Assessing Government-funded Operational Expenditures for Routine Immunization Activities at the Health Zone Level in the Democratic Republic of the Congo

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SEPTEMBER 2024

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MOMENTUM Routine Immunization Transformation and Equity is funded by the U.S. Agency for International Development (USAID) and implemented by JSI Research & Training Institute, Inc. (JSI), along with PATH, Accenture Development Partnerships, Results for Development, and CORE Group under USAID cooperative agreement #7200AA20CA00017. The contents of this report are the sole responsibility of JSI and do not necessarily reflect the views of USAID or the U.S. Government.

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Suggested Citation

MOMENTUM. *Assessing Government-funded Operational Costs for Routine Immunization Activities at the Health Zone Level in the Democratic Republic of the Congo*. 2024. Washington, DC: USAID MOMENTUM.

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ABBREVIATIONS AND ACRONYMS

Africa CDC	Africa Centres for Disease Control and Prevention
BCG	Bacillus Calmette-Guérin
CHE	current health expenditure
cMYP	Comprehensive Multi-Year Plan
CHW	community health workers
DRC	Democratic Republic of Congo
DTP	diphtheria, tetanus toxoid, and pertussis-containing vaccine
ECV	Vaccination Coverage Survey (*Enquête de Couverture Vaccinale)*
EPI	Expanded Programme on Immunization
ETD	decentralized territorial entities
FY	financial year
GDP	gross domestic product
HSS	Health Systems Strengthening (Strategy)
HZ	zone de santé (health zone)
HZMT	Health Zone Management Team
ICC	Interagency Coordination Committee
ICT	information and communication technology
KSPH	Kinshasa School of Public Health
LOFIP	Public Finance Law
MOB	Ministry of Budget
MOF	Ministry of Finance
MSP	*Ministère de la Santé Publique*
MSPHP	Ministry of Public Health, Hygiene and Prevention
PFM	public financial management
PNDS	*Plan National de Développement Sanitaire 2019–2022*
RI	routine immunization
VPD	vaccine-preventable disease
UNICEF	United Nations Children's Fund
UHC	universal health coverage
USAID	United States Agency for International Development
USD	U.S. dollar
WHO	World Health Organization

EXECUTIVE SUMMARY

Immunization is among the most cost-effective public health interventions to date.[1] As a public good, governments have a unique role in funding immunization programs. The routine immunization (RI) system in the Democratic Republic of the Congo (DRC) faces many challenges, including persistent large-scale outbreaks of polio, measles, and yellow fever; a large number of unvaccinated children for all antigens; minimal and delayed funding; and poor use of immunization data at all governance levels.[2] Significant efforts have been made to improve immunization through implementation of the Mashako Plan, an emergency plan to strengthen the Expanded Program on Immunization (EPI) aimed at reviving RI activities to avoid epidemic outbreaks of certain vaccine-preventable diseases (VPDs) by increasing immunization coverage.[3] Despite improvements in system targets and increases in vaccination coverage, an estimated 19.1 percent of children ages 12–23 months remained *zero-dose* (771,000), and 25.5 percent remained under-immunized (1.03 million) in 2021.[4] This high number of *zero-dose children* and low immunization coverage in the DRC may be attributed to conflict in some areas, an increased number of mobile people who are not properly registered, or inadequate domestic resources for the subnational levels[5] and inadequate funding for vaccinators' operational expenditures.[6] Inadequate funding for immunization at the subnational level remains a major determinant of the ability of health facilities to provide services. Financing the non-vaccine components of immunization service delivery at the health zone (HZ) level—such as collection and distribution of vaccines to health facilities or the ability to conduct outreach services—poses a particular challenge in the country.

In response to these financing constraints, and recognizing the importance of improving access to high-quality vaccines to the remaining *zero-dose* and under-immunized children through domestic resources, the EPI, MOMENTUM Routine Immunization Transformation and Equity project, and the U.S. Agency for International Development identified a need to better understand current spending on RI operational activities at the subnational levels, particularly at the HZ level. Discussions revealed that, theoretically, operational costs for immunization in the HZs are included for certain activities in the immunization comprehensive multi-year plan, but in practice these activities are not implemented per the plan. It is therefore necessary to understand the extent to which funding is available and expended for these activities at the HZ level. Specific objectives of this assessment were to: (i) Describe the policies, laws, directives, and other regulations that govern RI financing at the health zone level; (ii) describe the planning and budgeting process at the HZ level; (iii) analyze RI operational expenditures at the HZ level, financed by both central and provincial government budgets, and potential opportunities to monitor RI operational expenditures over time using existing financial reporting systems. The outcomes of these assessments are intended to be used to increase transparency and accountability for operational funding for immunization activities at subnational levels.

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[1] Rémy, Vanessa, York Zöllner, and Ulrike Heckmann. 2015. "Vaccination: The Cornerstone of an Efficient Healthcare System." *Journal of Market Access & Health Policy* 3(1). https://doi.org/10.3402/jmahp.v3.27041.

[2] Lame, Paul et al. 2023. "A Successful National and Multipartner Approach to Increase Immunization Coverage: The Democratic Republic of Congo Mashako Plan 2018-2020." *Global Health: Science and Practice* 11(2): e2200326. https://doi.org/10.9745/GHSP-D-22-00326. PMID: 37116931; PMCID: PMC10141424.

