



Joint work program
TEKANO Group and
Ekiti State Ministry of Health and Social Services

The Ekiti State Basic Package of Health Services: THE COSTS

Discussion Paper - July 2022

**SCALING-UP THE EKITI STATE BASIC PACKAGE OF HEALTH SERVICES:
THE COSTS**

JULY 2022

FOREWORDS

WALKING THE TALK

The Government of Ekiti State is committed to improving the quality-of-service delivery, reducing the coverage gaps of high impact health interventions and achieving Universal Health Coverage (UHC).

To meet this objective, we must continue to focus on what matters; funding the health system and using data to refine our decision making.

This study provides a basis for this. Over the last 18months, we have analyzed and determined the financial costs of providing a set of cost-effective interventions under the Ekiti State Basic Package of Health Services (ESBHPS).

The ESBHPS represents a suite of 56 interventions aimed at addressing 72% of the State's disease burden. Delivering the ESBHPS for all residents and reducing coverage gaps to zero, will require an additional Naira 9.9bn, or N2,624 per capita by 2026.

Given weak macro fiscal conditions and pressures on government resources, we analyzed costs required to reduce coverage gaps by 20% and 40% respectively in 2026. These amounts came to Naira 1.2bn or Naira 269 per capita and Naira 2.4bn or Naira 538 per capita respectively.

With this report, I am excited that we have highlighted alternative pathways for equitable, yet financially sustainable progress in expanding health coverage with the ESBPHS interventions.

The journey of a thousand miles indeed begins with a single step and this paper is one of the many steps that the State government through the Ministry of Health has taken toward Universal Health Coverage in the State.

I acknowledge the support and technical assistance provided by TEKANO Group on the rollout of the State Health insurance Scheme and their incredible contributions to the design, development, and finalization of this paper.

As a government, we remain committed to walking the talk until we deliver a responsive health care system that meets the needs and aspirations of the Ekiti people. This is for Ekiti Kete.

Dr Oyebanji Filani
Honourable Commissioner for Health and Human Services
Ekiti State

TURNING THE TIDE

Nigeria's health system is at a crossroad. After more than a decade of declining government investments with poor returns, the creation of the national Basic Health Care Provision Fund together with the recently passed National Health Insurance Authority Bill provide the opportunity for a turn around.

Whether Nigeria will make meaningful progress toward Universal Health Coverage and improve its subpar health outcomes will, however, depend on reforms in its 36 states and the federal capital territory.

The government of Ekiti State has been taking bold reform steps to attain its mission of equitable high quality health services for its citizens and beyond, from filling critical regulatory voids to empowering public providers to bolster the quality of care and large-scale increases in government funding for health.

For TEKANO Group, it has been a privilege to join forces with the Ministry of Health and Human Services to accelerate the implementation of the Ekiti State Health Insurance Scheme and extend coverage with services to the most vulnerable under the Ekiti State Equity Health Plan.

This study is one of the first products of this collaboration. It establishes the costs of the Basic Package of Health Services of the Ekiti State Equity Health Plan. Given the current spending capacity of the Ekiti State government, guaranteeing the full package to the entire population seems beyond its means in the short and medium term. The study therefore establishes the costs of alternative pathways for still meaningful and equitable, yet financially sustainable progress in expanding coverage with interventions included in the Ekiti State Basic Package of Health services.

TEKANO Group is looking forward to continuing working with the Ekiti State government to make the Equity Health Plan a reality and accelerate progress toward Universal Health Coverage.

Christoph Kurowski
President
TEKANO Group

ABSTRACT

The Ekiti State Health Insurance Scheme Law establishes the foundations to provide social health insurance for all residents in Ekiti State. As stipulated by the law, the Ekiti State Health Insurance Scheme comprises several plans, most importantly, the Ekiti State Equity Health Plan to cover vulnerable groups with a set of essential health services – the Ekiti State Basic Package of Health Services or ESBPHS.

The present study establishes the direct, recurrent financial costs of the ESBPHS using an activity-based, bottom-up approach as approximately Naira 36.4 billion or USD 95.8 million in 2021. This translates into an annual per capita cost of Naira 9,660 or USD 25.4.

Given the current spending capacity of the Ekiti government, guaranteeing the full ESBPHS for the entire population seems beyond its means in the short and medium-term. The estimated recurrent financial costs of the ESBPHS constitute more than four times combined state and local government authorities' spending on health and more than 2% of Ekiti State's gross domestic product in 2020.

Scenario analyses point to alternative pathways for still meaningful and equitable, yet financially sustainable progress in expanding coverage with ESBPHS interventions under the Equity Health Plan. The incremental costs of reducing coverage gaps of ESBPHS interventions range from Naira 1.2 billion or USD 3.2 million for a 20% reduction of coverage gaps with select ESBPHS interventions (base case scenario) to Naira 8.5 billion or USD 22.4 million for a 40% reduction of coverage gaps with the full set of ESBPHS interventions in 2026 (optimistic scenario). Meeting these spending needs requires increases in subnational government spending on health from 14% to 100% between 2020 and 2026. If current staffing levels are sufficient to provide the additional services, spending needs are even lower.

Additional analytical work will be critical to inform the expansion of the Equity Health Plan. Among other insights, it will be important to critically review the state's capacity to mobilize government resources for its role out.

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TABLE OF ABBREVIATIONS

AIDS	Acquired Immuno-Deficiency Syndrome
BMPHS	Basic Minimum Package of Health Services
CHEW	Community Health Extension Worker
CBR	Crude Birth Rate
ESEHP	Ekiti State Equity Health Plan
ESBPHS	Ekiti State Basic Package of Health Services
ESHIS	Ekiti State Health Insurance Scheme
HIV	Human Immunodeficiency Virus
MHHS	Ministry of Health and Human Services
NGN	Nigerian Naira
UNICEF	United Nations International Children's Emergency Fund
USD	United States Dollars
WHO	World Health Organization

I. INTRODUCTION

In 2020, TEKANO Group joint forces with the Ministry of Health and Human Services (MHHS) of Ekiti State to support the government's ambitious plans to transform health financing and accelerate progress toward Universal Health Coverage. Collaborative activities include, among others, two studies to inform the implementation of the Ekiti State Health Insurance Scheme, specifically the design and implementation of the Equity Health Plan. This present study establishes the costs of the plan's benefits. The second, forthcoming study reviews current levels and patterns of health spending in Ekiti State and, drawing on the cost analysis, proposes an expansion path for the Equity Health Plan.

Following this introduction, section II offers some information on the Ekiti State Health Insurance Scheme. Section III presents the study objectives and section IV the methods and data employed in the exercise. Section V presents and section IV discusses the study results.

II. BACKGROUND

The Ekiti State Health Insurance Scheme Law (2016) establishes the foundations to provide social health insurance for all state residents. As stipulated by the law, the Ekiti State Health Insurance Scheme (ESHIS) comprises several plans, including the Ekiti State Equity Health Plan. The Equity Health Plan will cover vulnerable groups: Pregnant women, children under the age of five years, the elderly, the disabled and the poor.

The law mandates the State Health Insurance Scheme to define the equity health plan's benefits package, which will also serve as the core for all other plans. In line with the law's provisions, the State Health Insurance Scheme circulated a proposal for a package of health services - the Ekiti State Basic Package of Health Services or ESBPHS, which received the approval of the Commissioner of Health and Human Services in 2021.

