

**United Nations Statistical Institute for Asia and the Pacific (UNSIAP)
and World Health Organization (WHO)**

**Subregional Training on Monitoring Financial Protection in Health
(SDG 3.8.2 and related indicators)
(Hybrid training) | Chiba, Japan 23 – 26 October 2023**

Concept Note

I. Background and Rationale

Achieving universal health coverage (UHC), 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 is officially an agreed target (3.8) for health in the Sustainable Development Goals (SDGs). Critical to attaining UHC is a formal monitoring mechanism to assess progress. This is done through two separate indicators for target 3.8, one focused on its service coverage dimension ([SDG indicator 3.8.1](#)) and another focused on the lack of financial protection ([SDG 3.8.2](#)). This training will focus on the latter and related indicators.

One way to monitor the lack of financial protection in health is through the incidence of catastrophic health spending which is defined as the proportion of the population with large household expenditure on health as a share of total household expenditure or income. Household's expenditures on health comprise only the out-of-pocket part of it that is not reimbursed by a third-party payer. Two thresholds are used to define "large household expenditure on health": greater than 10% and greater than 25% of total household expenditure or income. This definition (including its two thresholds) has been chosen following a consultative two-year process led by the Inter-Agency Expert Group on SDG indicators and corresponds to [SDG indicator 3.8.2](#). The United Nations recognizes WHO as the custodian agency for SDG indicator 3.8.2. and the World Bank as a co-custodian.

SDG 3.8.2 indicator is focused on relatively large Out-of-Pocket (OOP) health spending which might lead to cutting spending on other basic needs such as education, food, housing and utilities. But, recognizing that for poor and vulnerable people it is the absolute level of OOP health spending that is crucial – even if it represents less than 10% of a household's total consumption or income (budget) – indicators of impoverishing health spending are also used to track the lack of financial protection in health and demonstrate the interdependency between SDG 1 "End poverty in all its form everywhere" and SDG target 3.8 on "Universal health coverage". Specifically, these additional indicators include the proportion of the population impoverished or further impoverished by household expenditures on health using different poverty lines.

The Subregional Training on Monitoring Financial Protection in Health will explain in detail the rationale to track SDG indicator 3.8.2, why additional indicators are needed and how the monitoring framework can be expanded to support relevant policy discussions. This training will also discuss the data requirements to monitor the lack of financial protection in health.

This specific training is part of a longer-term plan to build Member states capacity to track financial protection in health. It is articulated around three phases:

1. **Data generation:** For this component, statisticians familiar with a specific set of skills and past experienced described in section V are the primary target audience. Indeed, the data needed to produce the financial protection indicator is collected as part of the overall statistical monitoring framework rather than within the health sector data collection system. In general, the ministry of health has very little knowledge and very often lacks access to the relevant datasets. Therefore, for efficiency purposes, this first part of the program will focus on training statisticians to produce SDG 3.8.2 related indicators with a relevant statistical package.
2. **The story behind the numbers:** While the evidence can be generated by the statistical office, the interpretation and contextualization of that evidence requires the involvement of ministry of health policy advisors. For this second phase, they will be invited to interpret and discuss the indicators in the light of the health system characteristic in their territories in order to translate evidence into policy recommendations.
3. **Dissemination:** Based on the evidence generation progress and demands from countries, dissemination activities, including webinars, policy workshops and/or publications, might be planned in coordination and collaboration across the 3 levels of WHO (WHO Headquarters, Regional Offices & Division of Pacific Technical Support and WHO Country Offices) and with the government counterparts. Dissemination of the financial protection figures in the PICs will focus on linking data to inform policy development that is fit for purpose in the Pacific contexts as countries moving toward UHC.

This concept note develops the first part of the proposed long-term capacity building effort. Further content will be developed once the initial stage is completed.

II. Target Countries

This training will target Pacific Island Countries and Territories (PICs) with at least one relevant available household survey which has not been used to report on SDG 3.8.2 and related indicators. Focusing on this sub-region comes from the fact that among the 13 Western and Pacific countries for which there is no 3.8.2 estimate available, 11 countries are Pacific Island countries; and among the three Pacific Island countries for which an estimate exists, for two of them the estimate is outdated (2006 and 2009), even though, relevant and recent household income and expenditure surveys exist. By the end of the training participants are expected to have produced new evidence using such surveys and be able to interpret the numbers. This subregional training course is a partnership between WHO and SIAP.

