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Service Delivery



Demand Creation



Enabling Environment

THE FAMILY PLANNING TECHNICAL EFFICIENCY ASSESSMENT TOOL

User's Guide



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Executive Summary

Given plateauing external financing support and limited fiscal space for family planning in many low-income countries, it is essential to maximize the efficiency of existing family planning programs to achieve greater value for money, without compromising quality or equity. Efficiency is often assessed at the facility or community level, focusing on services delivered. Prior attempts to improve family planning technical efficiency include task-shifting/sharing and integration with other services, such as HIV. However, these do not account for the many other components of family planning programs, including demand-creation and the enabling environment, which may have inefficiencies and require contextualized assessment to identify solutions.

In response to the lack of easy-to-use efficiency assessments for program implementers, Health Policy Plus developed an Excel-based tool that can be applied by a group of family planning stakeholders in any country to diagnose, identify, and prioritize solutions for addressing technical inefficiencies of their program. This guide introduces users to the Family Planning Technical Efficiency Assessment Tool, including an explanation of technical efficiency and the tool's purpose, core methodology, and structure. The guide then provides easy-to-use instructions for navigating and applying the tool by a lead user or facilitator, in concert with a task force.

Introduction

Since the 2012 London Summit on Family Planning, low- and lower-middle-income countries across the world have committed to strengthening their family planning programs. In the years that followed, while millions of additional women gained access and began to voluntarily use modern contraception by 2020, an estimated one in seven (15.4 percent of all women) experience unmet need—that is, they want to avoid pregnancy but are not using a modern method of contraception (FP2030, 2022).

Among the key challenges to strengthening family planning programming is inadequate domestic funding for commodities, supplies, and core program activities—from training healthcare providers to implementing behavior change interventions and media campaigns. In 2019, donors contributed an estimated 45 percent of family planning total expenditure (US\$4.3 billion), followed by domestic governments (41 percent), and consumers themselves (14 percent) (FP2030, 2022). In the context of constrained domestic resources, increasing the share of funding for one program requires reducing spending elsewhere, involving difficult decisions across competing development priorities. In these settings, it is therefore essential to make the most of available family planning resource pools.

Interrogating the technical efficiency of family planning programs—the relationship between inputs and outputs—is one essential way of maximizing resources and results. To support the identification of family planning program inefficiencies and develop actionable solutions, the Health Policy Plus (HP+) project, funded by the U.S. Agency for International Development, developed the evidence-based “Family Planning Technical Efficiency Assessment Tool.” This tool uses a simple approach to holistically assess the efficiency of 26 family planning program components across the three areas of service delivery, demand creation, and overall enabling environment.

What is Technical Efficiency?

Unlike allocative efficiency—defined as “doing the right things”—technical efficiency concerns “doing things right” (World Health Organization, n.d.). Specifically, technical efficiency is achieved when an input is maximized to achieve additional output (like the number of family planning visits) or, alternatively, when the same level of output is achieved through lower use of an input (e.g., fewer healthcare workers) (Retzlaff-Roberts et al., 2004). Fundamentally, technical efficiency is about using resources efficiently and cost-effectively, so that no other combination of resources can achieve a higher or better health result (CABRI, 2016).

Governments globally have become increasingly concerned about achieving technical efficiency and maximizing performance, particularly in low-resource settings where many are not able to increase the resource pool allocated to health (Akazili et al., 2008). Studies examining the technical efficiency of health programs have identified a range of problematic inefficiencies at the service level, where prevailing methodologies are most commonly applied (Ahmed et al., 2019; Fulton et al., 2011; Garcia et al., 2002; Kirgia et al., 2011; Obure et al., 2016; Osei et al., 2005; Renner et al., 2005; Sebastian and Lemma, 2010; Seddighi et al., 2020; Tigga and Mishra, 2015; and Wang et al., 2016). For example, Akazili et al., 2008, found that health

centers in Ghana were too large for the volume of clients or services they provide. Specifically, the authors found that 65 percent of sampled public health facilities were technically inefficient—using more inputs than they needed to produce their outputs (e.g., number of antenatal care visits, number of children immunized, and number of family planning visits). In order to address this inefficiency, facilities would need to either increase the number of patients receiving services or minimize their costs through the reduction of inputs. Solutions proposed included transferring clinic staff to more efficient health centers, as well as sending nonclinical staff to early retirement to accrue savings (Akazili et al., 2008).

