

**BETTER PRACTICES** *in Performance Improvement*

Volume 1 -  
**Strategy**

# **Cost and Results Analysis**

Practical Applications in International Health  
from the PRIME II Project

**PRIME II**



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## **PRIME II Better Practices**

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### **Acknowledgements**

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This publication was prepared by Richard Killian.

The Cost and Results Analysis (CRA) perspective fits within the Performance Improvement (PI) approach employed by PRIME II. With the PI approach, after defining desired performance and measuring the gap between desired and actual performance, one identifies alternative interventions and selects the most promising intervention(s) in terms of anticipated costs and results.

Many colleagues contributed to the development of this CRA Strategy and Toolkit. PRIME II headquarters and field staff provided valuable feedback on successive drafts of the document, and they have embraced CRA and begun active participation in a number of applications of the concepts and tools. Marc Luoma, the PI Unit Director at PRIME II, gave ongoing guidance and encouragement. Dr. Tania Dmytraczenko of Abt Associates played a key role as a collaborator and technical reviewer. She participated in the discussions leading to the selection of CRA as an overarching, generic term encompassing a range of more specific methods for analyzing costs and results.

Previous work by Abt Associates and other USAID cooperating agencies (e.g., EngenderHealth, Management Sciences for Health, Family Health International and University Research Corporation) and the World Health Organization served as significant building blocks for this publication. We gratefully acknowledge those efforts.

Adding more rigorous cost analysis to PRIME II's ongoing Monitoring and Evaluation efforts will expand the evidence base of our results and thereby strengthen and reinforce our lessons learned. The collaboration across regions, countries and technical leadership areas (TLAs) that helped shape these CRA documents will also be a key factor in their ongoing application, adaptation and refinement.

## Introduction and purpose

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Drawing on experiences from the PRIME II Project, this Better Practices paper proposes an approach for costing and analyzing costs and results of activities designed to improve the performance of primary providers of family planning and reproductive health (FP/RH) services. The paper also discusses how the approach applies to PRIME II's technical leadership areas, describes specific activities in which the approach and tools are being tested, and identifies next steps.

These better practices build on the basic cost-benefit analysis steps that are part of PRIME II's existing Performance Improvement (PI) documents.<sup>1</sup> Demand for better practices and related tools for Cost and Results Analysis (CRA) has come from within PRIME II, especially from regional and country offices, from counterparts and from USAID in awarding the PRIME II cooperative agreement to Intrah and its partners.<sup>2</sup>

These better practices are intended to support decision-making and analysis in the field and match tools to identified needs. By enabling Project staff and counterparts to generate better decision support information for PI intervention and policy options, PRIME II should enhance its development impact and related success in achieving the indicators and targets in its Performance Monitoring Plan (PMP), as well as other results requested by clients.

A glossary of costing and health finance terms is included in the appendices<sup>3</sup> along with a brief description of some of the impacts of health sector reform on performance improvement and cost-effectiveness, and a bibliography. The *Cost and Results Analysis and Performance Improvement, Volume 2—Toolkit* (hereafter referred to as the *Toolkit*), which includes checklists, decision guides, forms and spreadsheets to support CRA is available to assist those who want to put CRA into practice.

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<sup>1</sup> These documents include the *Performance Improvement Sourcebook* (1998) and *Performance Improvement: Stages, Steps and Tools* (2003).

<sup>2</sup> Intrah's selection of Abt Associates as a partner for PRIME II was based in part on Abt's capabilities in health economics and finance, including costing and cost-effectiveness analysis.

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<sup>3</sup> The glossary is an abridged, adapted version of a publication of the Partnerships for Health Reform Project, *Glossary of Health Reform Terms for Translators*, Feb. 2000.



**Background*****PRIME: From training to Performance Improvement***

The PRIME I Project was noted for conducting high-quality training needs assessments and designing and delivering a variety of traditional and innovative training approaches to improve FP/RH provider performance. Through evaluating the impact of its training activities and researching the experiences of others, including the western industrial sector, PRIME I concluded that while training may at times be necessary to improve performance, in other cases it is not the most important factor in PI. In fact, training may not always be an appropriate use of scarce resources. This finding is significant in light of the traditional predisposition on the part of health planners and managers to look to training as the remedy of choice for performance issues.

Based on these findings and the increasing pressure on development organizations to demonstrate their results and cost-effectiveness, PRIME I refined and tested a conceptual model called the Performance Improvement Approach (PIA). In focusing on achieving desired performance, the PIA considers a range of performance factors, including, but not limited to, appropriate knowledge and skills, which are the targets of most training.<sup>4</sup>

The PIA is a systematic process for achieving desired performance, in which stakeholder consensus is used to define desired performance as well as to choose the most promising interventions. Appropriate interventions are selected after analyzing the gap between actual and desired performance to determine the root causes of the gaps and identify

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<sup>4</sup> Other performance factors include clear job expectations, with clear and timely performance feedback; a proper environment, including adequate tools, supplies and workspace; motivation and incentives to perform as expected; and organizational support, in terms of strategic direction, appropriate organizational structure, good communications and supportive supervision.

ways to narrow or eliminate them. For each root cause, interventions are defined and developed.<sup>5</sup> The estimated costs and anticipated results of the most promising and feasible options are compared to select the intervention(s) that should be most cost effective or have the highest benefit/cost ratio. In order to accomplish this, one needs to examine the costs of interventions and their link to results or performance.

***Existing costing tools and approaches***

A number of spreadsheet-based tools have been developed for costing clinical services.<sup>6</sup> As documented in the training and PI literature, tools also exist for costing various types of training activities and evaluating their return on investment. These tools contain principles applicable to evaluating alternative PI interventions. Basic concepts, including types of costs, which costs to count and how to determine unit costs will be relevant for any PI intervention or combination of interventions, whether the elements to be costed include training, supervision, organizational and logistical support, or incentives and motivation. However, PI interventions have rarely been costed.

***Performance Improvement and costing***

The limited examples of PI-related costing of FP/RH activities have mostly focused on associating the costs of various training activities with the numbers of persons trained for a cost per trainee. This approach falls short of identifying the most cost-effective ways of improving provider performance, or, put differently, of linking investments in a wider range of PI activities, including non-training interventions, with improved performance. PRIME II and others increasingly seek to identify and measure the links between PI interventions and improved performance.

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<sup>5</sup> Field experience has shown that there is not necessarily a one-to-one relationship between root causes and interventions. Several root causes might be addressed by one intervention, or a root cause may be addressed by several possible interventions.

<sup>6</sup> The tools include the Cost Analysis Tool (CAT) of AVSC (now EngenderHealth), the Cost and Revenue Analysis Tool (CORE) and Cost-Estimate Strategy (CES) of Management Sciences for Health, and the Mother-Baby Package of the World Health Organization.

PRIME II has developed costing and cost-effectiveness methods and tools to complement its *PI Stages, Steps and Tools* publication, and to serve as stand-alone tools for cost-related evaluation of activities apart from the standard PIA process.

Costing work in PRIME II analyzes service delivery and training or other PI intervention costs related to the scaling-up of a service or having a service delivered by a new cadre of providers. In such cases, analyses of cost and results are used to demonstrate the desirability of taking a particular course of action. Regardless of the need or resources for a rigorous analytical approach to measuring costs and before and after results of a particular activity, PRIME II staff and counterparts have to plan and budget activities and, therefore, will benefit from a working knowledge of costing techniques.

In cases where costing is used as a tool to select priority interventions within the PI approach, the activity likely involves *estimating anticipated costs* through a budgeting-type exercise rather than *measuring actual costs* through examination of accounting records for a given period. This is particularly true if the intervention(s) being assessed is a new activity without a cost history.

### ***Linking Performance Improvement interventions with performance***

Planners and evaluators face many challenges in linking PI interventions with performance improvements. There can be many intervening variables among the six performance factors that have been determined to affect performance results. (See Figure 1 for a discussion of variables that influence training impact.) Analyzing these variables to evaluate whether they are statistically significant or conclusive takes time and money, and there is generally pressure to limit the scope of monitoring and evaluation activities in favor of more direct investment in interventions.

The challenges presented by multiple variables and their impacts on performance are depicted in Figure 1, which uses a generic example of training. The figure describes the drop-out effects (a multiplier effect of diminishing returns) that can occur even when training is high quality and well delivered. A number of PRIME II headquarters and field-based staff held a “virtual” discussion on whether and how the PI approach should be applied to institutions as contrasted with individuals or cadres of providers. Feedback from the PRIME II PI Global Technical Team asserted that desired performance should be made as quantifiable as possible. Even if the focus of the desired performance is a large-scale indicator, (i.e., institutional or sector level), root cause analysis generally leads to targeting of the performance of individuals or a cadre of providers in the selection of a PI intervention. For example, root cause analysis might lead to the identification of a policy framework or development of a performance standard or guideline among possible PI interventions. Although one might think of such interventions as being the products of institutions, a closer look might reveal them to be the responsibility of individuals within institutions, making it somewhat easier to place responsibility for performance.

**Figure 1**

**Variables influencing training impact**

***Were the right persons selected for training?***

In many countries, it is common for a relatively small number of people, who may be managers or ministry officials rather than service providers, to repeatedly participate in training, while opportunities for others are very limited. Criteria for selection of participants should be carefully developed and enforced to ensure that persons selected for training will either directly offer the service for which the training is provided or otherwise apply the knowledge and skills to be gained (e.g., in supervision). Selecting the right participants significantly affects the ultimate impact of a training activity.

***Did trainees return to the job and perform the target functions?***

Even if the right persons are selected for training, high rates of attrition and transfer in most countries can produce the same effect as not selecting the appropriate persons. In such cases, training investments do not produce the desired performance results because the persons trained have left their posts or been assigned other duties, and are consequently not applying the acquired knowledge and skills. The PI approach suggests taking a closer look at the reasons for attrition, transfer or reassignment, and developing strategies for addressing the root causes of these issues so that training investments achieve higher results.

***Did the organization/employer support the performer after training?***

Assuming the appropriate persons were trained and have returned to their posts, to apply what they learned: how well are they performing based on their acquired knowledge and skills? PRIME II's experience has shown that a learner support system that addresses all of the performance factors is important for achieving and maintaining performance. Key to this system is supportive supervision, which may also include peer support or other measures designed to work around staffing and resource constraints. Unsupported learners may not perform well over the medium- to long-term even if they acquired the targeted knowledge and skills during training and were able to apply their learning over the short-term.

Follow-up to monitor and evaluate post-training impact and support learners requires more time and resources than the common but less useful process of measuring trainee programs, with pre-training and post-training tests. The lack of willingness and/or resources to invest in monitoring and evaluation is often a constraint in determining the impact of training programs. Consequently, such steps should be built into activity designs and monitoring and evaluation plans.

***Impact of training participation on service delivery, revenue, etc.***

Although this variable may not relate directly to the sequence of training impacts on provider performance, it also deserves attention. Even if the right persons are selected for training, remain in their positions after training, and perform the functions targeted by training, there is still a financial cost for the training and an "opportunity cost" for the trainee being away from their duty posts for the duration of the training.



**Toward a PRIME II  
cost-effectiveness approach**

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***The objective***

There is considerable demand within PRIME II and from clients for tools and technical support to analyze the costs and results of alternative PI interventions. For each activity a key question to ask is: what is the objective of the costing or cost-effectiveness exercise? Some examples of objectives include:

- Policy/advocacy—To persuade a policy-maker to decide whether to offer an FP/RH service or which cadre(s) of health workers should deliver a service.
- Programmatic—To aid in determining which training approach is best for scaling-up a service or which supervision approach is most cost-effective for achieving a desired result.

The objective does not necessarily require a comparison between alternatives, but may simply involve determining unit costs of an activity or service as part of a budgeting exercise. The approach taken to inform a policy or programmatic decision should be consistent with the needs of the specific situation and the approach itself should be cost-effective. Donors and ministries may prefer to invest their scarce resources in implementing interventions rather than in studying them.

