

19

Monitoring and Evaluating the Implementation of Essential Packages of Health Services

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ABSTRACT

Essential packages of health services (EPHSs) are a critical tool for achieving universal health coverage, especially in low- and lower-middle-income countries; however, guidance and standards for monitoring and evaluation (M&E) of EPHS implementation are lacking. This chapter assesses current approaches to EPHS M&E, including case studies of M&E approaches in Ethiopia, Pakistan, and Somalia. It proposes a step-by-step process for developing a national EPHS M&E framework, starting with a theory of change that links to the specific health system reforms the EPHS aims to accomplish and includes explicit statements about the "what" and "for whom" of M&E efforts. Monitoring frameworks need to consider the additional demands such efforts could make on weak and already-overstretched data systems, and they must put in place processes that enable quick action on emergent implementation challenges. Evaluation frameworks could learn from the field of implementation science; for example, they could adapt the Reach, Effectiveness, Adoption, Implementation, and Maintenance framework to policy implementation. Although each country will need to develop its own locally relevant M&E indicators, all countries are encouraged to include a set of core indicators that align with the Sustainable Development Goal 3 targets and indicators. The chapter concludes with a call to reprioritize M&E more generally and to use the EPHS process as an opportunity for strengthening national health information systems. It also calls for an international learning network on EPHS M&E to generate new evidence and exchange best practices.

Monitoring and Evaluating the Implementation of Essential Packages of Health Services

INTRODUCTION

Essential packages of health services (EPHSs) have risen to prominence in low-and middle-income countries (LMICs) as a means of delivering on Sustainable Development Goal (SDG) target 3.8 and national commitments to achieve universal health coverage (UHC) (Waddington 2013; Watkins et al. 2017). A major threat to the usefulness of EPHSs is that development and implementation processes have historically paid little attention to monitoring and evaluation (M&E) efforts (Glassman et al. 2016). Consequently, few empirical, country-derived precedents exist on how to conceptualize and execute M&E activities specific to EPHS-related reforms. Resource-limited countries face unique challenges in tracking the implementation and impact of their EPHSs. At the same time, the proliferation of stakeholders with different M&E requirements—for example, external donors, national ministries of health, district health administrative offices, and international normative bodies—limits the transferability of lessons from high-resource settings (Thomas et al. 2021).

This chapter emerged from a series of meetings on capturing lessons learned from country-level efforts to translate the model EPHS recommended in the third edition of Disease Control Priorities (DCP3). Drawing on the experience of DCP3 projects in Ethiopia, Pakistan, and Somalia, the chapter summarizes the state of the evidence on M&E for EPHSs. Ethiopia and Pakistan were chosen from among the seven case study countries and economies (others being Afghanistan, Kenya, Somalia, Sudan, and the semiautonomous region of Zanzibar) because they were the farthest along in development of their EPHS M&E frameworks. Somalia was chosen as one of the case studies included in the Disease Control Priorities, fourth edition, country and economy experiences series. The chapter proposes a generic framework for EPHS M&E, including reflections on key indicator features. That framework is intended as a starting point for developing local frameworks, and it will need reviewing and updating as experience with EPHS M&E accumulates in the coming years. The chapter also identifies high-priority areas for future research and collective action in this area, with the intention of stimulating new dialogue and laying out a learning agenda for practitioners, project sponsors, researchers, and policy makers.

WHY A NEW APPROACH?

The individual interventions and services within an EPHS exist within the larger health ecosystem, and monitoring and evaluation of those health services come in many varieties. Interventions addressing high-burden communicable conditions are captured by disease-specific M&E efforts, frequently within the context of donor-funded initiatives. Other basic services, such as obstetric care, are tracked by routine health management information systems (HMISs). For a very low-resource country with a limited set of interventions in its EPHS, the combination of such activities may allow for monitoring of all the included services, though in a fragmented, uncoordinated way. At the policy level, national and condition-specific strategy revision processes often include retrospective analyses of health targets, implicitly

or explicitly tied to services in an EPHS. Those analyses provide countries with opportunities to take stock and inform changes to the next iteration of strategic plans. Separately, one-off or periodic evaluations of major system areas such as through health sector performance assessments can provide additional insights.

