Primary health care expenditure in the Americas: measuring what matters*

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ABSTRACT This special report compares the measurement of primary health care (PHC) expenditure proposed by the Organization for Economic Cooperation and Development (OECD) and by the World Health Organization (WHO), according to the global framework for reporting health expenditures (SHA 2011) in three countries in the Region of the Americas. There are conceptual differences: (1) operationalization as basic care, by OECD, versus first contact, by WHO; (2) a wider range of goods and services in the WHO definition (including medicines, administration, and collective preventive services); and (3) consideration only of services in outpatient providers by OECD. PHC expenditures as a percentage of current healthcare spending in 2017 for WHO and OECD: Mexico (43.6% vs. 15.1%); Dominican Republic (41.1% vs. 5.75%), and Costa Rica (31.4% vs. 5.7%). The broad WHO definition of PHC as first contact facilitates inclusion of services that reflect the way countries provide care to their populations. Even so, WHO could improve its category descriptions for the purposes of international comparison. Restricting PHC to outpatient providers (as the OECD does) greatly limits measurement and excludes interventions intrinsic to the concept of PHC, such as collective preventive services. As a transitional step, we recommend that countries should monitor PHC funding and should explain what they include in their definition. SHA 2011 makes it possible to identify and compare these differences.

Keywords Primary health care; health expenditures; measurements, methods, and theories.

The Sustainable Development Goals (SDGs) aim to achieve universal coverage of essential and quality health services. There is international consensus on the key role that primary health care (PHC) plays in meeting the SDGs (1). This requires reaching consensus on the definition of PHC, key expenditure indicators, and how to measure them.

There is still no single, operational definition of PHC at the global or country level. PHC may refer to: 1) care provided by specific medical specialties; 2) a set of activities; 3) the level of care or setting: an entry point into a system that includes outpatient versus inpatient care; 4) a set of attributes (2); 5) care characterized by first contact or level of care, accessibility, longitudinality, and comprehensiveness; and 6) a strategy for organizing health care systems, with priority given to community-based care and less emphasis on technology-intensive medicine (i.e., complex, high-cost, hospital-based procedures and medications) (3).

The main challenges for monitoring PHC include establishing a quantitative definition and generating the required information in countries. There is a difference between the strategy and
implementation of PHC when measuring expenditure through the first level of care (FLC). In Latin America and the Caribbean, progress has been made through Compact 30–30–30, a call to action by the Pan American Health Organization (PAHO) in 2019 (4), providing continuity to the Universal Health strategy (5), based on the right to health. This compact proposes to eliminate at least 30% of access barriers by 2030 and to increase public spending to at least 6% of GDP, with at least 30% of these resources being directed to the first level of care. To move in this direction, progress must be measured robustly.

Multidisciplinary FLC functions as a gateway (first contact) to the system to ensure equitable access to a comprehensive and integrated set of services that respond to the needs of the population. It is the most critical level for integrating programs focused on different health problems, specific risks and populations, individual health services, and public health (6).

Standards are required for monitoring and for quantitative comparison. The international standard for measuring health expenditure is the System of Health Accounts (SHA 2011) (7), the result of a collaborative effort between the Organization for Economic Cooperation and Development (OECD), the European Statistical Office (Eurostat), and the World Health Organization (WHO). SHA 2011 is based on a triaxial framework of financing, provision, and consumption of health goods and services (health care functions); its standardized classifications describe the categories in detail, achieving standardized content. The classifications are the product of an international consultation (8) aimed at establishing relevant categories consistent with international spending classifications according to the purpose of each expenditure (by the public sector (9) and the private sector (10)), adjusted to the information needs of the health system.

SHA 2011 was not designed to monitor PHC expenditures versus other health expenditures. For this reason, it does not offer guidelines on how to measure PHC expenditures. A basic principle is to define health spending based on the goods and services provided or the functions covered. Thus, measurement and comparability are made possible by establishing an operational definition of PHC/FLC based on the goods and services (or functions) covered, regardless of who provides them and who pays for them.

Expenditure information that is based on types of activities or standardized goods and services, (and ideally) according to the provider involved, is much more informative than the content compiled in budget items that do not sufficiently detail the allocation of resources for PHC/FLC, which is very common in Latin American and Caribbean countries.