If existing cost data are adequate, it may not be necessary to conduct primary costing or cost-effectiveness studies, and the additional costs, time and human resource requirements associated with those studies can be avoided. Adequate cost data may be found from the same setting or other relevant settings. PRIME II's Responsive Training and Learning Unit speaks of selecting approaches that are "not high-tech, but 'right'-tech"; the Project's Cost and Results Analysis approaches should be similarly selected.

In WHO's *Cost analysis in primary health care: a training manual for programme managers* (Creese and Parker, 1994), the authors' description of a cost-effectiveness analysis very much resembles PRIME II's PI approach. It emphasizes definition of the objective or desired performance and the performance gap in quantifiable terms. The authors advise that efforts to collect and analyze cost data should be distributed roughly in proportion to the relative importance of each category. For example, personnel costs are frequently a large part of activity costs and, therefore, care should be taken to ensure this category is as accurate as possible. The relative importance of different categories of costs should become clearer as each category is reviewed. The WHO document provides good explanations of various types of costs and offers guidance on how to include them in budgeting or costing exercises. If the purpose of costing is budgeting as part of a planning process, the costs included should be as complete as possible. If the purpose is not budgeting, but a cost and results, or cost-effectiveness analysis, it may be possible to exclude some costs. This approach would focus more on the incremental costs associated with the subject of the analysis rather than total costs. Still, care must be taken in such decisions in order not to distort the outcome of the analysis.

### Costing considerations

Costing can be expensive in terms of time and money. Some of the challenges in conducting costing studies are defined in this section. Costing requires a detailed knowledge of a specific system or service and thorough documentation of often difficult-to-find information. Facility and program budgets can be a starting point for a costing study; however, there is often a substantial variance between budgeted and actual expenses. Several reasons can account for this, and the list in Figure 2 is only representative. In addition, an analysis of costs and results should take into account non-budget expenses, such as economic or opportunity costs of service providers and their clients (see Appendix 2 for definitions).

**Figure 2**

#### Reasons for budget and expense/result variances

1. The budget may be accurate and budgeted funds received, but implementation is constrained by factors such as exchange rate fluctuations, political events, natural disasters, epidemics, travel disruptions, weak logistical support, etc. This culminates in the budget being underspent and results limited, as well as a lack of correspondence between the budget, actual expenses and expected results.
2. The budget may be accurate, but funds received are less than budgeted, thus constraining implementation and results in a similar way as number 1.
3. The budget may be an underestimate of actual requirements, so even if funding received is the amount requested, it is less than needed, with similar results as numbers 1 and 2.
4. Priorities of funding sources or stakeholders may change during implementation resulting in less funding being received than budgeted. (The main difference between number 2 and number 4 is that number 2 assumes no significant change in priorities or plans, whereas in number 4 priorities have changed.)

Accurately reconstructing or estimating costs in the absence of good expense information can be challenging; however, suggested ways of doing this are presented in the *Toolkit*.

Another challenge to costing is deciding how to allocate resources that are shared among one or more activities. Some of the factors for allocating joint or shared costs are shown in Table 1.

**Table 1**

#### Dividing costs of shared resources

Input	Component that determines cost
Vehicles	Distance traveled / time used / depreciation
Vehicle operation and maintenance	Distance traveled / time used
Equipment	Time used / depreciation
Building space	Time used / space used
Personnel	Time worked
Supplies	Number / weight / volume
Building operation and maintenance	Time used / space used

*Creese and Parker, 1994*

If a new service is being offered or scaled-up, the costs would include developing materials to train service providers, implementing training, equipping facilities and/or providers to deliver the service, supervision and other direct and indirect costs associated with delivering or improving delivery of the service. *Life cycle* costs, such as the costs of anticipated follow-up visits and equipment maintenance, are important to consider in calculating costs to avoid underestimation and contribute to sustainability. Sustainability, in this case, means both financial viability and capacity to continue offering the service.

If the service or facility is new, the initial capital cost or investment will likely be higher than for scaling-up from an existing service or facility. If a facility or provider is already in place and delivering related services, it may be useful to focus on the additional or *incremental* costs that would be necessary to offer a new service. An additional factor to consider is that even if a new service, approach or facility has a higher short- to medium-term cost due to the initial capital investment, it may still be more cost effective in the medium- to long-term. For example, while a Responsive Training and Learning (RTL) approach such as self-directed learning (SDL) may require initial investments that would not be required to maintain existing training approaches, the SDL approach may be less expensive and produce better results over the medium- to long-term.

Table 2 defines and classifies some common costing elements.

**Table 2**

**Classification of costs by inputs**

<b>Recurrent or operating costs</b>
<b>Personnel</b> (all types): supervisors, health workers, administrators, technicians, consultants, casual labor
<b>Supplies:</b> drugs, vaccines, syringes, small equipment
<b>Vehicles, operation and maintenance:</b> petrol, diesel, lubricants, tires, spare parts, registration, insurance
<b>Buildings, operation and maintenance:</b> electricity, water, heating, fuel, telephone, telex, insurance, cleaning, painting, repairs
<b>Training:</b> recurrent (e.g., short in-service courses)
<b>Social mobilization:</b> operating costs
Other operating costs not included above
<b>Capital or investment costs</b>
<b>Vehicles, purchase:</b> bicycles, motorcycles, four-wheel-drive vehicles, trucks
<b>Equipment, purchase:</b> refrigerators, sterilizers, manufacturing machinery, scales, and other equipment with a unit cost (price) of \$100 or more
<b>Buildings, space, purchase or construction:</b> health centers, hospitals, training facilities, administrative offices, storage facilities
<b>Training, nonrecurrent:</b> training activities for health personnel that occur only once or rarely
<b>Social mobilization, nonrecurrent:</b> social mobilization activities (e.g., promotion, publicity campaign) that occur only once or rarely

*Creese and Parker, 1994*

For service delivery costing, an important issue is how to account for contact (direct labor) vs. non-contact time of providers with clients, as well as the proportion of time other resources such as equipment and vehicles are in use. For personnel, non-contact time includes room preparation, administrative and personal time, as well as non-service days for meetings, training activities and vacation (Levin, McEuen, et al, PHR Project, 1999).

Decisions must be made about which cost elements to include and how to define them. Tools and checklists can be helpful to avoid underestimation due to the omission of cost elements. In cases where cost data for certain categories are insufficient, a

decision may be made to exclude those data and to note the exclusion as a limitation of the study.

Proxy measures and estimation methods may be applied for some cost elements if data quantity or quality is inadequate. WHO’s *Mother-Baby Costing Spreadsheet User Guide* addresses issues associated with proxy measures and estimation methods in comparing the WHO’s Standard Practice Model (ideal/preferred practices) with the Current Practice Model (optimal local practices) in a given setting (WHO, 1998). The WHO document encompasses 18 interventions, defining their scope and the treatment protocols at different levels of the health system, and it lists the drugs, supplies and staff time required for each service. The advantage of this method is that it allows for rapid assessment through application of the already-developed instruments.

In carrying out a study of the costs of essential maternal health services in three African countries, the Partnerships for Health Reform (PHR) Project identified the need to adapt the WHO Standard Practice Model to take into account staffing, practice and utilization variances in each country. Since personnel costs account for a large percentage of most service delivery, training or supervision activities, the methods used for determining allocation of personnel time are important. One of the adaptations made by the PHR team was to develop a modified method for conducting direct observation of health workers as a cost factor rather than applying standard assumptions.<sup>7</sup> Such adaptations help to account for the gap between optimal and actual conditions for delivery of a service. This method makes the results of the analysis more realistic and accurate, and the recommendations more feasible. The downside of this method is that it is more costly and time-consuming than, for example, recall from provider interviews (Levin, McEuen, et al, PHR Project, 1999).

Comparing results from different countries presents an additional challenge. Few international standards exist to facilitate such comparisons and there is

<sup>7</sup> The *Cost Analysis Tool* (CAT), developed by PRIME II partner EngenderHealth, also provides for direct observation of providers to determine time allocations and account for practice variances. The *Cost Revenue Analysis Tool* (CORE) developed by MSH similarly measures allocation of personnel time and also factors in revenues to calculate unit costs and estimate sustainability.

debate on whether such standards are feasible. This leads to variances in methods, results and interpretation, and raises questions related to reliability, validity and transparency. These issues are discussed in a *Reproductive Health Costs Literature Review* prepared by the POLICY Project (Mumford, et al, 1998). This review was carried out in part to provide more information on the costs of delivering integrated RH services as advocated at the International Conference on Population and Development in Cairo in 1994. The authors observe that “variations in technique [and other factors] may form the basis for different estimates for the same intervention.”

Mumford, et al, describe and contrast “bottom-up” costing methods, such as direct observation and patient flow analyses, which are useful in establishing direct costs of a service delivery or training activity, and “top-down” methods based on cost accounting and application of standards. “Top-down” methods may be more likely to capture indirect costs such as overhead, planning and administration and weaker in terms of direct activity costs. Neither approach is necessarily “better” than the other. Each has its strengths and weaknesses and a situation-specific combination of methods is likely to yield the best result.<sup>8</sup>

### ***Efficiency and effectiveness considerations***

#### *Efficiency*

A key concept related to costing is efficiency. In spite of examples such as hospitals overloaded with AIDS patients in East and Southern Africa, utilization of services is low in many developing country health systems, particularly at the primary level. The reasons for this are varied and complex, but are often related to resource constraints and the low quality of services. This results in chronic inefficiency and contributes to the problem of unmet need for health services. Improving efficiency of service delivery and implementing PI interventions that support service delivery allows facilities to achieve the same results at lower cost, freeing-up resources that can potentially be invested to obtain higher-level results. In simple terms, one can think of efficiency as “doing more with the same or less.” In addition to improving

efficiency, another financing goal of health sector reform is to mobilize additional resources in order to “do more with more,” recognizing that health systems are also seriously under financed in most low- and middle-income countries, even when they may operate relatively efficiently.

The PHR maternal health study team in Africa observed that utilization of services can have a significant impact on unit costs for services where there is low utilization and unused capacity in terms of staff, facilities and equipment. Once root causes for the performance gaps are identified through application of the PI approach, interventions can be chosen to increase appropriate utilization and, thereby, reduce the unit cost of services. These interventions might include:

- 1) A public information campaign to stimulate demand for health services
- 2) Supportive supervision and other means designed to increase and publicize quality and improve utilization of services
- 3) Establishing incentives for providers to increase service volume
- 4) Improving referral networks.

In the context of the PRIME II Project, such interventions can be assessed in terms of their estimated costs and anticipated results in order to assist stakeholders in selecting only those that may offer the greatest return on investment.

In Mali, another PHR team observed very low utilization rates for FP/RH/PHC services in target areas due to lack of awareness of the services, concerns about user fees and perceptions of low quality. A quasi-experimental approach was taken to analyze community perceptions and behaviors and expenditure patterns. Based on the results, PHR identified and tested alternative ways to address equity and ability-to-pay concerns of clients and potential clients in order to increase utilization and efficiency of services, and address unmet health needs (PHR End of Project Report, January 2001). In this case, PHR employed a consumer and community focus similar to PRIME II’s work with the USAID Maximizing Access and Quality (MAQ) Initiative.

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<sup>8</sup> The previously mentioned *Mother-Baby Package Costing Spreadsheet User Guide* and *CAT* and *CORE* tools can all be considered “bottom-up” approaches.

### *Effectiveness*

Effectiveness can be even more difficult to measure than costs, especially at the impact level. PRIME II's Monitoring and Evaluation Model recognizes three levels of results: (1) processes and outputs, (2) effects and (3) impact. Measuring impact typically requires a longer timeframe than measuring process and effect results, particularly if the impact is expressed in terms of changes in health status. Due to factors such as the timeframe of development projects and the difficulty of measuring changes in health status, projects such as PRIME II generally avoid trying to demonstrate direct health status impacts. Process and effect results are often used as proxy measures that can reasonably be expected to generate health status changes. To the extent they are used, such proxy indicators should be defined so as to incorporate as much as possible the direct link to quality or health status. One example of an indicator that clarifies direct links is "births attended by trained personnel and in which the umbilical cord is handled under sterile conditions," as opposed to "institutional or attended births."