Other documented inefficiencies include:

- Exceedingly high expenses on medicines when more affordable, equally effective options are available.
- Use of higher cost modes of health service provision (e.g., provision of family planning methods by physicians only, with limited or no task-shifting or task-sharing).
- Underperformance of human resources for health due to poor motivation and/or inadequate salaries, among other factors, often requiring staff to find other employment, reducing their effectiveness.
- Targeting demand-creation programs in areas where health service utilization is high, and unmet need is low.
- Poor practices that lead to commodity leakage or expiry, poor procurement forecasting, and insufficient knowledge/training of healthcare workers in areas of greater service delivery need.

Tool Purpose/Rationale

The HP+ Family Planning Technical Efficiency Assessment Tool is meant to be applied by a group of family planning stakeholders to diagnose, identify, and systematically prioritize solutions to inefficiencies in a country's family planning program. HP+ developed the tool given the limitations of existing technical efficiency diagnostic approaches. Principally, the dominant methodologies used to identify inefficiencies—Data Envelopment Analysis and Stochastic Frontier Analysis¹—are predominately applied in the field of econometrics and operational research, and are not easily accessible to decisionmakers and other program stakeholders. Secondly, these approaches are applied largely at the service level, overlooking broader programmatic dynamics and multiple levels of a health system. These approaches likewise fail to systematically identify the root causes of inefficiency. While regression analysis can be applied after both Data Envelope Analysis and Stochastic Frontier Analysis to isolate determinants of higher or lower efficiency, these findings are infrequently actionable in a program environment. Finally, studies in the area of family planning and other women's healthcare programs have

¹ Data Envelopment Analysis is a non-parametric linear programming method that converts multiple input and output measures into a single summary measure of productive efficiency. Efficiency scores range from a scale of zero to 100 percent, where a score of 100 percent is efficient. Stochastic Frontier Analysis is a parametric method of economic modeling in which technical efficiency is defined as the ratio of observed outputs to maximum feasible outputs. For additional information on both methods, see Jacobs, 2001.

been limited; those that exist are largely focused on exploring the efficiency gains from task-shifting/sharing and integrating family planning with other services, failing to evaluate the entire range of program activities.

Methodology

The Family Planning Technical Efficiency Assessment Tool is driven by a simple, easy-to-use methodology, in which a plausible inefficiency for a program component is identified through the interpretation of a ratio. The Excel-based tool guides users through a step-by-step process, through which representative input and output indicators are chosen for 26 family planning program components. Through the tool, user-entered data for the selected indicators are computed as a ratio. Through a built-in interpretation guide, users assign an efficiency rating for each ratio and subsequently proceed to identify root causes and solutions to remedy program inefficiencies. The methodology underpinning indicator selection, root cause identification, and solution development is presented next.

Indicator Selection for the Diagnostic Assessment

For the diagnostic assessment, HP+ identified 26 components of family planning programming in which technical inefficiencies can occur, categorized across the three dimensions of: service delivery (10), demand creation (6), and enabling environment (10) (see Table 1). These domains were selected for their alignment with the three areas of the High Impact Practices in Family Planning (HIPs) initiative (HIPs, 2022). The 26 components therein represent key and common areas of family planning programming, many of which are high-impact practices themselves.

Table 1. Family Planning Program Components Assessed

Dimension	Component
Service Delivery 	Family planning integration with HIV services
	Adolescent-friendly services
	Postpartum family planning services
	Availability of commodities
	Provider training on family planning
	Supportive supervision
	Task-shifting or task-sharing
	Health workforce distribution
	Facility use
	Distribution of service points
Demand Creation 	Vouchers
	Health insurance
	Interpersonal communication
	Mass media communication
	Male engagement
	Social marketing
Enabling Environment 	Policy commitment
	Private sector engagement
	Decentralization
	Budget formulation
	Budget execution
	Donor coordination
	Commodity procurement
	Commodity security
	Stewardship
	Information use

For each component of family planning, HP+ identified a series of input and output indicators that—when analyzed as a ratio—can be indicative of inefficiency. These were selected following a literature review of existing technical efficiency studies in health and family planning, with specific attention to the types and range of indicators selected for analysis (Ahmed et al., 2019; Fulton et al., 2011; Garcia et al., 2002; Kirgia et al., 2011; Obure et al., 2016; Osei et al., 2005; Renner et al., 2005; Sebastian and Lemma, 2010; Seddighi et al., 2020; Tigga and Mishra, 2015; and Wang et al., 2016). The input and output areas were likewise informed by the Health Systems Technical Efficiency Guide, developed by the Health Finance and Governance project (HFG, 2018).