Those myriad efforts are invaluable but are insufficient to capture the implementation and impact of EPHSs in the context of UHC in LMICs. An EPHS is a specific policy tool intended to motivate the rationalization of resource allocation and change the composition of services delivered. In the context of UHC, it is also a tool to advance progressive universalism by expanding the types of health conditions for which care is available. Growing numbers of EPHSs in LMICs include interventions for high-burden noncommunicable diseases, like cardiovascular disease and cancer, as well as acute but complex issues like emergency and surgical care.

To understand whether EPHSs as currently designed are an effective policy mechanism for service delivery reforms will require new approaches for M&E. Those approaches will need to draw on existing theory while integrating classical targets of evaluation, such as commodities and measures of health status, along with measures of policy implementation. The latter is especially important in determining whether the EPHS effectively influences activities throughout different departments of the Ministry of Health, rather than simply sitting on a shelf in the planning department. The new approach is not meant to duplicate the immense M&E efforts already under way, but rather to interrogate the data they collect in a way that allows for determining whether the resource-intensive processes involved in health benefits package revision are producing the desired impact on resource allocation, equity, and ultimately the scope of care available to patients at little to no cost. The following sections briefly review relevant literature on EPHS M&E, reflect on EPHS M&E experiences in Ethiopia, Pakistan, and Somalia (three countries that recently underwent EPHS revision processes), and outline how other countries could develop their own frameworks.

M&E OF HEALTH SERVICES PACKAGES IN THE UHC ERA

Information to supplement the experiences of the *DCP3* country projects and place them in context came from searches of Pubmed, PAIS, and a few gray literature sources known to contain information on EPHS M&E. The original search, conducted in January 2022 and updated in January 2023, focused on studies published after 2002. (Refer to online annex 19A for additional information regarding the methods used [https://dcp4.w.uib.no/volumes/volume-1-country-led-priority-setting-for-health].)

Monitoring

High-income country analogues of EPHSs are benefits packages and medicine formularies that act primarily as tools for determining provider payments and controlling drug costs (Ulmer et al. 2012). In LMICs, however, EPHSs have a mandate to rationalize the entire suite of health services currently (or potentially)

provided in the country. Countries often link EPHSs to national strategic planning exercises and, as such, use them to outline a vision for health reforms that can help progressively realize UHC by expanding the range of publicly financed health services (for example, to address emerging challenges like cancer or cardiovascular disease) as available budgets for health increase (Soucat, Tandon, and Gonzales Pier 2023). High-quality, timely monitoring is essential for accountability and management of health facilities, and findings from the literature support the need to leverage existing data collection efforts to the greatest extent possible, even if they provide an incomplete picture of EPHS adoption, implementation, and impact (Global Health Cluster and WHO EPHS Task Team 2018).

Current monitoring efforts in LMICs emerged from specific programs or disease areas (such as HIV/AIDS, family planning, and vaccination campaigns) and efforts to strengthen national HMISs generally (Thomas et al. 2021). In settings where resource constraints effectively limit EPHSs to donor-financed interventions delivered in community and primary care settings, a robust HMIS could capture the alignment of service delivery outputs with EPHS priorities. HMISs alone, however, cannot monitor whether an EPHS as a policy mechanism is being implemented as intended (for example, EPHS dissemination, or changes in financial flows following EPHS revisions). Little monitoring guidance exists for complex, integrative policy efforts such as those related to UHC, though emerging work from the field of policy implementation science offers promise (Bullock et al. 2021). Compounding the challenge is the fragmentation of financing and service provision mechanisms. For example, the most recent resource-mapping exercise in Malawi identified 185 sources of funding, which flowed through 226 implementing agents (Yoon et al. 2021). Existing approaches to routine monitoring—tied to specific development projects and global health initiatives—may not be meaningful for EPHS M&E.

