Costing Case Study: Uganda Country Learning Hub

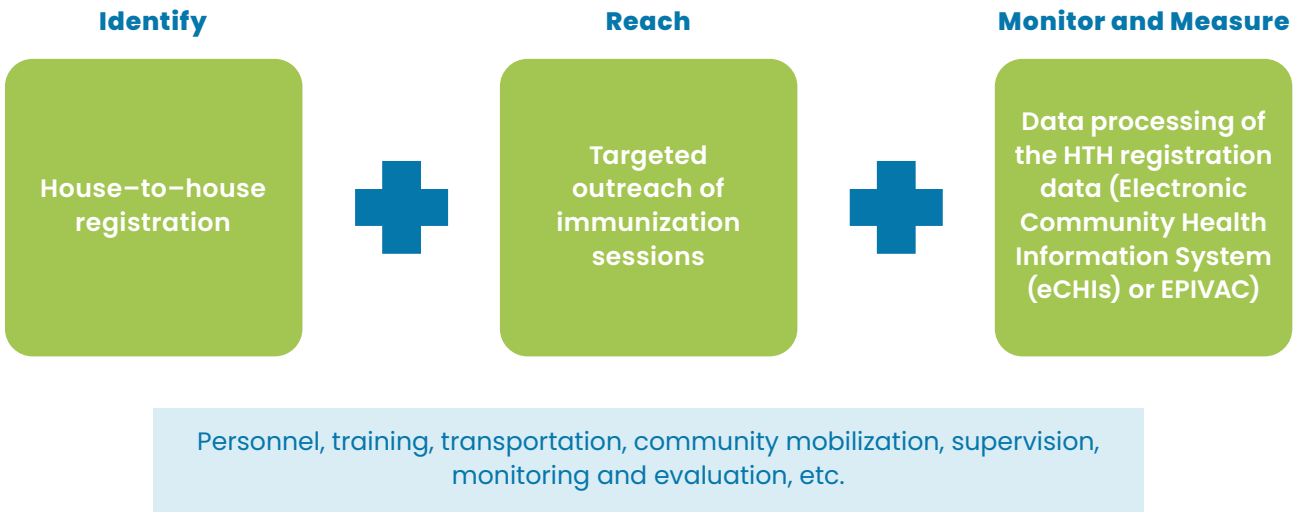
Zero-Dose Learning Hub - August 2025

Reliable cost estimates are key to planning and scaling interventions to reach zero-dose (ZD), under-immunized (UI) children, and missed communities. They enable governments and partners to make informed funding decisions and improve immunization coverage. The following case study is an excerpt from the Zero-Dose Learning Hub's (ZDLH) *Costing Zero-Dose Child Interventions: An Operational Guide* and illustrates how the Uganda Learning Hub applied retrospective costing methods to estimate the resources required for the country's Big Catch-Up campaign. Conducted across three districts, the study focused on the costs associated with identifying and reaching ZD and UI children through house-to-house registration, targeted outreach, and data processing interventions. By capturing both financial and economic costs from a payer perspective, the study provides critical insights into the investment needed to scale similar strategies nationally. **Download the full toolkit** to access additional resources, tools, and examples to support your own costing study.

The Uganda Learning Hub conducted a retrospective costing study in three districts from February to April 2025. The costing study analyzed the nationwide Big Catch-Up campaign, launched in November 2024, to estimate the resources used to implement the campaign interventions and activities. While the campaign comprised several interventions, the costing study focused on the key interventions (Figure 1):

1. **House-to-house (HTH) registration of children:** This activity identified the ZD and UI children eligible for vaccination. Village Health Teams (VHTs) visited each house and registered children under five years in their respective villages. These lists were subsequently used to update the health facility microplans and map hotspots for outreaches.
2. **Data processing:** Once registration was completed, the information captured on paper-based tools was compiled into line lists and child health registers at the health facility level and subsequently entered by the district biostatistician into Uganda's Electronic Immunization Vaccination Coverage (EPIVAC) system, the country's online platform for immunization data capture and reporting.
3. **Targeted outreach/immunization sessions to reach/vaccinate children:** After registration, outreach sessions were conducted in identified hotspots where ZD children were located, specifically to reach the children in these areas with immunization services.