In many cases, multiple input and corresponding output indicators were chosen for each family planning component to allow users flexibility in selection to minimize the need for data collection during the application process. Likewise, HP+ selected input and output indicator pairings for which there was the most direct relationship, in an effort to control for possible covariates (other variables that may affect the output). These considerations limited the types of indicators that could be included in the tool, particularly desired financial indicators for which data is not widely available in low-resource settings. The proposed indicators by component were subsequently reviewed by family planning experts for construct validity and were then further refined.

In total, 40 input and 50 output indicators were selected and retained across the 26 family planning program components. Despite the intent to select indicators for which data is broadly available, HP+ retained several indicators that are (1) not part of routine data collection efforts and (2) require construction/adjustment by the user (e.g., constructing a composite score from more than one indicator). These indicators were retained given their direct representativeness of the component(s) being investigated/measured.² To support users to derive data for these indicators, HP+ created methods for manually computing them. Instructions for manually calculating input and/or output indicators through basic estimation are featured in the “Tool Configuration, Manual Computations” section of this guide.

Inefficiency Root Cause Identification

After selecting the final list of input and output indicators, HP+ developed a database of possible root causes for diagnosed inefficiencies. To identify possible root causes, HP+ conducted a second, targeted literature review of inefficiencies and general programmatic barriers to fully implementing and optimizing the 26 family planning components. Unlike the literature review described previously, sources of information for root causes consisted mainly of family planning programmatic documentation, including studies and reports by family planning program implementers, reports on best practices (e.g., from HIPs and FP2020), and a limited number of peer-reviewed studies. From this literature review, HP+ curated a list of five to ten possible root causes for each program component, which is built into the tool. While users can select any number of possible built-in root causes, they likewise have the option to select the “other”

² The components with these indicators are: task-shifting/task-sharing, interpersonal communication, mass media communication, male engagement in family planning, social marketing, private sector engagement, budget formulation, donor coordination, commodity security, and information use.

category and input drivers specific to their own program context and/or geography. For additional guidance, see the “Analyzing Root Causes” section of this document.

Solution Scoring Approach

To support users in prioritizing solutions for each identified inefficiency, HP+ created an assessment using multi-criteria analysis. Specifically, HP+ set criteria to compare solutions, weigh the criteria based on relative importance to the key stakeholders involved in applying the tool, and score solutions based on these criteria. The solution evaluation criteria were selected based on the rationale described in Table 2. These criteria—dependent on the weight assigned at the configuration stage (see the “Tool Configuration” section)—are used to prioritize solutions.

Table 2. Solutions Scoring Rationale

Criteria	Rationale
1. Does the family planning program have control over implementation?	Prioritizes those solutions that are under the direct control of the family planning program, and ideally those stakeholders involved in the application of the tool. This criterion helps reduce contingencies and the risk of not achieving/implementing a solution.
2. How long will it take to implement the solution?	Prioritizes those solutions that take the least amount of time to fully implement.
3. What is the additional cost to implement the solution (estimate)?	Prioritizes solutions that are low or no-cost. This is an important consideration given ongoing domestic resource constraints to family planning and health programming.
4. What is the perceived effectiveness of the solution?	Prioritizes solutions that are subjectively (by the group applying the model) deemed the most effective.

Limitations

Through its simple methodology and interface, the Family Planning Technical Efficiency Assessment Tool allows users to identify inefficiencies for remedy in a way that is customized to country context, consultative, and solution oriented.