[3] Ministère de la Santé Publique de RDC. *Plan D'urgence Pour la Relance de la Vaccination de Routine Dit « Plan Marshall sur la Vaccination de Routine » (Plan MASHAKO)*.

[4] Kinshasa School of Public Health (KSPH). 2021. *Enquête de Couverture Vaccinale (ECV) 2021–2022*.Kinshasa, Democratic Republic of Congo.

[5] In the context of DRC, this refers to the provincial government, health zones, and health centers.

[6] Ahanhanzo, Césaire Damien et al. 2015. "Determinants of routine immunization costing in Benin and Ghana in 2011." *Vaccine* 33 (Suppl. 1): A66-71. https://doi.org/10.1016/j.vaccine.2014.12.069.

A cross-sectional study design employing both qualitative and quantitative research methods was adopted to map and analyze RI operational expenses at the HZ level. The study involved listing the budget lines provided for in the Finance Acts of 2021–2022 and analyzing achievements in terms of the chain of operational expenditure financed exclusively by the government. The provinces and HZs included in the study were selected through convenience sampling. Lualaba and Kasaï Oriental provinces were the two provinces sampled. Four health zones (Kanzenze and Manika in Lualaba province, Nzaba and Lubilanji in Kasaï Oriental province) were selected for the study based on their proximity to the units that coordinate and manage financial data systems, as well as their ease of access.

The main findings of the assessment are summarized as follows:

Policies, laws, directives, and other regulations that govern RI immunization financing at the HZ level

- Immunization is a key political priority, with commitments to strengthen RI programs and increase financing emanating from the highest levels of the government.
- EPI oversees the procurement, management, and distribution of vaccines and supports the regulation, standardization, monitoring, evaluation, and surveillance of VPDs.
- EPI works with its local counterparts to estimate vaccine needs, cold chain supplies, and other immunization-related equipment necessary to sustain the immunization program for the designated timeframe for each HZ.
- Subnational levels are typically responsible for the operational costs of service delivery, including facility-based RI, outreach, social mobilization, supervision, training, supply chain and logistics, surveillance, management, and health information management systems, some of which may be shared with the national level.
- There is a strong contingent of internal stakeholders and platforms who work to oversee and improve RI financing.

Planning and budgeting process for RI at the HZ level

- In general, the public financial management (PFM) practices followed at the national level are also followed at the subnational level by the HZs.
- Central budget transfers to provinces and external assistance provide the majority of provincial health funding, with provincial-level local resource mobilization contributing relatively little to the total provincial health sector resource envelope.
- Operational costs to facilities—those funds that are available to support activities like RI—are funded separately through discretionary funding received through a separate transfer from the central level.
- The process of budget allocation at the provincial level begins in July with the provincial Minister of Finance compiling financial data and projecting expenses and revenues. The provincial budget projection integrates the economic and social priorities included in the development action programs of the province and HZs in accordance with the PFM law. For verification, the projection passes through the Provincial Assembly, which examines, votes on, and adopts the budgets (Annex 3).
- Once the budget is enacted, budget execution goes through four main stages in the HZs: expenditure initiation, expenditure liquidation, expenditure authorization, and expenditure payment.
- The central government's audit office assists the Provincial Assembly in monitoring budget execution at both provincial and HZ levels through chambers of accounts in different provinces.

Analysis of RI operational expenditures at the HZ level

- At the national level, a dedicated budget line item for immunization caters to the procurement of vaccines through a co-financing arrangement with Gavi. There are no budget provisions for RI operational costs, such as those related to cold chain equipment maintenance, spare parts, procurement, and supervision visits from the HZs to health centers. However, certain budget lines were observed in the financial year (FY) 2021 and FY2022 budgets in relation to RI operational activities such as staff allowances, fuel and transport. During FY2021, FY2022, and FY2023, the national budget allocation for immunization showed a progressive trend of $16 million (3.1% of the health budget), $19.7 million (2.2%), and $20.3 million (2.3%), respectively.
- The Provincial Government Finance Act provides a budget line for RI operational activities, but only 11 out of 26 provinces (42%) provided for this allocations in their budgets. It was observed that Lualaba province's HZs have benefited from provincial funding for RI operational activities (three times in FY2021 and four times in FY2022). The HZs of Kasaï Oriental province did not receive provincial funding for RI operational activities in FY2021 and FY2022 but they did incur expenses from funding out-of-pocket expenditures from the health centers.
- As a result of minimal to no flow of operational funds from the national to the peripheral levels, health centers mainly depend on their own capacity to travel to the HZ to collect vaccine orders using funds from fee recovery or personal funds to cover their operational costs.
- An immunization budget line item was associated with increased government budget expenditure for vaccination operational activities. The operational expenditure on vaccination varied between 4.7 percent to 13.8 percent of the total provincial budget allocation in FY2022 and 3.2 percent to 12.9 percent of the provincial budget allocation in FY2021 for HZs in Lualaba province. On the other hand, operational expenditure on vaccination in HZs in Kasaï Oriental province, incurred through local generated revenue, varied between 4.7 percent and 4.8 percent of the budget allocated.

