Contents
Acknowledgements .......................................................................................................................... iii
Introduction ...................................................................................................................................... 1
1. What is primary health care? ....................................................................................................... 1
2. What is the accounting method of the global measure of PHCE? ............................................. 2
3. Can SHA2011 accounting framework capture all PHC spending in a country? ................... 2
4. How is the global PHCE measure calculated? .......................................................................... 3
5. Why does the global PHCE measure include 80% of spending on medical goods purchased as a result of consultation and self-treatment? ............................................................................ 4
6. Why does the global PHCE measure include 80% of spending on governance and administration costs? ................................................................................................................................. 4
7. What PHCE indicators, based on the global measure, are published in the GHED and what can they tell us? ....................................................................................................................... 5
8. What other measures are available for tracking PHCE? ......................................................... 5
9. What other information is required for a fuller picture of PHC? ............................................. 6
10. What are the ongoing efforts to further improve the global PHCE measure? ...................... 7
Further questions? ......................................................................................................................... 7
References ..................................................................................................................................... 8
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Abbreviations

GHED    Global Health Expenditure Database
HC      healthcare functions
HP      healthcare providers
OECD    Organisation for Economic Co-operation and Development
PHC     primary health care
PHCE    primary health care expenditure
SHA     System of Health Accounts
WHO     World Health Organization
Introduction

Despite the importance of expenditure data on primary health care (PHC), both within countries and worldwide, until recently no standardized approach to measuring PHC expenditure (PHCE) could be applied globally. This reflected a combination of factors. PHC requires an inherently multisectoral strategy, which makes measurement difficult. Furthermore, countries interpret the concept of PHC differently, and organize their service delivery arrangements differently. The System of Health Accounts (SHA 2011) – the international accounting standard for measuring health expenditure – does not include a readymade classification to apply to PHCE.

The lack of a standard frame of reference for measuring PHCE across countries has hindered the ability to compare PHC expenditure across countries. To fix this, a far-reaching and comprehensive expert consultation process was initiated by the World Health Organization (WHO). The aim was to devise a global PHCE measure (that is, a PHCE measure that can be used to determine PHCE for any country) with three primary aims, which are to:

- reflect the PHC definition and to be relevant to policy;
- use the SHA 2011 methodology – the only systematic and internationally recognized framework for tracking healthcare spending.; and
- inform cross-country comparisons of PHCE – regardless of countries’ service delivery architectures or health system configurations.

This substantial agenda of work culminated in the publication of a technical note by WHO in December 2021, which introduced and explained the global PHCE measure to technical audiences (1).

This document seeks to broaden the understanding of the global PHCE measure. It is organized around a set of critical questions about PHC and the global PHCE measure. These questions help to explain the PHCE measure methodology, application and utility.

Importantly, the global PHCE measure has emerged as an integral part of health system monitoring. Because it is calculated using countries’ existing health accounts, the WHO’s Global Health Expenditure Database (GHED) now includes PHCE estimates for 108 countries, with data stretching back to 2016. These PHCE estimates provide an important reference for comparing countries with their peers. They also feature in prominent monitoring and evaluation frameworks, such as the WHO’s monitoring framework for tracking PHC performance (2) and the Immunization Agenda 2030: A Global Strategy to Leave No One Behind, endorsed by the Seventy-Third World Health Assembly (3).

1. What is primary health care?

PHC is a whole-of-government and whole-of-society approach to health that aims to ensure the highest possible health and well-being for people and communities and the equitable distribution of health services. According to the Operational Framework for Primary Health Care (4) published by WHO and UNICEF, PHC combines three interrelated components:

- **Comprehensive integrated health services that embrace primary care as well as public health goods and functions as central pieces.** This involves meeting the health needs of individuals, families, and the population through comprehensive promotive, protective, preventive, curative and palliative care. People are protected from adverse health outcomes.
through population-based measures that are planned and delivered with consideration for the needs of those served.

- **multi-sectoral policies and actions to address the upstream and wider determinants of health.** This involves systematically addressing the broader determinants of health (social, economic and environmental factors, as well as individual characteristics and behaviours) through evidence-based policies and actions across all sectors.

- **engaging and empowering individuals, families, and communities for increased social participation and enhanced self-care and self-reliance in health.** This involves empowering individuals, families, and communities to optimize their health by being advocates of policies that promote and protect health and well-being, co-developers of health and social services, and self-carers and caregivers.