Despite these strengths, the tool has the following limitations:

- Efficiency interpretation does not account for covariates. Efficiency interpretation is based on the ratio score, which is computed from the value of only one input and one output indicator. Other factors that may affect efficiency of the component are not accounted for in the interpretation.
- Some ratios are more difficult to interpret. In some instances, a ratio cannot be created because input and output indicators are of different units and interpretation requires qualitative analysis.
- The tool does not generate an overall technical efficiency score for the family planning program. Efficiency scores are specific to the component assessed; because indicators may be of different years and units, summation of efficiency scores across the components would be invalid.

- The tool requires detailed data inputs. Countries may not have accurate, complete, or updated data for each indicator.

Tool Structure

The tool is housed in Excel, and is structured in the following way:

- **Cover:** The first tab/sheet in the Excel file provides the overarching purpose of the tool as well as contact information for any questions from users.
- **Instructions:** The second tab/sheet consists of short-form instructions on how to navigate through and apply the tool. Detailed instructions are provided in the following section of this guide.
- **Configuration:** This tab/sheet is the first main step in applying the tool. It prompts the user to enter basic details about the application, specifically the country/geography of focus, the date of the application, and the user-defined solution weighting (for more information, see the “Tool Configuration” section). The configuration likewise features the instructions and data entry fields for manual computation of a select group of family planning components (for more information, see the “Manual Computations” section).
- **Diagnostic assessment:** This tab/sheet is the second step in applying the tool. On this tab, the user selects their preferred input and output indicators from the options provided for each family planning component (via dropdown). After selection of each indicator, users are then prompted to enter a point estimate value for each, along with the reference year of that value, and the data source. The input-output ratio is automatically calculated for the user. Referring to the “Ratio interpretation guide” tab, users are then prompted to assign a rating for each score.
- **Ratio interpretation guide:** This tab/sheet provides guidance to users on how to interpret the ratio that is automatically computed for each family planning component on the diagnostic assessment sheet. Specifically, users can find examples for how to interpret both a high and low ratio for each area. After referring to this sheet, users can then return to the diagnostic assessment sheet to select the relevant interpretation from the drop-down menu.
- **Root cause analysis:** This tab/sheet is the third step in applying the tool. On this tab, the user identifies possible root causes for each of the components deemed likely to be inefficient from the diagnostic assessment. As described in the methodology section, HP+ has pre-populated a series of possible root causes for each component, developed through a literature review. The user likewise has fields to enter their own root causes if they deviate from those provided.
- **Solutions:** This tab/sheet is the final step in applying the tool. On this tab, the user enters possible solutions to each identified inefficiency, in response to the root causes identified in the previous sheet. These solutions are intended to be developed in consultation with other family planning stakeholders—for further details, see the “Process for Completing the Application Consultatively” section of this guide.

After entering solutions, the user is prompted to select responses for each of the four solution evaluation criteria. Once these are entered by the user, a solution score will be automatically computed, enabling the user to prioritize and pursue responses for addressing identified inefficiencies.

- **Hidden tabs/sheets:** There are four additional tabs/sheets in the Excel file, which are hidden from view. These tabs are not intended to be altered by the user. They are:
 - The back-end to the input and output indicator manual computations (of those family planning components referenced on the configuration tab)
 - An indicator reference sheet
 - A reference sheet for all drop-down menus
 - The back-end to the solutions scoring, where relevant weights are applied

Guide to Applying the Family Planning Technical Efficiency Assessment Tool

This guide provides step-by-step instructions on how to apply the Family Planning Technical Efficiency Assessment Tool for any country.

Convening a Task Force

The application of the tool is intended to be carried out through a consultative process, incorporating input from a range of key family planning stakeholders (e.g., a task force). Participants should include individuals drawn from the ministry or department overseeing the provision of family planning services in the application country (e.g., Ministry of Health), other key government staff (e.g., statistics division or research department), as well as members from family planning-focused civil society organizations, implementing partners, and donors. The general scope of the task force is as follows:

- Select the desired input and output indicators for each family planning component
- Facilitate linkages to data sources to complete the diagnostic assessment
- Validate preliminary findings from the diagnostic assessment
- Discuss and propose root causes for identified inefficiencies
- Identify and propose solutions to root causes for family planning program inefficiencies
- Review and evaluate solutions based on the four criteria
- Commit to taking action on the basis of application results, specifically taking forward the most highly prioritized/scored solutions for addressing technical inefficiencies

For adequate country ownership, it is recommended that the ministry or department overseeing the provision of family planning lead the task force, and that they nominate one or two users/facilitators to lead each of the consultative sessions necessary for completing the

application. It is likewise recommended that membership in the task force not exceed 15 individuals in order to ensure adequate accountability and timely completion of the application.