Analysis of PFM tools that are used to capture operational expenditure for RI at the HZ level

- PFM tools are used to capture operational expenditures for RI at the HZ level, namely: an entry voucher booklet, exit voucher booklet, cash book, and budgeted action plan. These tools are up to date; however, they do not explicitly show the linkage between expenditure and RI operational activities.
- Capturing these expenses at the HZ level is carried out exclusively through a paper-based system. At the central and provincial levels, this data is captured through both paper-based and electronic systems; this is because the infrastructures in some provinces and HZs do not allow reliable internet access.
- While there are wide variations in operational expenditure on immunization from one HZ to another, the pattern is clear for all HZs: the paper-based system at the HZ level faces challenges that prevent effective monitoring of expenditure. The parallel PFM paper-based tools—besides HZ and facility reports on immunization coverage data—increase the reporting burden and increase the risk of errors and confusion among HZ and facility staff.

This finding identifies four key enabling factors needed to strengthen health sector stakeholders' abilities to track RI expenditure: (i) progressively promote the computerization of RI financial data and its use at the HZ level; (ii) establish a routine financial data collection and analysis mechanism for RI expenditure in the health system; (iii) capacitate the Health Zone Management Team and health workers to capture financial information on resources allocated and spent on immunization activities; and (iv) create and institutionalize knowledge-sharing platforms on RI expenditure for the health sector stakeholders and Ministry of Finance.

1. INTRODUCTION

Routine immunization (RI) is globally considered to be a highly cost-effective public health program that reduces child morbidity and mortality, preventing approximately three million child deaths each year.[7] The RI system is meant to ensure that children are fully vaccinated against vaccine-preventable diseases (VPDs) by ensuring the sustainable, reliable, and timely delivery of vaccines to children by health care workers.[8] RI vaccines for children and women who are pregnant or of childbearing age vary by country, but they generally include bacillus calmette-guérin (BCG); hepatitis B; polio; diphtheria, tetanus toxoid, and pertussis-containing vaccine (DTP); pneumococcal; haemophilus influenzae type B; rotavirus; and measles-containing vaccines.[9]

The Democratic Republic of the Congo (DRC) persists as one of the countries that is most vulnerable to VPDs and has experienced several recent outbreaks, including a measles epidemic in 2019 that resulted in more than 300,000 suspected cases and 6,000 deaths.[10,11] Inadequate funding for immunization at the subnational level remains a major determinant of the ability of health facilities to provide services. Financing of the non-vaccine components of immunization service delivery at the HZ level—such as the collection and distribution of vaccines to health facilities and the ability to conduct outreach services—poses a particular challenge in the country. This study aims to provide a better understanding of expenditure on RI operational activities at the subnational level, particularly at the health zone (HZ) level.

1.1 Background

1.1.1 COUNTRY IMMUNIZATION CONTEXT

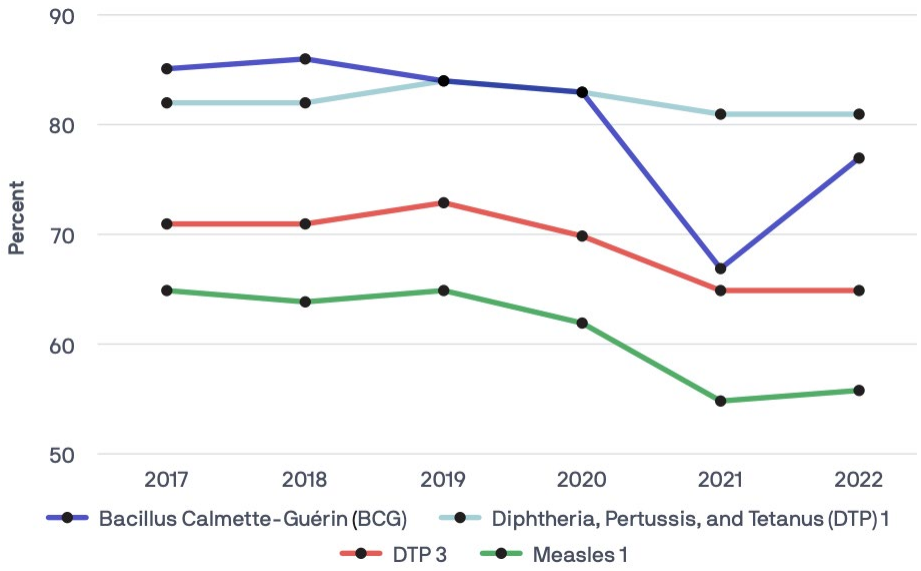
The DRC faces critical immunization program challenges, including one of the largest zero-dose populations in the world,[12] insufficient and delayed funding for immunization programming, and poor use of immunization data for decision-making at all governance levels.[13] In response, the Expanded Programme on Immunization (EPI) within the Ministry of Public Health, Hygiene and Prevention (MSPHP) collaborated with global partners to develop a revitalization strategy for the RI system called the Mashako Plan.[14,]he primary aim of the Mashako Plan in 2019 was to reduce the number of *zero-dose children* by 35 percent for children ages 12–23 months by the end of 2025 and increase vaccine coverage with a first phase of campaigns in the nine provinces (Haut-Katanga, Haut-Lomami, Ituri, Kasaï, Kinshasa, Kwilu, Mongala, Tanganyika, and Tshuapa) most affected by