With either health status impact or intermediate results, before (baseline) and after (results or impact) data are needed. If data cannot be collected on all units or events, which is often the case, a sample or samples need to be taken. Samples should be large enough to detect any important changes. In sampling terms, this is known as "statistical significance." Technical support may be needed to help determine sample size for some studies. Since many of the steps involved in analyzing costs and results involve estimates or assumptions, it may be useful to test variations in some of the assumptions by modifying values within ranges that might reasonably be expected. This is called "sensitivity analysis." Software tools make a sensitivity analysis easier to conduct by enabling the user to change values in a formula or do "modeling" more easily, with automatic recalculation of totals. Sampling is also addressed in the *Toolkit*.

In the interest of practicality and limiting costs, it is preferable to identify results or measures of effectiveness from existing records, known as secondary data. Record-keeping systems may need to be improved so that they will meet data needs. If using existing records or improving record-keeping systems does not seem feasible, special studies requiring collection of newly generated data, known as primary data,

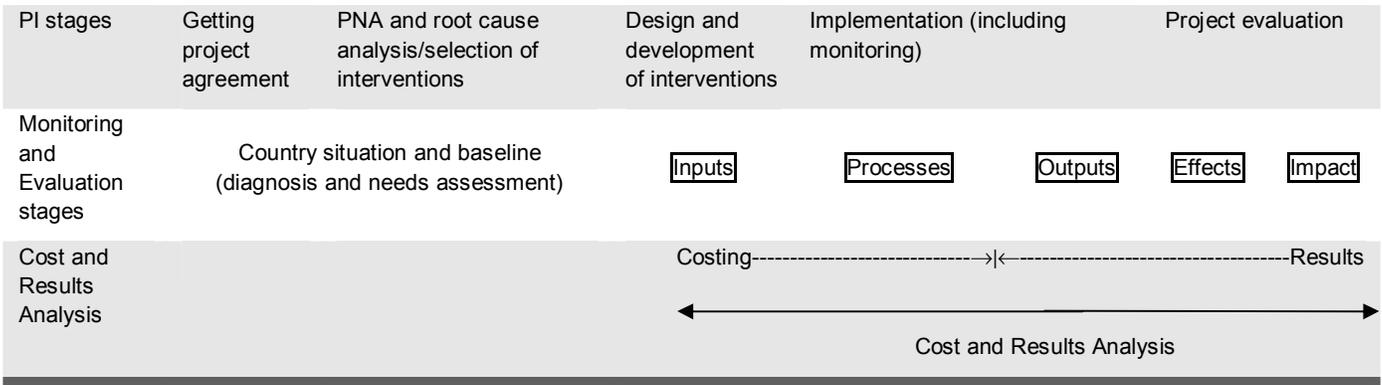
may be warranted. Applications of the PI approach typically involve a mix of both primary and secondary data. Special studies or primary data collection are more likely to be needed when quality of services or client-provider interaction is being examined, since data on these areas are less routinely collected.

There is a lack of consensus on which denominators to use to compare cost-effectiveness across health and PI interventions. Couple Years of Protection (CYP) is a widely used (but also controversial) measure of effectiveness for contraceptive methods that is often promoted by donor organizations. New indicators are needed on the broader range of FP/RH interventions and efforts to improve FP/RH provider performance. The state-of-the-art strategies, guidelines, indicators and better practices related to PRIME II technical leadership areas (TLAs) and sub-areas are important to consider as we determine results measures and denominators for Cost and Results Analysis ratios. These approaches should consider issues related to access, quality and integration of services, political and other factors, and possibly include methods for weighing these factors to arrive at a composite measure of improved performance. PI practitioners should strive to develop results or improved performance indicators that are descriptive and detailed enough to address the quality of an activity and how it was accomplished, as well as simply showing that it was completed.

Figure 3 juxtaposes the stages in PI and Monitoring and Evaluation with Cost and Results Analysis to illustrate how they relate to each other.

Figure 3

**Relationship between PI stages, M&E stages and Cost and Results Analysis**



## Linking Cost and Results

### Introduction

The term “cost-effectiveness analysis” is often used generically when speaking of the analysis of costs and results of activities. Referring again to Figure 3 for illustrative purposes, “Costing” helps analyze the Inputs and Processes shown in the row of Monitoring and Evaluation stages; “Cost and Results Analysis” then links costs with “Results” over the Outputs, Effects and Impact stages, mostly focusing on Outputs and Effects.

*Cost-benefit, cost-effectiveness, cost-utility analysis and return on investment* are all terms that could apply to a PI process and assessment of PI interventions, depending on the situation and alternatives being considered. Each of these terms has a specific meaning and therefore the terms should not be used interchangeably. The four cost and result analysis terms are briefly discussed here due to their central relevance to this strategy. A glossary of costing and health finance terms is found in Appendix 2.<sup>9</sup>

In *cost-benefit analysis (CBA)*, neither the cost nor the benefit variable is fixed, and the benefit variable (numerator) and cost (denominator) are both expressed in monetary terms. CBA thus compares the monetary cost and monetary benefit of alternatives, typically in the form of a benefits-to-costs ratio. The term CBA is often used in describing analyses that would more correctly be classified as cost-effectiveness analysis (CEA) or cost-utility analysis (CUA)—see the following definitions and examples for these terms. Put simply, a CBA aids in deciding whether a particular activity is worth doing at all (i.e., whether the cost of the activity is at least offset by its savings or financial gain). For example, if a performance improvement activity had benefits of \$60,000 and costs of \$20,000, the CBA or benefit-to-cost ratio (BCR) would be as follows:

$$\text{BCR} = \frac{\text{program benefits}}{\text{program costs}} = \frac{\$60,000}{\$20,000} = 3, \text{ or } 3 \text{ to } 1$$

In this example, the net benefits of the activity are \$40,000 (\$60,000-\$20,000). This same example will be used to illustrate the following return on investment (ROI) example.

*Cost-effectiveness analysis (CEA)* is applied to determine the costs and effectiveness of alternative ways of achieving the same objective. A cost-effectiveness ratio is expressed as cost divided by unit of effectiveness for each alternative intervention. The result or effectiveness value is not expressed in monetary terms, but in units of results. An example from child health might be “cost per fully immunized child.”

CEA can help to identify the most efficient way of achieving a specific objective. CEA gives guidance on how to use funds most efficiently when a specified output (or “desired performance” in PI terms) must be achieved. For example, if a ministry of health wants to know which of two training and learner support approaches will contribute the most to improved provider performance, they can test the two approaches and collect cost and results data. Approach A costs \$50,000 and results in 50 providers performing to standard one year later. Approach B also costs \$50,000, but results in only 40 providers performing to standard one year later. The CEA for each approach would be as follows:

$$\begin{aligned} \text{CEA for Approach A} &= \frac{\text{program costs}}{\text{units of results}} = \frac{\$50,000}{50} \\ &= \$1,000 \text{ per provider} \\ &\quad \text{performing to} \\ &\quad \text{standard} \end{aligned}$$

$$\begin{aligned} \text{CEA for Approach B} &= \frac{\text{program costs}}{\text{units of results}} = \frac{\$50,000}{40} \\ &= \$1,250 \text{ per provider} \\ &\quad \text{performing to} \\ &\quad \text{standard} \end{aligned}$$

The CEA shows Approach A to be the more effective, costing \$250 less than Approach B for each provider performing to standard. Approaches A and B could also be assessed prospectively in the context

<sup>9</sup> The Glossary of Costing and Health Finance Terms is an abridged version of a “Health Reform Glossary” produced by the USAID Partnerships for Health Reform (PHR) Project. The definitions on this page vary slightly from the CBA and CEA definitions shown in the Glossary.

of applying the PI approach. To do this would require analyzing the estimated rather than actual costs of each approach, along with the estimated results.

*Cost-utility analysis (CUA)* compares the cost of alternatives with the subjectively determined ratings (benefits or effectiveness) of those alternatives. CUA may be used when effectiveness cannot be objectively measured due to lack of data, lack of resources for special studies, or other factors such as time constraints. An alternative form of CUA applies the concepts of Disability Adjusted Life Years (DALYs) or Quality Adjusted Life Years (QALYs), developed by the World Bank and others in the 1990s, in attempting to provide more objective denominators, particularly for sector-level analysis and policy support. DALYs and QALYs apply population-based formulas to estimate years-of-life-saved, with weighting for quality-of-life factors such as disability, in measuring the impact of alternative health interventions. (See the Glossary in Appendix 2 for definitions of these terms.)

**Figure 4**

**A cost-effectiveness analysis of PI approaches in Indonesia**

Operations research results from the Quality Assurance Project demonstrate the cost-effectiveness of alternative approaches for improving client-provider interaction (CPI) among clinic-based FP service providers in Indonesia. The study compares the cost-effectiveness of combinations of training, training + self-assessment, and training + self-assessment + peer review to improve performance. It measures direct and opportunity costs to providers for the combinations of interventions and uses average number of utterances per counseling session at baseline and follow-up as the primary impact indicator, with analysis also on the type and quality of utterance. The cost and effectiveness data are combined to give a cost-effectiveness ratio for the percent gain in utterances per dollar of cost. This result is provided for two categories of utterance: facilitative communication and provision of medical and family planning information.

*Kim, Pujiuk, Kois and Basuki, 2000*

A recent publication, *Development of WHO Guidelines on Generalised Cost-Effectiveness Analysis*, discusses issues related to application of CEA as a tool to aid in allocating a fixed health budget between health interventions in such a way as to maximize health in a society. This concept is referred to as “sectoral cost-effectiveness analysis” (Murray, Evans, Acharya, Baltussen, 1999). For example, where “lives saved” is the desired result, an analysis might show that more lives would be saved by devoting most of a country’s health budget to preventive measures such as expanding potable water supplies and reducing incidence of malaria than by applying those same resources to another mix of activities. For a variety of reasons, these sorts of analyses have not been performed in many countries; when they have, applying the results is complicated. For example, although more lives might be saved by expanding potable water and reducing incidence of malaria, there is a humanitarian imperative to prevent childhood communicable diseases and treat victims of illnesses and accidents. Thus, while the results of a “sectoral cost-effectiveness analysis” may provide valuable planning information, those results must be weighed against other considerations in making resource allocation decisions.

*Return on investment (ROI)* is similar to and based upon a benefit-to-cost ratio in a CBA, where both benefits and costs are shown as monetary values, except that ROI is expressed as a percentage. Using the example where program benefits are \$60,000 and program costs are \$20,000, ROI is calculated as follows:

$$\begin{aligned} \text{ROI (\%)} &= \frac{\text{net program benefits}}{\text{program costs}} \times 100 \\ &= \frac{\$60,000 - \$20,000}{\$20,000} \times 100 \\ &= \frac{2}{1} \times 100 = 200\% \end{aligned}$$

*Note: Net program benefits = program benefits – program costs*

The example shows that the activity being evaluated has a 200% return on investment.

### ***Definition and data issues***

As noted earlier, a key constraint in costing alternative PI and other training and learning approaches in international settings is the quantity and quality of cost- and results-related information. In the context of specific countries where PRIME II works and in close collaboration with in-country teams, PRIME II develops and applies instruments and checklists to assess the availability of financial information for conducting cost and cost-effectiveness analyses, and for defining and measuring results. PRIME II's Performance Monitoring Plan (PMP) provides a framework of indicators and targets for measuring results, with accompanying guidance on collecting and analyzing data for reporting. Tools developed for costing and Cost and Results Analysis help link costing elements with the PMP and other PRIME II program planning and results reporting at the country and regional levels.

