World Health Organization

Step-by-step GUIDE

to conducting a cross-programmatic efficiency analysis

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The Step-by-step guide to conducting a cross-programmatic efficiency analysis is the product of a collective effort by the WHO Health Financing Team. This guide is part of an overall programme of work to identify and address inefficiencies across health programmes within the overall health system. The guide builds off of WHO's System-wide approach to identifying inefficiencies across health programmes, led by Antonio Durán, Joseph Kutzin and Susan Sparkes. This guide directly reflects lessons learned in the implementation of this programme of work to provide concrete steps that are encouraged to consider when conducting a cross-programmatic efficiency analysis.

This document was prepared by Alexandra Earle (WHO), Susan Sparkes (WHO), and Denizhan Duran (former WHO consultant, World Bank). Thanks are due to Phyllida Travis (Independent Consultant), Grace Kabaniha (WHO Regional Office for South-East Asia) and Tomas Roubal (WHO Ukraine) for their review and suggestions to the guide, as well as to the many individuals who have contributed to the guide through their application of the cross-programmatic efficiency approach and relevant trainings. The guide was produced under the leadership of Joseph Kutzin (WHO).

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1. Overview of approach and guidance document

The World Health Organization (WHO) has developed a diagnostic approach to enable countries to look across health programmes that are part of their health system to detect "cross-programmatic" inefficiencies.[1,2] These cross-programmatic inefficiencies are duplications or misalignments across core health system functions (financing, governance, service delivery and generation of human and physical resources/inputs) that constrain the level of effective coverage potentially achievable by the health system.

The approach uses applied health system analysis to unpack vertical programmes by their functional components and places them within the context of the broader health system. Cross-programmatic efficiency analysis (CPEA) provides an evidence-based process for stakeholder engagement to identify and develop options to address critical areas of inefficiencies in these specific functions both within and across health programmes. While the focus of CPEA is to identify areas where efficiency can be enhanced, it can also highlight areas where efficient approaches are already implemented that can be leveraged across the health system.

The goal of this document is to distil the process-related steps to provide a guide to implementation. The approach is meant to be adapted based on implementation conditions and contexts. This process guide provides the steps to assist practitioners and policymakers, as well as those that might be assisting them, as to how to apply this approach practically. It complements the detailed conceptual approach presented in A system-wide approach to analysing efficiency across health programmes.

[1] For more information on the technical framework, please refer to *Sparkes, S., Durán, A., Kutzin, J., 2017. A System-Wide Approach to Analysing Efficiency across Health Programmes. Health Financing Diagnostics & Guidance No 2, WHO.*

[2] For more examples on how this approach has been conducted in countries, please visit the following website: https://www.who.int/teams/health-systems-governance-and-financing/health-financing/diagnostics/cross-programmatic-efficiency-analysis

2. Guide to conducting a cross-programmatic efficiency analysis

This section provides the steps that are encouraged to conduct a cross-programmatic efficiency analysis (CPEA). Applying CPEA should result in the identification of specific functions where efficiency can be enhanced, proposals to make these efficiency enhancements and a process to engage stakeholders from across health programmes and the overall health system. This analysis should not be viewed as a one-off assessment in countries, but rather it can serve as a baseline analysis of findings of inefficiencies within and across the health system as well as a process of engagement that can be periodically updated.

Useful templates for data collection, analysis and policy options are provided in Section III of this document.

These steps are described in detail below, with clear recognition that the contents require adaptation based on implementation context.

Step 1
Objectives and scope
Step 2
Data collection
Step 3
Within programme functional mapping
Step 4
Across programme functional analysis
Step 5
Prioritization and option-building

Step 1. Determine objectives and scope of analysis

Objectives:

To begin the analytical process, the objectives and scope of the overall analysis based on country need, capacity and demand should be determined. This includes: (1) identifying the analytical team and key focal points for the analyses; (2) embedding the analysis into broader health system reform agendas; and (3) developing a detailed workplan.

Suggested activities:

1.1 **Define the objectives of the study** for your given context. What were the reasons for the request to conduct this analysis? How best can this analysis be positioned in this space? Objectives can include:

- *More efficient allocation and use of resources across programmes/system*
- *Identify targeted areas for integration/harmonization across programmes/system*
- *Identify key challenges to sustainability in the context of donor financing and epidemiological transition*
- *Ensure alignment between financial flows and service delivery objectives*
- *Enable alignment between purchasing agency and disease-specific interventions*

1.2 **Identify and convene focal points within Ministry of Health, WHO and other partners,** and define roles and responsibilities. Under the leadership of the counterpart Ministry of Health, this can include a member of the WHO country office, WHO technical experts from their regional or headquarter officers and/or consultants who are trained in implementing this approach, as well as technical focal points from Ministry of Health who can oversee data collection and play a key role in relationship building and stakeholder identification. Depending on the context, it might also make sense to involve representatives from external funders involved in financing health programmes to inform donor transition discussions. There can be two levels of technical working groups: (1) the core analytical team, as described above, and (2) the consultative technical expert group. This should include programmatic focal points from Ministry of Health along with other key stakeholders at the ministerial level (for instance the Director of Planning or Chief Director) as well as key partner focal points (such as donors).