The ESBPHS is a modification of the National Basic Minimum Package of Health Services (BMPHS). It represents a set of cost-effective interventions to prevent and control the most prevalent causes of infant, child, maternal and adult morbidity and mortality in Ekiti State (Annex 1). The ESBPHS does not include some acute inpatient care services that have been introduced to the BMPHS after the approval of the ESBPHS.

The Ekiti State Health Insurance Scheme Law establishes an Equity Fund as the funding source for the Ekiti State Equity Health Plan. The Equity Fund pools contributions of not less than 1% of the consolidated revenue of the Ekiti State Government with donations and grants from private organizations and non-governmental organizations. Funding for the equity fund is also expected from the National Health Insurance Scheme through the Basic Health Care Provision Fund (BHCPF). The BHCPF has been established in the National Health Care Act of 2014 as the main source of funding for the BMPHS.

The Ekiti State Health Insurance Scheme Law establishes the scheme as the purchaser of the ESBPHS. The law designates registered public healthcare facilities in Ekiti State as the exclusive providers of the ESBPHS. The law mandates that registered public primary healthcare providers serve as the first point of contact

for beneficiaries, and, if necessary, refer patients to designated public secondary and tertiary healthcare facilities.

III. STUDY OBJECTIVES

The purpose of this study is two-fold. First, it establishes the costs of the ESBPHS. Second, it explores the incremental costs of two different scenarios for closing coverage gaps with ESBPHS services in 2026: A base-case scenario assumes a reduction of current coverage gaps by 20 percent, an optimistic scenario considers a reduction by 40%.

IV. METHODS AND DATA

This section explains the approach to costing ESBPHS interventions, to establish the cost of the ESBPHS, and to assess the incremental cost of different coverage scenarios for ESBPHS interventions.

COSTING ESBPHS INTERVENTIONS

The costing exercises adopt the perspective of the Ekiti Health Insurance Scheme and establish estimates for the direct, recurrent financial cost of delivering the ESBPHS. Direct, recurrent cost include personnel, medicines, medical supplies, and overhead expenditures incurred at the facility level. Estimates exclude capital costs as well as administrative costs at the local, state, and federal government level. Funding for these expenditures is secured from sources other than the Ekiti Health Insurance Scheme, most importantly, funding from the State Primary Health Care Development Agencies and budgets from local and state governments.

The cost analysis adopts an activity-based, bottom-up method. The approach follows the methodology for the costing of the national BMPHS (World Bank 2017). The activity-based, bottom-up method has the advantage of avoiding distortions of cost estimates due to shortcomings in the efficiency and care quality of service delivery, which pose significant challenges in Ekiti state and Nigeria as a whole.

The activity-based, bottom-up method estimates the cost of the ESBPHS as the sum of the costs for all included interventions. In its current version, the ESBPHS comprises a total of 64 interventions falling into the categories of (i) maternal and reproductive health (antenatal care, skilled birth attendance, postnatal care, and family planning); (ii) child health (treatment of infectious diseases and malnutrition, immunization), (iii) management of communicable diseases (malaria, HIV/AIDS and tuberculosis), and management of non-communicable diseases (screening for risk factors of cardiovascular disease, hypertension and diabetes mellitus).

The annual costs of providing an intervention rest on three principal variables. They are explained in the remainder of this section.

$$\text{Annual Intervention Cost per Year} = \text{Population in Need} * \text{Intervention Frequency} * \text{Unit Cost}$$

All cost estimates are presented in 2020 Nigerian Naira [NGN] and United States dollars [USD]. NGN-USD conversions are based on the average exchange rate of the last quarter in 2020 (Central Bank of Nigeria 2021).

Population in need

Estimates of the population-in-need for each intervention and year are based on (i) the size of the Ekiti State population or specific population groups and (ii) the incidence or prevalence of a condition (annex 2). For example, in the case of treatment of childhood pneumonia, the population-in-need is calculated based on the population of children under the age of five years and the incidence of pneumonia in this age-group. In contrast, for some of the screening interventions, the population-in-need corresponds to the respective population group, for example, in the case of the inoculation with a pentavalent vaccine, the population-in-need is the population of children below the age of one year.

Estimates of population sizes, including different population groups rest on projections of the National Population Commission (2016) (National Population Commission and National Bureau of Statistics 2016) and data from the latest national census (2006) (Federal Republic of Nigeria 2009). The National Population Commission assumed an annual population growth rate of 3.14% for Ekiti State over the period 2006 to 2016, projecting the state population to grow from 2.40 million in 2006 to 3.82 million in 2016. In the absence of any other demographic updates, population estimates for 2021 and 2026 rest on the same annual population growth rate. The breakdown into population sub-groups is based on the age distribution of the 2006 census for Ekiti state (Table 1).

Table 1: Ekiti state demographics

Population group	%	Source	Projection 2021
Total population	100	Census projection	3,817,591
Children under 5 yrs.	11	Census, population share	419,935
Population 5 yrs. and older	89	Census, population share	3,397,656
Population 20 yrs. and older	51	Census, population share	1,946,971
Population 40 yrs. and older	20	Census, population share	763,518
Women of reproductive age (15 to 49 yrs.)	27	Census, population share	1,030,750
Pregnant women	5	MHHS estimate	190,880
Number of live births		UNICEF CBR	152,704
Children 6 - 23 mos.	4	MHHS estimate	167,974
Children 6 - 59 mos.	7	MHHS estimate	267,231

Information about the incidence and prevalence of conditions and diseases originate from two national sources: The Nigeria Demographic and Health Survey and the Nigeria HIV/AIDS Indicator Impact Survey, both in their 2018 versions (National Population Commission (NPC) Nigeria and ICF 2018) (Federal Ministry of Health, Nigeria 2018). When these sources do not provide Ekiti State-specific information, the study uses regional (southwest) or national estimates. When they do not provide estimates at all, the study relies on WHO estimates (World Health Organization 2021).

Intervention frequency

The total number of interventions per year is a measure of both the population-in-need and the intervention frequency. As discussed, population-in-need estimates already account for the frequency of a condition or disease in a population group over the course of a year. For example, the incidence of diarrhea in children under 5 years of age is on average 3.3 times per year.

Yet, the frequency of an intervention during an episode of a disease or condition may vary as well. For example, in the case of pregnancy, multiple, repeated antenatal care visits are needed. In contrast, in the case of some family planning methods, the intervention is effective for up to four or five years. Data about the intervention frequency are based on national and international care guidelines (Annex 2).

Unit cost

The study adopts two different approaches to establish the unit cost, that is, the recurrent cost of delivering an intervention including costs of labor, medicines, medical supplies, and overhead. For maternal, reproductive, and child health services, malaria treatment and NCD screening, the study estimates unit costs based on a detailed costing exercise of service inputs and overheads. The exercise uses an Excel-based model, which follows with few modifications the costing approach of the national BMPHS (World Bank 2017). The national BMPHS costing approach is an adaptation of the algorithms of the WHO One Health Tool, which reflect most recent WHO guidelines for prevention and care (World Health Organization 2021). The following subsections describe the components of the Excel-based model: labor, drugs, medical supplies, and overhead.