[7] Centers for Disease Control and Prevention. 2006. Vaccine Preventable Deaths and the Global Immunization Vision and Strategy, 2006–2015." *MMWR Weekly* 55(18): 511–515.
[8] World Health Organization (WHO) and Global Polio Eradication Initiative. 2019. *Polio Endgame Strategy 2019–2023: Eradication, Integration, Certification and Containment.* https://polioeradication.org/wp-content/uploads/2019/06/english-polio-endgame-strategy.pdf.
[9] WHO. *WHO Recommendations for Routine Immunization—Summary Tables*. Last updated March 2024. https://www.who.int/teams/immunization-vaccines-and-biologicals/policies/who-recommendations-for-routine-immunization---summary-tables.
[10] Lame et al. 2023, "A Successful National and Multipartner Approach to Increase Immunization Coverage: The Democratic Republic of Congo Mashako Plan 2018–2020."
[11] WHO Africa. 2020. "Deaths from Democratic Republic of the Congo Measles Outbreak Top 6000." *WHO African Region*, Jan. 7, 2020. https://www.afro.who.int/news/deaths-democratic-republic-congo-measles-outbreak-top-6000.
[12] Gavi Staff. 2021. "The Zero-Dose Child: Explained." *Gavi,* April 26, 2021. https://www.gavi.org/vaccineswork/zero-dose-child-explained.
[13] Lame et al. 2023, "A Successful National and Multipartner Approach to Increase Immunization Coverage: The Democratic Republic of Congo Mashako Plan 2018–2020."
[14] Lame et al. 2023, "A Successful National and Multipartner Approach to Increase Immunization Coverage: The Democratic Republic of Congo Mashako Plan 2018–2020."

measles and polio epidemics and where half of all Congolese zero-dose children lived. [15] The Mashako Plan gradually expanded between 2020 and 2022 to cover all the country's provinces, generating a 50 percent increase in the number of vaccination sessions compared to 2018. As a result, full vaccination coverage increased from 35 percent to 50 percent between 2018 and 2020.[16] The Mashako Plan II in 2021 aimed to amplify the positive momentum initiated by the original plan. Between the 2020 and 2021 national surveys, data showed that full vaccination coverage at the national level fell from 50 percent to 41 percent due to the impact of the COVID-19 pandemic and its effects on both demand and delivery of immunization services. However, vaccination coverage gradually increased to 45 percent in the 2023 national survey as service delivery resumed.[17]

Even though full vaccination coverage increased from 2018 to 2020, national immunization coverage rates showed a declining trend between 2019 and 2022, particularly for diphtheria, tetanus toxoid, and pertussis-containing vaccine (DTP) 3, BCG, and measles 1 (see Figure 1). This suggests reduced utilization of immunization services, possibly due to contextual factors such as COVID-19-related restrictions or ongoing conflicts within the DRC. Data on measles 2 was not available since the vaccine had yet to be included in the national routine immunization schedule as of 2022.[18]

Figure 1: DRC Immunization Coverage



Source: WHO/UNICEF, Joint Reporting Form

1.1.2 ORGANIZATION OF HEALTH SERVICE DELIVERY

The realigned National Health Development Plan 2019–2022 (*Plan National de Développement Sanitaire 2016-2022* [PNDS]) identifies three levels of the DRC's health system: national, provincial, and the operational HZ

[15] KSPH, *Enquête de Couverture Vaccinale (ECV) 2021–2022*.

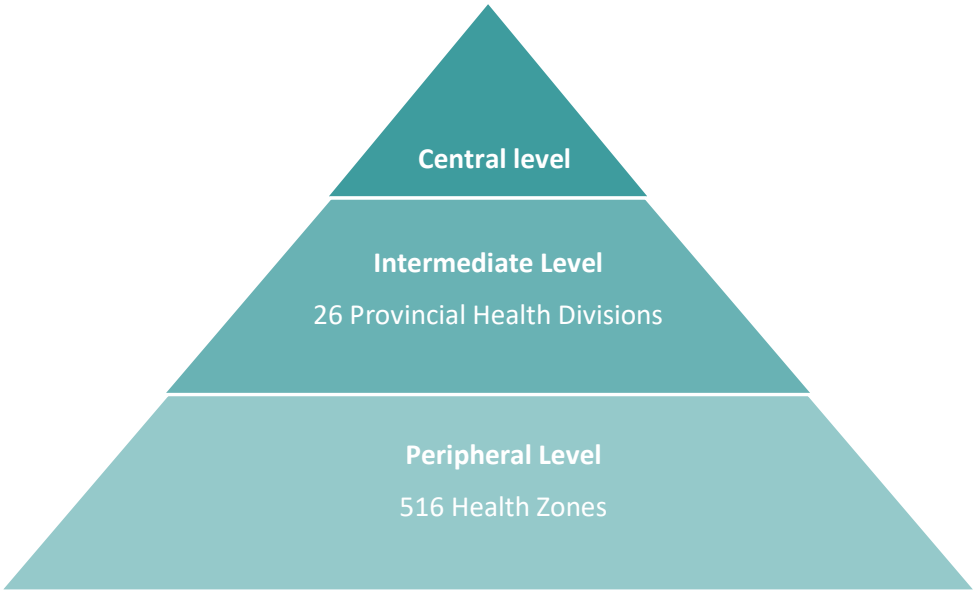
[16] WHO. *Global Immunization Coverage 2021* (WHO Estimates of National Immunization Coverage; Data as of July 2022). https://www.who.int/news-room/fact-sheets/detail/immunization-coverage.

