



# Costing Tool for Scaling Up Community-based Health Planning and Services (CHPS) in Ghana

December 2018

[www.mcsprogram.org](http://www.mcsprogram.org)

## Background

Ghana's Community-based Health Planning and Services (CHPS) strategy aims to improve the delivery of primary health care (PHC) at the community level by increasing community participation in health decision-making. The shift from facility-based to community-based health service delivery is an important health system reform by the Ghana Health Service for reducing maternal and child mortality. National expansion of CHPS began in 2000, but the pace of scale-up has been slow and inconsistent across Ghana's 10 regions<sup>1</sup> due to a variety of factors including costing information to help plan for CHPS.

## Summary of Costing Tool for Scaling Up CHPS

In 2016, the Ghana Health Service, with support from the US Agency for International Development's flagship Maternal and Child Survival Program (MCSP), developed cost estimates for average investment (or start-up) and operating costs for a functional CHPS zone<sup>2</sup> to inform policy, planning, and advocacy. Based on the cost estimates, a CHPS Costing Tool was also developed in 2017 to support national and sub-national implementers to plan for establishment, refurbishment, and annual operations and maintenance costs of a CHPS zone. The Tool also helps with decision-making, planning, budgeting, and mobilizing resources for CHPS.

To inform continued scale-up of CHPS in Ghana, this document presents the rationale, methods, findings and implications of the CHPS costing exercise and the implementation of the CHPS Costing Tool.

## Methodology and Assumptions

The purpose of the CHPS costing exercise was to estimate costs for expanding (or scaling up) and operating CHPS compounds. The following integral components to implement a CHPS compound were costed:

- **Investment costs:** community mobilization (including land and land titling costs), building (including water and electrical source costs), non-medical and medical equipment, and one-time staff trainings.
- **Operational costs:** drugs and consumables, professional and non-professional staff salary, in-service trainings, and other recurrent costs (including utilities and maintenance).

Cost modeling was conducted to define 1) current<sup>3</sup> and ideal<sup>4</sup> CHPS implementation estimated average investment costs and the cost components that account for the largest proportions of those costs; 2) estimated

<sup>1</sup> Awoonor-Williams et al. 2013

<sup>2</sup> A CHPS zone is a demarcated geographical area of up to 5,000 persons or 750 households in densely populated areas. A functional CHPS zone does not necessarily depend on the presence of a CHPS compound, though it is highly desirable, particularly in an undeserved area.

<sup>3</sup> For this costing exercise, researchers collected both current and ideal cost data for investment costs only. "Current" refers to the existing quantities of cost items collected during data collection, while "ideal" refers to quantities of cost items needed (based on respondents' professional opinion).

<sup>4</sup> Ibid

average operating costs for CHPS zones and 3) per capita investment and operating cost estimates. Cost modeling was also conducted to estimate the costs of scale-up under a range of scenarios, including the cost of providing CHPS annually to Ghana's rural population. A key assumption of the analysis is that cost components remain consistent across all CHPS as it does not account for variation in CHPS implementation.

Data was collected in September and October of 2015 for a purposive sample across 10 districts (focused on one CHPS zone within each district), and sampled two districts in five MCSP-supported regions<sup>5</sup> for a total of 10 districts and CHPS zones. Unit cost and expenditure data from the 2014 calendar year was compiled from structured interviews with staff at CHPS compounds, district health management teams (DHMT), district planning officers from district assemblies, regional medical stores, and the Ghana Health Service headquarters. The collected data were analyzed to identify the key cost inputs and drivers for scale-up. Demographic and contextual data such as district population, land size, epidemiological profile, services provided by a CHPS compound, referral practices, history of CHPS compound building and current revenue streams and sources of financing for CHPS zone investment and operating costs, was also collected. The modeling used standard MOH salary and building costs.

## Key Findings<sup>6</sup>

The estimated *average current investment costs* for a CHPS zone totals 327,000 Ghanaian Cedis (GHS) (USD 77,000). Estimated *average ideal investment costs* for a CHPS zone totals GHS 614,000 (USD 144,000). Across the cost components, building costs constitute by far the largest cost driver for current total average investment costs. This is followed by one-time staff training and then medical equipment (**Figure 1**).

The estimated *average annual operating costs* for a CHPS zone total GHS 163,000 (USD 38,000). Professional staff salary constitutes the largest operating cost driver, followed by drugs and consumables, in-service training, and other recurrent costs (**Figure 2**).

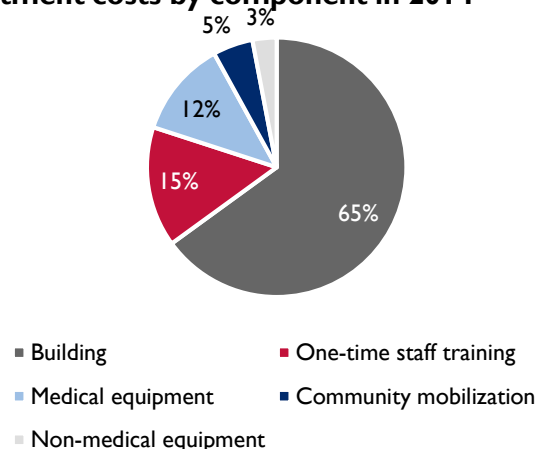
The estimated *per capita current investment costs* total GHS 75 (USD 18), while the estimated *per capita ideal investment costs* total GHS 134 (USD 31). The estimated *per capita annual operating costs* total GHS 35 (USD 8).