Process for Completing the Application Consultatively

Under the remit of a task force, the tool can be applied consultatively during approximately five (ideally in-person) working sessions:

- **Session 1 (2–3 hours):** A planning meeting of task force leadership (e.g., Ministry of Health, Family Planning Division). Topics during this session may include: (a) nominating other task force members, (b) developing the terms of reference for the group, (c) agreeing on the timeline for the application, and (d) identifying one or two users/facilitators from the task force who will lead the subsequent sessions, including making inputs into the tool.
- **Session 2 (half-day meeting):** The first meeting of all task force members. Topics during this session may include: (a) an overview of technical efficiency, the tool, and the proposed application process and timeline, (b) review, revision, and agreement on the task force terms of reference, (c) completion of the **configuration** sheet in plenary (see the “Tool Configuration” section for additional guidance).
- **Session 3 (one-day meeting):** During the second meeting of all task force members, the users/facilitators should guide the group through the **diagnostic assessment** sheet, consultatively selecting the input and output indicators for each family planning component. Task force members should come prepared to share and agree on data sources for each input and output indicator. The session should conclude with a review of the auto-calculated ratios, with the group assigning interpretation categories for each by referencing the **ratio interpretation guide** tab. There may be cases in which data is not available for select indicators, and thus the ratio computations are not completed during this working session. In this case, task force members should be assigned data collection responsibilities for the intervening period before session 4. Data should be shared with facilitators before this session.
- **Session 4 (one-day meeting) and Session 5 (one-day meeting):** It is recommended that sessions 4 and 5 are held consecutively.
 - During session 4, facilitators should guide the group through the **root cause analysis** sheet. Before doing so, a refresher should be provided to participants, recounting the outcomes of session 3, notably, which family planning components are likely to be inefficient based on indicator selection and data entry. Progressing onto the next phase, facilitators should guide the group through a discussion of the root causes of each likely inefficiency, including reviewing the pre-populated, literature review-derived causes. The facilitators document all root causes identified within the Excel tool.
 - The focus of session 5 is on completing the **solutions** sheet. During this session, facilitators should guide participants through the process of developing one to five solutions for each inefficiency that are responsive to the root causes identified during session 4. The facilitator should then take participants through the solution evaluation criteria, so that all agreed solutions receive a score/rating. Finally, using the solution score/rating, facilitators build consensus around those solutions that

will be pursued by task force members. The session concludes with task force members committing to specific actions that will support implementation of the agreed solutions.

It is highly recommended that facilitators schedule one to two additional meetings of the task force—these can be virtual, lasting one to two hours each. The purpose of these sessions is for task force members to share updates on progress toward implementation of the agreed solutions, vis-à-vis the commitments made during session 5.

Step 1: Tool Configuration

Upon opening the Family Planning Technical Efficiency Assessment Tool, the user should proceed sequentially through the tabs/sheets, beginning with **instructions** and proceeding to the **configuration** page. On this sheet/tab, the user should enter basic details about the application, specifically the country/geography of focus, the date the application was started, and edit or retain the solution weighting. This third feature alters the weight—or significance/emphasis—given to the four criteria that are applied to support users in prioritizing solutions for task force pursuit. The user can choose to retain or amend the standard weighting of 25 percent for the following criteria:

- **Control over the solution:** By increasing the weight for this category, users prioritize solutions over which the family planning program has more direct control.
- **Timelines:** By increasing the weight for this category, users prioritize solutions that take comparatively less time to implement.
- **Cost:** By increasing the weight for this category, users prioritize solutions that are estimated to cost less.
- **Effectiveness:** By increasing the weight for this category, users prioritize solutions that have a higher perceived effectiveness.

The **configuration** sheet also includes instructions and data entry fields for manual computation of a select group of family planning components.

Manual Computations

The tool features several input and output indicators across the 26 components that require manual computation. These are: task-shifting/task-sharing, interpersonal communication, mass media communication, male engagement in family planning, social marketing, private sector engagement, budget formulation, donor coordination, commodity security, and information use.