2. **What is the accounting method of the global measure of PHCE?**

The SHA2011 accounting framework is used as the basis for measuring PHC expenditure for cross country comparison. Measurement of the global measure of PHCE relies on the functional classification (HC) of health spending in the SHA 2011 framework. This categorizes health spending according to its primary purpose – regardless of how it was financed, where services are consumed or by whom.

By focusing on what is consumed, the HC classification can consistently identify PHCE regardless of a country’s service delivery architecture. This helps make the PHCE measure comparable across countries, a key feature of a globally applicable measure.

Many countries already produce health accounts using the HC classification for national and international reporting of health expenditures. Accordingly, the PHCE measure can be derived from existing health accounts information.

3. **Can SHA2011 accounting framework capture all PHC spending in a country?**

No. The global PHCE measure is just a proxy that captures as much of the PHC concept as possible.

The SHA 2011 framework reduces the concept of PHC to a combination of activities. PHCE can then be measured by looking at first-contact personal services (consultations and retail spending) and population-based services, plus related governance and administration. However, this does not capture the broader, multidimensional and multisectoral aspects of PHC.

As indicated in question 1, the definition of PHC includes social determinants of health, including (but not limited to) environmental factors, economic factors, and water and sanitation. There is no consistent method for tracking spending in these areas, nor is there a method for attributing these to PHC. Accordingly, they are not included in the PHCE measure. This is a challenge common to all available methodologies for measuring PHCE.
4. How is the global PHCE measure calculated?

Explicitly, the global PHCE measure focuses on first-contact personal health services, population-based interventions and system coordination. This is consistent with the notion that PHC is the first contact of individuals, the family and the community with the national health system, its key role in underpinning public health and health security, and its systemic approach to health care.

Formally, the PHCE measure is the sum of the following nine functional expenditure indicators, split across four broad categories:

<table>
<thead>
<tr>
<th>Curative care (HC.1)</th>
<th>Long-term care (HC.3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• General outpatient curative care (e.g. visits to a general practitioner or nurse) (HC.1.3.1)</td>
<td>• Outpatient long-term health care (HC.3.3)</td>
</tr>
<tr>
<td>• Dental outpatient curative care (e.g. visits for regular control and other oral treatment) (HC.1.3.2)</td>
<td>• Home-based long-term health care (HC.3.4)</td>
</tr>
<tr>
<td>• Curative outpatient care not elsewhere classified (excluding specialized outpatient care) (HC.1.3.n.e.c.a)</td>
<td></td>
</tr>
<tr>
<td>• Home-based curative care (e.g. home visits by a general practitioner or nurse) (HC.1.4)</td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Preventive care (HC.6)</td>
<td>Otherβ</td>
</tr>
<tr>
<td>• Preventive care and health-promotion activities (e.g. immunization, health checkups, health education, disease detection, monitoring and emergency response programmes) (HC.6)</td>
<td>• 80% of spending on medical goods purchased as a result of consultation and/or self-treatment (HC.5)c</td>
</tr>
<tr>
<td></td>
<td>• 80% of spending on health system administration and governance (HC.7)</td>
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<td></td>
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<tr>
<td>a  n.e.c. = not elsewhere classified.</td>
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<tr>
<td>b  This is explained in more detail in question 6.</td>
<td></td>
</tr>
<tr>
<td>c  The SHA 2011 framework includes a separate functional category (HC.5) for spending on medicines and medical goods that are not included in service delivery (for example, medicines consumed after an outpatient consultation).</td>
<td></td>
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</tbody>
</table>

Curative and long-term care provided as outpatient services and within the home are classified as first-contact and continuous personal-care services that are not specialized. This means that some types of spending (for example, ambulances) that might appear to be first contact or continuous – and thus, PHC-related – are excluded from the global measure because of the difficulties in separating generalized and specialized components.

PHCE also includes population-based health measures through the classification of preventive care. Prevention is based on a health-promotion strategy that includes specific health measures to avoid diseases and risk factors, and specific interventions to detect disease and provide therapy as early as possible – for example, via screening activities.