[17] Africa Centres for Disease Control and Prevention (Africa CDC). 2023. "Africa CDC Renews Its Commitment to Reduce Vaccine-Preventable Diseases and Outbreaks in Africa." *Africa CDC,* July 4, 2023. https://africacdc.org/news-item/africa-cdc-renews-its-commitment-to-reduce-vaccine-preventable-diseases-and-outbreaks-in-africa/.

[18] PATH. 2022. *Immunization Financing in Africa: Democratic Republic of the Congo*. https://media.path.org/documents/CP-immunization-financing-DRC-240412.pdf.

level. The PNDS builds on the health sector decentralization process that began in 2006 with the National Health System Strengthening Strategy (*Stratégie de Renforcement du Système de Santé*), mandating division of the country's existing 11 provinces into 26 (see Figure 2).[19]

Figure 2: Diagram of the Decentralized Health System Structure in the DRC



Source: PNDS

The ***central level*** is led by the Minister of Health and includes the Secretary General for Health, central directorates, specialized programs, the General Health Inspectorate, tertiary-level hospitals, and other institutions operating at the national/central level. The MSPHP has a regulatory function with the mandate to define policies, strategies, standards, and guidelines; provide advisory support; monitor compliance; and follow up on implementation at the provincial levels. It also plays a critical role in resource mobilization and allocation. Within the MSPHP, the existing 13 departments are organized into seven central directorates, including the Directorate General for Disease Control, to which the EPI is attached as a specialized program. The directorates oversee human resources for health, strategic planning, service delivery, pharmacies and medicines, disease control, health education, and family health.

The ***provincial level*** is led by the Provincial Minister of Health and comprises a Provincial Health Division, a Provincial Health Inspectorate, a Regional Drug Distribution Centre, a provincial hospital, and other provincial institutions operating in the health sector. These structures exist in each of the 26 provinces. The provincial level role is to provide technical supervision and monitor and translate directives, strategies, and policies in the form of instructions and technical sheets to facilitate the implementation of actions in the HZs. It manages and administers the provincial health services and is responsible for providing secondary referral health care through the provincial hospital. It also inspects and monitors health care, pharmaceutical, and scientific establishments. Further, the funding constraints from the central government induces the provincial offices to impose levies

[19] Wright, Jenna. 2015. *Essential Package of Health Services Country Snapshot: The Democratic Republic of Congo*. USAID and Health Finance & Governance Project. July 2015. https://www.hfgproject.org/essential-package-of-health-services-country-snapshot-the-democratic-republic-of-the-congo/.

such as property taxes, rental income taxes and mining royalties and informal taxes. Through their provincial budget ministry, they allocate this revenue for various expenditure within the provinces.

The ***peripheral level*** is organized around the HZ, which is the operational unit of the health system. Its mission is to implement the primary health care strategy. It is made up of a central office and a constellation of health areas. There are 516 HZs across the country, covering 100,000 to 150,000 inhabitants with a general referral hospital. Government-run general referral hospitals exist in 393 zones, and the remaining 123 have either a faith-based hospital or a private health facility that serves as the referral hospital for the zone.[20] An autonomous Health Zone Management Team (HZMT) manages each HZ. The HZMT's mission is to ensure consistency of activities, including improving health coverage and quality of care, streamlining the operation of integrated health structures, managing human and financial resources, and organizing community participation. While the composition of HZMTs may vary, the core members often include:

- *HZ Medical Chief or Chief Medical Officer:* a senior health care administrator responsible for the overall management and leadership of the HZ.
- *Medical Officer:* a medical doctor responsible for clinical oversight, ensuring the delivery of quality health care services and providing medical expertise within the HZ. They generally serve as the HZ's Medical Director of the General Referral Hospital.
- *Nursing Officer or Nursing Supervisor*: a registered nurse who manages nursing staff, nursing procedures, and patient care at all integrated health facilities within the HZ.
- *Pharmacist:* The Pharmacist manages pharmaceutical services, including the procurement, storage, and distribution of medicines and medical supplies within the HZ.
- *Laboratory Technician:* The Laboratory Technician oversees diagnostic and laboratory services, including management of laboratory equipment and quality control procedures.
- *Administrative Officer or Administrative Manager:* Handles administrative tasks, such as budget management, human resources, and general administration within the HZ.
- *Data Manager:* Data Managers are responsible for maintaining health records and data collection within the HZ.
- *Community Health Officer and Health Promotion Officer:* They are often a representative of the HZ's Health Development Committee. They engage with the local community and implement public health programs.
- *Epidemiologist:* In some HZs, an epidemiologist may be part of the team to monitor disease outbreaks, conduct surveillance, and support public health responses.

The specific roles and titles of HZMT members may vary, and some HZs may have additional personnel or specialized positions based on the unique needs and challenges of their area. This team represents the foundation for the leadership that contributes to strengthening the health system at the operational level.[21] HZs are further broken down into 8,504 health areas, each of which operates a health center covering 5,000 to 10,000 people. Health areas are managed by a local committee, the Comité de Développement de l'Aire de Santé , that brings together 10 local leaders—including the zonal Medical Officer—to identify health needs, manage health centers, and organize community activities.[22]

1.2 Rationale and Objectives of the Assessment

[20] President's Malaria Initiative. *President's Malaria Initiative Democratic Republic of the Congo Malaria Operational Plan FY 2018.* 2017. https://www.pmi.gov/wp-content/uploads/2021/03/fy-2018-democratic-republic-of-the-congo-malaria-operational-plan.pdf.
[21] MSP. *Plan National de Développement Sanitaire recadré pour la période 2019–2022: Vers la couverture sanitaire universelle*. 2018. https://www.globalfinancingfacility.org/sites/gff_new/files/documents/RC_Investment_Case_FR.pdf.
[22] MSP. *Plan National de Développement Sanitaire 2016–2020*. 2016.

