



## *Health Sector Support Investment Project*

### **Building the sampling frame and ensuring political buy-in during survey preparation**

#### **1. Background**

**Country Context:** Cameroon has made little progress towards achieving the MDGs. In fact, with a few exceptions like immunization, many key indicators of maternal and child health and nutrition have stagnated or worsened since 1990. Although the government has mounted a major effort to expand access to key child health and nutrition services that can reduce mortality, their coverage remains low and rich-poor differentials remain an important concern.

**Intervention:** In response to these concerns, Performance-Based Financing (PBF) will be piloted in public, private and Faith Based Organization (FBO) facilities across 14 districts in the North-West, South-West and East regions of Cameroon, covering a total population of approximately 1.8 million. International NGOs with the best PBF technical proposals have been hired to design PBF programs in each of these three regions in consultation with the Ministry of Health.

**Impact Evaluation:** The policy objectives of the impact evaluation are to (a) Identify the impact of PBF on maternal and child health (MCH) service coverage and quality, (b) Identify key factors responsible for this impact, and (c) Assess cost-effectiveness of PBF as a strategy to improve coverage and quality. The study is a blocked-by-region cluster-randomized trial (CRT), having a pre-post with comparison design. Individual health facilities in each region will be randomized to one of the 4 study groups. The study groups are: (T1) full PBF package; (C1) Same per capita financial resources as PBF but not linked to performance; Same supervision and monitoring and managerial autonomy as T1; (C2) No additional resources but same supervision and monitoring as PBF arms and T1 and C1; and (C3) Status quo. In total, approximately 270 primary care facilities are included in the impact evaluation.

#### **2. Country Experience**

**Facility-level randomization and developing a household sampling frame:** Individuals living in the intervention zone of a facility assigned to a given study group (e.g. C3) may visit a health facility assigned to a different group (e.g. T1). To minimize contamination between study arms, it was decided that facility-level catchment areas were to be used as a sampling frame to randomly select households for the household survey component of the IE. Yet in Cameroon, the most decentralized

official geographic health unit is the “Health Area”, which can include one, many or even no primary care facilities. As a result, official facility-level catchment areas do not exist. Worse still, household estimates for enumeration zones from the National Census Bureau were unreliable and outdated.

In response to this challenge, a World Bank-Ministry of Health team was created to design methodology and data collection tools for the mapping of health facility catchment areas. In July-August 2011, all 14 pilot districts were visited. During each visit, the team worked with District Health Management Teams to collect information related to health facilities existing in each Health Area, and the villages/town sectors associated with each facility. Data collected also included the population size of each location, and its distance to the associated facility. The sampling frame generated from this work was then used by the Baseline Survey Firm (*IFORD – Institut de Formation et de Recherche Démographiques*) for first-stage sampling of locations within health facility catchment areas. Once in the field, survey teams from IFORD then conducted a household listing in each sampled location, where from 16 households who met the study’s inclusion criteria (at least one pregnancy or birth in the 2 years preceding the survey) were randomly selected.

***Multi-stage approach to sensitization and consensus-building for IE and facility randomization:*** To prevent possible resistance from some central or regional levels actors who may be sensitive to the idea of randomizing study arms at the facility level, an “Introduction to Impact Evaluation” workshop was held in Yaoundé in February 2012. The methodology of the IE was endorsed by central, regional and district levels actors who attended the workshop and a plan of actions was developed to ensure a successful implementation of the IE. In February 2012, the Government organized a launching workshop for PBF in the Northwest Region of Cameroon. The objectives of the workshop were: (i) to provide an overview of PBF key concepts and experiences to local actors implicated in the Northwest Region PBF pilot; (ii) to introduce AEDS/ Belgium, the Performance Purchasing Agency (PPA) that will implement PBF in Northwest Region; (iii) to inform the health personnel on the impact evaluation (IE) and to carry out the randomization of the health facilities for the IE (distribution into 4 groups according to the impact evaluation strategy); and (iv) to inform the authorities and the population about the logistics and timing of the impact evaluation baseline survey. More than 150 participants took part in the two-day workshop, which was chaired by the Secretary General of the Ministry of Health. Representatives from all health facilities in the four PBF pilot districts in the Northwest also participated in the workshop.

### **3. Lessons Learned**

- In designing the Impact Evaluation, it is necessary to take into consideration the strengths and weaknesses of the health information system and census data.
- If quality data is not available for the identification strategy, solutions should be identified in collaboration with local stakeholders.
- Sensitization and consensus-building needs to first start at the central level, but should be soon

followed-up by ensuring regional, district and facility-level authorities are on board as well.

- In order to ensure acceptance and support for the IE, randomization of health facilities should be conducted via a public and transparent ceremony. Facility managers should take part in this ceremony.

Authors: Paul Jacob Robyn, IE Field Coordinator, Gaston Sorgho, TTL Impact Evaluation

**[www.worldbank.org/health/impacetevaluationtoolkit](http://www.worldbank.org/health/impacetevaluationtoolkit)**

2012/04/10