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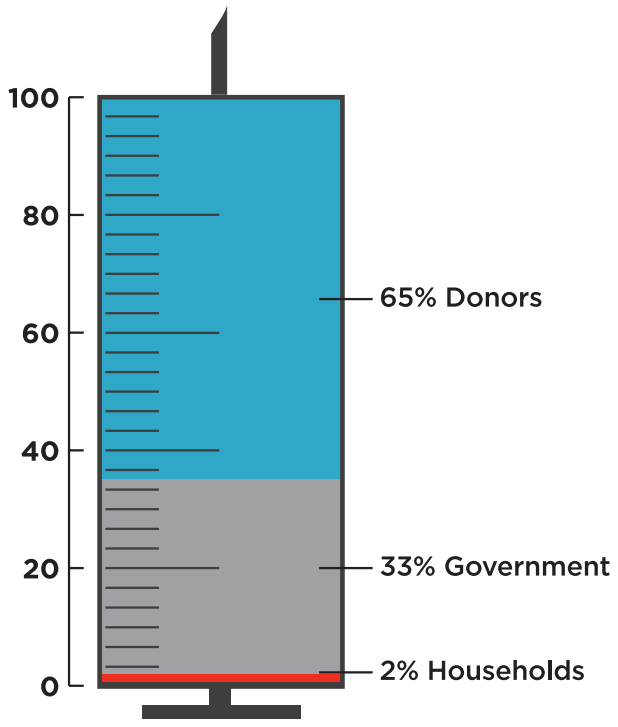
Investing Wisely to Improve Child Survival

Ethiopia's Immunization Financing Outlook

Immunization remains a critical component of countries' activities to achieve their universal health coverage (UHC) goals. Research shows that investing in immunization not only improves health outcomes of the population, but also provides a return on investment, by as much as 44 times the initial investment (Ozawa et al. 2016). Recognizing these potential benefits, Ethiopia has substantially expanded immunization coverage of its population. DPT3 coverage reached 77 percent in 2016 – significant progress considering the country's population of 100 million (WHO and UNICEF 2017).

Despite this achievement, Ethiopia needs to continue its effort to sustain the growth in coverage and then maintain it at the Global Vaccine Action Plan's target of 90 percent coverage for all vaccines by 2020. The immunization financing landscape based on the country's 2013/14 Health Accounts findings reveals the need to address sustainability, equity, and allocative efficiency issues. While this brief uses full immunization spending as a basis of analysis, the spending table on routine immunization per the WHO/UNICEF Joint Reporting Form Indicators for Immunization is available in the Annex.

FIGURE 1. IMMUNIZATION SPENDING BY SOURCE OF FUNDS, ETHIOPIA 2013/14



Source: Ministry of Health (2018)

Sustainability

Ethiopia's 2013/14 Health Accounts estimates show that the country spends around US$177 million per year on immunization. ***This amount of spending on immunization is over 85 percent of the US$206 million needed, as outlined in the most recent Country Multi-Year Plan (FMOH 2014)***. Approximately 70 percent of immunization spending in 2013/14 was on routine immunization services, and 30 percent was on supplemental immunization activities, which are key to strengthening routine services.

Regarding financing sources for immunization, Figure 1 shows that a third of the spending is financed by domestic sources and 65 percent is funded by development partners, the majority by Gavi. This heavy reliance on partner spending places ***the issue of sustainability of immunization funding front and center for government consideration***. Although funding of personnel who deliver immunization services largely comes from the government, the cost of vaccines is covered predominantly by donors. Ethiopia has begun to co-finance new vaccines, but Gavi still pays the majority of the costs. Thus, Ethiopia needs to start planning how it will sustain immunization funding, especially when Gavi support declines.

Ethiopia has seen a steady increase in immunization coverage; progress needs continued government commitment to sustain it.

Equity

In 2013/14, households directly contributed around US$3 million to immunization services (FMOH 2017), 2 percent of total immunization spending. Although small in proportion, this spending is financed directly by households, through out-of-pocket spending. About two-thirds of this household spending was at health centers, private clinics, and NGO health centers, while the remaining one-third was at public hospitals. The household survey did not capture which part of the immunization service households are paying for, as the usual costs related to transport for seeking health services is separately tracked.