Evaluation

The search yielded seven publications evaluating EPHSs in LMICs. Six studies either compared the contents of an EPHS to a normative set of recommended services (Akazili et al. 2020; Hepburn et al. 2021; Shekh Mohamed et al. 2022) or assessed the extent to which the EPHS development process reflected an overarching set of aims (such as human rights) (Chapman, Forman, and Lamprea 2017; Kapiriri 2013; Mbau et al. 2023). One study assessed a set of service delivery indicators to understand the impact of EPHS on clinical or health outcomes (Bowie and Mwase 2011). Beyond systematic evaluations, information on EPHS effectiveness surfaced in case studies and program reports (Phoya et al. 2014; Wright and Holtz 2017). The publications on EPHS implementation discussed one-time evaluation activities that occur after policy adoption and use a range of methods. The search did not find any instances of the integration of formal impact evaluations into EPHS planning and design; however, to the extent that such integration occurred, it would likely have been captured within national policy processes and thus not picked up by the search method.

COUNTRY EXPERIENCES

The following subsections summarize the experiences with EPHS M&E in three *DCP3* country projects, illustrating different potential approaches.

EPHS M&E Approach in Ethiopia

Ethiopia took a parsimonious approach to M&E that relies heavily on population surveys (Eregata et al. 2020; FMoH 2021) and trends in health outcomes reported by the Global Burden of Disease study. Other countries with resource-limited information systems might choose such an approach, which is feasible in nearly all contexts and requires limited setup or additional EPHS-specific M&E investment. Still, imperfect survey coverage makes it difficult to reliably correlate changes in deaths and disability-adjusted life years to specific EPHS measures, making the approach suboptimal.

Ethiopia's Federal Ministry of Health completed an EPHS revision process in 2019. That process involved 35 consultative workshops with numerous stakeholders and resulted in a list of about 1,000 interventions to be included in the EPHS, with just over half deemed high priority and thus free of charge. (Unlike in Afghanistan and Pakistan, the process in Ethiopia drew on a range of sources for candidate interventions, beyond the model lists from *DCP3*.) Refer to Eregata et al. (2020) for a summary of the deliberative process and outcomes.

Development of M&E plans occurred later in the EPHS reform process, with M&E for the EPHS nested in a larger M&E framework for all of Ethiopia's Health Sector Strategic Plan goals (FMoH 2021). Ethiopia's framework relies heavily on population-based surveys supplemented by other data sources like health information systems and National Health Accounts data (refer to online annex 19B, https://dcp4.w.uib.no/volumes/volume-1-country-led-priority-setting-for-health).

To track the EPHS's objectives related to universal health coverage, the Ministry of Health chose 16 tracer service coverage indicators that aligned with the World Health Organization Service Coverage Index and with SDG indicator 3.8.1. It also included financial risk protection indicators (online annex 19B). The overarching M&E framework also includes a proposed list of tracer indicators to explicitly monitor equity of service provision across several dimensions (including sex, wealth, and geography) during the EPHS implementation time frame (FMoH 2021).

The Ministry intends to evaluate the impact of the EPHS by tracking annual estimates of age-standardized death and disability-adjusted life-year rates using estimates from the Global Burden of Disease study, with 2019 as the baseline year for evaluation (online annex 19B). The framework also includes mechanisms for assessing how the EPHS has been adopted within various strategy and planning activities, such as the national essential drugs list and development/revision of clinical guidelines.

