

The Role of Economic Evaluation in Strengthening Health Systems

Economic evaluation can help decision makers gain important information about what health-service benefits are obtained for the resources that are used.

A basic assumption of economics is that individuals seek to allocate their own limited resources in ways that maximize the total benefits received from all purchases of goods and services. For example, when purchasing a phone, they might weigh their desire for the latest technology and the value it would bring them against the reality of their budget. Resource allocation decisions involving public or donor funds, which primarily affect individuals other than the decision maker, do not always reflect the same consideration of economic consequences, although they should.

Economic evaluation, which emphasizes explicit consideration of costs and consequences, can help decision makers gain important information about what health-service benefits are obtained for the resources that are used. FHI 360 has a proven track record in such evaluation. Our work in health economics seeks to answer questions about how to expand service provision with existing resources, estimate resource requirements accurately, and make the best choices among alternative strategies in order to achieve health objectives.

Recent Examples of FHI 360's Work

- FHI 360 developed an approach for measuring costs of pilot interventions and for using this information to predict scale-up costs (assuming an intervention merits scale-up).¹ In Tanzania, FHI 360 measured costs and outputs of a new approach to providing family planning information to HIV and AIDS clients and referring them to a co-located family planning facility. Although the Ministry of Health has decided to scale up a slightly different model, actual costs incurred during the pilot phase are being used to create activity budgets. Similar analyses are under way in pilot studies to assess feasibility and affordability of training community-based family planning distribution agents to provide Depo-Provera in Zambia, and also to evaluate a model for delivering reproductive health information and services through dairy cooperatives in Kenya and Zambia.
- The global health community has espoused a goal of universal access to HIV prevention, care, and treatment services. However, little is known about how much it actually costs to provide these services. FHI 360 recently carried out a study in collaboration with the Zambia HIV/AIDS Prevention, Care and Treatment Partnership to measure unit costs of selected outpatient HIV-related services and to estimate total annual costs of antiretroviral therapy and services for the prevention of mother-to-child transmission in the country.² Results showed that total costs of services were dominated by drugs, laboratory tests, and clinical labor. For each type of visit, variability across facilities in total costs and in cost components suggested that some potential exists to reduce costs through greater harmonization of care protocols and more intensive use of fixed resources. The authors concluded that improving facility-level information on the costs of resources used to produce services should be emphasized as an element of health systems strengthening.

- FHI 360 economists contributed to the development of a costed implementation program to help revitalize public-sector family planning efforts in Tanzania.³ The work revealed that the initial budget estimate was less than half of the actual resources required to meet key targets for family planning use. The costed implementation program helped the Government of Tanzania set new priorities, clarified resource requirements, and guided the investment decisions of the Ministry of Health and its principal funders.
- In a recent analysis of seven Laotian facilities (called “Wellness Centers”) that provide outreach, testing, and treatment for sexually transmitted infections (STIs), FHI 360 highlighted differences among facilities in relative costs and effectiveness of providing STI prevention and control services.⁴ The findings identified reasons for differences in performance and ultimately should help improve performance in all centers by encouraging adoption of the practices used by the most efficient facilities.

The Evidence

Economic information can make clear contributions to the goal of strengthening health systems. The evidence shows that:

- The need for health services in low- and middle-income countries far outweighs available resources, and this resource gap is expected to widen.⁵
- Shortages of health care workers profoundly affects access to health care, especially in sub-Saharan Africa where health systems lack the resources to pay providers competitive wages.⁶
- Many evidence-based interventions are labeled “cost-effective,” but this designation often is incorrectly used as a synonym for “inexpensive” (for example, when describing vitamin A supplementation) or “efficient” (indicating high output relative to inputs used). Cost-effectiveness studies that measure costs of roll-out at scale, with all of their service delivery, human resources, health information, and financing ramifications, are scarce.⁷
- Global health policies traditionally have emphasized expanding access and coverage with relatively less concern for efficiency and financial sustainability. However, the World Health Organization (WHO) framework for health systems, which most development agencies accept as the definitive structure for health systems strengthening, clearly states that efficient use and adequate supply of resources are two key measures of health systems performance.⁸
- International donors and governments have made large investments in program evaluation and implementation research but have not built similar capacity to produce and use economic information.⁹

Relevance of Economic Evaluation to Strengthening Health Systems

In global health it is often customary to use effectiveness as the main criterion for supporting introduction of new health services, with less attention paid to costs, affordability, or long-term sustainability. For example, some countries have implemented costly and complex mechanisms such as universal health insurance without first ensuring that sustainable financing* is in place. One result is that programs may be evaluated based on the number of outputs produced, without considering the resources that were used to produce them. Similarly, scale-up strategies may be adopted mainly based on predicted outcomes, without considering financial feasibility and sustainability at scale. Economic evaluation can help countries understand the resource implications of decisions, circumventing problems in, for instance, service delivery or health commodities.

