

Activity-Based Costing and Management in Kenya

Background

In 2020, USAID's Health Policy Plus (HP+) project and the University of Nairobi implemented the activity-based costing and management (ABC/M) methodology in Kenya. This approach was applied to cost HIV, tuberculosis (TB), malaria, family planning, and maternal and child health services at the facility level in Kenya, assessing the costs incurred by clients throughout the care cycle. The ABC/M methodology identified all resources used during service delivery and actual costs of providing selected services to equip policymakers with a solid foundation for optimizing resource prioritization, thereby maximizing health outcomes for the population.

Implementation of ABC/M in Kenya consists of two phases:

Phase 1 included a retrospective baseline of costs for one year at facility, community, client, and above-site levels. A landscape assessment informed the sampling of facilities, a data systems assessment provided information on the architecture needed to produce more routine, up-to-date costing information, and the time-driven activity-based costing approach was used to collect facility-level cost data. Thirty health facilities (encompassing facility levels 2 to 5) across five counties were sampled. Thirteen interventions were costed, including antiretroviral therapy (ART) for new, stable, and unstable clients; HIV testing; prevention of mother-to-child transmission; voluntary medical male circumcision; pre-exposure prophylaxis; outpatient TB and malaria diagnosis and treatment; routine antenatal care; childhood immunization and vaccination; provision of family planning commodities; and intrauterine contraceptive device/implant insertion and removal services. To ensure stakeholder ownership, foster effective collaboration, and build local capacity, a core research team was established consisting of representatives from the Ministry of Health; the National Syndemic Disease Control Council; HIV, TB, malaria, and maternal and child health and family planning programs; the University of Nairobi's School of Economics; HP+; and subsequently, PROPEL Health. For sustainability, HP+ built the capacity of local champions, primarily from the Ministry of Health and the University of Nairobi's School of Economics, to independently apply the ABC/M methodology.

ABC/M Phase 1: Key Findings

- There were notable differences in ART costs per visit between adults and children, with the average cost of pediatric ART being 13% higher than that of adult ART.
- Pharmaceutical consumables and personnel cost were the main cost drivers.
- Clinical contact time varied across different types of facilities, with patients spending different amounts of time on the same interventions depending on the facility.
- Clients spent considerable time seeking and waiting for services at health facilities.
- Significant variations were observed in how services were delivered across different facilities. For example, clinical activities performed by providers often deviated from the protocols outlined in national guidelines.
- Transportation and opportunity costs incurred by clients to seek services posed a significant economic burden on households, particularly those in lower-income quintiles.

Phase 2, expected to commence later this year, will focus on further strengthening local capacities at both the national and decentralized levels in applying the ABC/M methodology. It will also focus on institutionalizing routine costing data collection at all levels of the health system.

Applying ABC/M to Primary Health Care

The Kenya ABC/M assessment and capacity strengthening were completed at a pivotal moment—when the country was undergoing major health sector reforms that required costing data, among other evidence, to advance its universal health coverage agenda. The Ministry of Health utilized insights and newly acquired skills from ABC/M phase 1 to design its social health insurance benefits package and tariffs. Specifically, they applied the ABC/M approach to map the resources needed to deliver services at the primary facility level (levels 2 and 3). Given the limited time to develop the social health insurance benefits package, a normative approach was used instead of the time-driven activity-based costing method. Nevertheless, the remainder of the social health insurance costing process adhered closely to the ABC/M approach, including adjustments for the cost variations observed during ABC/M phase 1.

Next Steps

The following key activities are planned for phase 2 of ABC/M implementation:

- Develop an ABC/M toolkit to build the capacity of key stakeholders at the national and county levels and enable them to effectively apply the ABC/M approach and use the data for planning and management.
- Collaborate with the Ministry of Health and county departments of health to institutionalize routine costing data collection at all levels of the health system.
- Advocate for an upgrade to the financial system to include more detailed data on vertical programs such as HIV, TB, malaria, and reproductive, maternal, and child health.
- Organize a meeting with clinical leadership to discuss and interpret the process map outputs from phase 1 of ABC/M implementation.

“The costing of the strategic interventions in ABC/M informed the pricing of the respective health services as well as the setting of tariffs and provider payment mechanisms. As such, it facilitated innovative ideas for output-based financing. Further, the data facilitated in estimating resource needs for integration of donor-funded strategic programs to enhance financial sustainability.”

— Dr. Trizah Tracey John, Head of Costing, Analytics, and Strategic Purchasing, Ministry of Health

“One of the key tasks following the launch of the Social Health Authority is determining the cost of the social health insurance benefit package. With limited costing data available, the arrival of ABC/M data was timely, allowing the benefit package team to utilize this methodology and base the design of benefit packages and tariffs for level 2 and 3 PHC [primary health care] facilities on this analysis. As part of the Ministry of Health's efforts to institutionalize ABC/M across all levels, the MOH costing team plans to extend this methodology to gather accurate data for level 4, 5, and 6 facilities.”

— Stephen Macharia, Director of Planning, Ministry of Health, Kenya

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