III. Objectives

The main objectives of this specific training are twofold:

1. To build the capacity of countries to produce SDG 3.8.2 and related indicators using the latest available relevant household survey conducted in PICs. This is the short-term objective and key output of the training.

2. To develop a pool of experts from National Statistics Offices (NSOs) in PICs who can produce and analyze key indicators of financial protection and support analytical work on monitoring financial protection with or without collaboration with WHO and SIAP. This is the longer-term objective of this specific training.

IV. Learning Outcomes

By the end of this training, the participants will understand the key concepts, definitions, methodologies, and data sources for monitoring financial risk protection. Specifically, the participants will:

- (a) Understand what the household survey data requirements are to track the lack of financial protection in health and how different indicators complement each other.
- (b) Become familiar with WHO programs to produce SDG indicator 3.8.2 and related; and
- (c) Be able to interpret the indicators to inform policy.

A range of training methodologies will be used in the delivery of the training, such as lectures (theoretical components), group/ country presentations, discussion sessions and hands-on and practical exercises. Those approaches will differ depending on the mode of training and are explained in section VI.

V. Target Participants

The main requirement for participation is the availability of household survey micro datasets with the variables needed to compute the financial hardship indicators included in this training. The following PICs will be invited: Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, Palau, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu.

To meet the workshop objective and outcomes, workshop participants should be those individuals with previous experience in analysing household (income and expenditure) survey data and solid statistical skills. Each PIC will be invited to nominate one participant meeting the following requirements:

Essential

- Is a technical staff or statistician from the National Statistical Office whose primary responsibility is currently or has been analyzing the Household Income and Expenditure Survey data.
- Has good working knowledge of Microsoft Excel
- Is proficient in English
- Has the statistical knowledge typically covered in an introductory statistics course.
- Has some familiarity with the 2030 Agenda for Sustainable Development.

- Has access to laptops for both components of the training to complete the practical exercises and to access the SIAP Learning Management System. Microsoft Excel and R software must be installed on the laptop.
- Has access to at least the microdata of the surveys listed in Annex 2 for their territory. The NSO should also be willing to allow facilitators from WHO and SIAP to access (subject to the provisions of their Statistics Act) the full or sample of the dataset **only** for the purposes of supporting data preparation and compilation of relevant indicators.

Desirable

- Experience in planning or conducting Household Income and Expenditure Survey.
- Familiar with at least one of the three statistical software is desirable such as SPSS, STATA or R.
- Proficiency in R is welcomed.

Confirmed nominees will be invited to participate in the three components of the training (virtual and one face-to-face) described in the next section. Successful completion of the online component is a requisite for the face-to-face training.

VI. Methodology and Content

This *hybrid* training will be conducted using R statistical software and organized into three parts:

Part I – virtual – 3 group sessions: The first part is an online training focused on the data requirements and use of R software commands to clean the household survey data to produce the financial protection indicators. The sessions will be delivered through two main modes: the SIAP Learning Management System (LMS) and webinars. It will combine presentations, hands-on review of material, homework and open discussions. The three virtual sessions will be scheduled during the weeks of 2 October and 9 October. Details will be communicated to nominees.

Part II – virtual – 1 country specific session: This session aims at reviewing more in depth the data availability in each specific island. It will be based on the metadata and data dictionary sent to trainers in part I and will consist of an open discussion and questions and answers to corroborate the appropriateness of the selected survey to track SDG 3.8.2 and related indicators (see Annex 2) and the level of data cleaning that would be required during the face-to-face training (in part III). This training will take place right after part I and scheduled in agreement with each territory.

Part III – face to face – 4 full days: The third part will be delivered face-to face over a period of 4-days, from 23 to 26 October 2023. It will entail computing sessions, using R to provide hands-on experience in preparing the data to monitor SDG 3.8.2 and related indicators; R shiny interface will be used to produce all indicators and create some country profiles; participants will then reflect on the findings and prepare a short presentation to

interpret them. It will conclude by a panel discussing how the data is used to inform policy at global, regional and country levels.