1.3 **Identify scope and connections with other reform priorities/processes.** Embedding this analysis into broader health system-level reform, as well as programmatic priorities, is critical to ensure the analysis can be used and respond to needs across the health system. The entry point for this analysis may come from either system-level priorities or through programmatic demand (such as transition planning or national strategic planning processes) (see Box 1 for examples of contexts in which this was done across several countries). Additionally, this work can be linked as part of other country health system and health financing diagnostic assessments currently being or planned to be conducted (such as the ones included in Box 2). This step will also include the selection of priority health programmes that will be included in the analysis. More information on what a health programme is and how they relate to the overall health system can be found in Box 3. Please consult **Template 1.3** for guiding questions to help identify programmes to be analysed. Prior countries who have conducted this analysis have chosen 3-5 programmes to analyse.

Box 1: Examples of implementation contexts

Cross-programmatic efficiency analysis is ideally connected in relation to reform priorities, whether through the programmatic or system level entry point. Table 1 summarizes the health programmes, as well as the reform contexts and triggers for the work in countries where the analysis has been conducted.

Table 1

Country	Programmes included in analysis	Broader analytical context
Bhutan	Tuberculosis (TB), HIV/AIDS, malaria, non-communicable diseases, immunization, and Maternal, Newborn, and Child Health	Service delivery reform, donor transition
Comoros	TB, HIV/AIDS, malaria, immunization, nutrition, family health	Service delivery reform, donor transition
Côte d'Ivoire	Mother-child health, malaria, nutrition, TB, HIV/AIDS, immunization	Health financing strategy development and PFM bottlenecks
Ghana	TB, HIV/AIDS, malaria, immunization, and Maternal, Newborn, Child, and Adolescent Health programmes, COVID-19	Donor transition, fiscal space analysis, UHC roadmap planning, COVID-19 response
Lao People's Democratic Republic	TB, HIV/AIDS, immunization	National strategic plans for TB/HIV, health financing strategy development
Nigeria	HIV/AIDS, malaria, immunization, family planning, neonatal and child health, leprosy, nutrition	Improving efficiency, state-level health financing strategy development
South Africa	TB, HIV/AIDS, Maternal, Newborn, Child Health	National health insurance reform
Sri Lanka	TB, HIV/AIDS, non-communicable diseases	Service delivery reform, donor transition
United Republic of Tanzania	TB, HIV/AIDS, malaria, Mother and Child, immunization	Donor transition, efficiency improvements

For more in-depth details on CPEA context and findings, policy briefs for selected country studies have been published that present key findings from the application of CPEA (see Box 6 for more information).[3]

[3] Country CPEA policy briefs can be found on this page: https://www.who.int/teams/health-systems-governance-and-financing/health-financing/diagnostics/cross-programmatic-efficiency-analysis

Box 2: Additional health system and health financing diagnostic tools

Cross-programmatic efficiency analysis can be a complement to other WHO health financing diagnostic tools that are described below.

Health financing country diagnostic (World Health Organization et al., 2016):
This assessment tool provides guidance on how to undertake a situation analysis of a country's health financing system and assess the existing system relative to the goal of universal health coverage (UHC). The results aim to inform the development of a health financing reform strategy. This tool is helpful in order to gain a better understanding of the overall health system.

Health Financing Progress Matrix 2.0 (Jowett et al., 2020):
The Health Financing Progress Matrix 2.0 (HFPM) responds to the need for an instrument to systematically monitor and measure progress in the development and implementation of health financing policies that support progress towards Universal Health Care (UHC). The HFPM assesses country health financing systems against a set of evidence-based benchmarks, framed as nineteen desirable attributes. CPEA is represented in this assessment with a section on undue fragmentation that constrain the efficient use of resources.

Analytical guide to assess a mixed provider payment system (Mathauer et al., 2019):
This guide compliments the "Health financing country diagnostic" by providing a deeper dive into assessing provider payment systems in order to identify options for better aligning the payment system with the objectives of UHC. The results aim to inform and improve the national policy dialogue on purchasing. It assists in making the case for and drawing attention on to the need of aligning payment methods within and across purchasers as an important step towards strategic purchasing, and better efficiency within the health system.

1.4 **Determine the modality for analysis:** There is not a one-size-fits-all approach to conducting this analysis. Options can include, but are not limited to, conducting remote or in-person key informant interviews and/or through workshops with key stakeholders. Typically, there is a mix between desk review and in-person data collection. The analytical team can be both in-country and remote. Desk review can lay the analytic foundation for targeted interviews.

1.5 **Create a list of key stakeholders** affiliated with the selected programmes, as well as the overall health system. Where relevant, stakeholder mapping and analysis can be helpful to understand the range of key actors and their roles/responsibilities/relationship to the selected health programmes or sector. For ease of organization, **Template 1.5** can be used as a helpful table to map out these stakeholders and their interest and influence on the health system/programmes. General groups of stakeholders can be considered under the categories: interest groups, bureaucrats, budget/finance, leaders, beneficiaries and external actors (Campos and Reich, 2019; Sparkes et al., 2019). This should include a list of types of facilities to be visited across geographic areas.

