve equity, and pool financial risks are key factors in progress towards UHC [4]. Strong health care services delivery system based on comprehensive primary health care system facilitates easy access to quality health care services for all citizens. The economic power of a country plays a major role in its political commitment to realizing UHC [68, 226]. In 2014, major actors in Iran’s health care system sought to achieve UHC by investing political capital and economic resources in implementing the Health Transformation Plan as a highly effective and sustainable policy decision. Political sustainability was identified as the essential element of achieving UHC [68]. Achieving UHC requires a powerful and multilateral support at the very top of the country’s political system. The political and national commitment to support the healthcare system is a major influencing factor in implementing programs of UHC
Global movements (dimension 8) can be reflected by using two major axes: country’s international goals and international commitments in moving towards UHC by earmarking financial resources. Learning from experience of countries that managed to successfully achieve UHC, other countries can deal with similar challenges. However, all strategies, policies, and programs in order to achieve UHC need to be tailored according to country’s circumstances and needs. Identifying the key determinants of UHC and carefully planning in accordance with them will strengthen the country's implementation activities, while helping avoiding the resource waste.

Our findings showed that in order to achieve UHC as a major development in public health, all influential factors should be taken into consideration, including economic growth, percentage of national income devoted to health, demographic characteristics, technologies, politics, health financing system, and health spending. Although the factors mentioned above can foster the progress to UHC, the absence of these factors can also negatively impact progress towards UHC.

Strengths and limitations

We believe that this proposed standalone tool can be further refined and adjusted following a bigger international study using experience and expertise of other countries. One of the limitations of our tool is that it cannot be used as a standalone measure in a static manner to measure progress towards UHC. The recommend using the developed tool in a dynamic manner to be able to show the trends and progress towards UHC. A need to tailor the content of the tool and its possible necessary adaptation and revision can also affect comparability across countries. Nonetheless, we believe that this limitation is also the tool’s advantage, as it provides usability, flexibility to be adapted by any country to account for its context, needs and existing structures.

Conclusion

To pave the way in progress towards UHC, countries can chose and prioritize different policies at various levels of their healthcare system depending on the local context and healthcare system organizational structures. There is no perfect and certain way to achieve UHC. Given the highly diverse health systems, socio-economic constraints, and political forces, each country seeking to achieve UHC may benefit from tailored strategies, polices, and plans. Comprehensive, retrospective, and prospective analyses of the health system, as well as the functional capacity
of government, are affective strategies and tools in successful transition towards UHC.

Countries need a valid tool and frameworks to assess their progress towards UHC. This study offers a tool that can aid in gaining additional insights in the process of such progress by identifying possible barriers and enablers.

The proposed tool assesses the main aspects of the healthcare system of the country. Various countries according to their context might need to revise its content and tailor it before application. Countries can use this tool to assess each dimension of their health system in detail and then plan necessary improvement steps.

Abbreviations

UHC
Universal Health Coverage
WHO
World Health Organization
GGE
General Government Expenditure
THE
Total Health Expenditure
GDP
Gross Domestic Product.

Declarations

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Authors' contributions: D & L.D collected, reviewed papers, analyzed and prepared the figures. H.S & A.A contributed in designing, analyzing and drafting the paper. N.D & L.D contributed in categorizing the indicators, developing the tool and reviewing and A.F & V.G Contributed in analyzing and editing the paper. All authors have contributed significantly, and that all authors read and approved the final version of the manuscript.
Availability of data and materials: The dataset used during the current study, including a list of the excluded articles, are available from the corresponding author on reasonable request.
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Supplementary Information

Appendix 1- Characteristics of extracted studies with consideration to type of study was conducted and country.

Appendix 2- Identity of Indicators to achieve Universal Health Coverage

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Table 1: Dimensions and axes of the country’s assessment tool to achieve Universal Health Coverage

| Dimensions and Axes | Age Group | Indicators | Rate or (%) | Sources |
|---------------------|-----------|------------|-------------|---------|
| Social Infrastructure & Social Sustainability | Age Group | Indicators | Rate or (%) | Sources |
| 1. Percent of population who ages 0-5 years | | | | |
| 1. Percent of population who ages 6-17 years | | | | |
| 1. Percent of population who ages 18-39 years | | | | |
| 1. Percent of population who ages 40-64 years | | | | |
| 1. Percent of | | | | |
| Population | 1. Total population (pop.) |
|------------|----------------------------|
|            | 1. Population growth rate (%) |
|            | 1. Economically active pop. |
|            | 1. Population employed in the informal sector economically (%) |
|            | 1. Population employed in the formal sector economically (%) |
| Literacy and Education | 1. Children |
| Dimension 3: Financial and Economic Infrastructures | GDP trends |
|---------------------------------------------------|------------|
| Poverty                                           |            |
| 1. Adult Secondary Education Achievement Level    |            |
| 1. Adult Literacy Rate                            |            |
| 1. Unemployment Rate                              |            |
| 1. Percent of Population Living below the Poverty Line |          |
| 1. Gini Index of Income Inequality                |            |