All health systems are clearly different, so achieving international comparability requires agreement on what to include in the measurement of PHC. There are three options: (a) restricted: only activities agreed by all countries are included; (b) standardized: countries agree on a group of activities for international comparison purposes, even if they offer additional measurements internally (in which case, both the definition and the measurements would be relatively stable); and (c) broad: including all activities that each country defines as primary care.

This paper compares the OECD and WHO PHC expenditure measurement under SHA 2011, from a conceptual and quantitative point of view, in three countries of the Region. It presents the advantages and limitations of each definition and discusses the challenges involved in monitoring PHC spending in the Americas.

**OECD AND WHO PROPOSALS**

The OECD (12) and WHO (13) have produced initial estimates of PHC expenditure based on the SHA 2011 framework for countries where the necessary statistics were available. Each measurement was based on an operational and quantitative concept agreed upon within each organization, with different definitions of the SHA 2011 services that would make up PHC (Table 1). Health expenditure data are reported annually to the OECD by the 38 member states and are available in its database.

They do not systematically include PHC spending (14). In the case of WHO, annually updated data are available in the Global Health Expenditure Database (GHED) (15), although the 193 member states do not always provide complete data.

In short, the definitions established by the OECD and WHO differ in terms of how PHC is conceptualized: (a) the starting point of operationalization as basic care versus care at first contact, (b) the breadth of services included (i.e., defining what to measure); and (c) the inclusion or non-inclusion of the providers involved, or how to measure this.

The OECD relies on the opinion of experts from member states, and cross-tabulates providers by function (12). It includes spending on basic health services, based on the SHA 2011 classification of health functions, when care is provided in outpatient units. The OECD approach excludes highly relevant services, as well as some services with more complex technology, which could be considered a higher level of delivery (Table 1).

The services included by the OECD are outpatient and home care; general, curative, and dental care; and certain categories of preventive services such as health education, vaccination, early detection, and monitoring of healthy groups. Epidemiological surveillance and disease control programs are excluded, as well as prevention and preparedness for disasters and emergencies, because they are not part of first contact and basic care and are not offered in the selected outpatient care units. These are planning-level services, not first contact population-level services, and this approach is primarily for individual services.

The OECD also excludes health system administration and financing. Medical goods are limited to over-the-counter and prescription drugs, in an optional, separate measurement. The OECD approach allows for subsequent adjustment by member states, recognizing that the challenge is both to identify the services and the providers to be included, and to quantify them according to the SHA 2011 definitions. For example, it is difficult to separate general and specialized services. Some categories refer to the functional autonomy of individuals, for instance, in old age (such as cochlear implants and eyeglasses); these are predominantly out-of-pocket expenses, which highlights the importance of their being financed with public funds in the future.

Since many countries do not have cross-provider information, WHO focuses only on the type of services (health functions) no matter who the provider is (Table 1) (16). It includes all services considered as PHC by the OECD, adds long-term outpatient and home care, and expands the preventive component, with epidemiological surveillance and disaster and emergency preparedness. It also includes 80% of expenditure on medical goods (medicines, glasses, hearing aids, and prostheses) and 80% of expenditure on health system administration and financing, which reflects the effort to offer and organize primary health care. However, the inclusion of 80% of administrative and
medical expenditure has been debated in many countries where there is more specialized care that reduces the proportion of this expenditure on PHC.

There is a lack of consensus on certain services, and these are the focus of the call for a discussion on international standardized reporting. They include services such as: 1) rehabilitation, which is not FLC in many countries, but can be part of a basic care package; 2) long-term care, which may fall under first contact and may be part of a basic care package and is important for controlling risk factors; 3) emergency transport, which is part of ancillary services and may constitute first contact and may be included in basic care; the component associated with the delivery of medical goods (medicines, eyeglasses, hearing aids, and mobility aids), which can be considered first contact and relevant to quality of life and may be included as a product of a non-specialized outpatient visit (In countries where medicines are included in hospitalization, retail purchases correspond to follow-up medicines; in hospitals where medicines are not included or not available, retail sales could be higher, potentially leading to overestimation of primary care spending); 5) non-individualized preventive care, which should be included when it is related to PHC (When this relationship is not clear, its value could be distributed proportionally); and 6) administration and financing of the system as part of PHC/FLC, since the attributes of accessibility, longitudinality, and comprehensiveness depend to a large extent on the good governance of the system, with its respective expenditures. A standard procedure is to consider it as the percentage of current health spending that corresponds to PHC spending (sum of PHC components, excluding administration).