EPHS M&E Approach in Pakistan

Pakistan is pursuing a more ambitious approach (Shekh Mohamed et al. 2022). Its M&E efforts will use a broader array of domestically generated, service delivery—focused indicator data collected via existing, strengthened national and subnational health information systems. The monitoring data will be aggregated up to evaluative metrics. Other countries considering this approach would need to ensure sufficient resources for developing and maintaining such a system. For Pakistan, the increased costs are balanced by the potential benefits of (1) leveraging the EPHS process to strengthen much-needed existing health information system infrastructure at the local and national levels, and (2) generating data that provide a compelling case for the benefits of the EPHS on equity, financial risk protection, societal trust, and health outcomes.

Over 2017–18, Pakistan's Ministry of National Health Services, Regulations & Coordination led a two-year process to develop a national-level EPHS. Because of the federal and decentralized design of its health system, Pakistan intended the EPHS as a model for contextualized, provincial-level EPHSs. That process was under way as of 2021, with early-stage implementation in selected districts. As in Ethiopia, the national M&E framework is intended to align with Pakistan's global commitments, principally to SDG indicators 3.8.1 (service coverage index) and 3.8.2 (financial protection).

The EPHS M&E framework development process involved detailed consultations with provincial governments, development partners (including United Nations agencies), and international academic institutes such as the London School of Hygiene and Tropical Medicine. Development of the M&E framework, organized around a results chain model that includes the six components of the World Health Organization health systems framework, used the following cardinal principles:

- The district as the primary unit of implementation and of M&E
- Enhanced use of district-level routine data (that is, existing HMISs) or monitoring, complemented by provincial- and national-level data
- A careful approach to selection and use of monitoring indicators, ensuring they
 can all be collected and reviewed regularly
- Monthly, quarterly, and yearly benchmarks for EPHS monitoring
- Use of rapid and targeted special data collection activities in the yearly
 monitoring activities; examples include short client exit surveys, community
 catchment surveys across the served populations of primary health care facilities,
 and other data to assess effective coverage
- Taking a systemwide approach to monitoring rather than focusing on the EPHS; the rationale for this approach was to integrate efforts related to universal health coverage into the existing health system, including its M&E function.

The principles apply particularly to monitoring. A detailed evaluation, planned after three years of implementation, will involve additional survey data collection (for example, facility surveys, client exit surveys, and qualitative assessments of

process indicators). Refer to online annex 19C for more on Pakistan's approach (https://dcp4.w.uib.no/volumes/volume-1-country-led-priority-setting-for-health).

Somalia's Experience in Revising Its EPHS M&E Framework

The prolonged conflict in Somalia has hampered the country's progress on its health system objectives. Despite the challenges facing it, the country has sought to continue its efforts for improving population health by defining EPHSs. The initial EPHS, developed in 2009, allowed the country to expand service delivery through targeted demand creation and health system investments. The process of revising the package started in 2020 and aimed to address the shortfalls of the earlier work through an implementable package that incorporates a comprehensive approach to service delivery and enhances health system responsiveness. (Chapter 6 in this volume details Somalia's experience during the 2020 revision of its EPHS.)

The revision of the EPHS included the development of an M&E framework. Until that point, Somalia lacked a standardized health information system, necessitating the establishment of a system capable of generating routine and consistent data. As part of that process, it defined a standard list of key indicators. The data sources for those indicators included surveys, community-based surveillance systems, and a routine District Health Information System. The M&E framework aims to monitor multiple dimensions including service delivery, quality of health services, and overall impact of the EPHS. To ensure transparency and accountability, an independent agency is involved in conducting the M&E activities.

KEY ISSUES AND UNKNOWNS IN EPHS M&E PROCESSES

Logic models, used in both Ethiopia's and Pakistan's EPHS monitoring plans, and theories of change commonly used in program monitoring more broadly provide a starting point for EPHS monitoring but suffer from two limitations (Rogers 2014; Sharp 2021; W. K. Kellogg Foundation 2004). On the one hand, the simplified, linear approaches used to track single disease initiatives are inadequate for effectively monitoring the complex, systems-level objectives of health benefits packages. On the other hand, the existing EPHS-specific guidance from better-resourced countries requires extensive, highly detailed data that are often unavailable in lesser-resourced countries.