PRIME II's Cost and Results Analysis strategy and tools consider "life cycle" costs, including financial and opportunity costs to providers and clients where relevant, to ensure that PI interventions are sustainable. "Life cycle" costs refer to the costs likely to be incurred over the full period of implementing an activity. Omission of "life cycle" costs can lead to underestimation of costs and distort the results of a cost-effectiveness analysis.

Decisions must be made on a case-by-case basis as to whether to include capital costs, such as the purchase of equipment, and how to measure and allocate personnel costs for a costing or cost-effectiveness study (Dmytraczenko, Levin, et al, 1999). In measuring personnel time and associated costs, direct observation is generally preferable to provider recall as a data collection method. In cases where there is unused capacity of facilities, equipment and/or personnel, a study may choose to focus only on incremental costs of interventions being compared. This approach is based on the rationale that the unused capacity costs are already incurred or "sunk" costs. Omitting the "sunk" costs of unused capacity would not be appropriate in a situation where elimination or conversion to alternative use of the unused capacity resources is being considered.

From the perspective of our host-country counterparts/clients, costs of PRIME II technical support are generally not considered in such analyses, as these

inputs are donor-supported, time-limited and not sustainable by host countries. This is not to say that other factors related to the need for and cost of technical support should not be considered, simply that considering the *cost* of international technical support may not be useful to counterparts in informing decisions, even though its *availability* is valuable or necessary. An alternative might be to make budgetary allowance for a transition from international to local technical support, if required.

A critical step in any cost-effectiveness analysis is the preparation of a checklist(s) of data to be collected and the sources from which it should be obtained. Definitions, instruments and methods need to be feasible and compatible with counterpart institution capacities and systems, and with PRIME II capacities and resources. Considerable care must be taken in adapting models and tools so that local conditions, practices and data are taken into account.

### ***An alternative term to cost-benefit analysis or cost-effectiveness analysis***

CBA and CEA are scientific methodologies requiring a degree of rigor in data collection and comparison. CEA encompasses data issues such as study design, sample size, statistical significance and confidence levels, and other adequacy measures in order to establish causality between an intervention and an outcome. This entails the use of pilot and control groups and other measures that may not always be feasible.

In certain instances it may be more realistic to conduct a Cost and Results Analysis that serves the same objective as CBA or CEA, but that takes into account factors such as data limitations, overall objectives and time and resource constraints. A Cost and Results Analysis associated with a given performance objective can serve the same decision support purposes as more rigorous CEA. This is not to say that CEA or CBA should not still be pursued when possible. The point is that CEA may be seen at one side of a decision support continuum where time and resource investments are high, and that adequate decision support results may be obtained at other points along the continuum. It is useful to consider the Pareto Rule, also known as the 80/20 rule, a rule of thumb that postulates that 80 percent of resources are utilized in activities that produce only 20 percent of the output or results (see Appendices). As applied

to costing, the 80/20 rule suggests that effort should focus on those components that have the greatest impact on resource use and/or are programmatically possible to change.

An analysis of the community pneumonia volunteer program in Honduras by the PHR Project illustrates a case in which a decision was made to conduct a cost *and* effectiveness study (or Cost and Results Analysis) instead of a CEA (Perdomo and Holley, 1998). Despite a rigorous CEA study design, the authors encountered recording errors related to the functional literacy of the volunteers, inadequacy of cost accounting systems, and issues related to sample size and incomplete reporting from health areas and facilities. These factors caused the team to reclassify

the work from a CEA to a study of cost and effectiveness. The study still produced valuable results, documenting the costs and effectiveness of the program, ways to improve it, and financial requirements for expanding it. PRIME II seeks similar information from its cost and results analyses, whether they are prospective, as may occur in a PNA, or retrospective, as in an end of activity evaluation.

**The way forward*****A PRIME II Cost and Results******Analysis approach***

CEA and its variations are ways of thinking about trade-offs in measuring costs and benefits, comparing them to alternatives, and deciding which approach offers the most value. Such analyses can be applied with varying degrees of detail and sophistication, from highly refined statistical analyses to common-sense judgments.

In the *Toolkit*, PRIME II offers a set of application tools that staff and counterparts can select and adapt based on local circumstances. Decision factors include the nature of the proposed activity, availability of financial and service delivery information, geographic scope and numbers of persons or facilities involved, level of resources available, time factors and so forth. Methods and tools should be appropriate to the local context (and adequate to support a decision) but not disproportionate to the overall size and scope of the activity or program.

PRIME II's Cost and Results Analysis (CRA) approach is more than a single set of tools with a standardized reporting format. CRA draws upon all of the methods for linking cost and results described in the previous section, as well as the tools and lessons learned by PRIME II partners and others. CRA is based on recognition of the need for more rigor in quantification of costs and results within the PIA, and on applying the methods and tools most appropriate for particular situations. The *Toolkit* contains checklists, instruments, spreadsheets and other tools to aid PI practitioners in applying CRA, most of which have been adapted from materials developed in related international health contexts.

This need for more rigor comes from PRIME II's mandate to develop and demonstrate effective, innovative non-training and training approaches for improving the performance of FP/RH service providers. This mandate applies throughout the steps of the PIA, including continuous monitoring and evaluation once interventions are selected and implemented. The mandate requires data to support

assertions on both the cost and results aspects of PI interventions.

For PRIME II's CRA approach and tools to be successful, PRIME II staff and counterparts should be able to apply them with limited technical support following orientation and training. Exceptions may arise at the more sophisticated end of the continuum, where additional data collection and processing with computer applications is required. PRIME II plans for its CRA work to have demonstrated effects of regional or global significance related to the Project's TLAs.

***Cost and Results Analysis and PRIME II's technical leadership areas***

PRIME II's technical leadership areas include application of responsive training and learning (RTL) approaches, expanding availability and quality of postabortion care (PAC), and integrating consumer perspectives (ICP) as a means of improving provider performance. As part of the PI approach, CRA tools are cross-cutting methods that will inform selection of RTL, PAC and ICP strategies and interventions.

**PI**—Further development and application of the costing and results analysis decision support tools will strengthen PRIME II's leadership in PI and make PI more useful to counterparts and other clients. With CRA tools, PRIME's PI unit is able to provide a higher level of support to the rest of the Project. Within the PI unit itself, costing and results analysis tools are applied for assessing alternative supervision and worker motivation approaches, and for examining the best ways to promulgate and reinforce performance expectations with service providers.

**RTL**—The purpose of responsive training and learning is to continuously explore ways to improve the effectiveness and control the cost of training and learning approaches. This entails testing new approaches such as self-directed learning, alternative uses of media, innovative ways to organize training (e.g., adjusting the mix and sequencing of didactic/classroom and practical training) and restructuring pre-service and in-service training to modify the content and increase the integration of the two approaches. RTL takes into account the scarcity of service providers in most countries and the negative impact of removing providers from their service

delivery sites for training and learning activities. CRA for RTL considers both the financial and service delivery impacts of removing providers from their sites for training and learning, and helps to inform decisions among a wide array of options. Costing of training approaches also supports consideration of cost recovery for selected training activities where feasible.

**PAC**—PRIME II seeks to expand and scale-up PAC services by primary providers as a way of reducing the nearly 600,000 pregnancy-related deaths worldwide per year. The efficacy of this approach has been demonstrated through pilot activities in several countries. The challenge is to find the most cost-effective ways to go about expansion and scaling-up. As is generally the case with the cross-cutting nature of PRIME II, RTL, PI and ICP techniques are all applied to PAC. CRA informs selection of training strategies and the costing and pricing of PAC services. This information aids decision-makers in planning for scale-up and increasing the financial sustainability of primary-level PAC services through a mix of user fees, reimbursement and subsidies.

**ICP**—With ICP, PRIME strives to ensure that providers and health delivery systems are client-centered, consumer-driven and responsive. One way of achieving this goal is to involve consumers and communities in defining and helping to achieve quality services that are accessible and acceptable. Such services are more likely to be used and sustained by consumers and communities. ICP effects a paradigm shift from provider-oriented services to provider-community/consumer partnerships. Accomplishing this requires documenting and assessing existing methods and developing or adapting and testing new models. Part of the evaluation of the new models relates to their cost-effectiveness.

### ***Next steps***

#### **1. *Toolkit* development**

PRIME II has reviewed, adapted, developed and tested CRA approaches and tools. This information is organized in the *Toolkit* with modules, checklists, tables and spreadsheets, illustrated with case studies. The *Toolkit* is designed to help users determine availability and adequacy of data, collect and compile data, cost and budget, gather effectiveness/results information, and link cost and results information. Here again, it is important to note that there is no

“one way” to do costing or a CRA. This *Strategy* and the *Toolkit* are intended as guidelines that will have to be modified to fit the unique requirements of each application.

CRA activities reach across the full scope of expertise within PRIME II based upon knowledge of individual technical areas and the ways in which host-country programs and PRIME activities are designed, implemented and evaluated. Carrying out CRAs thus requires a team effort.

#### **2. *Toolkit* dissemination and application**

PRIME II’s Monitoring and Evaluation unit, regional and country offices, other technical units, and the Communications unit have collaborated in the process of dissemination and application of the CRA *Toolkit*. The expertise and experiences of partner organizations (e.g., EngenderHealth with CAT) has also been tapped.

Since the objective is to design tools that are user-friendly and field-oriented, some of the tools will be adapted or refined more fully in the context of specific country program applications. The strategy and tools are presently being applied in over half a dozen different activities.

PRIME II’s Health Finance and Policy Specialist is visiting PRIME II selected regional and country offices to help introduce the CRA approach and tools to field staff and offer opportunities for hands-on practice and application in case studies and local activities. Similar orientation is being provided for Chapel Hill-based staff and for selected field staff who may be visiting Chapel Hill on other business.

#### **3. Lessons learned and wider dissemination**

Lessons learned from applications in progress and ongoing feedback will be documented, and a revised *Toolkit* may be produced and disseminated. In-service training and technical support will continue to be provided to PRIME II headquarters, regional and country staff and programs.

### ***Conclusion***

CRA strengthens PRIME II’s ability to measure and document Project results by helping identify which strategies provide the best value when effectiveness, cost factors, and sustainability are also considered.

## Health sector reform, Performance Improvement and costing, and Cost and Results Analysis

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### *The impact of health sector reform*

Virtually all of the countries in the world are grappling with the challenge of making their health care systems more responsive to the needs of their population. At the same time, donor organizations are expecting countries to assume a larger role in providing or generating resources for their health sectors. Strategies developed in response to these challenges include:

- decentralization
- granting autonomy to health facilities
- contracting within the public sector and/or with the private sector
- partnering with communities
- alternative financing approaches.

Considered collectively, these strategies provide ways of reforming or restructuring the health sector to improve its performance.

Health reform strategies seek to mobilize additional resources for the health sector and to improve its efficiency. Increases in efficiency have the effect of enabling the health sector to provide more or better services and related health outcomes with the same level or even a reduced level of resources. Efficiency gains, both in allocative and technical efficiency (See Appendix 2, Glossary), are possible in virtually all countries and hold significant potential for improving accessibility and quality of services. Improved costing, budgeting and financial management methods, combined with application of the PI approach and CRA, can have an important impact on this process. While some of these activities can be considered basic sound management, they are also part of health reform strategies.

Governments have little choice but to consider such changes to their health systems. Given severe resource constraints, increasing populations and often declining health status indicators, *The World Health Report 2000—Health Systems: Improving*

*Performance* demonstrates the importance the international health community attaches to taking a systematic approach to improving health system performance.

The critical focal point for improving health system performance is at the level of the individual service provider, particularly at the primary level where most services are (or should be) delivered and where the potential for impact is the greatest.<sup>10</sup> International health leaders have recognized this strategy at least since the Declaration of Alma Ata in 1978. The Bamako Initiative in Sub-Saharan Africa emphasized the development of sustainable local primary health care services through community-oriented services supported at least partially by locally generated resources. The consensus now is that a mix of strategies, including some form of user fees or co-payments plus general and targeted subsidies may be needed to ensure that basic health system resource needs are met.