Figure 1: Types of Interventions Costed



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Costing Study Example - Uganda Learning Hub

Background: Uganda has significantly improved immunization coverage through the Uganda National Expanded Program on Immunization (UNEPI), achieving over 90 percent coverage for most routine antigens. Despite this, outbreaks of measles and polio have persisted, especially since 2020. The Uganda Ministry of Health (MOH) projected an increase in ZD and UI children in 2024 over previous years. In response, MOH/UNEPI launched the Big Catch-Up campaign in November 2024, targeting 297,687 ZD and 676,712 UI children.

Existing costing studies in Uganda mainly focused on estimating the costs of routine immunization and mapping financing flows for routine immunization. This costing study is focused on selected interventions carried out through the Big Catch-Up in Uganda:

1. House-to-house registration as a mechanism to identify the ZD and UI children.
2. Data processing to monitor and measure progress in vaccinating ZD children.
3. Targeted immunization sessions to reach the ZD and UI.

Information on the total and incremental costs will be used to assess the affordability of the intervention and inform scale-up.

Study type and objective: Costing study aimed at estimating the incremental cost of reaching ZD and UI children through selected interventions implemented during the Big Catch-Up campaign in Uganda in November 2024.

Study population: Children less than five years of age, the target age group of the campaign.

Study sites: The costing activity was carried out over three months in three Learning Hub districts (Mubende, Wakiso, and Kasese). In each district, the Learning Hub purposively selected two to three sub-counties that had been the focus of a previous process evaluation led by the Uganda Learning Hub to assess implementation of the Big Catch-Up campaign. For each of the selected sub-counties, health facilities that participated in the campaign were purposively selected to ensure representation across all levels of health centres. Data was collected at the district and health facility levels.

Costing perspective: Payer perspective (MOH/UNEPI) and payer/provider perspective focuses on the costs of delivering the intervention to the government but does not include costs to the vaccination beneficiaries.

Time horizon: The study time horizon was three months, corresponding to the start and end of the Big Catch-Up intervention.

Primary outcome: Cost per ZD/UI child vaccinated/reached with DTP1.[1]

Secondary outcomes: Cost per ZD identified (drawn from the house-to-house registration), cost per child identified/registered (includes all children registered), and cost per child vaccinated (all children vaccinated with other antigens).

Data sources for measuring the outcome:

- *Denominator*: Number of registered children from registration books (VHTs).
- *Numerator*: Number of vaccinated children (ZD or UI) identified through tally sheets/DHIS2, EPIVAC, and verified through expert opinion/key informant interviews (with EPI focal persons, Assistant District Health Officers – Maternal and Child Health, VHTs).

Costing methodology: Retrospective approach to estimate the incremental/additional costs of vaccinating ZD children after the intervention has been conducted. It is a post-intervention costing study without a comparison group. The retrospective approach will help the Learning Hub determine how many children were reached with DTP1 through the intervention. While data will be collected after the intervention is completed, the intent is to estimate the incremental cost of the intervention by comparing the outcome before and after the intervention.

Photo Credit: Infectious Disease Research Collaborative, Uganda

[1] DTP1 refers to the first dose of the diphtheria, tetanus, and pertussis vaccine.

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A combination of bottom-up and activity-based approaches was used to identify, quantify, and value (in monetary terms) the activities and corresponding inputs used to implement activities at each phase of implementation. Both financial and economic costs were captured.

Financial costs are defined as direct monetary or accounting costs received from the funder that were used in the implementation of the interventions. Economic costs include real-time value for voluntary effort expended in the implementation (for example, VHTs), in-kind contributions of inputs, and other assets, etc. All inputs were valued in 2024 Uganda shillings before being converted to U.S. dollars using the November 2024 exchange rate.

Data collection: Cost data were collected through field observations, key informant interviews, and review of relevant documents (budgets and field reports). Data on the number and proportion of ZD and UI children identified and reached were gathered from district registers, VHT registers, or line lists.

Photo Credit: Infectious Disease Research Collaborative, Uganda

Led by JSI, Gavi's ZDLH is a global learning initiative to generate evidence and engage stakeholders to identify and reach ZD and UI children. As the global learning partner, JSI supports Country Learning Hubs in Bangladesh, Mali, Nigeria, and Uganda to advance evidence-based strategies aligned with Gavi's Identify-Reach-Monitor and Measure-Advocacy (IRMMA) framework. Key ZDLH achievements include demand-driven technical assistance and the development of tools and resources, all aimed at reaching ZD children and integrating evidence into policy and practice.