When it comes to evaluation, available empirical data are even more scarce. The cross-sectoral, decentralized nature of an EPHS makes an integrated evaluation unlikely because the EPHS is not any one department's domain, as underscored by the lack of existing literature and empirical examples. Unlike monitoring, however, existing evaluation and implementation models and tools could be readily adapted to an EPHS.

Applying current M&E frameworks to an EPHS runs the risk of going straight from policy formulation to measuring changes in service coverage and health outcomes, thereby skipping the intermediary processes essential for understanding and improving the implementation of EPHSs. Developing effective EPHS M&E frameworks requires a better understanding of the mechanisms of EPHS operation on health systems and the determinants of EPHS implementation, as distinct from broader health system and socioeconomic factors.

PROPOSED APPROACH TO EPHS M&E

Given the lack of a systematic approach to monitoring and evaluating the implementation of EPHSs, this chapter proposes the following stepwise approach.

Step 1. Develop Theories of Change

Figure 19.1 presents examples of simple theories of change that illustrate how EPHS-related reforms might influence health and systems processes and outcomes that M&E activities ought to capture. It shows the types of questions a detailed theory of change might ask relating to priority areas for UHC and the EPHS, such as essential medicines, equitable financing, and management of chronic diseases like hypertension. Local theories of change will need to include the roles and obligations of nongovernment actors as applicable. For example, external partners may provide financial support for EPHS interventions, or private sector physician groups might have a contractual arrangement with the government to provide certain essential services. Overall, the theory-of-change exercise aims to help the Ministry of Health determine what is being monitored or evaluated, and for whom (that is, the government or otherwise).

Step 2. Create an EPHS M&E Framework

The most common approach to M&E framework development is a results chain or logic model, which links program inputs, activities, outputs, outcomes, and impact(s) in a linear and causal manner (UNAIDS 2010; W. K. Kellogg Foundation 2004). Such an approach is ideal for standalone health programs of low to moderate complexity (Institute of Medicine 2013; Nutbeam et al. 2015); however, it is unclear how applicable this linear, unidirectional approach is for whole-system reforms such as those implied in EPHS exercises. A retrospective look at Pakistan's experience in coming years could provide insight into the usefulness of the approach.

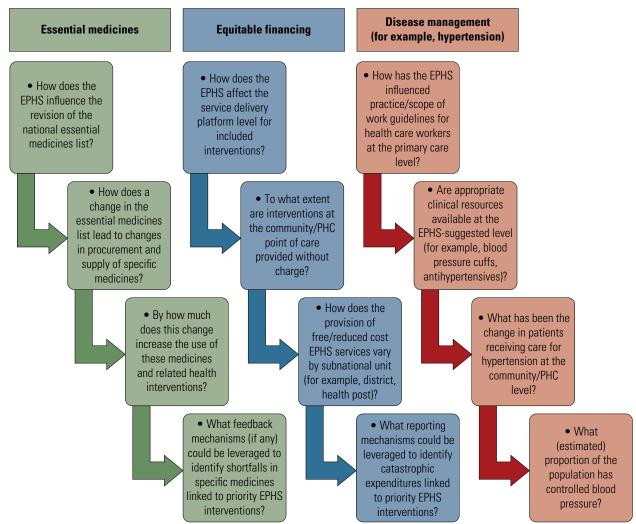


Figure 19.1 Sample Questions or Tracer Indicators Based on Theories of Change for EPHS Reform

Source: Original figure for this publication.

Note: EPHS = essential package of health services; PHC = primary health care.