Box 3: Health programmes

Health programmes are part of and contribute to the objectives of the health system. They are often defined by a specific population, particular disease, a region or location, or specific interventions and available technology. Examples of health programmes are provided below:

- HIV
- Tuberculosis (TB)
- Malaria
- Expanded Programme on Immunization (EPI)
- Maternal and child health
- Non-communicable diseases (NCD)

How health programmes are organized varies across contexts. For some, this can involve a focused strategy combined with monitoring delivery of services and outcomes. On the other extreme, it may include its own arrangements for service delivery, financing, human resources, facilities, information systems and procurement. The latter design has been reinforced in some contexts by donor assistance for priority areas (such as HIV, family planning and immunization).

1.6 **Develop workplan:** The list of activities, timelines, deliverables and work plan for execution should be clearly laid out so that the team members are aware of their specific role and when they can expect that task to occur. Within country sampling framework (such as across districts, provinces and subnational entities) should be discussed and agreed upon. This workplan should be updated and adjusted as needed throughout the study period.

Deliverables:

- Agreed upon objectives and scope of analysis
- Focal points across all relevant institutions and partners are identified, including roles and responsibilities
- An agreed upon and detailed modality of analysis and list of key stakeholders
- A finalized work plan, including timelines

Step 2. Data collection

Objectives:

This will usually be a mixed methods approach including the collection of primary data as well as reviewing secondary data sources, including published and grey literature on the overall health system and selected priority programmes. An emphasis should be placed on collecting data based on the four health system functions and subfunctions, and their interconnections, for each programme, including by level of facility (please see Box 4 for more information) or health system. Data collected in this phase will be used for the core analysis in Step 3 and 4.

Suggested activities:

2.1 **Conduct a desk review** to understand the current country context and performance of selected health programmes. This can include both a broad health system scoping as well as a more targeted desk review. This step can be done by reading key materials, both published and grey literature, already produced on the health system. This also consists of collecting key quantitative data outlining the performance of the selected health programmes, as well as expenditure analysis. Data should be collected at both the systems and programme level if available. See **Template 2.1** for a list of potential qualitative data sources and quantitative data to collect and review.

2.2 **Develop a semi-structured interview guide** for identified stakeholders: A sample interview guide is provided in **Template 2.2**, which includes questions across health systems functions on service delivery, financing, governance and creating resources. More information on health system functions and subfunctions can be found in Box 4. It is important to adapt these questions to reflect the context in each country, as well as stakeholder roles.

2.3 **Conduct interviews** using the interview guide as reference. It is advisable to have at least two team members conduct these interviews. Respondent anonymization should be promoted and the stakeholders need to be assured of the confidentiality of the interview process and information captured.

Deliverables:

- An inception report on targeted areas of the health system in relation to the selected health programmes of interests, health system as well as a list of key performance indicators of the selected health programmes to provide a baseline situation of the health programmes/system in the country of interest that also includes the analytical plan
- A list of relevant stakeholders and their affiliations, responsibilities and relationships
- Semi-structured interview guide

Box 4: Health system functions and subfunctions

As laid out in the World Health Report 2000, "a health system consists of all organizations, people, and institutions producing actions whose primary intent is to promote, restore, or maintain health" (World Health Organization et al., 2010). Using this definition and framework, all health systems need to develop a set of specific, repeated activities and tasks called "functions" intended to lead to the desired health system outcomes.

By decomposing health programmes into their functional parts, areas of programmatic duplication, overlap or misalignment can be highlighted. Specifically, these four basic functions, each with a number of interconnected subfunctions, are:

— **Service delivery:** The way that specific inputs are combined to produce and deliver services to individuals (personal health care services) and groups (population-based services). This also encompasses how and where services are delivered, as well as their management and organizational arrangements.
- Type of service
- Type of organizational arrangement
- Type of management

— **Financing:** The way in which revenues are raised, accumulated into fund pools and allocated to providers.
- Revenue raising
- Pooling and flow of funds
- Purchasing (provider payment and benefit design)

— **Generation of human and physical resources/inputs:** The production and creation of core inputs such as personnel, equipment, technologies, technical and managerial knowledge, physical resources and facilities, supply chains and information.
- Human resources
- Facilities
- Laboratories
- Technologies/medicines/supplies
- Information systems

— **Stewardship/governance:** The way the health system is run and how institutions involved in it, both public and private, are overseen and have influence over the health sector.
- Planning/strategizing
- Regulating
- Intelligence
- Coordination and accountability

Step 3. Within-programme functional mapping

Objectives:

The goal in this phase is to map the data collected in Stage 2 within each of the four health system functions and subfunctions for the selected priority programme. This is the first step to then analyse and identify inefficiencies across the priority health programmes.