Implementing any mix of health reform strategies has intended and unintended impacts on health service providers. The short- to medium-term impact of health reforms on service providers and their clients can often be negative due to inadequate planning or insufficient support to implementation. For example, along with decentralization and autonomy come increased management responsibility and often reduced direct public subsidies, forcing greater reliance on locally generated revenues and resulting in sometimes severe resource gaps.

Health service providers may be unprepared to respond to such changes, even if the reforms are in the long-term best interest of the health system and the population it serves. Already overextended physicians may have insufficient training or political skill to become planners, managers and advocates in addition to being service providers. Those attempting to improve provider performance should therefore analyze the policy environment and pay attention to how health system changes can, often unexpectedly, affect key PI factors such as incentives and motivation and organizational support. Health service providers may need training and coaching to perform new types of duties. They may need

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<sup>10</sup> See definitions of Primary Health Care and the Pareto Rule in the Glossary for more on the rationale for supporting primary-level health interventions.

preparation to understand and accept the introduction of new provider payment methods and incentives into the system.

Health reforms may also put local communities and clients in new relationships with the health system, facilities and providers. These measures generally seek to increase the dialogue between communities, clients and service providers, and take client perspectives into account to ensure that services are designed and delivered to be responsive for providers and consumers.

PRIME II program planners must be aware of the health reform context in countries where the Project works in order to take the effects of health sector reforms into account. Reform strategies and plans are described in national health sector development plans, as well as in other national, regional and local-level strategy and planning documents and budgets. Dialogue with counterparts and other key informers also provides information on the status of health sector reforms and is a necessary complement to long-term planning documents.

**Glossary of costing and health finance terms**

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Abridged and adapted from the Partnerships for Health Reform (PHR) Project<sup>11</sup>

**Access**

Accès

Acceso

The presence or absence of physical, economic or cultural barriers that people face in using health services. Physical barriers are usually those related to the general supply and availability of health services and distance from health facilities. Economic barriers are linked to the cost of seeking and obtaining health care, in relation to a patient's or household's income. Cultural barriers relate to social or community perceptions on receiving or knowing about certain health services.

**Adverse selection**

Antisélection

Selección adversa

(1) Tendency of people more likely to incur health costs to seek health insurance. (The opposite is favorable selection.) (2) A situation in which patients with greater than average need for medical and hospital care enroll in a prepaid health care plan in greater numbers than they occur in a cross-section of the population. For example, a plan enrolling only the Medicare population would suffer from adverse selection, as would one that somehow encouraged or allowed people to sign up when they were already ill.

**Allocative efficiency**

Efficacité de la répartition

Eficiencia de asignación

The extent of optimality in distribution of resources among a number of competing uses.

**ALOS/LOS**

Durée moyenne du séjour/durée du séjour (DMS/DS)

Estadía promedio/Estadía

Average length of stay. (1) The total days of stay (during their entire hospitalizations) of all patients in the specified group or institution discharged during a given time period, divided by the number of patients discharged during that same time period. (2) A standard hospital statistic. For a given group of patients, their total stays are added together, and that total is divided by the total number of patients in the group. For a hospital ALOS, the formula adds together the lengths of stay of all patients discharged from the hospital (for their entire stays) in a given time period, and divides that sum by the number of patients discharged in that time period. ALOS is often incorrectly referred to as "LOS"; that abbreviation means "length of stay" and pertains to an individual patient.

The ALOS may be calculated not only for the entire hospital, but also for specific age groups and diagnosis groups. It may also be calculated in a more refined (normalized) manner by "adjusting" for the case mix of the hospital. An ALOS that adjusts for the age distribution of the patients, for example, makes for more fair comparisons between hospitals than does one without such adjustment; additional factors, such as the distribution of patients among diagnosis groups, further improves the statistic for inter-hospital comparison purposes.

**Appropriation budget**

Crédits alloués

Presupuesto asignado

Type of budget commonly associated with government agencies and characterized by an authorized spending level for a specified period.

**Average cost**

Coût moyen

Costo promedio

Full costs divided by the volume or frequency of the cost object.

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<sup>11</sup> *Glossary of Health Reform Terms for Translators*. Bethesda, MD: Partnerships for Health Reform Project, Abt Associates Inc.; 2000.

**Bad debt**

Créance irrécouvrable

Deuda incobrable

A debt that is unpaid; for example, by a patient or insurance fund.

**Benefit package**

Ensemble de prestations

Paquete de prestaciones

Services covered by a health insurance plan, government budget or other funding source, and the financial terms of such coverage, including cost sharing and limitations on amounts of services.

**Benefits**

Prestations

Prestaciones

(1) Gains, whether material or not, accruing to an individual or a community. (2) The money, care or other services to which an individual is entitled by virtue of insurance.

**Indemnity benefits**

Prestations sous forme d'indemnités

Prestaciones de indemnizaciones

Insurance benefits that are provided in cash to the beneficiary rather than in service (service benefits). Indemnity benefits are usual with commercial insurance.

**Service benefits**

Prestations sous forme de services

Prestaciones de servicios

Insurance benefits that are the health care services themselves, rather than money. Service benefits are traditional with Blue Cross/Blue Shield and Medicare; indemnity benefits are standard with commercial insurance.

**Break-even point**

Seuil de rentabilité

Punto de equilibrio

The point at which total revenues equal total costs (fixed plus variable costs). The volume at which losses no longer occur and profit begins. Break-even analysis is the determination of the minimum volume or frequency necessary in order for a cost object to be financially self-supporting.

**Break-even time**

Seuil de rentabilité dans le temps

Tiempo de equilibrio

Capital budgeting method that measures time from the start of a project to when the cumulative present value of cash inflows equals the present value of total cash outflows. The payback period is similar to break-even time except that it is calculated without net present values.

**Budget**

Budget

Presupuesto

(1) A detailed plan for the future showing how resources will be acquired and used during a specific time period, expressed in formal, measurable terms. (2) Periodic allocation of funds to (or on the behalf of) health facilities. The total amount of the allocation is determined in advance (prospectively).

**Burden of disease**

Charge de la maladie

Carga de la enfermedad

(1) An indicator that quantifies the loss of life from disease; measured in disability-adjusted life years. (2) An indicator that quantifies the loss of health life from disease; measured in disability-adjusted life years.

**Capital budgeting**

Préparation du budget d'équipement

Análisis de inversiones

The process of planning expenditures on durable assets that last longer than one year.

**Case-mix**

Enveloppe des cas (traités)

Combinación de casos

(1) The mix of different types (defined by severity of illness and complexity of diagnosis and/or treatment) of patients treated in a health care organization. (2) The mix of cases, defined by age, sex, diagnosis, treatments, severity of illness, and so on, handled by a practitioner or hospital. Case mix is defined by: (a) grouping patients according to these factors; and then (b) determining the proportion of the total falling into each group. At present, the most popular group classification is the Diagnosis Related Group (DRG) system in the United States.

**Cash budget**

Budget de trésorerie

Presupuesto de caja

A schedule showing cash flows (receipts, disbursements and net cash) for an enterprise over a specified period of time.

**Catastrophic coverage**

Couverture contre les risques catastrophiques

Cobertura para enfermedades catastróficas

Insurance intended to pay only those costs that are unusual in their magnitude.

**Charge master**

Barème (des honoraires)

Guía de aranceles

A list of an organization's prices for each of its services.

**Claim**

Demande de remboursement

Solicitud de reembolso

A demand for an insurer to pay for medical services used by a beneficiary. The claim may be made by the beneficiary or by a health care provider.

**Clinical database**

Base de données cliniques

Base de datos clínica

The array of information (data set) that a physician collects on a patient in order to make a diagnosis and to be able to detect changes in the patient's condition during treatment and as the disease or healing progresses. See also international minimum basic data set.

**Clinical practice guidelines**

Directives de pratique clinique

Directrices de prácticas clínicas

Codified approaches to medical care. Guidelines may be used for both diagnostic and therapeutic modalities, and they may be used to lead physicians in the care of patients with defined diseases or symptoms or as surveillance tools to monitor practice on a retrospective basis.

**Code**

Code

Código

A shorthand representation. Codes may be used on a patient's bill, for example, to indicate the service for which a charge is shown. Diagnoses and procedures are commonly coded for ease of manipulation by computer (see coding).

**Coding**

Encodage

Codificación

The process of substituting a symbol (code), usually a number, for a term, such as a diagnosis or procedure. Coding is a clerical function and should only require substituting a code for the term to be coded. However, in many circumstances, the term to be coded will not be found in the coder's reference material, and a judgment will have to be made. In this case, the coder must know the meaning of the term and the way the coding system works, so that proper coding can be done. Under such circumstances, the task is far from clerical, and is one of classification (2) rather than coding.

There are two basic ways to code: (1) assigning to each individual term its own unique code (number); and (2) assigning to each term a code that represents a class, which may include one or more individual terms. The first technique is called "entity coding;" the second is "classification coding."

**Co-insurance**

Co-assurance

Seguro copartícipe

(1) A percentage of the charges for medical care, specified in a policy, that the beneficiary must pay.

(2) A type of insurance requiring that part of the charges be paid by the beneficiary, the primary purpose being to discourage small claims and "over-use" of services.

**Community financing**

Financement communautaire

Financiamiento comunitario

Direct financing or co-financing of health care by households in villages or communities, either by payment on receipt of care or by prepayment.

**Consumer satisfaction**

Satisfaction du consommateur

Satisfacción del consumidor

The overall power that consumers can have in a market to control the nature, quality and volume of goods and services produced, by the act of purchasing only those goods and services for which they are willing and able to pay. By contrast, in a centrally planned economy the goods and services provided are not determined by the mechanism of consumer satisfaction but by central planning decisions. Belief in consumer satisfaction is a notion central to neo-classical western economic theory. It assumes that a market works efficiently insofar as consumers are free to exercise their sovereignty and thus determine what and how much shall be produced in an economy. The market adjusts the supply of goods and services to consumer demand through prices. With complex services like real estate, equity investment and health care, it is common for the consumer to work with an agent or “buyer” for advice on the exercise of consumer choice. Some health systems have corporate purchasers at the primary care level or covering larger populations to exercise these functions on behalf of the consumers. The efficient operation of consumer satisfaction, whether at the individual or corporate level, depends upon the consumer having complete knowledge of personal welfare needs and the market, together with the expertise to discriminate between the quality of goods and services on offer for the resources available. In certain markets, where monopoly or oligopoly operate, producers are so much more powerful than consumers that they control the market in terms of supply, prices, quality and delivery. This can be the case with health care. Some health systems operate as monopsonies in which a small number of corporate purchasers, such as insurance companies, dominate the market with many competing providers trying to survive.

**Continuous quality improvement (CQI)**

Amélioration continue de la qualité

Mejoramiento permanente de la calidad

An approach to improving and maintaining quality that emphasizes internally driven and relatively constant (as contrasted with intermittent) assessments of potential causes of quality defects, followed by action aimed either at avoiding decrease in quality or correcting it in an early stage.

**Contracting out**

Sous-traitance

Subcontratación

The practice of the public sector or private firms of employing and financing an outside agent to perform a specific task rather than managing it themselves.

**Contribution margin**

Marge de participation

Margen de contribución

The contribution margin represents the difference between the rate or fee charged for a cost object and the variable costs required for providing that cost object. This residual amount, the difference, “contributes” toward covering the fixed costs. A related term is often used in break-even analysis. The break-even point formula is: Fixed Costs/(price-variable costs).

**Controllable costs**

Coûts pouvant être maîtrisés

Costos controlables

Those costs that are reasonably under the control of the manager in question. It is often useful to identify which costs are controllable by a given manager and which ones are not. Controllability is a measure of influence over the use or consumption of costs (resources).

**Copayment**

Ticket modérateur

Copago

(1) An arrangement whereby an insured person pays a particular percentage of any bill for health services received, the insurer paying the remainder. (2) A fixed fee per medical service that the beneficiary must pay, as specified in a policy. (3) An out-of-pocket charge paid by an insured individual at the point of services (in addition to the pre-paid premium). (4) The share of charges for a service for which the beneficiary is responsible under a coinsurance plan.