Considering the equity implications of out-of-pocket spending on immunization, which is among the list of services to be provided for free in public facilities, this spending warrants a closer look by the government.

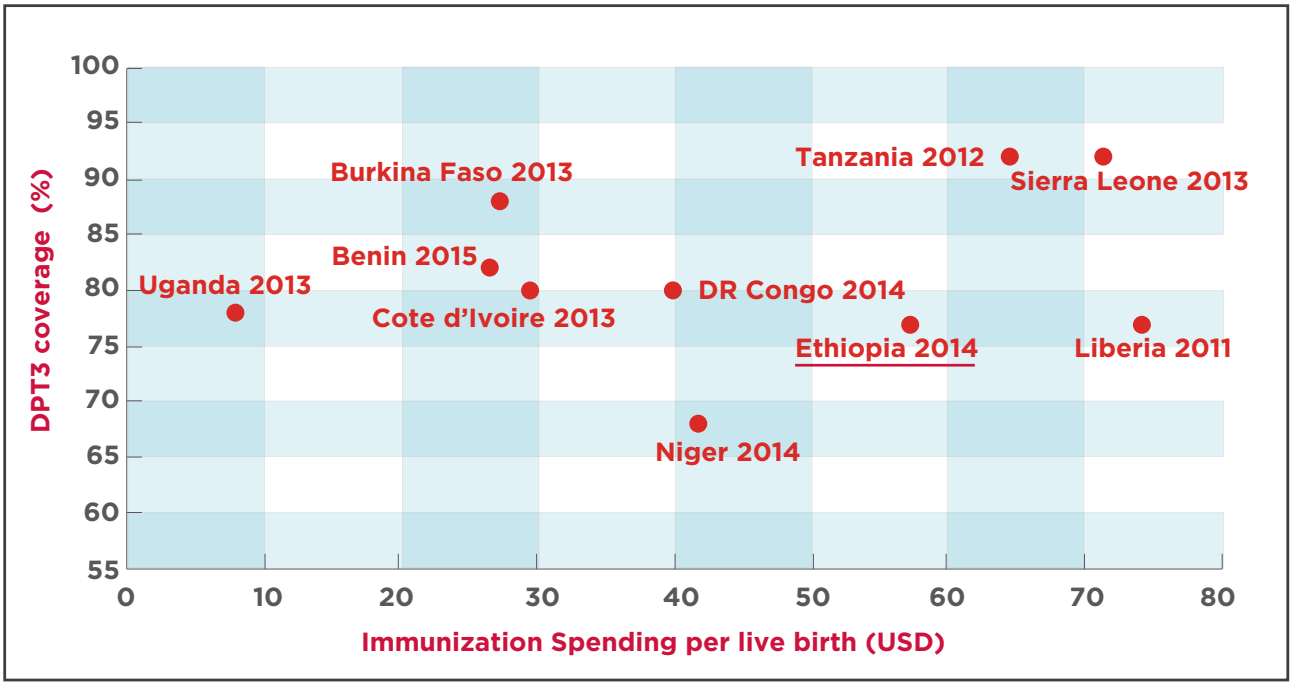
In addition, although the spending data did not allow the review of immunization spending by region, the 2016 Demographic and Health Survey (CSA and ICF 2016) indicates subnational equity challenges. In Afar region, pentavalent vaccine coverage is at 20 percent, and in Somali region, 36 percent. This is in stark contrast to coverage in Addis Ababa (96 percent) and Dire Dawa (93 percent). Also, progressively lower rates of coverage from the first pentavalent dose (73 percent) to the third dose (53 percent) indicate difficulty in maintaining health system contact with certain populations (FMOH 2014).