Suggested activities:

3.1 **Describe in detail each health system function for each selected health programme:** Using the data collected in Step 2, the four key health system functions and related subfunctions should be described and mapped for each of the health programmes selected. For example, for the HIV programme in Country X, what is the procurement process for necessary medicines? The same question would then be asked about the Tuberculosis programme (or another selected programme). To aid in these descriptions, please refer to **Template 3.1** for indicative guiding questions for how to map each function and subfunction to your selected programmes.

3.2 **Complete within-programme functional mapping table.** For ease of organization, **Template 3.2** can be used as a guiding tool. Please keep in mind that these rows are not mutually exclusive, and there can be an overlap of functions and subfunctions. For instance, financing related data may be documented in the information systems or human resources row. This table is meant to help inform whether the various functional responsibilities in each programme are segmented from, or integrated with, other programmes, or with the rest of the health system. Variations should be noted across geographic areas sampled (such as across districts, provinces and/or regions).

3.3 **Input data into across levels of care functional mapping table:** Data collected on the functions at each level of care should also be described and mapped. For instance, what services are delivered at the lowest level of care and what services are provided at a regional hospital? How many human resources are provided at each level of care (categorized by type)? For ease of organization, **Template 3.3** can be used as a guiding tool. This table will help to inform where there might be potential overlap, gaps, misalignment or duplication of services provided at the various levels of care. This step connects the service delivery realities with the other enabling health system functions. Variations should be noted across geographic areas sampled (such as across districts, provinces and/or regions).

Deliverables:

- Data fully mapped health system functions into a within-programme table (Template 3.2)
- Data fully mapped health system functions into an across levels of care table (Template 3.3)

Step 4. Across-programme functional analysis

Objectives:

The functional mapping exercise in Step 3 provides the foundation to move on to this step: to identify the critical areas of misalignments, duplication and overlap across the priority health programmes and the overall health system.

Suggested activities:

4.1 **Analyse the data looking at key themes:** Using the inputs from the data collection tables from Step 3, the team can analyse what key themes are emerging across different programmes and institutions. This requires discussing with your core analytical team as to "what really matters" in terms of functional inefficiencies across programmes and their consequences for the performance of the overall health system. Please see **Template 4.1** for guiding questions to help identify the key themes emerging from the data.

4.2 **Map inefficiencies into a functional analysis table:** The themes emerging from step 4.1 can be organized into a functional analysis table (sample table provided in **Template 4.2**) across findings, supporting evidence, analysis, implications and policy options. This step provides a cross-sectional or "horizontal" view of the health programmes of interest across the health system on a function-by-function basis. It also helps to organize the inefficiencies in terms of their implications on the health programmes as well as the overall health system to meet objectives. Please see Box 5 for more information on how to collect and analyse qualitative data.

4.3 **Presentation/dialog around inefficiencies to enable prioritization:** An initial prioritization exercise should be conducted with the study team and key focal points based on the critical areas of duplication and overlap across the selected health programmes as well as with the rest of the health system identified in 4.2. This set of issues should be prioritized based on the size and scope of the inefficiency, as well as the technical and political feasibility in being able to address it though a targeted policy response (Step 5). Additionally, in the case that these findings of inefficiencies are widely known across health sector actors, this process can include looking into why the known inefficiency has not been addressed in past reform plans. This consideration can further help with feasibility and prioritization of your findings.

4.4 **Produce reports and presentations summarizing key takeaways:** Once the analysis is completed, there are several options the team should agree on for how to present these findings. Many countries produce a detailed technical report on the main findings of the analysis. Other options include briefs and/or detailed PowerPoints, which focus more on key messages and supporting evidence to target decision-makers in the government. The outputs will depend on the country context and how this work is being used to inform policy and reform.

Deliverables:

- A completed functional analysis table, which details out inefficiency findings, evidence, implications and possible policy options to address them
- Detailed report (or presentation of the team's choosing) highlighting process, methods, evidence, detailed findings and implications with draft policy options
- Suggested: summary briefs/presentations targeted towards policymakers

Box 5: Methods to collect and analyse data

This document proposes a qualitative framing to conduct the cross-programmatic efficiency analysis in-country. In order to execute this process rigorously, certain tools can be used to frame and analyse your data.

Sampling and semi-structured interviews or focus groups: As suggested in this guide, the best way to analyse cross-programmatic inefficiencies is to conduct semi-structured interviews with the key stakeholders that are outlined in **Template 1.5**. The first step is to sample: a judgement sampling method can be used by looking across the different levels of the health system and identifying the number of participants to be interviewed from each category. Other sampling methods, such as snowball, convenience or stratified sampling, can also be used. Semi-structured interviews would then be conducted on these sampled populations, having questions that are a mix of descriptive, structural or contrast questions (Kvale, 1996). As demonstrated in **Template 2.1** there are potential questions that can be asked as part of this interview, and these can be asked in both semi-structured interviews or focus groups. While the interview guide provides an important framing for data collection and should form the foundation of the interview and analysis processes, in practice it is also advised to ask probing questions where necessary or tailor the content of the question based on the emerging themes from a conversation. Where necessary (such as at the district health office level), focus groups can also be conducted, looking into dynamics within an organizational entity. A valuable resource on these methods is a guide that was produced by RAND that can be accessed online (Harrell and Bradley, 2009).