**Cost accounting**

Comptabilité des coûts

Contabilidad de costos

Any coherent system designed to gather and report cost information to the management of an organization.

**Cost allocation base**

Base de répartition des coûts  
Base de asignación de costos  
Factor (e.g., square meters, FTEs) that is the common denominator for systematically apportioning a cost or group of costs to several cost objects such as department, activity or procedure.

**Cost-benefit analysis**

Analyse coûts-avantages  
Análisis costo-beneficio  
(1) A method of comparing the actual and potential costs (both private and social) of various alternative schemes with the actual and potential benefits (private and social), usually measured in monetary terms and present values, with a view to determining which one maximizes the benefits.

**Cost center**

Centre de responsabilité pour les coûts  
Centro (de determinación) de costos  
Responsibility center in which a manager is accountable for the costs (expenses) only.

**Cost-containment/reduction**

Maîtrise des coûts/réduction des coûts  
Control/Reducción de costos  
Control of medical care expenditures. A variety of methods can be used, such as regulating prices, limiting budgets, capping cost growth rates, utilization management, improving efficiency, etc.

**Cost-effective**

D'un bon rapport coût-efficacité  
Eficaz en función de los costos  
Effective or productive in relation to cost.

**Cost-Effectiveness**

Coût-efficacité  
Eficacia en función de los costos  
Effect produced per unit of cost.

**Cost-effectiveness analysis**

Analyse (du) coût-efficacité  
Análisis de eficacia en función de los costos  
A method of comparing alternative courses of action in order to determine the relative degree to which they will achieve the desired objectives per unit of cost. The costs are expressed in monetary terms but some of the consequences are expressed in physical units (e.g., number of lives saved or cases of disease detected).

**Cost finding**

Recherche des coûts  
Determinación de costos  
A process that finds the costs of unit of service, such as laboratory tests, x-ray or routine patient days, based on an allocation of nonrevenue cost center costs to revenue centers.

**Cost management**

Gestion des coûts  
Gestión de costos  
The performance by executives and others in monitoring and controlling the cost implications of the strategies they are following.

**Cost object**

Objet du coût  
Objeto de la determinación de costos  
The item for which the user is trying to establish a cost. This could be procedures, activities, services, or other items that use or consume resources and are a target of the costing effort. The term “cost object” is a more generic term and holds a greater applicability across the many types of departments. For example, one department might want to cost a given clinical procedure, while another department might want to cost an activity. Both are cost objects.

**Cost of capital**

Coût du capital  
Costo de capital  
The cost to the organization of the money used for acquiring capital. It is often represented by the interest rate that the organization pays on borrowed money.

**Cost recovery**

Recouvrement des coûts

Recuperación de costos

Receipt, by a health provider, of income from individuals or the community in exchange for health services.

**Cost sharing**

Partage des coûts

Participación en los costos

Usually refers to a method of financing in which costs are divided among multiple payers, e.g., user and employer, government, donor, taxpayer, insurance agency, etc.

**Costs**

Coûts

Costos

The value of the benefits that are foregone in order to achieve an objective (economic definition), or the total money expenditure required to achieve an objective (accounting definition).

**Covered services or benefits package**

Services couverts ou ensemble de prestations

Servicios cubiertos o Paquete de prestaciones

The types of medical care for which the insurer will pay all or part of the cost. An “Exclusion” refers to care that is not a covered benefit.

**Decentralization**

Décentralisation

Descentralización

The freedom to make decisions. Total decentralization in an organization means minimum constraints and maximum freedom for managers to make decisions at the lowest levels of an organization.

**Deductible**

Franchise

Deducible

A fixed sum, specified in an insurance policy, that is deducted from any claim made under that policy (and that is therefore paid by the beneficiary of the policy), the remainder of the claim, or a portion thereof, being paid by the insurer.

**Demand**

Demande

Demanda

The desire, ability and willingness of an individual to purchase a good or service. Demand for health care is influenced by prices, education, quality of care, distance from facilities, income level, and religious and cultural factors.

**Demand for health services**

Demande de services de santé

Demanda por servicios de salud

The amount of health care services chosen by individuals. The amount of services chosen depends on characteristics of the individuals, such as income, age, sex, and health status, and characteristics of the provider, such as quality, price, and distance.

**Direct costs**

Coûts directs

Costos directos

Costs clearly and directly associated, traced or identified to a cost object. Generally, direct costs are the labor resources, medical supplies, equipment costs, and other expenses directly used to produce or deliver a cost object. Examples include nursing time with a patient, medicines and specific equipment.

**Disability adjusted life year (DALY)**

Année de vie corrigée du facteur d'invalidité (AVCI)

Años de vida ajustados por la incapacidad

A unit used for measuring both the global burden of disease and the effectiveness of health interventions, as indicated by reductions in the disease burden. It is calculated as the present value of the future years of disability-free life that are lost as a result of the premature deaths or cases of disability occurring in a particular year.

**Economic analysis/evaluation**

Analyse économique/évaluation économique

Análisis/Evaluación económica

In health sector, process whereby costs of programs, alternatives or options are compared with their consequences in terms of improved health or savings in resources.

**Effectiveness**

Efficacité

Eficacia

The degree or extent to which an activity achieves its objectives.

**Efficiency variance**

Variance de l'efficiencia

Varianza de la eficiencia

Variance due to actual productivity differing from what was budgeted.

**Efficiency, economic**

Efficience économique

Eficiencia económica

For a given output, the minimum cost with which it can be provided.

**Efficiency, technical**

Efficience technique

Eficiencia técnica

For a given set of inputs (labor and capital), the maximum output that can be achieved. For a given output, the minimum set of inputs that can be used. This concept is measured in physical/material units.

**Equity**

Équité

Equidad

Not necessarily the same as equality, equity relates in general to ethical judgments about the fairness of income and wealth distribution, cost and benefit distributions, accessibility of health services, exposure to health-threatening hazards, and so forth. Several measures are used depending on preferences of the community.

**Essential drugs**

Médicaments essentiels

Fármacos básicos

Those therapeutic substances that are indispensable for the rational care of the vast majority of diseases in a given population. A model list of such drugs, including about 250 substances, is kept under review by a WHO expert committee. The list furnishes a basis for countries to establish their own lists in the light of their own priorities and special circumstances. Experience has shown that about 30 to 40 drugs are sufficient for primary health care in many countries, the rest being required for secondary and

tertiary health care. Such lists do not mean that no other drugs are useful, but simply that in a given situation those drugs are the most needed for the health care of the majority, and should, therefore, be available at all times in adequate amounts and in the proper dosage forms.

**Expenses**

Dépenses

Gastos

Costs that have been used or consumed in carrying on an activity.

**Fee-for-service**

Paiement à l'acte

Reembolso por atención prestada

(1) Reimbursement of providers on a service-by-service basis rather than on a salaried, per-case or capitated basis. A retrospective payment method where the units of services may be combined as visit packages (e.g., medicines, follow-up visits, tests, etc.). (2) A method of paying physicians (and other health care providers) in which each "service," for example, a doctor's office visit or operation, carries a fee. The physician's income under this system is made up from fees collected for services. Alternative methods of income for physicians are: (a) a salary, as from an HMO (health maintenance organization); and (b) a "capitation" payment system, in which the physician is paid a predetermined amount for each patient under their care for a given period of time (rather than each service rendered). The capitation method can, of course, be applied via a health care organization; for example, an HMO, in which case the capitation payment is made to the HMO, with the physician paid in the manner decided by the HMO.

**Financial accounting**

Comptabilité financière

Contabilidad general

Focuses on standard accounting techniques and how they are used to report to external decision makers (e.g., government). Methods follow legal and generally accepted accounting principles.

**Fixed budgeting**

Budgetisation fixe

Presupuesto no ajustable

A budget that is not adjusted or altered after it is drawn up, regardless of changes in volume, cost drivers or other conditions during the budget period.

**Fixed costs**

Coûts fixes

Costos fijos

Those costs that do not vary with fluctuations in volume, frequency or activity. The depreciation cost or fixed monthly rent of a building that houses varying volumes of patients does not change as the volume or frequency of patient visits fluctuates.

**Flexible budget**

Budget souple

Presupuesto flexible

Budget that takes into account the fact that certain costs vary with the level of activity or volume and other costs remain fixed over a relevant range of activity. Flexible budgets anticipate the possibility of change and show planned revenues and planned expenses at various levels of volume.

**Flexible budget variance**

Variance d'un budget souple

Varianza del presupuesto flexible

The difference between actual results and the flexible-budget amounts adjusted for the actual volume achieved.

**Full-time equivalent**

Equivalent plein-temps

Equivalencia de jornada completa

The equivalent of one full-time employee paid for one year, including both productive and non-productive (e.g., vacation, sick, holidays, etc.) time.

**Fully absorbed costs**

Coûts amortis

Costos aplicados integralmente

Includes all costs direct and indirect and allocated overhead. A cost object that is fully costed is said to be one that has had all of these costs identified, attributed or allocated to that cost object.

**Funder**

Source de financement

Financista

The entity responsible for paying for health and disability support services, e.g., government, private or public insurance, provider, etc.

**Fund or fundholder**

Fonds ou détenteur de fonds

Fondo o Tenedor de fondos

The institution responsible for accumulating and spending the (prepaid) contributions for insurance (see purchaser). Funds are usually third party payers (public or private) but can also be providers. In the latter case, some functions of insurer and provider are integrated in a single institution.

**Gatekeeper**

Portier

Coordinador de atención primaria

(1) A primary care provider, e.g., family physician, general practitioner or nurse practitioner, who is responsible for coordinating some or all non-emergency treatment provided for individuals enrolled in a health insurance plan (public or private). Not all health insurance programs require this feature. (2) The former term for patient care manager, an individual who comes between the patient and secondary (specialist) care. This is one role of a primary care physician. Some health care systems, such as in Great Britain, prohibit the patient from making the initial contact with the specialist; without a referral from the general practitioner (that is, the gatekeeper or patient care manager), the specialist may not see the patient.

**Gatekeeper function**

Fonction de filtrage

Función de coordinador de atención primaria

An accepted role of a particular professional or organizational unit (e.g., at the primary care level) through whom other, often expensive or scarce, care resources are accessed.

**Global budget**

Budget global

Presupuesto global

A prospective payment method in which the unit of service is either a political entity or health facility.

Total payment is fixed in advance to cover a specified period of time. Some end of year adjustments may be allowed. Various formulas can be used, including historical budgets and per capita rates with various adjustments (e.g., age, sex, etc.).

**Health care provider**

Prestataire de soins (de santé)

Proveedor de atención de salud

An individual or institution that provides medical services (e.g., a physician, hospital, laboratory). This term should not be confused with an insurance company that “provides” insurance.

**Health economics**

Economie de la santé

Economía de la salud

The application of economic theory to phenomena and problems associated with health and health services. Topics include, among others, the meaning and measurement of health status, the production of health and health services, the demand for health and demand for health services, cost-effectiveness and cost-benefit analysis in the health field, health insurance, the analysis of markets for health services, financing of health services, disease costing, option appraisal in health services, planning of human resources, the economics of medical supply industries, the determinants of inequalities in health and health care utilization, hospital economics, health care budgeting, territorial resource allocation, and methods of remuneration of medical personnel.

**Health financing**

Financement de la santé

Financiamiento de la salud

The system of fund generation, fund expenditures, and flow of funds used to support the health care delivery system.

**Health insurance**

Assurance-maladie

Seguro medico

A system of funding set up in advance to pool resources of many individuals as a means to pay for unexpected and usually large health care expenditures required by some individuals in the contractual arrangement.

**Health investment**

Investissement pour la santé;

Inversión en salud

Expenditure on equipment and human resources used to provide health services and promote health. In a more general sense, the undertaking of any activity that involves a sacrifice (e.g., payment of money), followed by a benefit (e.g., enjoyment of a good).