The challenges in funding RI operating costs are reflected in the DRC's *Comprehensive Multi-Year Plan 2020-2024*, which found that only 47 percent of HZs had functional vehicles and 32 percent had functional motorcycles, a critical contributor to the limited availability of vaccines at the point of service.[23] The situational analysis also showed that outreach efforts were hindered due to lack of fuel, poorly maintained cold chain equipment, and insufficient storage capacity at the HZ level due to the introduction of new vaccines, particularly Rotavirus.[24]

The multi-year plan also identified some of the immunization financing operational challenges faced at all levels of government, which include the following:

- Inadequate budgetary allocation for immunization operations.
- Inadequate disbursement in relation to allocated resources.
- Inadequacy of the EPI regulatory and institutional framework on immunization financing.[25]

Discussions revealed that, theoretically, operational costs for immunization in the HZs are included for certain activities in the immunization comprehensive multi-year plan, but in practice these activities are not implemented per the plan. It is therefore necessary to understand the extent to which funding is available and expended for these activities at the HZ level.

The DRC EPI program, MOMENTUM Routine Immunization Transformation and Equity project, and the U.S. Agency for International Development (USAID) recognized the need to better understand current spending on RI operational activities at the subnational levels, particularly at the HZ level.

Specific objectives of this assessment were to:

1) Describe the policies, laws, directives, and other regulations that govern RI financing at the HZ level.
2) Describe the planning and budgeting process at HZ level.
3) Analyze RI operational expenditures at the HZ level, financed by both central and provincial government budgets.

The outcomes of the assessment are intended to be used to increase transparency and accountability for operational funding for immunization activities at subnational levels.

Box 1: Definition of immunization operational costs

We define operational costs as the costs associated with delivering immunization services to target populations, exclusive of vaccines. In the context of DRC, we have also excluded injection supplies (e.g., safety boxes, diluents, reconstitution syringes) and paid human resources (labor) from delivery costs as these items are funded centrally. Operational costs may include any or all of the following recurrent and capital cost items: (1) volunteer human resources; (2) per diem and travel allowances; (3) cold chain equipment and their overhead (e.g., energy, maintenance, repairs); (4) vehicles, transport, and fuel; (5) program management; (6) training and capacity-building; (7) social mobilization and advocacy; (8) disease surveillance and activities related to adverse events following immunization; (9) buildings, utilities, other overhead and shared costs; (10) waste management; (11) other supplies and recurrent costs; and (12) other non-vaccine costs.

Source: Adapted from Vaughan et al. 2019. "The Costs of Delivering Vaccines in Low- and Middle-income Countries: Findings from a Systematic Review." *Vaccine X* 2: 100034. https://doi.org/10.1016/j.jvacx.2019.100034.

[23] République Démocratique du Congo, Ministère de la Santé Publique. *Plan Pluri Annuel Complet du PEV de la République Démocratique du Congo, 2020–2024 en RDC.*

[24] République Démocratique du Congo, Ministère de la Santé Publique, *Plan Pluri Annuel Complet du PEV de la République Démocratique du Congo, 2020–2024 en RDC.*

[25] République Démocratique du Congo, Ministère de la Santé Publique, *Plan Pluri Annuel Complet du PEV de la République Démocratique du Congo, 2020–2024 en RDC.*

2. METHODOLOGY

2.1 Study Design

The assessment team applied a cross-sectional study design using both qualitative and quantitative research methods, including mapping and analyzing budget and expenditure data for expenses related to RI operational activities.[26] Sources of information included HZ offices and health centers (beneficiary services), the Statistical Office of the Treasury Department, and the Budget Programming Policy Department based at the central and provincial levels.

The team collected qualitative data from interviews with the HZMTs to identify operational expenses directly linked to RI (earmarked expenses for immunization operational activities) and those that are not (unearmarked expenses for immunization operational activities), but all are financed by the government budget.

2.2 Sample Selection for the Assessment

Selecting the provinces and HZs was done through a convenience sampling approach. The study sampled a total of two provinces, namely, Lualaba and Kasaï Oriental provinces (see coverage data in Table 1).

The four HZ offices (Kanzenze and Manika in Lualaba province, Nzaba and Lubilanji in Kasaï Oriental province) were selected based on the proximity of the various units that coordinate and manage the available financial data systems and ease of physical access to the health zones offices.