Economic evaluation has a crucial place in many of the six building blocks† of WHO’s health systems framework. Health financing is one of the building blocks and could be considered the natural home for all economics-related content, including economic evaluation. Economic evaluation, however, cuts across all elements of the health systems framework. For example, within the service delivery building block, economic evaluation can provide analyses of efficiency, affordability, and cost-effectiveness of service delivery within and across the various components of a health system and can also identify cost savings realized through investments in specific interventions. The medical products, vaccines, and technologies building block can include economic evaluation of the incremental cost and effectiveness of new or improved products or services, helping decision makers allocate resources for greater impact. Within the leadership and governance building block, economic evaluation can improve transparency of decisions on resource allocation through explicit consideration of costs and consequences.

FHI 360’s Expertise in Economic Evaluation

FHI 360 has a proven track record of producing analyses that decision makers need to reduce uncertainty and allocate resources strategically—thereby strengthening their health systems. Questions we seek to answer include:

- How efficiently is a health system using its fixed resources (such as staff and equipment), and how many additional services could be provided with existing staff and infrastructure?

* In this brief, the term “sustainable financing” means that financial resources are in place to enable a delivery system to produce services for the foreseeable future. Resources may include a combination of public, donor, and private-sector funding.

† The six health systems building blocks in the WHO health systems framework are service delivery; medical products, vaccines, and technologies; health workforce; health financing; health information systems; and leadership and governance.

FHI's Services in Economic Evaluation

FHI experts can provide services that include the following:

- **Efficiency evaluation:** Measures costs of public health programs or services to assist leaders of health systems and international agencies in improving efficiency or mobilizing resources needed to finance services.
- **Affordability of scale-up:** Measures costs of health interventions and estimates resource requirements for scale-up.
- **Cost-effectiveness analysis:** Compares alternative interventions in terms of cost and effectiveness.
- **Modeling of costs and outputs or impacts:** Builds user-friendly computer models to show the economic impact of program decisions such as task-shifting and adoption of new technologies.
- **Technical assistance:** Builds local capacity in economic evaluations with implementing partners and key stakeholders.

- What is the cost of introducing an additional service delivery point to an existing health system, and how does this cost vary depending on location, scale of delivery, and other factors?
- How many more resources would be needed to meet country-level goals for use of services or health improvement?
- How do costs of services change if lower-cadre workers are substituted for higher-cadre workers?
- How much savings could be expected if the overall efficiency of the health system is improved?

A common first step for FHI 360 is to help health systems leaders identify and measure resources used to produce services or implement interventions designed to enhance the health system's capacity to deliver services. When resources are properly valued and allocated, programs and systems understand the costs of their actions and can consider the benefits of these investments. Knowledge of costs permits programs to compare the performance of different facilities or compare two or more alternative approaches to see which one delivers "more health for the money." It can also predict the cost of scaling up effective interventions. FHI 360 typically implements these activities in close collaboration with national stakeholders and often includes a capacity building component to develop local skills in health economics and economic evaluation.

Lessons, Challenges, and the Way Forward

Although there is growing recognition of the need to increase efficiency of health service delivery and an emerging consensus that better economic data are needed to support decision making, investments in systems to generate and use economic information have not yet been made. In most places, local capacity to measure and use economic information

(including generation of basic data, analysis, interpretation, and feedback loops to decision makers) remains weak. New mechanisms are needed to create incentives for decision makers to improve efficiency and reduce costs of service delivery. One approach currently under development is to bridge existing measurement and evaluation systems with financial information systems to produce routine information on cost per unit of output.

Results of economic evaluation can influence the policy process and budget requests at targeted decision levels within a health system, where resource allocation decisions are made. They can also guide local stakeholders in translating economic information into such specific programming documents as work plans and budgets. Many of the challenges in health systems strengthening have substantial economic dimensions, and FHI 360's economics group has the expertise to help decision makers better understand—and rise to meet—these challenges.



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About FHI 360: FHI 360 is a nonprofit human development organization dedicated to improving lives in lasting ways by advancing integrated, locally driven solutions. Our staff includes experts in health, education, nutrition, environment, economic development, civil society, gender, youth, research and technology — creating a unique mix of capabilities to address today's interrelated development challenges. FHI 360 serves more than 60 countries, all 50 U.S. states and all U.S. territories.