The framework for EPHS monitoring and the framework for EPHS evaluation should be distinct and separate documents, but they should align with each other as well as with the overall health sector M&E strategy. Monitoring is understood as an ongoing effort that uses routine data and existing staff to ensure that EPHS reforms are being implemented and corrected as needed to achieve the intended objectives. Thus, the EPHS monitoring framework should place relatively greater emphasis on policy processes and intermediate indicators to enable quick identification and remediation of emergent implementation shortfalls. By contrast, evaluation is understood as a periodic effort, usually covering a period of at least 12 months, that builds onto monitoring activities with specialized and one-off data collection

to ensure that the planned reforms are achieving their intended outcomes. Thus, the EPHS evaluation framework should place relatively greater emphasis on measures of service coverage, health status, client satisfaction, and so on, to build a coherent understanding of the effectiveness of the EPHS reforms and their effect on populations and health system performance.

Monitoring

Monitoring frameworks should start from the recognition that much work has been done to strengthen health information systems in LMICs and that many countries regularly review and revise their national and subnational indicators (Aqil, Lippeveld, and Hozumi 2009; Belay, Azim, and Kassahun 2014; Mutale et al. 2013). EPHS monitoring needs to determine how those existing data collection efforts, along with expensive ongoing surveys and health indicator databases, can be combined to understand EPHS implementation, rather than create novel indicators, as discussed in step 3 (Global Health Cluster and WHO EPHS Task Team 2018). Developing recommendations on procedures for identifying tracer indicators, for example, would be beneficial.

Monitoring of the EPHS should occur in multiple dimensions (refer to the earlier discussion on theory of change). Ministries need to monitor the content of the package itself as well as the process used for its development. Relevant characteristics to consider include responsiveness to local needs, inclusiveness, the extent to which the delivery and organization of services match the implementation arrangements with the health system, and feasibility (Glassman, Giedion, and Smith 2017). Without capturing these metrics over time, countries will find it difficult to determine whether implementation failures are due to a lack of acceptability or adoption of the EPHS (for example, among subnational planning teams), to limited demand for mismatched services, to insufficient resources, or to other factors.

The EPHS is fundamentally an evidence-informed tool to advance the UHC agenda, primarily via client interactions with the health care system. Prior retrospective assessments of EPHSs focused on nationally defined packages (Hepburn et al. 2021; Kapiriri 2013) but did not consider adaptations made, formally or informally, at subnational levels of service planning, or did not consider the EPHSs' impact on use or out-of-pocket costs. Not only is EPHS development an ongoing, adaptive process, but national and subnational health contexts will likely change over the EPHS life course (5–10 years), altering the assessment of feasibility, costs, and so on. Ongoing monitoring of policy adaptation is critical.

Pakistan's experience shows the importance of tracking quality of care as an early bellwether for monitoring client experience and health system responsiveness. Traditional quantitative monitoring approaches may not be fit for this purpose. Consequently, understanding how to integrate qualitative methods into routine monitoring efforts will require more theoretical work.

Evaluation

Insights from the field of implementation science can help fill the gap in linking the EPHS to changes in resource allocation, service delivery, and ultimately health outcomes. For example, many country- and disease-specific applications have used the Reach, Effectiveness, Adoption, Implementation, and Maintenance (RE-AIM) framework. RE-AIM seeks to identify and, when possible, quantify the "active ingredients" of a program that translate directly into favorable outcomes of UHC for the populations served (Glasgow, Vogt, and Boles 1999). RE-AIM could be applied to the implementation of the EPHS in general (that is, understanding how district managers use it) or to a series of specific tracer interventions (such as safe delivery) linked to the selected indicators (table 19.1).