In contrast, for unit cost estimates of treating HIV/AIDS, tuberculosis and non-communicable diseases in the general population, the study draws on estimates established in field research in Nigeria (Bautista-Arredondo, Colchero, et al. 2018); (Bautista-Arredondo, La Hera-Fuentes and Contreras-Loya 2018) (Bada, et al. 2020) (Hendriks, et al. 2015). These field works share the activity-based, bottom-up costing approach of the Excel-based model. To ensure full consistency, the study extracts the costs of labor, drugs, and medical supplies from the field research, and calculates the overhead costs as in the Excel-based model (see above).

Labor

Labor costs refer to the costs of personnel necessary to deliver an intervention. Labor cost estimates depend on the mix of health workers, time requirements, usually expressed in minutes, and staff costs per unit of time.

Table 2: Ekiti state service delivery modes and staffing

Service delivery mode	Personnel composition
Community outreach	<ul style="list-style-type: none">Community health extension worker (CHEW)
Primary health care	<ul style="list-style-type: none">Community health extension worker (CHEW)Nurse/midwifeLab technician
Secondary health care	<ul style="list-style-type: none">Community health extension worker (CHEW)Nurse/midwifeLab technicianPhysician (general practitioner / specialist (OB/GYN / pediatrician))

The mix of health workers involved in the delivery of an intervention depends on national and state standards of practice for different service delivery mode (Table 2). The costing model considers three different service delivery modes: (i) outreach, (ii) primary health care, and (iii), secondary care. Each of these modes is characterized by a different mix of health workers. The costing model assigns a service delivery mode for every intervention based on discussions with experts of the Ekiti State MHHS, in a few exceptions, allowing for multiple different modes (Annex 2).

The costing model adopts the time requirements employed in the costing of the national BMPHS (World Bank 2017). Estimates of personnel costs rest on the 2020/21 salary scale of the MHHS. Salaries are converted into per minute estimates assuming that health personnel work 8 hours per day and 240 days per year (Table 3).

Table 3: Ekiti state health personnel costs [NGN 2020]

Cost unit	Personnel category			
	Physician	Nurse/midwife	CHEW	Lab technician
Annual salary	₦2,963,700	₦1,149,947	₦507,498	₦574,212
Salary per minute	₦25.73	₦9.98	₦4.41	₦4.98

Note: Per-minute estimates assume health personnel working 240 days per year, 8 hours per day.

Drugs and medical supplies

The costs of drugs and medical supplies depend on their use and prices. Calculations adopt the assumptions about the use of drugs and medical supplies of the national BMPHS costing exercise. As Nigeria lacks national or state reference lists¹, price information originate from international sources, including WHO and, for vaccines, UNICEF (World Health Organization 2021) (UNICEF 2020).

Overhead

Overhead refers to the costs to operate a health facility, including activities like administration, reporting, training, and travel but excluding the direct costs of service delivery. Overhead cost estimates are established as a fixed share of the direct cost of service delivery. This share is set at 10%, roughly the midpoint of overhead estimates across cost studies carried out in Nigeria for interventions included in the ESBPHS. (Onwujekwe, et al. 2018) (Ologun, Sobande and Oke 2014) (Aboubacar and Ongwae 2015) (Brian and McGreevey 2010)

COSTING THE ESBPHS

The study establishes the costs of the ESBPHS in terms of the total and the corresponding annual per-capita cost in 2021. The estimates reflect the aggregate costs of delivering the interventions included in the ESBPHS for the Ekiti state population.

¹ Nigeria still lacks national or state reference lists, mostly due to highly decentralized procurement arrangements that result in large price variation across localities.

ASSESSING THE INCREMENTAL COST OF CLOSING COVERAGE GAPS WITH ESBPHS INTERVENTIONS

The study appraises the costs of two different coverage scenarios. They differ in their ambition to close current coverage gaps. Current coverage gaps are defined as full coverage, that is, 100 percent coverage of the population in need minus current service coverage, i.e., coverage of the population in need in 2021. Information about current coverage with ESBPHS interventions derive from the Nigeria Demographic and Health Survey of 2018. Whenever coverage data are not available, the study uses information from similar interventions as a proxy or relies on opinions from experts in the MHHS (annex 2).

The first scenario, the base-case scenario assumes a reduction of present coverage gaps by 20 percent. The second scenario, the optimistic scenario is more ambitious. It considers a reduction of current coverage gaps by 40%. The time horizon of both scenarios is the same – 2026. This is five years from the base year (2021) and roughly half-way to the global target date for universal health coverage (UHC 2030 2021).

The study's approach to set relative targets for reductions in coverage gaps has advantages over setting relative targets for coverage increases, especially, when coverage levels vary greatly across individual interventions. This is indeed the case in Ekiti State, where coverage levels for some childhood diseases remain below 10% while coverage levels with some childhood vaccines are close to 95%.

The main effect of setting relative targets for reductions in coverage gaps (rather than for coverage increases) is that progress in scaling up coverage is faster for interventions with low starting points (i.e., large gaps). For example, the current coverage with treatment of severe childhood pneumonia is 9.0%, in contrast, the current coverage with pneumococcal vaccine is 92.0%. A twenty percent reduction of the current coverage gaps, as in the base case scenario, yields a coverage increase for the treatment of severe childhood pneumonia of 18.2 percentage points (i.e., 20% of the 91% coverage gap), while it is 1.6 percentage points for coverage with the pneumococcal vaccine (i.e., 20% of the 8% coverage gap). In contrast, a twenty percent increase of current coverage yields only a 1.8 percentage point increase for the treatment of severe childhood pneumonia, but an 18.4 percentage point increase for pneumococcal vaccine.

Beyond the advantage of avoiding increases in coverage levels beyond 100%, the approach to setting relative targets for coverage reductions is also consistent with the experience that it takes less effort to raise low levels of coverage (e.g., by drawing on existing delivery platforms) compared to already high levels of coverage (e.g., extending the reach of the delivery system, especially going the last mile). Furthermore, it results in a convergence of coverage levels that is compatible with an equitable approach to scaling up service coverage levels, especially when the goal is to give priority to vulnerable populations, including populations lacking coverage, as stipulated in the Ekiti State Health Insurance Law.

The study also establishes the absolute increases in service coverage levels resulting from relative coverage gap reductions. Intervention-specific examples are given above, that is, the impact of the base-case 20% gap reduction on the coverage with treatment for severe pneumonia and pneumococcal vaccine. Following the methodology of the WHO UHC index, the study presents these effects for select tracer indicators and aggregates them as the geometric mean across disease areas and the ESBPHS. The

selection of tracers is limited to indicators for which service coverage data are available. For this reason, the selection excludes any interventions for NCDs part of the ESBPHS (table 4).