With respect to providers, the following should be considered: 1) Since cross-reporting by provider is not widespread, WHO prioritizes the classification of spending by function; 2)
According to the OECD approach and considering that SHA 2011 classifies providers according to their main activity, limiting the measurement to outpatient providers undervalues the services provided by units that mainly offer preventive care or dispense medicines. This underestimates PHC spending and makes it difficult to monitor strategic and relevant units, such as prenatal control and vaccination units; 3) There are curative outpatient services offered within hospital units, which can be general and specialized, but are difficult to separate.

**WHAT DOES MEASURING PHC/FLC EXPENDITURE IN THE AMERICAS INVOLVE?**

Defining PHC means setting well-defined boundaries. Countries will include very diverse service delivery processes that reflect the way in which they operationalize the provision of PHC/FLC to their population and expenditures must be reported according to their own definition.

In Mexico, for example, first contact may involve patients going directly (on their own initiative) to a laboratory for a health assessment, which broadens the meaning of first contact to ancillary diagnostic services. This is not possible in other places, e.g., the Netherlands, where a referral from a general practitioner is mandatory under basic insurance (17).

In Colombia, basic care is defined as a minimum package of services, including preventive and public health activities (13). The components of each “package of services” can be classified as first contact or basic care, according to national criteria. For example, first contact could include initial care of an episode, diagnosis, and treatment, excluding any referrals. It could also be argued that basic care includes a package of services that covers the most frequent needs in a population group and that subsequent visits, relevant for control and follow-up, should be included as long as they are in FLC; otherwise, they would be classified as specialized.

The degree of complexity allowed for FLC (e.g., inclusion/exclusion of ancillary services, purchase of medicines, and management of hospitalization and emergencies) needs to be clarified. The point of first contact has been critical in the COVID-19 pandemic for diagnosis, counseling, and selection of patient care, in addition to public/collective health interventions. This should include ancillary, emergency transport, and diagnostic (laboratory and imaging) services. Likewise, monitoring of chronic conditions, which are increasingly prevalent, suggests not restricting the measurement to first contact. To ensure efficient monitoring, parameters must be established in which both first contact and basic care can be delimited.

The main source for measuring expenditures in PHC/FLC will always be health accounts based on SHA 2011; adopting any other frame of reference would add confusion and inconsistency to the collection and classification of data. However, the availability of SHA 2011 expenditure data is a challenge in Latin America and the Caribbean. Only 11 of the 33 countries had data, by function, with different levels of disaggregation and quality in 2021: Barbados, Brazil, Costa Rica, the Dominican Republic, Guyana, Haiti, Mexico, Paraguay, St. Kitts and Nevis, Trinidad and Tobago, and Uruguay. Promoting increased availability of these data is part of supporting the best use of available resources for PHC.

Three countries in the Region were chosen (Costa Rica, Mexico, and the Dominican Republic) that had expenditure data by provider and by function for the year 2017, at a sufficient level of disaggregation. PHC/FLC expenditure was compared as part of Compact 30-30-30 monitoring, using WHO and OECD definitions for comparison.

Health expenditures in these three countries amount to just under one-fifth of the health expenditure of Latin American countries reported in GHD. The expenditures of the three countries, by function, under the OECD and WHO definitions of PHC are presented as a percentage of current health expenditure (CHE), as a percentage of GDP, and per capita (Table 2).