Table 19.1 General and Specific Application of RE-AIM for EPHS Evaluation, Using the Example of the Maternal Health Services Tracer "Safe Delivery"

Construct	Application to EPHS in general	Application to specific service, safe delivery	
Reach	% of population covered ^a by facilities that use EPHS	% of population in needa receiving safe delivery services	
Effectiveness	Change in service delivery (qualitative ^b) + 00P costs (quantitative)	Change in mortality and OOP costs for facility delivery (quantitative)	
Adoption	% of units ^c adopting EPHS	% of units ^c adopting safe delivery service	
Implementation	Level of fidelity to EPHS overall (for example, % of services provided)	Level of fidelity (quality) of core components of safe delivery	
Maintenance	Sustainment of adoption/implementation over time	Sustainment of adoption/implementation over time	

Source: Adapted from Glasgow, Vogt, and Boles 1999.

Note: EPHS = essential package of health services; OOP = out of pocket; RE-AIM = Reach, Effectiveness, Adoption, Implementation, and Maintenance.

- a. Calculation of coverage would be a population-weighted average based on utilization data and measures of adoption.
- b. Because an EPHS reform might continue some interventions from a previous EPHS and add or remove others, "effectiveness" would need to be a holistic, qualitative assessment of how effective the EPHS reform was in *actually* changing clinical practice.
- c. Units can refer to districts, facilities, or individual providers depending on the needs of the particular application.

Although RE-AIM does not usually include a specific assessment of equity impact, such an assessment could flow naturally out of the application of RE-AIM across different subnational units. Specifically, population levels of each of the (quantitative) RE-AIM indicators could be disaggregated by province/state or a comparable measure of socioeconomic/demographic status, such as through a geospatial analysis of HMIS or Demographic and Health Survey data. In principle, results could also be stratified by gender, income, or other dimensions (depending on the service area), though such stratifications would probably require additional client-level data collection via population surveys (for example, benefit incidence analysis), which could prove costly and labor intensive in some circumstances (McIntyre and Ataguba 2010). Establishing or expanding health records systems that can cover the entire population could also provide additional insights into the equity impact of the EPHS, though at a considerable cost.

Step 3. Select Indicators

The modern concept of an EPHS is that of a policy instrument that helps achieve the SDGs, including target 3.8 relating to UHC. All countries are expected to report on two indicators related to that target: SDG 3.8.1 (service coverage index) and SDG 3.8.2 (financial protection)—refer to box 19.1 (UNSD 2023a, 2023b). Pakistan and Ethiopia have integrated the two measures into their M&E frameworks, but many countries do not currently track even these most basic indicators, so efforts to improve national-level EPHS monitoring and reporting must start here.

Box 19.1

Sustainable Development Goal 3 Universal Health Coverage Indicators

3.8.1. Coverage of essential health services (defined as the average coverage of essential services based on tracer interventions that include reproductive, maternal, newborn and child health, infectious diseases, non-communicable diseases and service capacity and access, among the general and the most disadvantaged population).

3.8.2. Proportion of population with large household expenditures on health as a share of total household expenditure or income.

Source: UN General Assembly 2017, 7.

This chapter proposes that M&E of EPHS implementation should use two sets of indicators. The first set, or "core" indicators, would be based on the indicators for SDG target 3.8, including the indicators used to compute the World Health Organization's Service Coverage Index, and used in nearly all countries unless compelling epidemiological reasons suggest otherwise. The second set, or "dynamic" indicators, would be based on the local context and reflect the specific reforms the EPHS aims to achieve. For example, although not included in the Service Coverage Index, breast cancer has increasingly become a priority for many countries. A country that introduces or significantly expands a breast cancer program as part of an EPHS process might then include a dynamic indicator related to breast cancer screening or treatment access. Several sources of available UHC indicators used in research and implementation in LMICs could serve as a starting point (Haas et al. 2012; Lozano et al. 2020).

Regardless of the sources of core and dynamic indicators, they should leverage ongoing data collection activities whenever possible, and the M&E needs of the EPHS should be seen as an opportunity to improve routine data collection systems. The challenges countries have experienced in reporting on the SDG indicators highlight the depth of the need for greater investment in human, technological,

and financial resources (WHO and World Bank 2021). Further, to minimize the risk of adding to already high data collection burdens, countries could focus on a limited number of tracer conditions and components not related to service delivery (for example, supply chain strengthening and financing system) along with their associated signal indicators. The choice of dynamic indicators should also be linked to the theory of change created during the EPHS development process (refer to step 1).