The 80% threshold for spending on medical goods and health system governance and administration is not based on empirical study and remains under discussion. The following two questions examine these categories in more detail.
5. **Why does the global PHCE measure include 80% of spending on medical goods purchased as a result of consultation and self-treatment?**

In principle, when medicines and medical goods are consumed as a result of a general outpatient consultation, they are part of the outpatient service delivery package and so are linked to PHC. Accordingly, when patients purchase prescribed medicines and medical goods from retail outlets (such as pharmacies), this spending should also be considered PHCE. When people buy medicines and medical goods from retail outlets over the counter for self-treatment, this should also be included in PHCE.

Importantly, however, purchases from retail outlets may also include expenditures on medicines and medical goods purchased as a result of a specialized outpatient consultation. These are not counted in PHCE.

Data limitations mean that it is not always straightforward to separate spending on medical goods related to general outpatient care from medical goods related to specialized outpatient care. Accordingly, based on expert opinion and individual case studies, 80% of spending on medicines and medical goods purchased from retail outlets is assigned to PHC.

Of course, the precise share of each category related to PHC depends on context; the assumption of 80% will overestimate spending on PHC in some settings and underestimate it in others. Research has shown that there may be significant variation in spending on PHC medicines (5). Accordingly, this assumption is under review.

6. **Why does the global PHCE measure include 80% of spending on governance and administration costs?**

A substantial share of governance and administration spending (80%) is assumed to be related PHC because of its systemic nature and inclusion of population-based health measures. This 80% includes coordination activities undertaken by the government across the health system (that is, within the health system and between sectors) as well as policy development and implementation activities, which are essential public health functions. In contrast, spending on managing health financing schemes and general administration of the ministry of health and local health authorities are not included in PHC.

There are some arguments that including 80% of governance and administration costs in the global measure inflates PHC spending in low-income countries (6). But there are many possible reasons why these countries might spend a larger share of PHCE on governance. For example, in low-income countries, some prevention programmes are assigned to the ministry of health rather than a separate disease control agency. In such cases, some of the expenditure attributed to governance should be assigned to preventive care, and therefore to PHCE.

A deeper analysis is needed to better understand these differences and to distinguish differences from artifacts of organization and measurement.
7. What PHCE indicators, based on the global measure, are published in the GHED and what can they tell us?

For all countries that report health accounts spending by function, the GHED publishes two key spending metrics:
- current PHCE per capita in US dollars
- current PHCE as a percentage of current health expenditure.

These two indicators are important for understanding the level of resources allocated to PHC within the health system. This information can help establish spending baselines and set goals around future investments.

However, total resource flows potentially mask important variations in where the funds come from, which can have important policy implications. For example, if PHCE is predominantly financed by out-of-pocket spending and not pooled public funds, then this way of funding PHC is likely to be inconsistent with the principles of universal health coverage.

Accordingly, when a country provides the functional classification of health spending cross-tabulated with financing sources, then the GHED can publish an additional five policy-relevant PHCE estimates:
- domestic general government PHCE as a percentage of current PHCE;
- externally funded PHCE as a percentage of current PHCE;
- domestic general government PHCE as a percentage of domestic general government health expenditure (GGHE-D);
- externally funded PHCE as a percentage of externally funded health expenditure (EXT); and
- domestic general government and externally funded PHCE as a percentage of gross domestic product.

These seven indicators collectively provide a concise overview of the absolute amounts spent on PHC, the priority given to PHCE, the origin of PHC funding (domestic general government and external), and the relative importance of each revenue source.

8. What other measures are available for tracking PHCE?

Many countries have customized PHCE measures, which reflect their individual health systems’ unique service delivery configurations. For example, PHC may be limited to a specific set of healthcare providers or applied broadly to include service delivery networks and telemedicine. Differences also exist in what expenditures countries consider to be part of PHC – for example, the inclusion or otherwise of governance spending.

These diversities imply that country-specific approaches to measuring PHCE are critical for country level policy-making. Accordingly, countries are strongly encouraged to retain these measures, with PHCE calculated using the global method sitting alongside.