According to the WHO definition, PHC expenditure is higher than 30% in the three countries studied (43.6% in Mexico, 41.1% in the Dominican Republic, and 31.4% in Costa Rica). Restricting data to OECD-defined outpatient providers has a substantial impact, reducing primary health care spending to 15.1% in Mexico, and 5.7% in both Costa Rica and the Dominican Republic (Table 2). Thus, in the three countries analyzed, PHC expenditure according to the WHO parameter would exceed the 30% target in the 30-30-30 strategy. However, according to the OECD benchmark, countries such as Costa Rica, considered to be an exemplary health care system in the Americas, appear to be very far from the target.

In per capita terms, the WHO level is highest in Costa Rica ($US271), while the Dominican Republic has the lowest level ($US182). However, using OECD criteria, Mexico has the highest per capita value ($US77), while Costa Rica is much lower ($US49), and the Dominican Republic is only a third as high ($US25) (Table 2).

The decision to limit the scope of PHC to services delivered by OECD outpatient providers greatly restricts measurement, because it leaves out interventions that are intrinsic to the concept of PHC, such as collective preventive services. Defining expenditure on basic services without taking into account specific providers would seem to be the most appropriate when tracking PHC spending and for international and time comparison purposes.

Many functions are reported as non-existent according to the OECD measurement, when they are not offered in outpatient facilities, and especially when they are offered in preventive care facilities. Surprisingly, the largest proportion of spending is on medical goods from retailers, and it is substantial in all cases (50% in Mexico, 50% in the Dominican Republic, and 49% in Costa Rica). Spending on preventive care is also very low in all countries (0.7-3%), especially in Costa Rica. Spending on governance and financing administration is also low (3.7-7.6%), especially in Mexico (Table 2).

To better assess the differences, we performed a comparative analysis of the distribution of expenditure by function. Spending on outpatient curative care is higher in Mexico, tripling that of the other two countries under the OECD definition. This suggests greater provision of services in outpatient units, as opposed to inpatient hospital care.

The definition of PHC as FLC or first contact makes it easier for the countries of the Region to include very diverse services that reflect how they provide care to their population and facilitates the adoption of a broad measurement. Even so, WHO could improve its category descriptions for international comparison purposes. In both cases, with a national and an international definition, it is essential that health accounts show their PHC expenditure measurements in detail.
The adoption of the standardized measurements used by WHO and OECD to track PHC expenditures in the Compact 30-30-30 would likely be difficult in both cases. Although the three countries analyzed have already surpassed the 30% target according to the WHO approach, a pending review of spending on administration and medical goods will adjust the proposed 80% to country conditions. With the OECD approach, all countries would fall far short of the target and would leave basic components such as preventive spending on PHC unmonitored. It is important that international organizations agree on better content, rethinking prevention and administration, as well as medical goods.

The SHA has proven to be a robust tool for the study of resource allocation to the goods and services covered by PHC. A key practical issue is the availability of data, so countries should receive support in the preparation of complete health accounts with all allocations, showing the most important elements of PHC expenditure. They should also produce cross tables of functions by provider and financing arrangements by function.

Expenditure on FLC services should be presented by source and by financing arrangement in order to determine the degree of public priority and the financial burden on households in the system. Additionally, cross-referencing providers makes it possible to view their role either as first contact or basic health care. We also recommend publishing: (a) expenditure on medicines, both total expenditure by the different actors in the country and public expenditure, i.e., medicines delivered in FLC, basic or essential medicines or medicines financed by social security; (b) expenditure on other health goods, specifically eyeglasses, hearing aids, and mobility aids; (c) expenditure on non-individualized preventive activities and on administration and governance, seeking to separate the administration and the financing of the system, and calculating the proportions allocated to each level of care; and (d) expenditure on ancillary services in FLC.

In conclusion, the SHA is a framework for comparing international expenditure that does not replace national measurements. It offers guidelines for estimating expenditure in each country and monitoring changes over time or geographically within a country. Its details classifications and its flexibility to adjust by type of activity, by the goods and services included, and by provider makes it possible to monitor and adjust policies when necessary. It can also be useful for making ad-hoc comparisons between selected countries.

In order to inform policies, it is important to specify how the system is organized and the policies that support the provision of basic and first-level services in each country. For example, the existence or absence of a gateway to the system entails different indicators of first contact and provider. Therefore, it is important to support practice and guided interpretation of the differences between countries, linking the measurement of PHC spending to its context.