**Health outcome**

Résultat médical

Resultados de salud

(1) The consequence of a medical intervention on a patient. (2) Final consequence or result; a recorded change in the well-being of a consumer that is presumed to have been caused by a health care event.

**Health sector reform**

Réforme du secteur de la santé

Reforma del sector salud

(1) A process that seeks major changes in national policies, programs and practices through changes in health sector priorities, laws, regulations, organizational structure and financing arrangements. The central goals are most often to improve access, equity, quality, efficiency and/or sustainability. (2) A sustained process of fundamental change in policy and institutional arrangements, guided by government, designed to improve the functioning and performance of the health sector and ultimately the health status of the population. Health sector reform is concerned with defining priorities, refining policies and reforming the institutions through which those policies are implemented.

**Incentives**

Incitations

Incentivos

(1) Factors that motivate a person or group to behave in a certain way. (2) Rewards for desired behavior. Now used regarding rewards for decreasing hospital and physician costs, and for encouraging patients to be frugal in demands for health care. Sometimes incentives are negative; for example, when a patient is required to pay the first dollars for a service (deductibles). This is a “disincentive” to seek the care, and thus an incentive to be frugal.

**Indicator**

Indicateur

Indicador

A quantitative measure for monitoring any aspect of a process or outcome.

**Indirect costs**

Coûts indirects

Costos indirectos

Those costs that cannot be directly traced, identified, linked or associated with a cost object in an economically feasible way. Some arbitrary method of tracing the cost to the cost object is required. Indirect costs typically include office supplies and most management costs that are not specifically linked (hands-on patient or direct activity), administrative time, general overhead, etc. Indirect costs can be reclassified as direct costs if extra detailed calculations are made; however, the actual costs of performing these calculations may not merit the value of defining these direct costs.

**Indirect costs (allocated)**

Coûts indirects (alloués)

Costos indirectos (asignados)

Overhead costs that have eventually been attached to cost objects by measures of allocation. Cost allocation refers to taking costs from one area or department, such as administration costs, and allocating them to another department or cost object.

**Inputs**

Intrants

Insumos

Goods, services, personnel and other resources provided for an activity with the purpose of producing output and achieving the activity’s objective.

**Internal control**

Contrôle interne

Control interno

The plan of organization of all the coordinated methods and measures adopted within a business to safeguard its assets, check the accuracy and reliability of its accounting data, and promote operating efficiency.

**Licensing**

Agrément

Acreditación

Legal permission to deliver services based on receiving certification.

**Line item budget**

Budget par poste

Presupuesto por partidas

A payment method where the unit of service is a set of functional budget categories usually on an annual basis. Can be either retrospective or prospective. Examples of resource categories include salaries, medicines, equipment, food, overhead and administration.

**Living standards measurement**

Mesure du niveau de vie

Encuesta de niveles de vida (ENV)

World Bank extensive household survey to collect data to be used for developing new methods to monitor progress in raising levels of living, to identify the consequences for households of past and proposed government policies, and to improve communications between survey statisticians, analysts and policymakers.

**Managed care**

Soins coordonnés

Atención controlada

(1) Generally refers to personal health care that is financed through fixed annual payments per person and is subject to utilization management and review. The fact that providers can expect fixed amounts for their services acts as an incentive for containing costs and improving efficiency in delivering care. (2) The system of purchasing services in which providers are given responsibility for ensuring that a defined population receives a defined set of services in a coordinated way.

**Management accounting**

Comptabilité de gestion

Contabilidad de gestión

Focuses on internal use of information within the enterprise and is the process of identification, measurement, accumulation, analysis, preparation, interpretation and communication of information that assists executives in fulfilling organizational goals.

**Management by exception**

Gestion par exception(s)

Gestión por excepción

The practice of concentrating on areas or processes within the organization that deserve attention and ignoring areas that are presumed to be running smoothly.

**Management control system**

Système de contrôle de gestion

Sistema de control de la gestión

A means of gathering data to aid and coordinate the process of making decisions throughout the organization.

**Means testing**

Contrôle (du niveau) des ressources

Comprobación de recursos económicos

An administrative mechanism that identifies an individual's income for purposes of establishing eligibility for benefits or services, such as health care, at no charge or reduced charge. By identifying individuals who are unable to pay and granting fee waivers (or reductions) to them, this mechanism is one of the principal approaches that can be used to protect the poorest under health sector cost recovery programs.

**Moral hazard**

Risque subjectif

Riesgo subjetivo

(1) A situation in which someone who acquires insurance changes their behavior because they no longer bear the full cost of that behavior. (2) Impact on an individual's demand for care of an out-of-pocket payment that is less than the cost of providing services. Because insurance (including centrally tax-funded services) covers some or all of the costs of service use, individuals tend to use more services than if they faced the full cost of care.

**Morbidity**

Morbidité

Morbilidad

(1) A measure of disease incidence or prevalence in a given population, location or other grouping of interest. (2) Illness, injury or other than normal health. Often used in describing a rate (statistical term). One type of hospital morbidity rate, for example, is the postoperative infection rate, meaning the number of patients with infections following surgery, expressed as a proportion of those undergoing surgery.

**Mortality**

Mortalité

Mortalidad

(1) A measure of deaths in a given population, location or other grouping of interest.<sup>11</sup> (2) A term that pertains to death. Usually used in the phrase “mortality rate,” which means the number of patients who died expressed as a proportion of those at risk; for example, a mortality rate of 1 percent for appendectomy would mean one death per one hundred patients undergoing that operation. Mortality rates for more rare events are often given as per 10,000 or per 100,000.

**National health expenditures**

Dépenses nationales de santé

Gasto nacional en salud

Total spending on health services, prescription and over-the-counter drugs and products, nursing home care, insurance costs, public health spending, and health research and construction.

**Net present value (NPV)**

Valeur actuelle nette (VAN)

Valor neto actual (VNA)

The present or current value of a series of receipts less the present or current value of a series of payments made over time.

**Non-controllable costs**

Coûts non maîtrisables

Costos no controlables

Those costs that cannot be controlled by a manager. Generally, as an individual moves upward in a health care organization’s management structure, costs become more controllable by that individual. As one moves downward in the structure, more and more of the entity’s total costs become non-controllable to the individual. Department managers generally have control over their direct costs and little, if any, control over the overhead that has been allocated to their area.

**Official development assistance (ODA)**

Aide officielle au développement (AOD)

Asistencia oficial para el desarrollo (AOD)

Concessional financing, including grants, provided for external development by governments, either bilaterally or multilaterally.

**Opportunity cost**

Coût d’opportunité

Costo de oportunidad

The cost or rate of return of the best alternative investment that is available.

**Out-of-pocket maximum**

Maximum à la charge du patient

Máximo desembolso en efectivo

The maximum amount of money that a beneficiary must pay in cost sharing per time period. Once that amount is reached, the insurer pays 100% of additional charges.

**Outcome standards**

Normes de résultats

Estándares de resultados

Long-term objectives that define optimal, measurable future levels of health status, maximum acceptable levels of disease, injury, or dysfunction, or prevalence of risk factors.

**Output**

Résultat(s)

Resultado

The product(s) that an activity is expected to produce from its inputs in order to achieve its objectives; the quantity of goods or services produced in a given time period.

**Overhead costs**

Frais généraux

Gastos generales

Indirect costs that are not easily associated with individual patients, procedures, activities or services and, by their very nature, cannot be specifically identified to a given output. Overhead costs are costs that frequently require some form of aggregated allocation to cost objects. Typical examples of overhead departments include accounting, human resources, administration, security and facility/building maintenance.

**Pareto rule**

Loi de Pareto

Regla de Pareto

(1) Also known as the 80/20 rule. A rule of thumb indicating that 80 percent of the resources are utilized in activities that produce only 20 percent of the procedures or output. Employing the 80/20 rule focuses the costing effort on those areas that have the highest impact on resource use. (2) A principle that states that in any series of steps in a process, such as the diagnosis of a patient's illness, there are a "vital few" steps and a "trivial many." This principle makes feasible productive efforts at quality improvement since, through a "Pareto analysis," the vital few steps where efforts pay off can be identified, and action taken. The Pareto rule is key to optimizing the care possible under a condition of limited resources. The principle was developed by J.M. Juran, an authority on quality, and named after an Italian economist.

**Payback method**

Méthode de l'amortissement

Método de recuperación

A form of break-even analysis. Capital budgeting method that measures the time it will take to recoup, in the form of cash inflow from operations, the total dollars invested in a project.

**Payer**

Payeur

Pagador

(1) Any entity that pays for health care services. This is usually an insurer or government agency, but it can be one provider paying another or a self-insured employer paying providers. See also fundholder. (2) An organization or person who furnishes the money to pay for the provision of health care services. A payer may be the government (for example, Medicare), a nonprofit organization (such as Blue Cross and Blue Shield), commercial insurance or some other entity. In common usage, payer most often means third-party payer.

**Per-case payment**

Paiement par cas (traité)

Pago por caso específico

A fixed payment covering all services for a specified case or illness. Patient classification systems group patients according to diagnoses, major procedures performed (e.g., DRGs). Most frequently applied to inpatient services, although outpatient groupers are being developed.

**Per capita payment**

Paiement par personne

Pago per capital

A prospective payment method in which the unit of service is the individual. A specific amount is paid per enrollee in an insurance plan or per person for a population target group to cover the costs of a defined package of services for a specified period of time.

**Per diem payment**

Paiement par journée d'hospitalisation

Pago diario

An aggregate payment covering all expenses incurred during one inpatient day.

**Performance reports**

Comptes rendus sur les performances

Informes de desempeño

Reports that measure activities. These reports usually compare budgets with actual results and link them with volume and other productivity indicators.

**Pre-paid health plan**

Plan de santé à remboursement anticipé

Plan de salud prepagado

A contract between a health unit (or group of units) and a person (or group of persons) that entitles the person(s) to receive certain types of health services for a fixed price paid in advance. The contract may or may not include additional payments that vary with the services provided to the persons enrolled in the plan.

**Premium**

Prime

Prima

(1) Amount of money paid to insurers on a regular basis in return for coverage (membership in an insurance plan). Premium rates for health insurance may be based on average costs of claims of the covered population or vary by socio-demographic characteristics such as age, sex and occupational activity. (2) An amount paid for an insurance policy for a given period of time.

**Prepayment**

Remboursement anticipé

Prepago

(1) Payment made in advance giving a guarantee of eligibility to receive a service when needed at reduced or zero additional cost at time of use (e.g., insurance premiums, membership dues, crop share contributions). (2) Payment in advance. A fee is paid to a third-party payer, such as a health maintenance organization (HMO), Blue Cross/Blue Shield, or commercial insurance, and the third party agrees to pay for stipulated care when it is provided. The voucher system now being put in place for Medicare is a prepayment system.

**Present value**

Valeur actuelle

Valor actual

The value today of a future payment, or stream of payments, discounted at the appropriate discount rate.

**Preventive services**

Services préventifs

Servicios preventivos

Services intended to prevent the occurrence of a disease or its consequences.

**Primary care**

Soins primaires

Atención primaria

Primary care refers to personal, curative or preventive health care services that people need to address 80-90% of their health complaints. (2) The care provided by a primary physician. Care requiring more specialized knowledge or skill is obtained by referral from the primary care physician to the specialist (secondary care physician) for consultation or continued care. See also secondary care and tertiary care. (3) The first level of contact with people taking action to improve health in a community.

**Private sector**

Secteur privé

Sector privado

That part of the economy in which economic activity is carried out by private enterprise and nongovernmental organizations (NGOs).

**Privatization**

Privatisation

Privatización

The process of introducing private financing and/or ownership into government entities. This could include policy and legal frameworks, as well as implementation of some aspects of private health care service delivery.

**Profit Center**

Centre de responsabilité pour les bénéfices

Centro de utilidades

Responsibility center in which a manager is accountable for revenues and costs.