Instructions for manually calculating input and/or output indicators through basic estimation are featured in the **configuration** tab of the tool. Taking the example of “interpersonal communication,” the user is asked to select the drop-down responses in the yellow-colored cells that best represent the current state (within the past 12 months) of interpersonal communication. Each drop-down option is assigned a score (housed in a hidden sheet), which is automatically populated into the green-colored fields (see Figure 1). A composite score is calculated for the user, visible in the darker green-colored field.

Figure 1. Example of a Manual Computation—Data Entry and Automated Scoring

INTERPERSONAL COMMUNICATION	
<i>Select the response option that best represents the reality in your context.</i>	
<i>Response</i>	<i>Score</i>
Does a recent* assessment of barriers to and motivations for family planning use exist?	0
Has there been recent* identification of primary and secondary audiences for social and behavior change communication (SBCC)?	0
Do recent* interpersonal SBCC interventions cover all target audiences/areas?	0
<i>*Within 12 months of tool application</i>	Composite score 0%

As the user progresses in the application of the tool, moving onto sheet **2. diagnostic assessment**, the interpersonal communication composite score serves as the input value under the demand creation domain, “(13) Interpersonal communication.” The user is reminded to enter/transfer over this value from **1. configuration** to the **2. diagnostic assessment** tab (see Figure 2).

Figure 2. Prompt to Transfer over Manual Computation Value

Demand Creation	(11) Voucher program				
	(12) Government-run health insurance				
	(13) Interpersonal communication	Interpersonal communication score -- transfer value from the manual computations section on sheet "1. Configuration"			
	(14) Mass media communication				
	(15) Male engagement				

Step 2: Diagnostic Assessment

Next, the application progresses to the diagnostic assessment phase, which corresponds to the **2. diagnostic assessment** tab in the tool. During this step, the task force must assess the 26 components of the family planning program across three main technical areas: (1) service delivery, (2) demand creation, and (3) enabling environment. For an explanation of how indicators were selected, see the methodology section of this guide.

For each component visible on the sheet, one or more representative input and output indicators are proposed for the computation of ratios, visible in the drop-down menus in the yellow-colored cells. One input and one output indicator should be selected from these drop-down menus in consultation with the task force. It is recommended that indicator selection is driven by data availability (for example, select an indicator for which data is readily available

rather than an alternative that requires additional data collection). Information sources for the input and output indicators can include:

- Demographic and Health Surveys
- Service Provision Assessment Surveys
- DHIS2 or other health management information systems
- FP2020/FP2030 data dashboards and reports that provide, for example, data on family planning program expenditure³
- Programmatic data from implementing partners
- Health-related surveys and development partner reports

After reaching agreement on the input and output indicators, the user should enter the most recent value/point estimate for that indicator in the “value” column, along with the data source and year to which the data correspond. It is highly recommended that users source data for the same (e.g., all data from 2021) or similar years (e.g., 2020 and 2021). It is important that the user pay close attention to the unit of measurement indicated—some indicators require percentages, while others require absolute values.

The tool likewise features several input and output indicators across the 26 components that require manual computation (e.g., task-shifting/task-sharing, interpersonal communication, mass media communication, male engagement in family planning, social marketing, private sector engagement, budget formulation, donor coordination, and commodity security). These values are computed on the **configuration** sheet in the preceding step, and should be transferred over manually by the user into the relevant fields in the **diagnostic assessment** sheet.

In cases of limited data/survey availability in a country, additional data collection may be required for select indicators. While users are encouraged to use robust data whenever possible, estimations and assumption-driven values are acceptable in their absence. For example, if there is no data available for the indicator “percentage of service delivery points providing PPF³ counseling or services” under component (3) postpartum family planning (PPFP), one route to sourcing a value may be to issue a survey to all qualified task force members in which they are asked to provide an expert-informed estimate. An average can be taken across all surveyed respondents; that value may then serve as the data source for the input. In such cases, the user should carefully document this or alternative methodology in the “source” field.

Based on the input and output values for each component, a ratio will be automatically computed for the user in column K. Next, the user should proceed to assign an interpretation for each ratio.