Table 4: Selection of tracer indicators to assess the impact of relative coverage gap reductions on absolute service coverage levels by service category

Service category	Tracer indicators	
Maternal and reproductive health	<ul style="list-style-type: none"> ▪ Antenatal care ▪ Intermittent presumptive treatment for malaria 	<ul style="list-style-type: none"> ▪ Skilled birth attendance ▪ Treatment of obstructed labor ▪ Family planning (modern methods)
Child health	<ul style="list-style-type: none"> ▪ Treatment of diarrhea with ORS and Zinc ▪ Treatment of severe diarrhea 	<ul style="list-style-type: none"> ▪ Treatment of malaria ▪ Treatment of pneumonia
Treatment of infectious diseases (general population)	<ul style="list-style-type: none"> ▪ Treatment of malaria 	<ul style="list-style-type: none"> ▪ Treatment of AIDS (anti-retroviral drugs)

V. COST ESTIMATES

This section presents cost estimates for the ESBPHS as well as different scenarios for closing coverage gaps with ESBPHS interventions in 2026. The paper presents cost estimates for different combinations of interventions part of the ESBPHS as well as service inputs. The goal is to explore different pathways and their fiscal impact on Ekiti's journey towards universal coverage with ESBPHS interventions. The study therefore the full as well as reduced selections of ESBPHS interventions. The reduced versions reflect the design of the original proposal for the national BMPHS, which focuses on maternal and child health services. The analysis of incremental costs to close coverage gaps also establishes the recurrent financial costs with and without personnel, assuming that current levels of staffing - funded from government budgets - may be sufficient to provide the additional services.

COSTS OF THE ESBPHS

The estimated recurrent, financial costs of the ESBPHS in 2021 total approximately Naira 36.4 billion or USD 95.8 million (Table 5). This amount translates into a per-capita cost of the ESBPHS of Naira 9,660 or USD 25.4.

The largest share of the EPHS costs, more than 45%, fall into the service category of non-communicable diseases, followed by HIV/AIDS and tuberculosis (26.3%), maternal (12.6%) and child health services (11.2%). The costs of hypertension treatment alone (27.7%) exceed the combined costs of maternal and child health services (23.8%).

Table 5: EPHS costs in 2021 by service category (NGN / USD 2020)

Service category	Cost [NGN]	Cost [USD]	Per-capita cost [USD]	Share of total cost
Maternal and reproductive health	₦4,596,343,445	\$12,094,368	\$3.21	12.6%
▪ Antenatal care	₦1,568,531,411	\$4,127,280	\$1.10	4.3%
▪ Skilled birth attendance	₦1,258,302,439	\$3,310,974	\$0.88	3.5%
▪ Postnatal care	₦583,915,594	\$1,536,458	\$0.41	1.6%
▪ Family planning	₦1,185,594,001	\$3,119,656	\$0.83	3.3%
Child health	₦4,067,599,151	\$10,703,082	\$2.84	11.2%
▪ Infectious diseases and malnutrition	₦2,856,123,569	\$7,515,324	\$1.99	7.8%
▪ Immunization	₦1,211,475,581	\$3,187,758	\$0.85	3.3%
Malaria	₦1,215,376,624	\$3,198,023	\$0.85	3.3%
HIV/AIDS and tuberculosis	₦9,593,951,646	\$25,244,584	\$6.70	26.3%
▪ HIV/AIDS	₦5,237,680,734	\$13,781,920	\$3.66	14.4%
▪ Tuberculosis	₦4,356,270,912	\$11,462,664	\$3.04	12.0%
Non-communicable diseases	₦16,946,748,883	\$44,592,014	\$11.83	46.5%
▪ Screening for risk factors (CVD)	₦2,349,949,183	\$6,183,426	\$1.64	6.5%
▪ Hypertension	₦10,099,773,775	\$26,575,555	\$7.05	27.7%
▪ Diabetes	₦4,497,025,925	\$11,833,033	\$3.14	12.3%
ESBPHS	₦36,420,019,749	\$95,832,070	\$25.43	100.0%

By delivery platform

Given current service delivery practices, the largest share of EPHS costs, approximately three-quarters (73.1%) arise at the primary care level (Table 6). The remaining costs predominately emanate at the secondary care level (23.2 %) with only a small share occurring at the community outreach level (3.6%).

These shares substantially vary across EPHS components with roughly 80% or more of the costs of child health services, malaria treatment and NCD services arising at the primary health care level compared to more than 80% of the costs of tuberculosis service occurring at the secondary care level.

Table 6: Share of ESBPHS costs in 2021 by delivery platform

Service category	Community outreach	Primary health care	Secondary health care	Total
Maternal and reproductive health	17.3%	60.0%	22.7%	100.0%
▪ Antenatal care	0.0%	64.1%	35.9%	100.0%
▪ Skilled birth attendance	0.0%	79.8%	20.2%	100.0%
▪ Postnatal care	11.6%	49.9%	38.6%	100.0%
▪ Family planning	61.5%	38.5%	0.0%	100.0%
Child health	13.1%	79.1%	7.8%	100.0%
▪ Infectious diseases and malnutrition	14.0%	74.9%	11.1%	100.0%
▪ Immunization	10.9%	89.1%	0.0%	100.0%
Malaria	0.0%	100.0%	0.0%	100.0%
HIV/AIDS and tuberculosis	0.0%	56.4%	43.6%	100.0%
▪ HIV/AIDS	0.0%	93.9%	6.1%	100.0%
▪ Tuberculosis	0.0%	11.3%	88.7%	100.0%
Non-communicable diseases	0.0%	82.8%	17.2%	100.0%
▪ Screening for risk factors (CVD)	0.0%	100.0%	0.0%	100.0%
▪ Hypertension	0.0%	80.0%	20.0%	100.0%
▪ Diabetes	0.0%	80.0%	20.0%	100.0%
EPHS	3.6%	73.1%	23.2%	100.0%

By service inputs

The largest share of costs, around 70% fall into the expenditure category of drugs and medical supplies, followed by labor – approximately 21% (Table 7). Given the costing methodology, the share of overhead costs is 9.1% for all service categories.

The ratio of labor versus drugs and medical supplies varies substantially across service categories, from a low of 5.8% for labor and 85.1% for consumables in the case of malaria, to 52.8% for labor and 38.1 % for consumables in the case of skilled birth attendance.

Table 7: Share of ESBPHS costs in 2021 by service inputs

Service category	Personnel	Drugs and medical supplies	Overhead	Total
Maternal and reproductive health	39.0%	51.9%	9.1%	100%
▪ Antenatal care	46.2%	44.7%	9.1%	100%
▪ Skilled birth attendance	52.8%	38.1%	9.1%	100%
▪ Postnatal care	49.2%	41.7%	9.1%	100%
▪ Family planning	9.9%	81.0%	9.1%	100%
Child health	15.0%	75.9%	9.1%	100%
▪ Infectious diseases and malnutrition	20.4%	70.5%	9.1%	100%
▪ Immunization	2.3%	88.6%	9.1%	100%
Malaria	5.8%	85.1%	9.1%	100%
HIV/AIDS and tuberculosis	10.3%	80.6%	9.1%	100%
▪ HIV/AIDS	9.0%	81.9%	9.1%	100%
▪ Tuberculosis	11.8%	79.1%	9.1%	100%
Non-communicable diseases	7.7%	83.2%	9.1%	100%
▪ Screening for risk factors (CVD)	37.4%	53.6%	9.1%	100%
▪ Hypertension	55.6%	35.3%	9.1%	100%
▪ Diabetes	15.4%	75.5%	9.1%	100%
ESBPHS	21.4%	69.5%	9.1%	100%

COSTS OF THE REDUCED ESBPHS

The costs of the core set of interventions constituting the original federal BMPHS amount to USD 8.5 per capita or approximately a third of the per capita costs of the ESBPHS (33.6%). This package includes maternal care, childcare, malaria treatment and screening (but excluding treatment) for NCDs. Without the NCD screening component, the costs for such a core package of maternal and child service combined with malaria treatment for the general population amount to USD 6.9 per capita or less than a third of the per capita costs of the ESBPHS (27.2%).

