

Special Initiatives
Report No. 29

**Design and
Application of a
Costing Framework
to Improve
Planning and
Management of
HIV/AIDS
Programs
(With Case Study)**

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Partnerships
for Health
Reform

Mission

The Partnerships for Health Reform (PHR) Project seeks to improve people's health in low- and middle-income countries by supporting health sector reforms that ensure equitable access to efficient, sustainable, quality health care services. In partnership with local stakeholders, PHR promotes an integrated approach to health reform and builds capacity in the following key areas:

- > *better informed and more participatory policy processes in health sector reform;*
- > *more equitable and sustainable health financing systems;*
- > *improved incentives within health systems to encourage agents to use and deliver efficient and quality health services; and*
- > *enhanced organization and management of health care systems and institutions to support specific health sector reforms.*

PHR advances knowledge and methodologies to develop, implement, and monitor health reforms and their impact, and promotes the exchange of information on critical health reform issues.

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Abstract

HIV/AIDS-related interventions can be enhanced by management cost accounting, a range of accounting and analysis techniques enabling cost-conscious management decisions in a specific organization or program. While traditional accounting rigorously adheres to generally accepted accounting principles, management accounting is more discretionary and, as such, open to adjustment and customization required by particular users and applications. Efficiency gains from management accounting in the HIV/AIDS area may be significant, given the rapidly increasing amount of funding and the choice of alternative management options in the implementation of most interventions.

Selected international programs focused on HIV/AIDS prevention and care in Cambodia participated in the validation of an activity-based costing (ABC) methodology, an important technique of management accounting whose purpose is to provide program managers and their funding agencies with uniform guidelines for allocation of costs to activities. The guidelines include a standardized list of activities by major intervention, a list of “activity lines,” a standardized cost classification system, a set of cost drivers to trace indirect costs to activity centers, and a program management agenda that can be addressed with cost information generated by ABC.

Conclusions from the activity included the following:

- > More than 200 activities were identified in the technical portfolio of studied HIV/AIDS programs and were grouped into 17 activity lines, i.e., components shared by various programs.
 - > Existing cost information may be mapped by most programs into a uniform activity list, although it would not match the activity list at the initially proposed level of detail.
 - > Postulating that services and products consume activities, and activities consume resources, ABC provides a more realistic match with program design and planning process than does traditional cost accounting. (The latter holds that services and products consume resources.) Indeed, most HIV/AIDS programs are designed and being implemented in terms of activities and processes rather than in terms of output and outcomes.
 - > The validated ABC methodology provides an important feed into program economic evaluations, i.e., studies involving both cost and benefit information.
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Executive Summary

Growth of demand and funding for HIV/AIDS prevention and care has outpaced most other public health needs and bears heavily on the budgets of national governments and international donors alike. HIV/AIDS interventions are many and often target the same or overlapping outcomes. Choosing between objectives and alternative paths that reach the same objective may not be clear unless the choice relies on the cost information that puts different HIV/AIDS interventions and activities on the same measurement scale. There is a pressing need for a uniform and replicable methodology of cost accounting that would enable direct cost comparison among HIV/AIDS programs.

The study upon which this paper is based attempted to design and validate a uniform methodology of HIV/AIDS program costing. This methodology should be used to compare costs of different HIV/AIDS interventions, various stages of the same intervention, and various sets of activities that offer alternative ways of carrying out a given intervention.

The basic question that underlies this study is, “What do various HIV/AIDS programs have in common in relation to cost accounting?” The study does not necessarily address prevention and care strategies or expected outputs or outcomes. The common “construction material” of which multiple HIV/AIDS programs are built is the activities and activity sets, called in the context of this study “activity types” or “work formats.” The methodology that slices different programs into common structural units and enables cost comparisons among the programs is called “activity-based costing” (ABC).