As a transitional step, we recommend that countries should monitor PHC funding and should explain what they include in their definition. Countries will adopt specific solutions related to their problems. SHA 2011 makes it possible to identify and compare these differences. There is no single level or distribution of expenditure to which countries should restrict themselves; rather, there are different ways of using resources that are compatible with equity and efficiency in each context.

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Gasto en atención primaria en salud en las Américas: medir lo que importa

RESUMEN

En este informe especial se compara la medición del gasto en atención primaria en salud (APS) propuesta por la Organización para la Cooperación y el Desarrollo Económico (OCDE) y la Organización Mundial de la Salud (OMS) según el marco mundial para reportar gastos en salud (SHA 2011) en tres países de la región de las Américas. Hay divergencias conceptuales: 1) la operacionalización como atención básica, por OCDE, o primer contacto, por OMS; 2) la mayor amplitud de bienes y servicios en la definición de OMS (incluye medicamentos, administración y servicios preventivos colectivos); 3) la consideración únicamente de servicios en proveedores ambulatorios en OCDE. Los gastos en APS como el porcentaje del gasto corriente en salud (GCS) en 2017 para OMS y OCDE, serían: México (43,6% vs 15.1%); República Dominicana (41,1 vs 5,75%) y Costa Rica (31,4% vs 5,7%). La definición amplia de APS como primer contacto de OMS facilita la inclusión de servicios que reflejan la forma en que los países ofrecen atención a su población. Aun así, la OMS podría mejorar las descripciones de las categorías incluidas para fines de comparación internacional. Restringir la APS a proveedores ambulatorios como hace OCDE limita mucho la medición y excluye intervenciones intrínsecas al concepto de APS, como servicios colectivos de prevención. Como paso transitorio se recomienda a los países que monitoreen el financiamiento de la APS, explicitando qué incluyen en su definición. El SHA 2011 permite identificar y comparar estas diferencias.

Palabras clave
Atención primaria de salud; gastos en salud; mediciones, métodos y teorías.

Gasto em atenção primária à saúde nas Américas: medir o que importa

RESUMO

Este informe especial apresenta uma comparação entre a medida do gasto em atenção primária à saúde (APS) conforme as propostas da Organização para a Cooperação e o Desenvolvimento Econômico (OCDE) e da Organização Mundial da Saúde (OMS), usando a metodologia mundialmente aceita para reportar gastos em saúde – o System of Health Accounts (SHA 2011) – em três países da Região das Américas. Observam-se divergências conceituais entre os métodos: 1) operacionalização do conceito como atenção básica pela OCDE ou primeiro contato pela OMS; 2) maior abrangência de bens e serviços de acordo com a definição da OMS (englobando medicamentos, administração e serviços de prevenção em âmbito coletivo) e 3) inclusão exclusivamente de serviços ambulatoriais de acordo com a OCDE. Os gastos em APS como percentual do gasto corrente em saúde (GCS) em 2017, de acordo com os métodos propostos pela OMS e pela OCDE, foram: 43,6% vs. 15,1% no México; 41,1% vs. 5,75% na República Dominicana; e 31,4% vs. 5,7% na Costa Rica. A definição ampla de APS como primeiro contato proposta pela OMS permite incluir os diferentes arranjos de atenção existentes nos países. No entanto, as categorias deveriam ser mais bem detalhadas para facilitar a comparação internacional. Por outro lado, a proposta da OECD restringe a APS aos prestadores de serviços ambulatoriais, o que limita muito a medição e exclui intervenções próprias do conceito de APS, como serviços de prevenção no âmbito coletivo. Numa etapa de transição, recomenda-se aos países monitorar o financiamento da APS, explicitando os itens incluídos na definição empregada. A metodologia SHA 2011 possibilita identificar e comparar essas diferenças.

Palavras-chave
Atenção primária à saúde; gastos em saúde; medidas, métodos e teorias.
Corrigendum

The *Pan American Journal of Public Health* draws readers’ attention to an error in the following article, pointed out by the authors.


In page 3, table 1, HC.3.4 Outpatient long-term care (health), should read HC.3.4 Home-based long-term care (health).