The provisional agenda is provided in Annex 1.

After the training, continued virtual support will be provided to participants throughout the whole process of data generation.

VII. Evaluation

This training will include several mini assessments to check participants understanding of the concepts and techniques. Quizzes will be also used throughout the training to encourage participation and for reinforcement. After the conclusion of the training, participants will be eligible to receive a certificate of participation. They will also be required to complete an electronic feedback form.

VIII. Language

The training will be conducted in English.

IX. Recommended reading

The slides, reading materials, R software syntax and tests data sets will be shared prior to the training. Useful references include:

World Health Organization and International Bank for Reconstruction and Development / The World Bank. (2021). [Global monitoring report on financial protection in health 2021](#).

WHO (2023) WHO methods and data sources for global monitoring of UHC indicators of financial protection coverage within the sustainable development goals. Draft mimeo.

Wagstaff A, Flores G, Hsu J, Smitz M-F, Chepynoga K, Buisman LR, van Wilgenburg K and Eozenou P. (2017) Progress on catastrophic health spending: results for 133 countries. A retrospective observational study. *Lancet Global Health*.

Wagstaff A, Flores G, Smitz M-F, Hsu J, Chepynoga K and Eozenou P. (2017) Progress on impoverishing health spending: results for 122 countries. A retrospective observational study. *Lancet Global Health*.

O'Donnell, O, E van Doorslaer, A Wagstaff, and Magnus Lindelöw. (2007) *Analyzing Health Equity using, chapters 18 and 19 Household Survey Data: A Guide to Techniques and Their Implementation*, The World Bank.

ANNEX 1 – OUTLINE OF THE AGENDA

**Parts I and II: Data requirements and R training program to be delivered online
(2-3 weeks prior to the face-to-face component)**

| Date/Time | Session | Presenter |
|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| <i>Part I – virtual group sessions</i> | | |
| Day 1: 1.5 hours | <p>Data requirements to tracking financial hardship</p> <ul style="list-style-type: none"> • What is financial hardship and how is it tracked? • Which type of survey is the most relevant and why? <p><i>Homework:</i> Participants to fill in the metadata form. Prepare a presentation about current and future rounds of the household budget survey (objectives, survey design and changes over time, periodicity, plans) Share the data dictionary with the instructors</p> | |
| Day 2 Duration: 2 hours | <p>R Training: Part 1</p> <ul style="list-style-type: none"> o Introduction o Basic Commands o Working with Variables: Creating, Missing, ... o Working with datasets: import, export, append, merge, ... <p>Note: R and R studio should be installed on participants' computers prior to this session; in any case material will be shared in advance for that purpose.</p> | |
| Day 3 (1.5 hours) | <p>Guided session on implementing the commands learned from the previous session</p> <p>Homework: Participants to import, export, append and merge dataset</p> | |
| <i>Part II – virtual country specific session</i> | | |
| Day 4 (1.5 hour) | <p>Instructors and country participant review the data dictionary and survey design jointly to confirm the appropriateness of the proposed survey to track SDG 3.8.2 and related indicators and the level of data cleaning that would be required during the face-to-face training</p> | |

Part III: Face-to-Face Training

All days start at 8:30 and end at 17:00 (except day 4 which ends at 12:00). There is one coffee break each morning and each afternoon, and lunch time is from 12:00 to 13:00. From Day 2, each day starts with a recap of previous day session.

Day 1, morning: Introduction

Registration starts at 8:30 and ends at 9:00.

It is followed by an Opening Session, with opening remarks, conceptual overview and overview of workshop objectives, introduction of participants and facilitators, and housekeeping announcements.

Then a session on financial protection in health provides an overview of financial protection monitoring activities globally and country consultation process and discusses about the construction of SDG3.8.2 indicators and beyond.

Finally, a session focuses on the Household Income and Expenditure Surveys use in the participating countries, asking what their purpose is and what can be measured. This session consists in a facilitated country experience sharing and Q&A

Day 1, afternoon, and Day 2: Data cleaning and preparation

These sessions consist in the continuation of the virtual part II of the training, and in the finalization of the preparation of the datasets.