Table 1: Immunization Coverage Among One-Year-Olds for Lualaba and Kasaï Oriental Provinces in 2017

Province	Population (millions)	BCG immunization coverage among one-year-olds (%)	Measles immunization coverage among one-year-olds (%)	Polio immunization coverage among one-year-olds (%)	DTP3 immunization coverage among one-year-olds (%)	Full immunization coverage among one-year-olds (%)
Kasaï Oriental	3.145	74.5 [55.4-87.3]	42.0 [28.5-56.9]	35.9 [23.9-50.0]	42.1 [27.0-58.8]	25.9 [15.4-40.0]
Lualaba	3.18	65.3 [51.6-76.9]	42.2 [35.4-49.4]	24.1 [12.5-41.3]	33.0 [21.8-46.4]	14.6 [10.2-20.5]

Source: *https://apps.who.int/gho/data/node.searo.NODESUBREGimmunization-COD?lang=en*

2.3 Data Collection

Data collection took place between August 23 and September 6, 2023. Information on laws, regulations, policies, standards, and guidelines for immunization financing were collected at the central level in Kinshasa from the MSPHP. Information on operational expenditures was collected from the selected HZs for FY2021 and FY2022. The primary data sources included qualitative stakeholder interviews and the financial management tools used in the HZs, namely: Operational Action Plan, Budgeted Work Plan, Budget Act, Financial Tracking Chart, Bank Journal, Cash Book, Payment Order Book, Check Books, Cash Receipt Book, Cash Exit Book, and Requisitions Slips. These sources of quantitative data were all paper-based. The collected information related to activities dedicated entirely to immunization and have been modeled on those not dedicated to immunization in order to

[26] The costs of resource inputs that are used frequently and fully expended in less than one year are often referred to as "recurrent costs" in RI costing studies. Examples of recurrent operating costs include health worker time, supplies, fuel, and utilities.

establish the ratio-to-overall expenditure. As an example, the ratio of EPI in the health budget is calculated with the EPI budget as the numerator and the total health budget as the denominator. The key assumptions in this analysis were that there were no changes in the price level due to inflation for different operational expenses during the period.

2.5 Data Availability

In general, the DRC has limited high-quality data available about RI operational expenses that the government budget finances. At the national level, a computerized information management system enables the EPI to monitor operational activities regarding RI. HZs and health centers, however, do not have computerized data management systems to capture HZs operational expenses. At the provincial, HZ, and health center levels, warehouse and facility staff must manually record updates on RI operational expenses. Ideally, this happens on the standard reporting template, but all too often critical data are captured on a sheet of paper and easily lost, damaged, or destroyed and therefore not translated into the standard reporting template. Furthermore, operational expenses are not predefined at the level of the departments receiving funding. These data gaps mean that the assessment team relied on the triangulation of data from various qualitative and quantitative sources at the provincial and HZ levels.

2.6 Limitations of the Study

The authors of this study note that, in some instances, the budget and expenditure data formatting was inconsistent and at times difficult to access and understand. The HZMTs presented budgets and expenditures in different formats and did not strictly adhere to the standard Charter of Government Accounts' format for budget presentation. Additionally, weaknesses were noted in HZs' misclassification of expenditure items among the different operational items such as fuel for supervision; transportation costs were entered in the cash register and/ or exit voucher books but they did not clearly reflect the outcome of the expenditure. This analysis attempted to correct such identified mistakes by reclassifying them correctly to the extent possible. This information was triangulated by that from the lowest level of operations, the health center, in order to identify an estimate of the true operational expenses and costs incurred for immunization.

3. FINDINGS

This section presents the findings of this assessment. They are organized in three categories based on the objectives: (i) policy environment for immunization financing, (ii) Budget process at the HZ level, and (iii) analysis of operational expenditure on RI.

3.1 Objective 1: Policy Environment for Immunization Financing

3.1.1 SETTING A STRATEGIC VISION FOR IMMUNIZATION

Following decades of conflict, the DRC has made significant progress in rebuilding its collapsed health system. Immunization is a key political priority, with commitments to strengthen immunization programs and increase financing emanating from the highest levels of the government.[27] At the third National Forum on Vaccination and Polio Eradication in Kinshasa in June 2023, the Minister of Public Health, Hygiene and Prevention, Dr. Roger Kamba, reaffirmed the government's commitment to redouble its efforts to reach the goal of vaccinating 75

[27] PATH. (2023).

percent of children by 2027. These commitments reinforce national policies that prioritize universal access to essential vaccines. The PNDS recognizes immunization as a critical part of health programs.[28]

According to the PNDS 2019–2022, at the national level, the EPI under the Directorate General for Disease Control oversees the procurement, management, and distribution of vaccines and supports the regulation, standardization, monitoring, evaluation, and surveillance of VPDs. The EPI works with its local counterparts to estimate vaccine needs, cold chain supplies, and other immunization-related equipment necessary to sustain the immunization program for each of the 516 HZs. This information is then shared with the United Nations Children's Fund (UNICEF), which procures vaccines. Subnational levels are typically responsible for the operational costs of service delivery, including facility-based RI, outreach, social mobilization, supervision, training, supply chain, and logistics, some of which may be shared with the national level.