Analysis: Once the interviews are concluded, the next step will be to analyse the transcripts, either through notes that were taken during the interviews or the recordings of the conversations. A first step can be to review the transcripts and code across themes. Codes that are used could be the health systems functions areas in **Template 4.2** and emerging themes would be grouped across these areas. Analysing the emerging themes can help identify inefficiencies across programmes and functions.

Step 5. Prioritization and option-building

Objectives:

Once the analysis is finalized, the next step is for the core team to validate the findings with relevant stakeholders. From here, potential options can be discussed with senior policymakers to develop targeted and actionable policy options to address the sources of the identified inefficiencies to ensure accountability for results.

Suggested activities:

5.1 Validate findings and co-develop a draft set of prioritized options targeting critical areas of inefficiency: The core team, advisors and relevant stakeholders need to come together to validate the findings of the analysis and potential areas for response (see Box 6 for examples of findings). This includes an explicit prioritization exercise to sort potential interventions based on both technical and political feasibility. In general, options can be framed in terms of sequencing or time frame (short-, medium- and long-term), feasibility and cross-cutting/inter-linked functions rather than programmes. Each policy option should also be clear on the source of inefficiency that it aims to target, the intended impact on outcomes, the stakeholders involved, and the proposed process for change. Please see **Template 5.1.1** for guiding questions to help with this analysis, as well as the table provided in **Template 5.1.2** to help with the organization of this process.

5.2 Conduct meetings and workshops to build consensus and disseminate findings: After the core team develops a preliminary set of policy options, the next step is to conduct workshops with senior policymakers to continue to validate findings and build consensus. It is important to not just think about the inefficiencies identified, but to instead place these findings within a larger policy context and into on-going broader health system reform agendas. This can also include discussions around actual efficiencies that were identified and how they can be leveraged.

5.3 Develop an operational plan outlining the way forward with these policy options: Once consensus is built on the areas of targeted inefficiencies, the stakeholders in these meetings should develop an operational plan looking into how these different plans can be implemented, including plans for reassessments of CPEA to monitor policy progress. An additional option here is to hold subnational workshops to discuss and disseminate these findings across all levels for further validation. This operational plan should consider sequencing, and timeframe and the level of the system where the intervention should take place.

Box 6: Examples of cross-programmatic inefficiencies

WHO has produced a series of policy briefs based on a set of cross-programmatic efficiency analyses that have been conducted between 2017 and 2020. These policy briefs summarize the key areas of duplication, overlap or misalignment identified, which are listed below. Please see policy briefs through provided links for more details on the implications of these inefficiencies and related policy options.

Table 2

Country	Key inefficiencies identified
Bhutan	No sector-wide health plan; fragmented financial flows; service delivery duplications; disjointed supply chains; Fragmented and underutilized information system
Ghana	Lack of coordination across institutions within the health sector; Heavy reliance on donor support and lack of general, non-programmatic funds; Duplication and lack of coordination of services across levels of care; Uncoordinated supply chains and heavy reliance on private market procurement; High reporting burden due to lack of centralized and consolidated data systems
Lao People's Democratic Republic	Misalignment of human and physical resource planning and management; Delays in financing and low budget execution; Lack of governance resulting in weak and uncoordinated planning and budgeting processes; Uncoordinated service delivery and management
South Africa	Overly-segmented financing and planning arrangements; Misalignment between frontline needs and top-level allocations/Management; Overlapping lines of financial or performance responsibility; Narrow approaches to human resources allocations; No comprehensive information system

These policy briefs provide important examples from the application of this approach to share information on the inefficiencies identified and suggested policy options to address them as well as to facilitate cross-country learning. They are based on analysis from a particular point in time, with contexts continuously changing.

Deliverables:

- An operational plan detailing targeted policy options for addressing these inefficiencies and a sequenced implementation plan, as well as their potential impact on inefficiencies

3. Templates

Template 1.3. Indicative guiding questions to identify programmes to be analysed

— Which health programmes are priorities for political leaders in discussing health reform (and why?)?
— How large are these health programmes relative to each other and to the overall health system? What share of the government budget is dedicated to each programme?
— Which programmes attract large donor funding?
— Which health programmes are experiencing a possible decline in external assistance as a source of financing?
— Which health programmes are not delivering sufficient results in terms of health outcomes and outputs?

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Template 1.5. Stakeholder mapping table

Name of stakeholder	Role	Interest	Influence
e.g. Minister of Health			
e.g. Director of Policy and Planning, Ministry of Health			
e.g. Directors of health programmes			

Stakeholders can be grouped based on: interest group politics, bureaucratic politics, budget/finance politics, leadership politics, beneficiary politics, and external actors politics. See Reich and Campos (2019) for more guidance (Campos and Reich, 2019).

The interest and influence columns are with respect to the stakeholder's interest and influence in terms of addressing cross-programmatic inefficiencies through integration, or other measures aimed at reducing fragmentation and overlaps across programs.