| Reaching Grade 5 of Primary Education             |            |
| 1. GDP per capita                                 |            |
| 1. GDP growth rate                                |            |
|                                 | 1. GDP adjusted |                                     |
|---------------------------------|-----------------|--------------------------------------|
| Currency                        |                 |                                      |
| 1. National currency unit       |                 |                                      |
| 1. Exchange rate US$            |                 |                                      |
| Health Expenditure Statistics   |                 |                                      |
| 1. Total health expenditure (THE) |                 |                                      |
| 1. Total health expenditure (THE) as % of GDP |                 |                                      |
| 1. THE per capita (p.c.) in US$ (exchange rate) |                 |                                      |
| 1. General govt. health expenditure as % of GGE |                 |                                      |
| 1. General govt. health expenditure as % of THE |                 |                                      |
| 1. | **General govt. health expenditure (GGHE) p.c. (USD)** |
| 1. | **Out-of-pocket expenditure (OOP) per capita** |
| 1. | **OOP expenditure as % of THE** |
| 1. | **General govt. expenditure as % of GDP** |
| 1. | **Social security funds for health as % of GGHE** |
| 1. | **private insurance as % THE** |
| 1. | **Private health expenditure as** |
| % of THE | 1. supplemental insurance as (% of total health expenditures |
|----------|-------------------------------------------------------------|
| 1. Fairness in Financial Contribution Index (FFCI) | |
| 1. Incidence of catastrophic health expenditure due to OOP payments | |
| 1. Incidence of impoverishment due to OOP payments | |
| 1. Poverty gap due to OOP payments | |
| 1. Average per | |
| Dimension 4 - population health status |  |
|--------------------------------------|---|
| -Mortality |  |
| -Morbidity |  |

| 1. Investment Share in GDP |  |
|----------------------------|---|
| 1. Balance of Trade in Goods and Services |  |
| 1. Debt to GDP Ratio |  |

| 1. Life expectancy at birth |  |
|----------------------------|---|
| 1. Healthy life expectancy (HALE) at birth |  |
| 1. Probability of dying per 1000 population between 15 |  |
and 60 years
(adult
mortality rate)

| 1. Probability of dying per 1,000 live births under 5 years (under-5 mortality rate) |
|--------------------------------------------------------------------------------------------|
| 1. Neonatal mortality rate (per 1,000 live births) |
| 1. Maternal mortality ratio (per 100,000 live births) |
| 1. Cause-specific mortality rate (per 100,000 population): HIV/AIDS |
| 1. Cause-specific mortality rate |
(per 100,000 population):
Tuberculosis

| 1. | Age-standardized mortality rate by cause (per 100,000 population) |
| 1. | Years of life lost (YLLs) by broader causes |
| 1. | Causes of death among children under-5 years of age |
| 1. | HIV prevalence among adults (15-49) |
| 1. | Tuberculosis prevalence |
| Dimension 5- Service Delivery | Benefit packages | Geographical access | Quality of care | Human Resources for Health |
|-------------------------------|-----------------|--------------------|-----------------|---------------------------|
| **1.** Number and distribution of health facilities per 10 000 population |
| **1.** Number and distribution of inpatient beds per 10 000 population |
| **1.** Number of outpatient department |
| **1.** Tuberculosis incidence (per 100 000 population) |
| **1.** Number of confirmed poliomyelitis cases |
| visits per 10000 population per year |
|-------------------------------------|
| 1. General service readiness score for health facilities |
| 1. Proportion of health facilities offering specific services |
| 1. Number and distribution of health facilities offering specific services per 10000 population |
| 1. | Specific services readiness score for health facilities |
|----|--------------------------------------------------------|
| 1. | Total ODA Given or Received as a Percent of GNI |
| 1. | Percent of Population with Access to Primary Health Care Facilities |
| 1. | Immunization Against Infectious Childhood Diseases |
| 1. | Contraceptive Prevalence Rate |
| 1. | Density of |
| Dimension 6- Coverage | Financial coverage | Service coverage | Population Coverage |
|-----------------------|--------------------|------------------|---------------------|
| hospitals (per 100 000 population) | 1. Generalist | 1. Specialist | 1. Density of nursing and midwifery personnel (per 10 000 population) |
| Dentistry personnel | 1. Dentistry personnel | 1. Pharmaceutica l personnel | 1. Environmental /public health workers |
| Types of insurance coverage | 1. Types of insurance coverage | 1. Type of membership | 1. Coverage |
| Dimension 7: Stewardship/governance Political leadership and Government's responsibility Political will and Commitment | essential need |
|---|---|
| 1. Population coverage by different organizations | |
| 1. Multi-sectoral strategies such as health, education and labor sectors | |
| 1. Integrated Universal Health Coverage into its general development plans | |
| 1. Having a functional national Universal Health Coverage | |
An organization that promotes interaction among government, the private sector and civil society

1. Evaluation of the impact of Universal Health Coverage on its socio-economic status of planning purposes

1. Having a general policy or strategy to promote information and education on universal
| Dimension 8: Global Movements | International Goals | International Commitments |
|-------------------------------|---------------------|--------------------------|
| 1. Having a policy or strategy to expand access, including among vulnerable groups, to essential services | 1. Budget support as a share of GGE |
| 1. Sector budget support for health as a share of GGHE | 1. Total amount of loans for the health |
Figure 1

Flow diagram of the searches and Inclusion process

Supplementary Files

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PRISMA_2009_Checklist. Derakhshani N. et al.doc
Appendix 1.docx