**Prospective payment**

Paiement prospectif

Pago previsto

(1) Refers to when the payment rate for a package of health care services is negotiated and agreed upon before the treatment takes place. Prospectively set payment rates increase incentives for efficiency because the health provider faces higher financial risk. Examples include case-based payment and per capita-based payment when the rates are set in advance of services actually being rendered. (2) That element of a payment scheme whose level is fixed in advance of actually providing a service. (3) A term more accurately called “prospective pricing system.” The generic term for the system currently in use in the U.S. for paying for services for Medicare patients under the Diagnosis Related Group (DRG) program. The idea is that patients are classified into categories (in this case, DRGs) for which prices are negotiated or imposed on the hospital in advance. At present this kind of system is only applied to hospital care, not physician care, although the idea is the same as a single fixed “package” fee that includes prenatal care, delivery and postpartum care for a maternity patient, or the inclusion of preoperative care, surgery and postoperative care for an appendectomy patient within one fixed physician’s fee. See also retrospective payment.

**Protocols**

Protocole(s)

Protocolos

(1) Rules agreed upon in advance that are to be followed in decision-making unless an exception is sought. (2) Plans of treatment or case management.

**Provider**

Prestataire (de soins)

Proveedor

(1) The health service facility or health service worker, e.g., a hospital, a general practice clinic, an individual doctor, a nurse. (2) A hospital or health care professional who provides health care services to patients. May be a single hospital, an individual, or a group or organization.

**Provider payment mechanisms**

Mécanismes de paiement des prestataires

Mecanismos de pago a proveedores

Provider payment is the way in which money is distributed from a source of funds, such as the government, insurance company or other fundholder, to a health institution.

**Recurrent/operating costs**

Charges récurrentes

Gastos operativos recurrentes

Costs that occur on a regular timely basis, such as those involved in running a clinic; for example, payment of salaries of doctors and nurses and purchase of medicinal drugs.

**Reimbursement**

Remboursement

Reembolso

(1) Payment to a health facility or physician from the government, insurance company or other fundholder for services rendered. (2) The payment to a hospital, other provider or entity, after the fact, an amount equal to the institution’s or individual’s expenses. The current trend steers away from such a “blank check” approach, toward a prospective pricing system. Several varieties of reimbursement are discussed in health care.

**Cost-based reimbursement**

Remboursement sur le base du coût

Reembolso basado en costos

Payment of all allowable costs incurred in the provision of care. The term “allowable” refers to the terms of the contract under which care is furnished.

**Relative value**

Valeur relative

Valor relativo

Index number assigned to a procedure based upon the relative amount of labor, supplies and capital needed to perform the procedure.

**Relative value unit (RVU) costs**

Coûts unitaires en valeur relative

Costos de la unidad de valor relativo

(1) A methodology for costing in which the resources of one procedure, product, activity or service (cost object) are measured “relative” to one another. By establishing a hierarchy of the relative consumption of resources among cost objects, total costs can be assigned to all cost objects according to their relative value adjusted for their frequency of occurrence. (2) A numerical figure designed to make possible comparisons of the resources needed (or appropriate prices for) various units of service. An RVU takes into account labor, skill, supplies, equipment, space, and so on, into an aggregate cost for a procedure or other unit of service. This cost is converted into the RVU of the procedure or service by relating it to the cost of the procedure or service selected as the “base.” For example, a red blood count might be used as the base and thus have an RVU of 1.0. If a blood sugar determination were, say, five times as “costly,” it would have an RVU value of 5.0 (the illustration is imaginary as to the values given).

**Relevant costs**

Coûts pertinents

Gastos pertinentes

Expected future costs that directly result from the proposed new project or investment.

**Reproductive health**

Santé de la reproduction

Salud reproductiva

Providing accessibility and choice in family planning; caring for women before, during and after pregnancy; preventing and controlling sexually transmitted diseases, including HIV; preventing and treating cervical cancer; promoting the health of adolescents; and supporting positive health practices.

**Resource allocation**

Allocation des ressources

Asignación de recursos

In general, assignment of scarce inputs to the production of outputs.

**Responsibility centers**

Centres de responsabilité

Centros de responsabilidad

Parts, segments or subunits of an organization whose managers are accountable for a specified set of activities.

**Revenue planning**

Planification des revenus

Planificación de ingresos

Plotting future income.

**Risk**

Risque(s)

Riesgo

(1) The unexpected but estimated loss an insurer considers in issuing a contract to cover the loss in the event that it occurs. (2) The possibility of financial loss because of an injury to a patient (or visitor or employee), either through custodial liability (such as slips and falls) or professional liability (harm from the medical or hospital care). (3) Health care plan risk is a term which, when used in connection with organizations for providing patient care, refers to finances. For example, a health maintenance organization (HMO) that offers prepaid care for a given fee or premium is “at risk;” it must provide the care within the premium funds available or find the money elsewhere (the individual assets of partners, for example).

**Risk assessment**

Evaluation des risques

Evaluación de riesgos

The means by which plans and policymakers estimate the anticipated but uncertain claims costs of enrollees. This includes careful analysis of the probability of various health care costs that might be incurred by the individuals enrolled in the health insurance.

**Risk pool**

Pools de risques

Mancomunación de riesgos

A fund set up as a reserve for unexpected expenses. Organizations providing prepaid health care for a fixed fee typically set up such pools to cover, for example, unusually large demands for hospital care or specialist services.

**Risk selection**

Sélection des risques

Selección de riesgo

An insurer's attempts to enroll a population that will have lower-than-average risk. Risk selection refers to decisions by the insurer as to who to enroll; adverse selection refers to decisions by the enrollee as to whether to buy coverage.

**Risk sharing**

Partage des risques

Riesgos compartidos

(1) Usually the distribution of the risk or probability of health expenditures among members of the population, whether they are healthy or ill. Within the memberships group, some individuals will require health care services while others will not. (2) The division of financial risk among those furnishing the service. For example, if a hospital and group of physicians form a corporation to provide health care at a fixed price, they will ordinarily do it under an arrangement in which the hospital and physicians are both liable if the expenses exceed the revenue; that is, they share the risk.

**Salvage value**

Valeur de récupération

Valor de rescate

The value of a capital asset at the end of a specified period.

**Sector program assistance (SPA)**

Assistance par programme sectoriel (APS)

Asistencia para proyectos sectoriales

Providing cash and grant assistance as program benchmarks are achieved.

**Semi-variable costs**

Coûts semi-variables

Costos semivARIABLES

Some costs have certain characteristics of both fixed and variable costs. These are also referred to as "mixed costs." Telephone costs is an example, in that there is a fixed monthly based rate augmented by a variable rate that increases as long distance calls are made.

**Skim (cream skim)**

Écrémage

Descremado

A term which, in hospital usage, usually means to select patients who will be financially profitable; for example, because they have an illness for which the prospective payment system (PPS) favors the hospital, or because they have insurance and are not charity patients.

**Social cost**

Coût social

Costo social

Costs to society, and not merely to the individual or agency carrying out an activity, that do not appear in financial accounts (e.g., the costs of air pollution, noise, congestion).

**Social financing**

Financement social

Financiamiento social

Funds are drawn from society at large to pay for an array of health care benefits offered at little or no out-of-pocket charge to a particular group of people or to all members of society. Social financing can be paid for from general tax revenues (as in services provided by ministries of health); from mandatory health taxes specific to (earmarked for) health (as in the health component of social security in South America, the Caribbean and Asia); or from compulsory contributions, established by law, to a public or private health fund other than social security.

**Stakeholders**

Parties concernées

Partícipes

Those individuals or entities interested in or potentially affected by a planned intervention in a program or project.

**Standard benefits package**

Paquet de prestations standard

Paquete de prestaciones estándar

(1) A core set of health benefits that everyone in a country should have through their employer, a government program, or a risk pool. (2) A defined set of health insurance benefits that all insurers are required to offer.

**Straight-line depreciation**

Amortissement linéaire

Depreciación lineal

Depreciation method in which an equal amount of depreciation is taken each year.

**Structural/economic adjustment**

Ajustement structurel/ajustement économique

Ajuste económico estructural

The set of measures aimed at achieving the longer term objective of accelerating economic growth chiefly by restructuring the economy and reducing excessive or inefficient government intervention.

**Subsidy**

Subvention

Subvención

(1) A grant of money to an organization or an individual from a government or other agency. (2) A payment made by the government with the object of reducing the market price of a particular product or of maintaining the income of the producer. The aim of a subsidy may be to sustain demand for a particular product; to protect a particular industry; or to ensure that those consumers, especially the poor, who would otherwise not purchase a product or whose demand for it would decline, maintain their previous level of consumption.

**Sunk costs**

Coût irrécupérables

Costo no recuperables

Past costs that are unavoidable because they cannot be changed no matter what action is taken. They are not included in profitability analyses of future investments.

**Sustainable development**

Développement durable

Desarrollo sustentable

The capacity to meet the needs of the present without compromising the ability to meet future needs. This concept is central to current thinking on global protection and overcoming the threats to health presented by industrial growth and exploitation of natural resources. The idea of sustainable development contains two basic concepts, as defined by the World Commission on Environmental Development—the Brundtland Commission. These are the concept of needs, in

particular the essential needs of the world's poor, to which overriding priority should be given; and secondly the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs. The Brundtland Commission asserts that physical sustainability cannot be secured unless development policies pay attention to such considerations as changes in access to resources and in the distribution of costs and benefits. The notion of physical sustainability implies a concern for social equity between generations, a concern that must logically be extended to equity within each generation. It is generally now well accepted in development policy that poverty, declining health, environmental degradation, and population growth are inextricably related and that none of these fundamental problems can be successfully addressed in isolation. They are all part of the challenge of sustainable development. Sustainability of development programs is achieved when a program continues to deliver intended recurring benefits after the cessation of the original development assistance. Achieving sustainable health development through foreign aid is a special challenge in the health sector.

**Targeting**

Ciblage

Focalización

The general process of channeling benefits such as food or health care to a specific (target) population group such as the poor, women or children. Targeting is usually compared with offering services to everyone free-of-charge (i.e., through a general price subsidy). Means testing is but one of a number of targeting mechanisms.

**Third-party payer**

Tiers payant

Tercer pagador

(1) Intermediary institution responsible for paying providers for services rendered to covered patients. Such funds or purchasers are called third party payers because they are neither patients nor health care providers. (2) An intermediate institution (e.g., insurance company) that modifies the transactions between consumers and providers of health care. Third party payers can be the government or private sector companies. (3) A payer who neither receives nor gives the care (the patient and the provider are the first two parties). The third-party payer is usually an insurance company, a prepayment plan, or a government agency; organizations that are self-insured are also considered third parties.

**Unit cost or rate variance**

Coût unitaire ou variance du taux

Varianza de costo unitario o arancel

Difference (variance) due to the actual cost per unit or amount per unit differing from what was budgeted (or standards expected).

**User charges**

Paiement par l'utilisateur

Cargos a usuarios

Charges to be paid by the users of a service.

Also, fees.

**Utilization management and review**

Gestion et examen de l'utilisation

Gestión y revisión de utilización

Procedures to identify whether health care services are being provided inappropriately or in excess.

Managed care organizations make extensive use of these procedures in order to reduce utilization of services and costs. Some examples of utilization management include gatekeeping, referrals and second opinion requirements. Some examples of utilization review include profiling and physician peer review.

**Variable costs**

Coûts variables

Costos variables

(1) Those costs that vary directly or proportionally with changes in volume or activity. X-ray film consumed in taking chest x-rays is a variable supply cost. As more chest x-rays are taken, more film is consumed. (2) Those costs that vary with the volume of output, unlike a fixed cost, which remains constant with variations in output.

**Variations**

Variations

Varianzas

Difference between actual financial results and budgeted amounts.

**Volume variance**

Variance du volume

Varianza de volumen

Difference due to actual volume differing from what was originally budgeted. Flexible budgeting eliminates this variance from the budget.



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