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Template 2.1: Information that can be collected in desk review

Qualitative Data *(both published and grey literature)*

- Potential sources to review:
  - Health Systems in Transition country report
  - Reports on service delivery and/or human resources
  - Studies previously conducted on health system challenges
  - Strategic plans for health sector
  - Investment cases
  - Government documents
  - Grant submissions
  - External evaluations

Quantitative Data *(collected at both the system and programme level if available)*

- **Overall macroeconomic indicators:** GDP growth rate, GDP per capita, poverty rate, employment rate, inequality, income status, HDI breakdown (World Bank, World Development Indicators), data in the past 5-10 years

- **Health financing** (Source: World Health Organization)
  - Key health financing indicators: current health expenditure per capita, domestic government, out-of-pocket, external as share of current health expenditure
  - SDG 3.8: Coverage of essential health services (3.8.1), proportion of population with large (10 or 25%) household expenditures on health as a share of total household expenditure or income, % of population experiencing impoverishing health expenditure
  - Distribution of health expenditure between disease programmes (WHO Health accounts)
  - Ministry of Health budget/budget execution overview, largest external financing sources and what they are financing, on-budget and off-budget health spending, fiscal space, strategies to increase fiscal space, donor harmonization and donor planning systems
  - Overview of insurance schemes in the health sector: insurance schemes, their target populations, risk adjustment, co-financing/contributory schemes
  - Overview of purchasing in the health sector: procurement policies, benefits package/free services, how services are paid, public good versus personal service financing, financing for health systems components
  - Comparative analysis: comparison of health spending and life expectancy with other similar countries (regional or economically similar)

- **Service delivery and health outcomes**
  - Overall health outcomes: population size, population growth rate, total fertility rate, life expectancy, infant mortality, U5 mortality, maternal mortality, disease burden distribution/snapshot, effective coverage for key communicable and non-communicable diseases, vaccination rates, % of population getting treatment for key diseases (HIV, TB, malaria, hypertension, diabetes, others based on country disease burden), service use by socioeconomic status
  - Service use and provision: % public/private, % primary/secondary/tertiary, service use by socioeconomic status, reasons for not seeking care, inpatient and outpatient service use data,

  - Service readiness/quality of care: availability of services, patient satisfaction, adherence to protocols, availability of essential medicines, responsiveness indicators
  - SDG monitoring and results

- **Generation of human and physical resources/inputs**
  - Supply chains and procurement: which financing sources procure which commodities, supply chain organization and mapping, essential drug lists, spending patterns on pharmaceuticals)
  - Human resources for health: overview on HR planning and distribution, HR payment, HR policies
  - Infrastructure: capital investments, review of capital investment plans, funding levels for capital expenditures, access (% of population living <5km from a health centre), bed occupancy rates, questions on medical equipment
  - # of information systems

- **Governance**
  - Key governing and managing actors/agencies in the health system, and how they fit in with each other
  - Overall organogram of the health system
  - Decentralized governance structures
  - Responsibility for planning for the sector
  - Overview of important policy documents (health sector strategic plan, disease plans) and how they overlap with each other
  - Overview of planning cycles and monitoring and evaluation processes

- **Efficiencies**
  - Focus on resource allocation across levels, look at administrative efficiency (administrative costs as a share of total health expenditure, vertical programmes and their role in the health system), prices of inputs and how they compare to other countries and prices, over or under-utilization evidence

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Template 2.2. Sample interview guide

To be completed at each relevant level of the health system and selected health programmes:

A. Service Delivery

— List the following: programmes/interventions/services/overall results. Where are they strong and where do they face constraints/challenges?
— What are the services that are being delivered within XXX programme? At what level are each of the services provided being delivered and by whom?
— What is the balance between preventative, public-health, and treatment related services?
— What is the type of management at each level of service provision?

B. Financing

Revenue Raising

— Does XXX programme have specific/distinct sources of revenue either from domestic or donor funds? If yes, what is the relative magnitude?
— Are any of the raised revenues earmarked for a specific disease programme?
— In the case of donor funds, are they on-budget/off-budget? How are they incorporated or taken into consideration in domestic budget processes?

Pooling

— Are the funds for the services supported by XXX programme pooled separately, or are they merged together with funds for other health services? At what level of the system do they come together if so?
— Are funds for all of the inputs needed to provide the services supported by this health programme pooled separately, or are certain line items (such as staff salaries) merged while others (such as medicines) held separately?

Purchasing of Services and Interventions

— Are there any differential payment methods or mechanisms for providers to deliver programmatic interventions?
— What incentives do providers face with respect to delivering services for XXX programme? Are there differences by level of care?
— Who has the responsibility of purchasing? What are the different purchasing methods used?
— What is the relative price/cost of relevant services support by XXX programme?