COSTS OF SCALING UP COVERAGE WITH ESBPHS INTERVENTIONS

The study estimates the incremental costs of scaling up ESBPHS interventions under two different scenarios for closing current service coverage gaps in 2026. The base-case scenario assumes a 20% reduction and the optimistic scenario a 40% reduction of coverage gaps.

Base-case scenario

The incremental recurrent costs of a 20% reduction of ESBPHS service coverage gaps in 2026, the base-case scenario, amount to close to Naira 4.3 billion or USD 11.2 million in the final year of expanding services, that is, in 2026 (table 8). The 20% reduction of the coverage gaps is commensurate to an

average increase in the coverage with core ESBPHS services² from 48.8% in 2021 to 59.0% in 2026 (table 9).

In the base-case scenario - as well as in the optimistic scenario - more than half of the incremental costs (54.0%) fall into the category of NCD services (table 8).³ Maternal, reproductive, and child health services account for less than a quarter of the incremental costs (22.5%).

Table 8: Incremental recurrent costs of the base-case scenario in 2026 (NGN / USD 2020)

Service category	Cost [NGN]	Cost [USD]	Share of total cost
Maternal and reproductive health	₦458,855,167	\$1,207,387	10.8%
▪ Antenatal care	₦202,772,265	\$533,555	4.8%
▪ Skilled birth attendance	₦92,774,515	\$244,118	2.2%
▪ Postnatal care	₦77,310,263	\$203,427	1.8%
▪ Family planning	₦85,998,124	\$226,287	2.0%
Child health	₦499,026,968	\$1,313,091	11.7%
▪ Infectious diseases and malnutrition	₦433,526,406	\$1,140,739	10.2%
▪ Immunization	₦65,500,561	\$172,352	1.5%
Malaria	₦241,689,736	\$635,959	5.7%
HIV/AIDS and tuberculosis	₦758,805,074	\$1,996,645	17.8%
▪ HIV/AIDS	₦414,258,781	\$1,090,040	9.7%
▪ Tuberculosis	₦344,546,293	\$906,605	8.1%
Non-communicable diseases	₦2,297,747,495	\$6,046,068	54.0%
▪ Screening for risk factors (CVD)	₦318,620,987	\$838,388	7.5%
▪ Hypertension	₦1,369,391,265	\$3,603,282	32.2%
▪ Diabetes	₦609,735,243	\$1,604,398	14.3%
ESBPHS	₦4,256,124,441	\$11,199,149	100.0%

Non-personnel costs

The incremental recurrent non-personnel costs amount to approximately Naira 3.4 billion or USD 9.1 million in 2026 or approximately 80% of the total recurrent costs of a 20% reduction of ESBPHS service coverage gaps in 2026 (table 10).

Almost 60% of the incremental non-personnel recurrent costs fall into the category of NCD services. Maternal, reproductive, and child health services account for less than one fifth of the incremental, recurrent non-personnel costs (19.7%).

² For a definition, see methods and data.

³ This share is larger than in the cost calculations for the ESBPHS (45.5%) because of below average coverage levels for NCD services in 2021, and in turn, relatively large coverage gaps.

Table 9: Coverage with ESBPHS interventions: Baseline (2021) and future scenarios (base-case and optimistic) (2026)

Service category	Coverage 2021 Baseline	Coverage 2026 Base-case scenario	Coverage 2026 Optimistic scenario
Maternal and reproductive health	61.9%	69.5%	77.2%
▪ Antenatal care	90.6%	92.5%	94.4%
▪ ITPM	24.0%	39.2%	54.4%
▪ Skilled birth attendance	87.1%	89.7%	92.3%
▪ Obstructed labor	40.0%	52.0%	64.0%
▪ Family planning	68%	74.3%	80.7%
Child health	39%	51%	63%
▪ Pentavalent vaccine	93%	94.4%	95.8%
▪ ORS and Zinc	23%	38.2%	53.7%
▪ Severe diarrhea	9%	27.3%	45.5%
▪ Malaria	62%	69.4%	77.1%
▪ Pneumonia	9%	27.3%	45.5%
Population > 5 yrs. and non-pregnant	40%	52%	64%
▪ Malaria	12%	29.6%	47.2%
▪ Anti-retroviral treatment of AIDS	68%	74.3%	80.7%
Total	48.8%	59.0%	69.3%

Table 10: Incremental recurrent non-personnel costs of the base case scenario in 2026 (NGN / USD 2020)

Service category	Cost [NGN]	Cost [USD]	Share of total cost
Maternal and reproductive health	₦282,535,077	\$743,435	8.2%
▪ Antenatal care	₦106,005,309	\$278,932	3.1%
▪ Skilled birth attendance	₦54,702,551	\$143,939	1.6%
▪ Postnatal care	₦44,315,149	\$116,607	1.3%
▪ Family planning	₦77,512,069	\$203,958	2.3%
Child health	₦396,226,072	\$1,042,590	11.5%
▪ Infectious diseases and malnutrition	₦333,021,412	\$876,280	9.7%
▪ Immunization	₦63,204,660	\$166,311	1.8%
Malaria	₦227,719,492	\$599,199	6.6%
HIV/AIDS and tuberculosis	₦475,331,448	\$1,250,741	13.8%
▪ HIV/AIDS	₦183,854,830	\$483,778	5.3%
▪ Tuberculosis	₦291,476,618	\$766,963	8.5%
Non-communicable diseases	₦2,059,995,513	\$5,420,470	59.9%
▪ Screening for risk factors (CVD)	₦289,873,935	\$762,746	8.4%
▪ Hypertension	₦1,207,580,214	\$3,177,508	35.1%
▪ Diabetes	₦562,541,364	\$1,480,216	16.3%
ESBPHS	₦3,441,807,602	\$9,056,435	100.0%

Optimistic scenario

The incremental cost of a 40% reduction of ESBPHS service coverage gaps by 2026, the optimistic scenario, amount to approximately Naira 8.5 billion or close to USD 22.4 million in the final year of expanding services, that is, 2026 (table 11). The 40 % reduction of the coverage gaps is commensurate to an average increase in the coverage with core ESBPHS services from 48.8% in 2021 to 69.3% in 2026 (table 11).

The distribution of costs across the different disease groups is the same as for the base case scenario presented earlier.