Households in Ethiopia spent US$3 million on immunization in 2013/14, a significant level of out-of-pocket spending for what should be a free public service

Efficiency

Comparison of immunization coverage and spending for Ethiopia among countries in Africa for which data are available indicates that there might be lessons regarding efficiency from which Ethiopia can draw. As Figure 2 indicates, Ethiopia spends US$56 per live birth and achieves DPT3 coverage of 77 percent. ***Ethiopia's spending on immunization (per live birth) is on the higher side compared to some of the African countries***. Burkina Faso, Benin, and Cote d'Ivoire achieved similar or higher DPT3 coverage with lower spending per live birth. Their experience may provide Ethiopia lessons for organizing and delivering immunization activities.

FIGURE 2. IMMUNIZATION SPENDING* PER LIVE BIRTH VERSUS DPT3 COVERAGE**



Immunization (specifically, vaccine-preventable disease, or VPD) expenditure per live birth, if not directly calculated, was estimated by converting VPD expenditure per capita to expenditure per annual live births, using data from draft System of Health Accounts reports, and population and fertility data from United Nations (2017).

*** DPT3 coverage: WHO and UNICEF (2017) estimate for year matching expenditure data.*

Policy Implications

Ethiopia's immunization strategies can be readjusted to further accelerate the progress that the country is making in improving sustainable coverage.

Increase sustainability of financing

While the government has been taking an increasingly large role in financing immunization, there needs to be a plan to shift the balance in financing immunization toward domestic funding. Just as the government covers the human resources components, it needs to explore domestic sources for financing vaccines, in preparation for the next phase of Gavi financing.

Investigate out-of-pocket spending

The Health Accounts exercise and underlying household survey flagged the existence of out-of-pocket spending. While the share is less than 5 percent, it is significant. Ethiopia needs to take a closer look at why households are spending money on a service that should be free of cost.

Increase efficiency

Experience from other countries may provide useful lessons about increasing the efficiency of immunization activities, which could free up resources for the program. In comparison to nearby countries with similar coverage rates, Ethiopia's spending is on the high side.

References

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Annex: Ethiopia's Routine Immunization Spending- 2013/14

Given the comprehensive approach the System of Health Accounts (SHA) 2011 takes in capturing expenditures, the data can be used to report on UNICEF/WHO Joint Reporting Form (JRF) financing indicators on routine immunization and vaccines. The data below presents the cross-walk for 2013/14 routine immunization expenditures: all values are SHA estimates that, as seen in the table, can be used to report on JRF immunization financing indicators.

SHA–JRF CROSS-WALK TABLE

	(in US$)	PER THE JOINT REPORTING FORM INDICATORS			
		Government spending on vaccines	Total spending on vaccines	Government spending on immunization	Total spending on immunization
SYSTEM OF HEALTH ACCOUNTS FRAMEWORK	CURRENT HEALTH SPENDING	11,890,337	61,207,761	58,812,601	126,409,362
	SOURCE				
	FS.RI.1 Government	11,890,337	11,890,337	58,812,601	58,812,601
	FS.RI.2 Corporations		-		-
	FS.RI.3 Households		Not Available		3,053,397
	FS.RI.4 NGOs		-		-
	FS.RI.5 Donors		49,317,424		64,543,363
	FUNCTION (ONLY RELEVANT ONES TO IMMUNIZATION)				
	HC.6 Preventive Care			-	-
	HC.6.1 Information, education and counseling programs			-	1,154,237
	HC.6.2 Immunization programs			58,565,359	118,946,326
	HC.6.5 Epidemiological surveillance and risk and disease control programs			-	5,176,761
	HC.6.nec Other Prevention			520	77,102
	HC.7 Governance and Health System Administration			246,763	1,054,936
	HC. Other			-	53,989
	INPUT				
	FP.1 Compensation of Employees			31,329,852	31,329,852
	FP.3 Materials and Services Used			-	-
	FP.3.1 Health care services			195,869	3,249,266
	FP.3.2 Health care goods			-	-
	FP.3.2.1 Pharmaceuticals	11,890,337	61,207,761	11,913,429	61,230,853
	FP.3.2.2 Other health care goods				
	FP.3.3 Non-health care services (training, TA, operational research)			510	14,553,822
	FP.3.4 Non-health care goods			-	41,617
	FP.3.nec Other Materials and Services Used			15,372,941	15,851,928
	CAPITAL INVESTMENT	-	-	4,008,226	4,185,268

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