³ Family planning program expenditure refers to spending on family planning commodities, demand creation, service delivery, training, and other program management.

Interpreting Ratios

The tool automatically computes a ratio of the user-entered input and output indicator values, which measures efficiency. Users must then interpret that ratio by assigning it one of the below four categories from the drop-down menus in the yellow-colored cells in column L on the **diagnostic assessment** sheet. These categories are:

- Likely to be inefficient
- Shows some sign of inefficiency
- Shows no sign of inefficiency
- Requires further investigation

To select the appropriate category, the user should refer to the sheet labeled as the **ratio interpretation guide**. This guide provides an interpretation of the ratios for each family planning component given that there is no standard interpretation due to variability in indicator types. For some family planning components, the optimal ratio is less than or equal to one or 100 percent, so a deviation from this indicates a possible inefficiency. In other cases, the value of each input or output indicator in relation to the other is more important than the magnitude of the ratio for determining the efficiency interpretation. Given this variability, the **ratio interpretation guide** features a key to help the user determine the rating. After referring to this guide for each component, the user should enter the corresponding interpretation in column L of the **diagnostic assessment** sheet.

Figure 3. Extract of the Ratio Interpretation Guide

Instructions		Example Input and Output Values						Possible Ratios: Input High & Variable Output											
For each of the 26 components, navigate the sheet by matching the chosen input indicator to the output indicator. For each pairing, column D provides summary guidance on how to interpret the ratio – derived from columns E–AB. In some cases, the relationship between inputs and outputs (e.g., input is a high value, but output is a low value) is more important than the magnitude of the ratio. In these cases, a prompt in column D will instruct the user to select the interpretation category using the examples provided in columns K–AB.		Input(s) Chosen by User...		...Matched to Output(s) Chosen by User		Inefficiency Determination (Summary of examples provided in Col E-AC)		Input High	Input Middle	Input Low	Output High	Output Middle	Output Low	Input High & Output High Ratio 1 Value	Input High & Output High Ratio 1 Interpretation	Input High & Output Med. Ratio 2 Value	Input High & Output Med. Ratio 2 Interpretation	Input High & Output Low Ratio 3 Value	Input High & Output Low Ratio 3 Interpretation
[1] FP and HIV integration	Percentage of public service delivery points (SDPs) that provide integrated HIV and FP services (e.g., by same provider or by different providers in the same clinic/center)	Percentage of clients accessing HIV services at public SDPs who received FP screening, counseling, method/service, or referral	OR	Percentage of women living with HIV who have heard of long-acting, reversible methods of FP (implants and IUDs)	If ratio is over 100%, this means that inputs exceed outputs – this is likely to be inefficient, or requires further investigation	90%	50%	20%	90%	50%	20%	100%	3) Shows no sign of inefficiency	180%	2) Shows some sign of inefficiency	450%	1) Likely to be inefficient		
	Percentage of health workers trained in both HIV and FP counseling and service provision	Unmet need for FP among women living with HIV (%)	OR	Unintended pregnancy among women living with HIV (%)	The value of each indicator in relation to the other is more important than the magnitude of the ratio for determining the efficiency interpretation. Using cells K-AB, match your input and output indicator values to the archetypes provided [e.g., high input value and high output value] in order to select your ratio interpretation	90%	50%	20%	40%	20%	5%	High input and high output (e.g., ratio of 225%)	1) Likely to be inefficient	High input and medium output (e.g., ratio of 450%)	1) Likely to be inefficient	High input and low output (e.g., ratio of 1800%)	3) Shows no sign of inefficiency		

Some components may require further investigation. For example, inconclusive ratios (i.e., the inputs are almost equal to the output, but a higher output is expected for efficiency) or lack of data available during the consultative meeting (refer to the “Process for Completing the Application Consultatively” section) may drive the need to investigate further. If these cases occur, the user/facilitator of the application should assign responsibilities for further investigation among task force members. Task force members should complete their assignments prior to the next consultative meeting, during which the findings can be validated by the full group. In cases where investigations cannot be resolved (e.g., no additional data collection is possible), retain the “requires further investigation” rating, and move forward with addressing those components marked “likely to be inefficient” and “shows some sign of inefficiency.”