Table 11: Incremental recurrent costs of the optimistic scenario in 2026 (NGN / USD 2020)

Service category	Cost [NGN]	Cost [USD]	Share of total cost
Maternal and reproductive health	₦917,710,335	\$2,414,773	10.8%
▪ Antenatal care	₦405,544,531	\$1,067,110	4.8%
▪ Skilled birth attendance	₦185,549,030	\$488,236	2.2%
▪ Postnatal care	₦154,620,525	\$406,853	1.8%
▪ Family planning	₦171,996,249	\$452,574	2.0%
Child health	₦998,053,936	\$2,626,181	11.7%
▪ Infectious diseases and malnutrition	₦867,052,813	\$2,281,478	10.2%
▪ Immunization	₦131,001,123	\$344,704	1.5%
Malaria	₦483,379,473	\$1,271,917	5.7%
HIV/AIDS and tuberculosis	₦1,517,610,149	\$3,993,291	17.8%
▪ HIV/AIDS	₦828,517,563	\$2,180,080	9.7%
▪ Tuberculosis	₦689,092,586	\$1,813,211	8.1%
Non-communicable diseases	₦4,595,494,990	\$12,092,135	54.0%
▪ Screening for risk factors (CVD)	₦637,241,973	\$1,676,776	7.5%
▪ Hypertension	₦2,738,782,530	\$7,206,564	32.2%
▪ Diabetes	₦1,219,470,487	\$3,208,795	14.3%
ESBPHS	₦8,512,248,882	\$22,398,297	100.0%

Non-personnel costs

The incremental recurrent non-personnel costs amount to approximately Naira 6.9 billion or USD 18.1 million in 2026 or, as in the base-case scenario, approximately 80% of the recurrent costs of the reduction of ESBPHS service coverage gaps (table 12).

The distribution of costs across the different disease groups is the same as for the base case scenario presented earlier.

Table 12: Incremental recurrent non-personnel costs of the optimistic scenario in 2026 (NGN / USD 2020)

Service category	Cost [NGN]	Cost [USD]	Share of total cost
Maternal and reproductive health	₦565,070,154	\$1,486,870	8.2%
▪ Antenatal care	₦212,010,617	\$557,864	3.1%
▪ Skilled birth attendance	₦109,405,101	\$287,878	1.6%
▪ Postnatal care	₦88,630,297	\$233,213	1.3%
▪ Family planning	₦155,024,138	\$407,915	2.3%
Child health	₦792,452,143	\$2,085,181	11.5%
▪ Infectious diseases and malnutrition	₦666,042,824	\$1,752,560	9.7%
▪ Immunization	₦126,409,319	\$332,621	1.8%
Malaria	₦455,438,985	\$1,198,397	6.6%
HIV/AIDS and tuberculosis	₦950,662,896	\$2,501,481	13.8%
▪ HIV/AIDS	₦367,709,661	\$967,555	5.3%
▪ Tuberculosis	₦582,953,235	\$1,533,926	8.5%
Non-communicable diseases	₦4,119,991,025	\$10,840,940	59.9%
▪ Screening for risk factors (CVD)	₦579,747,869	\$1,525,492	8.4%
▪ Hypertension	₦2,415,160,428	\$6,355,016	35.1%
▪ Diabetes	₦1,125,082,728	\$2,960,432	16.3%
ESBPHS	₦6,883,615,204	\$18,112,870	100.0%

COSTS OF SCALING UP COVERAGE WITH A SET OF REDUCED ESBPHS INTERVENTIONS

The incremental recurrent cost of reducing coverage gaps only for the core set of interventions constituting the original, federal BMPHS amount in 2026 to approximately Naira 1.5 billion or USD 4.0 million for the base case scenario and Naira 3.0 billion or USD 8.0 million for the optimistic scenario (or 35.7 % of the costs of scaling up coverage with the full set of ESBPHS interventions in both the base case and optimistic scenario) (table 13).

Without the NCD screening component of this reduced package, the incremental costs in 2026 drop further to Naira 1.2 billion or close to USD 3.2 million in the base case scenario and Naira 2.4 billion or USD 6.3 million in the optimistic scenario (or 28.1% of the costs of scaling up coverage with the full set of ESBPHS interventions in both the base case and optimistic scenario) (table 13).

Table 13: Incremental recurrent costs of the base-case and optimistic for the full versus reduced versions of the ESBPHS in 2026 (NGN / USD 2020)

Scenario	EPBPHS		Original BMPHS		Original BMPHS without NCD screening	
	Cost [NGN]	Cost [USD]	Cost [NGN]	Cost [USD]	Cost [NGN]	Cost [USD]
Base case	₦4,256,124,441	\$11,199,149	\$1,518,192,858	\$3,994,824	₦1,199,571,872	\$3,156,436
Optimistic	₦8,512,248,882	\$22,398,297	\$3,036,385,716	\$7,989,648	₦2,399,143,743	\$6,312,872

To put it differently, the incremental costs of reducing coverage gaps for all or part of the ESBPHS services in 2026 range from approximately Naira 1.2 billion or USD 3.2 million for the base-case scenario of the smallest service package (BMPHS without NCD screening) to Naira 8.5 billion or USD 22.4 million for the optimistic scenario of the full ESBPHS package. In per capita terms, the incremental costs vary from Naira 269 or USD 0.7 to Naira 1,910 or USD 5.0 (table 14).

Table 14: Incremental per capita costs of the base-case and optimistic scenario for the full versus the reduced version of the ESBPHS in 2026 (NGN / USD 2020)

Scenario	EPBHPS		Original BMPHS		Original BMPHS without NCD screening	
	Per capita cost [NGN]	Per capita cost [USD]	Per capita cost [NGN]	Per capita cost [USD]	Per capita cost [NGN]	Per capita cost [USD]
Base case	₦955	\$2.5	₦341	\$0.9	₦269	\$0.7
Optimistic	₦1,910	\$5.0	₦681	\$1.8	₦538	\$1.4

Non personnel costs

The incremental recurrent non-personnel cost of reducing coverage gaps only for the core set of interventions constituting the original, federal BMPHS amount in 2026 to approximately Naira 1.2 billion or USD 3.1 million in the base case scenario and Naira 2.4 billion or USD 6.3 million (or 28.1% of the total recurrent costs of scaling up coverage with the full set of ESBPHS interventions for both the base case and optimistic scenario) (table 15).

Without the NCD screening component of this reduced package, the incremental costs drop further to Naira 0,9 billion or USD 3.4 million in the base case scenario and Naira 2.6 billion or USD 6.8 million in the optimistic scenario in 2026 (or 21.3% of the total recurrent costs of scaling up coverage with the full set of ESBPHS interventions for both the base case and optimistic scenario).

Table 15: Incremental recurrent, non-personnel costs of the base-case and optimistic scenario for the full versus reduced versions of the ESBPHS in 2026 (NGN / USD 2020)

Scenario	EPBHPS		Original BMPHS		Original BMPHS without NCD screening	
	Cost [NGN]	Cost [USD]	Cost [NGN]	Cost [USD]	Cost [NGN]	Cost [USD]
Base case	₦3,441,807,602	\$9,056,435	₦1,196,354,575	\$3,147,970	₦906,480,641	\$2,385,224
Optimistic	₦6,883,615,204	\$18,112,870	₦2,392,709,151	\$6,295,940	₦1,812,961,282	\$4,770,449

In other words, the incremental recurrent non-personnel costs of reducing coverage gaps for all or part of the ESBPHS services in 2026 range from approximately Naira 0.9 billion or USD 2.4 million for the base-case scenario of the smallest service package (BMPHS without NCD screening) to Naira 6.9 billion or USD 18.1 million for the base case scenario of the full ESBPHS package. In per capita terms, the incremental costs vary from Naira 203 or USD 0.5 to Naira 1,545 or USD 4.1 (table 16).