Within the SHA 2011 framework, the main alternative to calculating the global PHCE measure is the standard framework for classifying spending by healthcare providers (HP) – that is, categorizing spending based on where healthcare services are consumed.
However, the HP classification was not chosen to construct the global PHCE measure because, unlike the HC classification, it cannot provide a consistent view of PHCE that is applicable across countries. The service delivery architecture, and thus the type of health provider delivering PHC, can vary from country to country. Also, there is no uniform link between health providers and their services. Providers can offer multiple service categories – for example, hospitals can offer specialized and generalized care, and inpatient and outpatient services. Conversely, the same PHC service (for example, breast cancer screening) may be provided in different settings. How this works in practice will also differ from country to country.

However, the HP classification of health spending can give a much better country-level understanding of PHCE by providing valuable insights into where PHC is consumed based on a country’s unique service delivery structure. This can considerably strengthen the policy relevance and precision of the global PHCE. Accordingly, countries are strongly encouraged to cross-tabulate health spending by function and provider when preparing health accounts.

The Organisation for Economic Co-operation and Development (OECD) has developed methods for estimating PHCE in Member States. The methods use the SHA 2011 framework to combine information on healthcare functions and providers (7). The OECD’s primary measure of PHC, “expenditure on basic services provided by providers of ambulatory care”, is more tightly focused than the global PHCE measure in two important ways:

- The OECD’s measure focuses on service delivery, whereas the global measure also includes some retail expenditure on medicines, medical goods, governance and administration.
- The OECD’s measure is limited to providers of ambulatory care (that is, outpatient and some preventive care – for example, medical practices, dental practices, and similar healthcare centres), whereas the global measure applies to first-contact services provided by any level or any type of health provider.

The tighter focus of the OECD approach works well for a narrow subset of high-income countries that have somewhat similar service delivery structures. However, it is less applicable to the rest of the world, given the many modes of service delivery.

9. What other information is required for a fuller picture of PHC?

PHCE measures can reveal important policy-relevant information but spending information alone cannot tell us the whole picture. To answer key policy questions, additional information is usually required:

- **To know whether a country spends enough on PHC**, more information is required about how PHCE is financed (whether by government, external partners or households) and about broader contextual factors such as the macro-fiscal situation.
- **To know whether PHC services are of good quality and are widely accessible** requires information on the quality of outcomes as well as information on where PHC services are being provided and to whom.
- **For a comprehensive picture of health system efficiency**, more detail is required about the outputs of PHC as well as inputs, including where services are provided and the factors of

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1 This is the OECD’s preferred measure of PHCE; however, other measures are also used, including expenditure on basic services (in all settings) and “expenditure on basic services with pharmaceuticals”.

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production. Information on the funding pathways of PHCE is also important. In lower-middle-income and low-income countries, external assistance can be provided within the national budget and integrated into national systems, but can also be fragmented from government financing arrangements, provided outside the budget and/or flow through stand-alone programmes. Such fragmentations are common in communicable disease control, in which donors have traditionally played a prominent role. They make financing difficult to track and can influence overall health system efficiency.

10. What are the ongoing efforts to further improve the global PHCE measure?

Measuring PHCE requires precision in the mapping of health expenditure using the SHA 2011 framework, which can be a challenge in many countries. For example, separating inpatient from outpatient services in a hospital and dividing generalized care from specialized care is difficult in some countries where facility-level data on expenditure and activities are limited.

Ideally, future investments will be made in bolstering country-level capability to measure and report functional classifications of the health spending, and in particular PHCE (including measurement systems, data, personnel and so on) so that they are better positioned to develop their own, country-tailored and policy-relevant measures.

Periodic reviews of the estimation method will also help ensure that the global measure remains relevant to policy. For example, further feasibility studies should be done to test the 80% assumptions about medical goods consumed in retail settings and governance and administration.

Further work may also clarify ambiguities in the SHA 2011 framework about PHCE. An example is uncomplicated vaginal delivery; in principle, this is not a specialized service, though it may be defined as a specialized service (whose costs remain outside the boundaries of PHCE) by some countries, depending on the location and complexity of the service. Improving clarity over the classification of this and other services should help reduce discrepancies in the PHCE measure caused by differing methodological interpretations in different countries.

Ultimately, the global PHCE measure is designed to provide a uniform spending measure that can help compare PHCE across countries over time. It is not intended to replace national measures of PHCE or replace the national approach. WHO strongly recommends that countries maintain their monitoring of PHC and continue striving towards producing their own good-quality estimates of PHCE.

Further questions?

Please contact the WHO Health Accounts team at nha@who.int.
References


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