The methodology of ABC postulates that activities consume resources to produce an output. Activities are considered to be the basic cost objects. The activity costs are then assigned to other cost objects such as interventions, beneficiaries, or program sponsors. The assignment of cost in ABC, thus, occurs in two stages: from resources to activities and then from activities to output-related cost objects. Program planning and budgeting commonly revolve around the process, that is activities, rather than around the goal(s) as a set of impact targets. This is why ABC matches the needs and reality of public health program design, planning, and funding better than traditional, output-oriented accounting. The main benefit of ABC is that it allows one to pick out the most efficient activities from a group of activities targeting the same output or outcome. Based on ABC findings, a program designer or manager will rate the activities inversely to his or her unit, annualized, or programwide costs, and will identify the top choice as the least costly option from those that meet other conditions of viability such as cultural appropriateness and presence of institutional capacity for sustainable implementation.

The current study has resulted in the creation of a standard activity-cost grid within which ongoing and future HIV/AIDS programs will be able to position themselves. A government supporting a multitude of HIV/AIDS interventions and an implementing agency customarily involved in HIV/AIDS programs will be able to use this grid to relate any one of their programs to other programs to see where their turf and key priorities are on the national and global map of HIV/AIDS activities. They will also be able to use the grid to identify areas of dense concentration of effort and resources as well as gaps yet to be filled. Furthermore, the proposed terminology of activities and costs will be used to design new programs as well as to evaluate ongoing programs and technical and budget proposals.

The initially validated standard language of ABC includes three lists:

- > A list of 234 activities grouped into 26 targeted outputs or program approaches
- > A standard list of 18 activity types, or work formats, e.g., baseline research, site selection, face-to-face work with beneficiaries, and media campaigning
- > A standard list of HIV/AIDS program costs.

Each activity from the first list of 234 items is classified into one of 18 work formats. Work formats, in turn, are grouped into seven HIV/AIDS program modules: Design and Planning; Capacity Building; Delivery of HIV/AIDS Goods; Prevention and Care; Monitoring, Evaluation, and Reporting; Training and Dissemination; Program Administration and Management.

The ABC classification lists were validated using several HIV/AIDS programs that are under implementation in Cambodia with the focus on behavior change, social marketing of condoms, nongovernmental organization-based community care, and borderline aspects of HIV/AIDS transmission. Cambodia has the most serious HIV/AIDS epidemic in Asia and has become a major international crossroads for the international aid and technical assistance in the HIV/AIDS area.

The paper presents an HIV/AIDS program management agenda that has been identified in the process of ABC validation and will be addressed with ABC analyses. The issues put on the list are universally important per se, and they demonstrate the analytical potential of ABC as a management accounting technique. The issues include the following:

- > Estimated unit costs of social marketing of condoms in urban and rural areas under the adopted and alternative delivery scenarios
- > Evaluation of cost implications of deployment of site offices to manage social marketing of condoms versus continuing in-country management from the national office
- > Evaluation of cost implications of variable population coverage, e.g., for condom social marketing
- > Assessment of factors of cost variability of condom distribution by funder
- > Comparisons of costs of community-based versus hospital-based support of people living with HIV/AIDS
- > Estimated cost implications of alternative targeting decisions to optimize allocation of effort among groups that represent primary source of infection, transmitters of infection, and those at the end of the transmission chain.

The diversity of the research agenda enabled by ABC in just one country suggests a strong buy-in potential for this methodology in Cambodia and worldwide. Global pooling of data for, and findings from, ABC will allow the government of a specific country to make a quick and comprehensive estimation of the established relationships between interventions, activity packages, and costs. It will also allow an examination of the cost breakdown of each intervention/activity set in order to assess cost implications of any change that may be required in that set to adjust it for a given country epidemiological and operational environment.

The buildup of ABC activities in the HIV/AIDS area in a given country is envisaged as an incremental process. It can begin with participation of one comprehensive HIV/AIDS program around whose action plan the initial listings of activities, activity lines, costs, and cost drivers will be designed; validated; pilot tested in a year-long cost tracing and allocation exercise; adjusted; and offered for implementation to other programs. Clearly, the ABC adoption may be put on a faster track if several programs buy in right after a prototype ABC system is successfully tested. The initially designed listings could be made more robust if reviewed by key implementing agencies in the HIV/AIDS area before being tested by the pilot program.