Step 3: Analyzing Root Causes

Next, the application progresses to the root causes analysis phase, labeled as **3. root cause analysis** in the Excel tool. This page is populated with the inputs from the **2. diagnostic assessment** tab; specifically, only those family planning components with a ratio interpretation of “likely to be inefficient” and “shows some sign of inefficiency” will be shown/visible to the user.

On this tab, the facilitator guides the task force in identifying possible root causes for each inefficiency. As described in the methodology section of this guide HP+ has pre-populated a series of possible root causes for each component, developed through a literature review. The user should review each pre-populated root cause in column C and facilitate a discussion with the task force to determine whether this is a relevant driver in the geography/country of application. If deemed accurate and relevant, the user should then provide additional contextual information in column D to qualify the cause (see Figure 4).

Figure 4. Adding Explanation/Context for Each Identified Root Cause

(1) Family planning and HIV integration	Provider bias/stigma	Providers are not adequately trained on rights-based service provision; as a result, some continue to exhibit bias during client consultations. This has a negative effect on adequately addressing unmet need for family planning among women living with HIV.

While the user is provided with up to five root cause fields, each does not have to be populated if all root causes are exhausted. Importantly, there may be additional root causes driving the inefficiency that are not included in the pre-populated drop-down list. The user, along with the task force, should engage in discussion to identify any omitted root causes. If a context-specific root cause is identified, select the “other (please specify)” drop-down option from column C. Next, describe this context-specific root cause in column D.

Step 4: Identifying and Evaluating Solutions

As the final step in the application, solutions for inefficiencies should be identified and prioritized in consultation with the task force on sheet **4. solutions**. As on the previous sheet, this page is populated with the inputs from the **2. diagnostic assessment** tab; specifically, those family planning components with a ratio interpretation of “likely to be inefficient” will be shown/visible to the user.

To complete this step, the user should guide the task force through the process of developing one to five solutions for each inefficiency; these solutions should be responsive to the root causes entered on sheet **3. root cause analysis**. This may require navigating between the two sheets. Alternatively, the user and facilitator of the application can distribute a PDF or document of the completed **3. root cause analysis** sheet to task force members for easy reference. While five solution fields are provided per family planning component, it is not necessary to complete each. It is recommended that the user enter one solution per root cause identified.

After all solutions are agreed upon, the user should then take participants through the solution evaluation criteria for each identified solution. These criteria were developed by HP+ to compare solutions and adequately prioritize them based on their relative importance to the task

force. For an explanation of how these criteria were developed, see the methodology section of this guide. In consultation with the task force, the user should select response options from the four drop-down menus in the yellow-colored cells in columns D–G. Each column corresponds to one of the following criteria:

1. Does the family planning program have control over implementing this solution?
2. How long will it take to implement the solution?
3. What is the estimated additional cost to implement the solution?
4. What is the perceived effectiveness of the solution?

Once each response option is selected, the solution will automatically receive a score in column H (computed in a hidden sheet within the tool) based on the weighting assigned in the **configuration** tab. The highest score indicates that the solution faces the fewest barriers to implementation and should be prioritized by the task force for action. Conversely, the lowest-scored solutions are indicative of some barriers to implementation; while they should be pursued, they are of lower priority compared to the higher-scoring solutions.

Finally, using the solution score/rating, the user leads the task force to develop an action plan. The session concludes with task force members committing to specific actions that will support implementation of the agreed solutions. For an example action plan, see Table 3.

Table 3. Technical Inefficiency Action Plan Template

Technical Inefficiency Component	Prioritized Solutions for Implementation	Responsible Individual /Organization	First Progress by When?	Completion / Resolution of Solution by When?
Name of component (e.g., family planning and HIV integration)	List solution A	List responsible party (ministry, organization, etc.)	Month and year	Month and year
	List solution B (if applicable)	List responsible party	Month and year	Month and year
	List solution C (if applicable)	List responsible party	Month and year	Month and year

Implementing Action Plans

It is highly recommended that the user monitors progress toward the action plan developed, which features the prioritized solutions. This may involve scheduling one to two additional meetings of the task force—these can be virtual, lasting one to two hours each. The purpose of these sessions is for task force members to provide updates on progress against their assigned tasks, ideally until final resolution/completion of the assigned action.

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