C. Generation of Human and Physical Resources/Inputs

Human Resources

— How are human resources trained for programmatic interventions? (pre-service and in-service)
— How are human resources distributed (geographically and across levels of care)?
— Are there sufficient health and health system professionals to cover the core health needs? If not, in which categories are they the most severe? Are there any pay differentials between XXX programme and other parts of the health system?
— Who pays for Human Resources remuneration (Domestic vs. external budget)? Are staff mapped to the programme part of the recurrent budget?

Information Systems

— How are data generated and managed by XXX programme? Do providers complete separate forms for XXX programme, or is the information included in an integrated data collection instrument?
— To what extent are information systems used by XXX programme and coordinated with other information systems? What human resources/inputs are used to input and analyse information/data?
— Does the output of the information systems facilitate decision-making in relation to the other functions (service provision, financing, stewardship/governance)? Or across disease and population groups?
— Are data collected by XXX programme widely accessible and transparent to the public?

Facilities

— Are facilities at the different levels available to deliver quality interventions for XXX programme?
— Are there facilities that are not operating at full capacity for specific interventions for XXX programme? What is capacity utilization like across different types of facilities?

Supply Chain and Procurement Systems

— What does the supply chains for XXX programme consist of (such as procurement, storage, distribution of consumables, pharmaceuticals)?
— How are stockouts tracked and how often do they happen?

D. Stewardship/Governance

— How is programme planning for XXX coordinated with planning for the entire health system and who makes these plans? At what level and how do programme XXX and health system plans come together?
— What is the budgeting process for programme XXX?
— Is there a centralized operational plan where XXX programme's plan fit into, and who are the key stakeholders in this process? Is there a donor coordination body which works closely with the Ministry of Health?
— What are the predominate types of governance arrangements for health facilities/ providers within XXX programme?
— What accountability mechanisms are in place to enable results in XXX programme (audit, annual reports, confidential dispatches, etc.)? Are there key differences with the rest of the health system?

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Template 3.1. Indicative guiding questions to map health system functions and sub-functions to selected health programmes

Service Delivery

- To whom are the services delivered?
  - To groups or the entire population (such as vector control, billboards)
  - To single individuals/clients/patients (such as treatment with pills, personal advice on lifestyles)
- Characteristics of benefits
  - Benefits accrue largely to the individual received services ("Private goods", such as a surgical operation)
  - Benefits accrue to all ("Public goods", such as air pollution control)
  - Benefits extend beyond the individual receiving the service but not the entire society (services with "positive externalities", such as communicable disease treatment)
- Types of services provided and the organizational arrangements
  - Separate facilities and providers: facility and provider are specialized to provide care for a specific disease, population group or intervention (such as separate facilities and providers for the services associated with the programme)
  - Integrated facilities and providers: facility and provider serve more than one given disease, intervention, or population (such as integrated service delivery, incorporating the services associated with the programme and other health services as well)
  - Mixed units: specialized units that are housed in a coordinated/integrated facility or network.

Financing

- Revenue raising
  - What are the sources of funds for the health system? Do some programmes have specific, distinct sources?
  - Do any programmes have their own distinct revenue collection arrangements?
  - Do out-of-pocket payments play a significant role for any of the services supported by health programmes?
  - Are any revenue sources (most notably external donor assistance) time-bound? Or is the timeline uncertain?
- Pooling
  - What are the overall arrangements for accumulating prepaid revenues for health on behalf of some or all of the population?
  - Are the funds for the services supported by each programme pooled separately, or are they merged together with funds for other health services?
  - Are funds for all of the inputs needed to provide the services supported by specific health programmes pooled separately, or are certain line items (such as staff salaries) merged while others (such as medicines) held separately?
- Purchasing of services/interventions
  - What are the means and methods used to allocate the prepaid resources from the pool to the providers for service benefits? How do they differ across programmes?
  - What incentives do providers face with respect to delivering services for a particular programme objective? Do these incentives differ by programme? What

is the picture compared to the health system overall? Are the same providers (such as primary health care centres) confronted with different financial incentives from different programmes?
- How autonomous are providers in their ability to respond to changing incentives?
- Are programme-related services part of a common benefit package? Or are they considered in practice separately outside of a package of basic services?

Generation of Human and Physical Resources/Inputs

- How are human resources trained, retained, distributed, used, and remunerated? Are there sufficient health professionals to cover the core health needs? Are there pay differentials across programmes and with other parts of the health system?
- Are facilities available of sufficient quality to meet patient needs irrespective of the programme? Are there facilities that are not operating at full capacity?
- To what extent is service provision within and/or across programmes affected by the segmented availability of technology and supplies?
- How are data generated and managed by programmes? Do providers complete separate forms for (each) programme, or is the information included as part of a more integrated data collection instrument? Are the programme-relevant data held separately by the programme, or is it simply made available to programme managers by the unit that manages the national health information system?
- Are programme data widely accessible and transparent to the public? Are they available upon request or published on the web?
- To what extent are information systems used for/by the programme coordinated with other information systems? Does their output facilitate decision-making in relation to the other functions (service provision, financing, stewardship/governance)? Or across disease and population groups? What is the comparative situation in other parts of the system?
- How many supply chains are there (such as procurement, storage, distribution of consumables, pharmaceuticals) within and across health programmes?