This covers some theoretical aspects with discussions on:

- the definition of out-of-pocket health spending, on what is included, on their decomposition,
- the definition and components of household total consumption,
- the definition of poverty indicators and poverty lines.

Examples and hands-on sessions using a template dataset allow to construct these variables and relevant statistics, on R.

Finally, specific sessions are planned to finalize the preparation of each country dataset.

If time allows an additional component to analyse health care utilisation and barriers will be discussed and prepared.

Day 3: Compute the Financial Protection Indicators

Using the Shiny app based on a script prepared on R, we construct all relevant indicators, including the incidence of both catastrophic health expenditure (SDG 3.8.2) and impoverishing health expenditure (SDG related indicators):

- The Shiny app and standardized R script and code file are presented,
- Hands-on sessions allow to apply it on the prepared datasets,
- Questions and uncertainties are discussed with facilitators.

Other approaches to measure effectiveness of financial protection policies are also discussed.

Day 4, morning: Interpretation of results and Closing

The last morning consists in:

First, a presentation of country group work results following a template: each participant presents the results of their analyses as well as the policy linkage. A reflection on the strength and weakness of such indicators is led.

Second, and finally, a closing session, consisting in the presentation of certificates, end of training evaluation, discussions on ways forward, and future collaboration.

ANNEX 2 – AVAILABILITY OF RELEVANT HOUSEHOLD SURVEYS

| Priority countries | Most recent survey | Reference |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Federated States of Micronesia | 1) Household Income and Expenditure Survey 2023 – to be confirmed 2) Household Income and Expenditure Survey 2019 | 1) The <i>Pacific data hub</i> catalog: https://microdata.pacificdata.org/index.php/catalog/805 . 2) <i>Pacific Community SDD</i> calendar https://sdd.spc.int/collection/2019-household-income-and-expenditure-survey-federated-states-micronesia |
| Fiji | Household Income and Expenditure Survey 2019 | <i>Pacific Community SDD</i> calendar https://sdd.spc.int/collection/2019-Household-income-and-expenditure-survey-collection-fiji-0 - and https://fbos.nso.spc.int/2007-census-of-population/2019-20-household-income-and-expenditure-survey-hies-preliminary-release/ |
| Kiribati | Household Income and Expenditure Survey 2019 | <i>Pacific data hub</i> https://microdata.pacificdata.org/index.php/catalog/760 |
| Marshall Islands | Household Income and Expenditure Survey 2019 | <i>Pacific data hub</i> https://microdata.pacificdata.org/index.php/catalog/761 |
| Samoa | 1) Household Income and Expenditure Survey 2023 – to be confirmed 2) Household Income and Expenditure Survey 2018 | 1) The <i>Pacific Community SDD</i> calendar (https://sdd.spc.int/census-and-survey-calendar?from_year=2021). 2) <i>Pacific data hub</i> https://microdata.pacificdata.org/index.php/catalog/501 |
| Tonga | Household Income and Expenditure Survey 2021 | <i>Pacific data hub</i> https://microdata.pacificdata.org/index.php/catalog/865 |
| Vanuatu | Household Income and Expenditure Survey 2019 Source: | <i>Pacific data hub</i> https://pacificdata.org/data/dataset/spc_vut_2019_hies_v01_m_v01_a_puf |
| Nauru | Household Income and Expenditure Survey 2023 | The <i>Pacific Community SDD</i> calendar (https://sdd.spc.int/census-and-survey-calendar?from_year=2021). |
| Palau | Household Income and Expenditure Survey 2023 – to be confirmed | The <i>Pacific Community SDD</i> calendar (https://sdd.spc.int/census-and-survey-calendar?from_year=2021). |
| Solomon Islands | Household Income and Expenditure Survey 2023 – to be confirmed | However, the <i>Pacific Community SDD</i> calendar (https://sdd.spc.int/census-and-survey-calendar?from_year=2016). |
| Tuvalu | Household Income and Expenditure Survey 2022 | The <i>Pacific Community SDD</i> calendar (https://sdd.spc.int/census-and-survey-calendar?from_year=2021). |