Table 16: Incremental per capita costs of the base-case and optimistic scenario for the full versus the reduced version of the ESBPHS in 2026 (NGN / USD 2020)

Scenario	EPBHPS		Original BMPHS		Original BMPHS without NCD screening	
	Per capita cost [NGN]	Per capita cost [USD]	Per capita cost [NGN]	Per capita cost [USD]	Per capita cost [NGN]	Per capita cost [USD]
Base case	₦772	\$2.0	₦268	\$0.7	₦203	\$0.5
Optimistic	₦1,545	\$4.1	₦537	\$1.4	₦407	\$1.1

VI. DISCUSSION

The study establishes the direct, recurrent financial costs of the ESBPHS using an activity-based, bottom-up approach as approximately Naira 36.4 billion or USD 95.8 million in 2021. This translates into an annual per capita cost of Naira 9,660 or USD 25.4.

These findings are consistent with the earlier cost study of the national BMPHS. The costs of comparable components total USD 8.5 for the ESBPHS compared to USD 11.0 for the BMPHS (World Bank 2017). The difference is largely the result of health worker salaries in Ekiti State that are lower than the assumptions used in the BMPHS costing exercise. This effect is compounded by the depreciation of the Nigerian Naira since the costing of the BMPHS in 2017. While data for these cost components are solid, for others, especially for non-communicable diseases, but also HIV/AIDS and tuberculosis, some important data gaps remain.

Given the current spending capacity of the Ekiti government, guaranteeing the full ESBPHS for the entire population seems beyond its means in the short and medium-term. The estimated recurrent financial costs of the ESBPHS in 2021 – Naira 36.4 billion – constitute (i) more than four times the sub-national government spending on health in 2020; (ii) close to one-third of the sub-national government revenue in 2020; and, (iii) more than 2% of Ekiti State's gross domestic product.⁴

The study, however, points to alternative pathways for still meaningful and equitable, yet financially sustainable progress in expanding coverage with ESBPHS interventions under the Equity Health Plan. It establishes the costs of scenarios that differ in the ambition to close coverage gaps in terms of both population coverage and the size of the benefits package. For example, the incremental costs of closing current coverage gaps by 20% or 40% for a reduced ESBPHS (with a focus on maternal and child health services and malaria treatment for the general population) or full ESBPHS range from Naira 1.2 billion or USD 3.2 million to Naira 8.5 billion or USD 22.4 million in 2026. Meeting these spending needs in 2026 requires increases from 14% to 100% of sub-national government spending on health between 2020 and 2026. If current staffing levels are sufficient to provide the additional services, the spending needs are even lower.

The findings of the costing study also point to some potential gains in spending efficiency. First, while the largest share of ESBPHS spending occurs at the primary health care level (73.9%), for some interventions, the share of spending at the secondary care level is high in international comparison (e.g., treatment of tuberculosis), while for others, the share of spending at the community outreach level is low (e.g., malnutrition). These deviations from international good practices seem to warrant a review of the current service delivery modes for the interventions included in the ESBPHS. Second, the large share of costs falling into the category of drugs and medical supplies is striking. It suggests potential saving gains through improved planning and procurement of consumables.

More work will be needed to develop an expansion path for the Equity Health Plan. Among next steps, it will be critical to better understand the ability to mobilize government funding for the Ekiti Health Insurance Scheme, which is the focus of the next study of this joint work program.

⁴ Sub-national government spending means state and local government authority spending combined.

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ANNEX 1: THE EKITI STATE BASIC PACKAGE OF HEALTH SERVICES

Maternal health services	
Antenatal care	
1	ANC consultations
2	Tetanus toxoid injections
3	Detection and treatment of syphilis
4	Management of hypertension without proteinuria
5	Management of pre-eclampsia
6	Treatment of anemia
7	Deworming
8	Antenatal corticosteroids
9	Antibiotics for premature rupture of membranes
10	Intermittent presumptive treatment of malaria (IPT)
11	Case management of malaria
12	PMTCT
13	Daily iron and folic acid supplementation
14	Blood test / hemoglobin screening / urinalysis
15	Screening for Hepatitis B
16	Ultrasound
Birth attendance	
17	Induction of labor (beyond 41 weeks of gestation)
18	Management of labor and delivery
19	Active management of third stage of labor
20	Pre-referral management of labor complications
21	Management of obstructed labor
22	Management of eclampsia
Postnatal care	
23	Postnatal preventive care for mothers
24	Treatment of mastitis
25	Management of postpartum hemorrhage
26	Management of maternal sepsis
27	Resuscitation of newborn
28	Kangaroo care for newborns
29	Treatment of local newborn infections
30	Treatment of newborn sepsis - injectable antibiotics
31	Treatment of newborn sepsis - full supportive care
Family planning	
32	Pill
33	Condom
34	Injectable
35	Intra-uterine device
36	Implant

Childcare			
Infectious diseases / malnutrition		Immunization	
37	Oral rehydration solution and zinc for diarrhea	50	Vaccination BCG (1 dose)
38	Treatment of severe diarrhea	51	Vaccination polio (3 doses)
39	Antibiotics for dysentery	52	Vaccination pentavalent (3 doses)
40	Treatment of pneumonia	53	Vaccination pneumococcus (3 doses)
41	Treatment of severe pneumonia (children)	54	Vaccination measles (2 doses)
42	Treatment of malaria	55	Vaccination yellow fever (1dose)
43	Treatment of severe malaria		
44	Vitamin A treatment for measles		
45	Treatment of severe measles		
46	Multiple micronutrient powders		
47	Vitamin A supplementation		
48	Vitamin A treatment of xerophthalmia		
49	Treatment of severe acute malnutrition		

Malaria (other than pregnant women and children <5 years)	
56	Treatment of malaria

HIV and tuberculosis (TB)	
HIV	
57	HIV counseling and testing (other than pregnant women and newborns)
58	Anti-retroviral therapy (other than pregnant women and newborns)
Tuberculosis	
59	Testing for tuberculosis
60	Treatment of drug susceptible TB
61	Treatment of drug resistant TB

Non-communicable diseases	
Screening	
62	Screening for risk of cardio-vascular disease
Hypertension	
63	Treatment of hypertension
Diabetes mellitus	
64	Treatment of diabetes mellitus type II