Stewardship/Governance

- How is programme planning coordinated with planning for the entire health system? At what level and how do programme and health system plans come together? Who makes the plans for programmes? The health system?
- What are the predominant types of governance arrangements for health facilities/providers within and across programmes, namely:
  - "hierarchical bureaucracy" with tight control and limited freedom of decision making at provider level, or
  - "direct market approach" with relatively unregulated interaction between patients and providers plus little external guidance or control, or
  - autonomous governance, often involving contractual relations with private or public providers
- What type of regulation is used to control health programmes (state laws, by-laws, decrees and local rules, etc)? Are there key differences with the rest of the health system?
- What accountability mechanisms are in place to enable results in each programme (audit, annual reports, confidential dispatches, etc.)? How are these accountability mechanisms used? Are there key differences with the rest of the health system?

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Template 3.2. Within-programme data collection table

Area	Health Programme #1	Health Programme #2	Health Programme #3
Key informants			
Financing: Revenue raising (public, private, external)			
Financing: Pooling			
Financing: Purchasing (actors, provider payment, price-setting, benefit design)			
Financing: Public financial management systems (on-budget/off-budget)			
Service Delivery: List of services offered			
Service Delivery: Characteristics of benefits, target population, delivery channels (health facility types CSOs etc)			
Creating Resources: HR Development and distribution			
Creating Resources: Facility quality and capacity			
Creating Resources: Information system use (systems, human resource capacities)			
Creating Resources: Supply chain flows (procurement, warehouse, distribution, stocks at facilities)			
Creating Resources: Data systems (collection and usage)			
Governance: Management, planning and budgeting			
Key takeaways, other notes, follow-ups			

Please keep in mind that these rows are not mutually exclusive, and there can be an overlap of functions and sub-functions written across rows.

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Template 3.3. Across levels of care data collection table

	Outreach Clinic	Community Health Centre	District Hospital	Regional Hospital	National Referral Hospital	Private Facilities
Services delivered						
Financing (purchasing, pooling)						
Human Resources						
Physical Resources, Data Management, Infrastructure						
Supply Chains & Procurement						
Governance						
Key Takeaways, Other notes, Follow-ups						

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Template 4.1. Indicative guiding questions for across-programme analysis

- Where are there duplications, overlaps and misalignments in the functions and specific sub-functions across health programmes? What is/are the main reason(s) for that?
- How are these duplications, overlaps and misalignments impacting the ability of health programmes to reach their target populations with their outputs?
- Are there particular programmes in which there is more overlap than others?
- Are there any problem areas that clearly stick out from the analysis (for example, several parallel drug procurement arrangements, information systems, or the use of unnecessarily expensive inputs)?
- What could be the best "entry point" in terms of "low hanging fruit"? Would this require new investment, such as to strengthen a national information system that could meet the needs of all health programmes?
- What are the main inefficiencies that reforms need to address?

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Template 4.2. Across-programme functional analysis table

Findings	Supporting Evidence	Analysis	Implications	Policy Options
Financing: …				
Resource Generation/Supply Chains: …				
Resource Generation: …				
Procurement: …				
Service Delivery: …				
Information Systems: …				
Governance: …				

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Template 5.1.1. Indicative guiding questions for policy option development

- What source of inefficiency is targeted?
- Which programmes and broader health system actors/institutions are involved?
- Why is that source and related policy response a priority for the health sector?
- What is the specific policy response expected? Through what levers will change be affected?
- How feasible are the concerned changes in political and operational terms?
- Which stakeholders will be directly and indirectly impacted by proposed reform? What is their position relative to the proposed reform and their power to either support or block it?
- What accountability mechanisms are proposed to ensure that coverage of priority services is either maintained, or preferably, increased?
- Based on the hypothesized effect of the reform, what outputs/outcomes should be beneficially impacted by proposed reform?
- How will efficiency gains be captured? Will savings or improved outputs be produced?
- In what sequence can this inefficiency be addressed?

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Template 5.1.2. Policy evaluation matrix table

What is the policy?	Which functions or programmes does the policy target?	How would this policy option be implemented?	Which stakeholders would this policy be implemented by?	What is the feasibility of implementation for this policy, both technically and politically?	What is the ultimate impact of this policy?
Policy #1					
Policy #2					
Policy #3					

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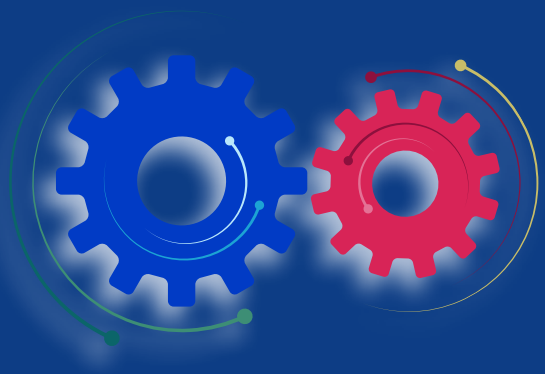

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