## Implications for Scale-up and Implementation of the CHPS Costing Tool

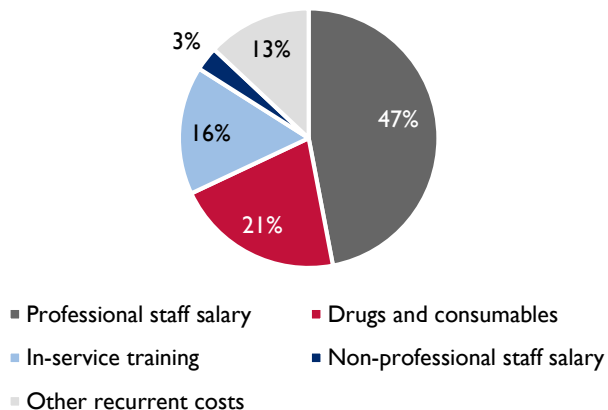
The results of this costing exercise were used to develop useful cost projections for CHPS scale-up.

**The exercise demonstrated that CHPS is a relatively affordable and scalable strategy for reducing maternal and child deaths in Ghana.** The investment cost to scale-up CHPS zones with compounds to meet the population in need of access to CHPS services (2.52 million people<sup>7</sup>) is GHS 189 million (USD 44 million). This is based on a per capita cost, based on the current situation and includes building costs. For operating costs,

**Figure 1. Percentage of total average current investment costs by component in 2014**



**Figure 2. Percentage of total average current operating costs by component in 2014**



<sup>5</sup> Ashanti, Eastern, Northern, Upper East, and Volta

<sup>6</sup> Figures use December 2016 GHS to USD conversion rate of .235 and values have been rounded.

<sup>7</sup> The Ghana Health Service report that in 2016 there were 2,017 CHPS zones with compounds (GHS 2017). Current CHPS policy states that each CHPS zone should serve no more than 5,000 people<sup>17</sup>. Based on these figures, it is estimated that approximately 10.1 million Ghanaians are

the cost to provide CHPS services annually to the rural population of 12.6 million<sup>8</sup> is GHS 439 million annually (USD 103 million). Based on these estimates, the costing exercise found that the cost to provide CHPS annually is approximately USD 8 per capita or about 14% of Ghana's Total Health Expenditure (THE) per capita, given a THE of USD 58 per capita in 2014<sup>9</sup>.



CHPS Costing Tool regional training in Ashanti, May 2018. Photo by Emmanuel Attramah/MCSP

**Sub-national managers can independently, and routinely, estimate resource needs and plan for CHPS operations and scale-up.** Using the cost estimates, MCSP and the Ghana Health Service developed a Microsoft Excel-based CHPS Costing Tool to support sub-national level stakeholders interested in implementing CHPS to plan for establishment, refurbishment, and annual operations and maintenance of a CHPS zone. The Tool allows implementers to: cost their own plans and compare them against their existing budget (if any); compare their costed plan against the CHPS National Implementation Guidelines costs and mobilize resources to close any funding gaps identified. The Tool is simple to use and is intended to be used by policymakers, national, regional and district health management teams, and providers to assist in developing CHPS cost estimates and advocating for financing for CHPS from their communities, District Assemblies, and other partners. An accompanying user

manual was also developed to give implementers the necessary information to navigate the CHPS Costing Tool confidently, modify the Tool to best fit his/her needs, including adjusting for inflation, and provide guidance on how to interpret and use the results.

In 2018, MCSP supported the Ghana Health Service to train national and regional level implementers on the use of the CHPS Costing Tool. The training also included a module on CHPS resource mobilization techniques, including funding gap identification, and stakeholder identification and analysis, identification and prioritization of resource mobilization targets, and development of a funding request targeted to the identified stakeholder to mobilize local resources for CHPS.

**The CHPS Costing Tool has provided GHS with a sustainable option for continued planning and financial analysis.** MCSP continues to support GHS to scale-up the CHPS Costing Tool and resource mobilization techniques, and next steps include training district level stakeholders. Further analysis and scenario planning at the district level using the CHPS Costing Tool could show additional cost implications of scaling up CHPS. Coupled with the evidence from the costing exercise on the cost of scaling-up CHPS, these tools can enable self-reliance, which is critical for health decision-making and provides important inputs for longer-term sustainability planning for CHPS in Ghana.

This brief is made possible by the generous support of the American people through the United States Agency for International Development (USAID) under the terms of the Cooperative Agreement AID-OAA-A-14-00028. The contents are the responsibility of the Maternal and Child Survival Program and do not necessarily reflect the views of USAID or the United States Government.

currently covered by CHPS. Ghana's rural population makes up 46% of Ghana's total population of approximately 27.4 million people, totaling approximately 12.6 million people (World Bank 2015). Therefore, it is estimated that a total of approximately 2.52 million people in Ghana's rural population are unable to access CHPS services.

<sup>8</sup> Ibid

<sup>9</sup> WHO Global Health Expenditure Database, 2014