ANNEX 2: INTERVENTIONS, POPULATION IN NEED, DELIVERY CHANNEL AND UNIT COST

#	ESBPHS	Population in need			Baseline coverage	Delivery channel			
		Population group (PG)	Share of PG in need of intervention	Intervention frequency (per episode)		CO	PHC	SHC	Unit cost
	Maternal health services								
	Antenatal care								
1	ANC consultations	Pregnant women	100.0%	4	90.6%	0%	100%	0%	1,266
2	Tetanus toxoid injections (2)	Pregnant women	100.0%	1	88.2%	0%	100%	0%	140
3	Detection and treatment of syphilis	Pregnant women	100.0%	1	24.0%	0%	100%	0%	355
4	Management of hypertension without proteinuria	Pregnant women	17.0%	1	24.0%	0%	100%	0%	618
5	Management of pre-eclampsia	Pregnant women	2.8%	1	24.0%	0%	0%	100%	21,400
6	Treatment of anemia	Pregnant women	60.0%	1	24.0%	0%	95%	5%	407
7	Deworming	Pregnant women	29.0%	1	40.3%	0%	100%	0%	73
8	Antenatal corticosteroids	Pregnant women	12.0%	1	24.0%	0%	0%	100%	2,640
9	Antibiotics for premature rupture of membranes	Pregnant women	4.7%	1	24.0%	0%	50%	50%	999
10	Intermittent presumptive treatment of malaria (IPT)	Pregnant women	100.0%	1	24.0%	0%	100%	0%	67
11	Case management of malaria	Pregnant women	30.0%	1	24.0%	0%	100%	0%	1,205
12	PMTCT	Pregnant women	1.1%	1	35.0%	0%	70%	30%	84,045
13	Daily iron and folic acid supplementation	Pregnant women	100.0%	1	53.8%	0%	100%	0%	97
14	Blood test / hemoglobin screening / urinalysis	Pregnant women	100.0%	1	89.6%	0%	100%	0%	1,267
15	Screening for Hepatitis B	Pregnant women	100.0%	1	24.0%	0%	100%	0%	753
16	Ultrasound	Pregnant women	100.0%	2	5.0%	0%	0%	100%	879
	Birth attendance								
17	Induction of labor (beyond 41 weeks of gestation)	Pregnant women	5.0%	1	40.0%	0%	0%	100%	1,007
18	Management of labor and delivery	Pregnant women	100.0%	1	87.1%	0%	100%	0%	3,881
19	Active management of third stage of labor	Pregnant women	100.0%	1	40.0%	0%	100%	0%	137
20	Pre-referral management of labor complications	Pregnant women	5.0%	1	40.0%	0%	100%	0%	18,453
21	Management of obstructed labor	Pregnant women	10.0%	1	40.0%	0%	25%	75%	14,728
22	Management of eclampsia	Pregnant women	1.0%	1	40.0%	0%	10%	90%	21,400

Post-natal care									
23	Postnatal preventive care for mothers	Pregnant women	100.0%	1	81.6%	50%	50%	0%	716
24	Treatment of mastitis	Pregnant women	10.0%	1	29.1%	0%	0%	100%	1,124
25	Management of postpartum hemorrhage	Pregnant women	9.7%	1	29.1%	0%	60%	40%	8,558
26	Management of maternal sepsis	Pregnant women	4.1%	1	29.1%	0%	50%	50%	21,466
27	Resuscitation of newborn	Newborns	1.0%	1	29.1%	0%	100%	0%	490
28	Kangaroo care for newborns	Newborns	12.2%	1	40.0%	0%	100%	0%	237
29	Treatment of local newborn infections	Newborns	10.0%	1	40.0%	0%	100%	0%	413
30	Treatment of newborn sepsis - injectable antibiotics	Newborns	9.0%	1	29.1%	0%	100%	0%	1,931
31	Treatment of newborn sepsis - full supportive care	Newborns	1.0%	1	29.1%	0%	0%	100%	31,054
Family planning									
32	Pill	Women 15–49 yrs	8.2%	1	67.9%	75%	25%	0%	3,127
33	Condom	Women 15–49 yrs	15.0%	1	67.9%	75%	25%	0%	3,869
34	Injectable	Women 15–49 yrs	9.9%	1	67.9%	50%	50%	0%	1,919
35	Intra-uterine device	Women 15–49 yrs	10.4%	0.2	67.9%	0%	100%	0%	1,016
36	Implant	Women 15–49 yrs	13.3%	0.25	67.9%	0%	100%	0%	3,843
Childcare									
Infectious diseases / malnutrition									
37	Oral rehydration solution and zinc for diarrhea treatment	Children < 5 yrs	100.0%	3.3	22.8%	50%	50%	0%	432
38	Treatment of severe diarrhea	Children < 5 yrs	3.3%	1	9.1%	0%	0%	100%	2,789
39	Antibiotics for dysentery	Children < 5 yrs	16.5%	1	64.8%	0%	50%	50%	93
40	Treatment of pneumonia	Children < 5 yrs	3.2%	1	9.1%	0%	50%	50%	490
41	Treatment of severe pneumonia (children)	Children < 5 yrs	0.1%	1	9.1%	0%	0%	100%	7,619
42	Treatment of malaria	Children < 5 yrs	100.0%	4	61.8%	0%	100%	0%	1,324
43	Treatment of severe malaria	Children < 5 yrs	4.0%	1	9.1%	0%	0%	100%	5,518
44	Vitamin A treatment for measles	Children < 5 yrs	5.3%	1	9.1%	0%	100%	0%	177
45	Treatment of severe measles	Children < 5 yrs	0.1%	1	9.1%	0%	0%	100%	1,731
46	Multiple micronutrient powders	Children < 5 yrs	64.0%	1	9.1%	60%	35%	5%	1,334
47	Vitamin A supplementation	Children < 5 yrs	100.0%	1	69.3%	80%	20%	0%	94
48	Vitamin A treatment of xerophthalmia	Children < 5 yrs	2.0%	1	9.1%	0%	100%	0%	258
49	Treatment of severe acute malnutrition	Children < 5 yrs	8.7%	1	9.1%	0%	80%	20%	37,021

Immunization									
50	Vaccination BCG (1 dose)	Children < 1 yr	100.0%	1	94.8%	0%	100%	0%	86
51	Vaccination polio (3 doses)	Children < 1 yr	100.0%	1	49.4%	50%	50%	0%	1,373
52	Vaccination pentavalent (3 doses)	Children < 1 yr	100.0%	1	93.0%	0%	100%	0%	1,298
53	Vaccination pneumococcus (3 doses)	Children < 1 yr	100.0%	1	91.8%	0%	100%	0%	4,409
54	Vaccination measles (2 doses)	Children < 1 yr	100.0%	1	11.4%	50%	50%	0%	380
55	Vaccination yellow fever (1dose)	Children < 1 yr	100.0%	1	11.4%	0%	100%	0%	490
Malaria (other than pregnant women and children <5 years)									
56	Treatment of malaria	Non pregnant population > 5rs	30.8%	1	12.0%	0%	100%	0%	1,245
HIV and tuberculosis (TB)									
HIV									
57	HIV counseling and testing	All except pregnant and births	2.0%	1	65.0%	0%	100%	0%	53,132
58	Anti-retroviral therapy	All except pregnant and births	0.7%	1	65.0%	0%	80%	20%	66,354
Tuberculosis									
59	Testing for tuberculosis	All	4.0%	4	65.0%	0%	0%	100%	9,203
60	Treatment of drug susceptible TB	All	4.0%	3	65.0%	0%	0%	100%	1,881
61	Treatment of drug resistant TB	All	0.9%	1	65.0%	0%	100%	0%	8,520
Non-communicable diseases									
Screening									
62	Screening for risk of cardio-vascular disease	Population > 20 yrs	100.0%	1	40.0%	0%	100%	0%	1,227
Hypertension									
63	Treatment of hypertension	Population > 20 yrs	28.9%	1	40.0%	0%	80%	20%	18,253
Diabetes mellitus									
64	Treatment of diabetes mellitus type II	Population > 20 yrs	5.8%	1	40.0%	0%	80%	20%	40,706