In the context of UHC and the EPHS, M&E of financial protection outcomes is particularly important. Measures of financial protection need to align with the reality of fragmented, nonfungible health resource flows in many countries. For example, most catastrophic health expenditure worldwide is for noncommunicable diseases (Essue et al. 2017), but EPHSs may not include many of the most expensive (and highest-financial-risk) interventions, especially in low-income countries. Efforts need to be made to estimate out-of-pocket spending on interventions included in the EPHS rather than out-of-pocket spending in general, because the latter may not capture the intended effect of the EPHS—that is, to reduce out-of-pocket spending on interventions in the package.

Finally, the set of measures necessary for routine tracking of the provision of comprehensive, high-quality health care to all citizens—the M&E function of the health system in general—must be distinguished from the much smaller subset of indicators required to monitor the implementation and effectiveness of an EPHS as a policy tool. As a complement to aggregate, quantitative indicators, countries should also institutionalize data collection activities that capture policy processes and the rollout of new services (that is, early policy implementation). Examples of those activities include key informant interviews conducted among EPHS implementers to better understand how the EPHS is being used (or not) and what determinants of nonuse are amenable to intervention.

The framework described in this chapter is intended to be a first, not a final, offering on how to extend M&E theory to understand EPHS impact. Integrating equity considerations more fully at each step will require additional theoretical work. The theory and its components will also need validation through empirical work in countries revising their EPHSs.

A CALL TO ACTION

Most guidance on M&E in LMICs either aims at strengthening national health data collection systems or follows from standalone health programs that address specific topics like HIV/AIDS (UNAIDS 2010) or child health (Bryce et al. 2004). Little published to date on M&E offers specific guidance for understanding the impact of EPHSs. Current M&E tools are inadequate for providing practical, actionable direction on how to evaluate the design and implementation of EPHSs as policy instruments and monitor their ongoing rollout in an affordable, timely way. Consequently, departments tasked with EPHS M&E risk defaulting to broad health

data collection efforts with limited adaptation or integration into an EPHS-specific theory of change and M&E framework.

This chapter lays out an approach to developing EPHS M&E frameworks intended to keep these needs front and center. Ideally, political buy-in for EPHS-related reforms could provide an opportunity to mobilize additional government resources to build out routine information systems, both supporting EPHS implementation and benefiting the M&E function more broadly. Countries can leverage strong HMISs for evaluations, so efforts to build HMIS capacity should be coordinated with EPHS-specific process and implementation data needs (Wagenaar et al. 2016). Additionally, considering the paucity of evidence on the relationship between EPHSs and improved health outcomes in LMICs, global health research funders should consider supporting a limited number of high-quality external evaluations of EPHSs.

The approach in this chapter has several practical and theoretical limitations. A full systematic search of the literature on EPHS M&E was beyond the team's remit, which creates a weakness of the findings presented here. Considering the scarcity of publications in the peer-reviewed literature, a comprehensive review that focuses particularly on gray literature and policy documentation would be immensely valuable and fill an important gap in understanding the different tools being applied to EPHS policy implementation M&E in practice. The chapter is further limited by the focus on seven DCP3 country and economy projects. Future efforts integrating lessons from non-DCP3 countries, particularly those with longer EPHS histories like Malawi and Thailand, would provide valuable insight into effective strategies for EPHS implementation M&E. The proposed way forward underscores the need for a learning agenda built around the experiences of countries undertaking EPHS reforms. International organizations and philanthropies committed to supporting national EPHS development should strongly consider investing in an international learning network that could help harmonize methods, tools, and reporting on country projects and help identify and disseminate best practices.

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