The EPI's central warehouses in Kinshasa and Kisangani distribute vaccines and other immunization supplies, including syringes, vaccine carriers, cold boxes, and fuel for refrigerators, to the warehouses at the provincial level. From the provincial warehouse, the vaccines and corresponding supplies are delivered to the HZs by air, boat, car, or motorcycle. At this point, EPI managers at the HZs transfer the vaccines to the 8,504 individual health centers, where they can be administered by health workers. Although the distribution process is clearly outlined in policy, poor infrastructure, limited resources to fund the operational activities, and a lack of trained staff often mean that the number of viable vaccines reaching the health center is a fraction of those that left the central warehouse.[29] To maintain a consistent stock of vaccines at all levels, the central-level warehouse, managed by the EPI, ideally has a six-month supply of vaccines, while the provincial warehouse should have a three-month supply and the HZs and health centers each should have a one-month supply. However, faulty warehouse infrastructure (in large part due to equipment that was not properly maintained and could not be repaired)—as well as a lack of consistent electricity, especially in the HZs and health centers—makes it difficult to ensure this supply.[30] Warehouses often lack the required temperature monitoring devices and cold chain equipment to preserve the potency of vaccines. Vaccine wastage is in part a result of imperfect quantification of needs, but also of limited resources to fund basic operations at the HZs, such as payment of electricity, maintenance of equipment, and fuel for refrigerators.[31]

The MSPHP has set a strategic vision for immunization through numerous policies and plans to address these challenges. These directives and strategies serve as guiding frameworks for both national and provincial governments to develop and implement immunization services for all women, newborns, and children. Table 2 outlines key policies that are pivotal for immunization efforts.

Table 2: National Policies and Plans on Immunization Financing

Plan, Policy, or Strategy	Policy Description/Objectives
Reframed National Health Development Plan 2019–2022 (PNDS)	• This document provides the MSPHP's overall strategic priorities. • This plan aims to improve the quality and accessibility of health services and outlines objectives for achieving universal health coverage. • The PNDS seeks to increase the national child immunization rate from 45.5% to 80%, with increased prioritization for zones with the hardest to reach communities.

[28] Ministry of Public Health. *Plan National de Développement Sanitaire 2019-2022*. 2019.

[29] République Démocratique du Congo, Ministère de la Santé Publique, *Plan Pluri Annuel Complet du PEV de la République Démocratique du Congo, 2020-2024 en RDC*.

[30] République Démocratique du Congo, Ministère de la Santé Publique, *Plan Pluri Annuel Complet du PEV de la République Démocratique du Congo, 2020-2024 en RDC*.

[31] République Démocratique du Congo, Ministère de la Santé Publique, *Plan Pluri Annuel Complet du PEV de la République Démocratique du Congo, 2020-2024 en RDC*.

Comprehensive Multi-Year Plan (cMYP) 2020–2024	● This document provides the EPI's five-year strategy and draws from the PNDS. ● This plan outlines specific benchmarks to achieve by 2024, including vaccine coverage rates, introduction of new vaccines, management of logistics and equipment, development of staff capacity, and reduction of specific disease burdens. ● The cMYP also prioritizes advocacy for increased resource mobilization for vaccine programs.
Annual Operating Plan (*Les Plans d'actions opérationnels*)	● The EPI prepares an annual operational work plan each year to guide and inform immunization activities at the national and provincial levels. ● It is developed based on the strategic priorities in the cMYP.
Health Systems Strengthening (HSS) Strategy (*La Stratégie de Renforcement du Système de Santé revisée*)	● Strategy focuses on building the capacity of health workers to administer vaccines, adhere to injection safety procedures, and collect surveillance data. It also seeks to improve the efficiency of cold chain equipment so women and children can access high-quality immunization programs in their communities.
Mashako Plan II	● This is an emergency plan to strengthen the expanded immunization program aimed at reviving RI activities to avoid epidemic outbreaks of certain VPDs by increasing immunization coverage.
National Economic Growth and Poverty Reduction Strategy	● Through increased investments in health, the government aims to spur economic growth and reduce inequality among women and children. ● The plan contains immunization coverage targets similar to those in the PNDS.

Source: Various

3.1.2 STRATEGIC PLATFORMS FOR ADVOCACY ON IMMUNIZATION FINANCING

A strong contingent of stakeholders and platforms work to oversee and improve immunization financing. Table 3 identifies some of the most influential stakeholders and platforms.

Table 3: Stakeholders and Platforms for Advocacy on Immunization Financing

Entity	Responsibilities
EPI, MSPHP	● At the national level, the EPI oversees all immunization activities; it is responsible for strengthening RI, delivering community mobilization campaigns for immunization, improving VPD surveillance, and introducing new vaccines. ● The EPI also governs program coordination and management, cold chain maintenance, and procurement and delivery of traditional vaccines.
Ministry of Finance (MOF) and Ministry of Budget (MOB)	● The MOB prepares and signs off on all government budgets, including the health budget. ● The MOF oversees the disbursement of all funds, including those for immunization.
Interagency Coordination Committee (ICC) on Child Health	● Chaired by the Minister of Health, the Child Health ICC includes strategic partners, such as Gavi, UNICEF, WHO, the Minister of Education, MOF, MOB, and civil society organizations. ● The ICC advises the Ministry of Health on all child health policies and is central to decision-making processes.
Immunization Advocacy and Communications Task Force	● Led by the EPI, this task force seeks to efficiently use vaccine resources and reduce duplication among immunization partners. The task force coordinates activities related to the introduction of new vaccines, addresses challenges, and identifies areas for increased collaboration.

Parliamentarian Network for Immunization Financing at the central and provincial levels	• This platform holds the MOB and MOF accountable for timely disbursements of immunization funds. The group builds support for vaccination programs among decision-makers at the national, provincial, and local levels.

Source: Various

3.2 Objective 2: Budget Process at the Health Zone Level

3.2.1 BUDGET ALLOCATION PROCESS FROM THE PROVINCIAL TO THE HEALTH ZONE LEVEL

The budget preparation process in the DRC is participatory (involving all relevant actors in the district, HZ, and province). The process begins with the provincial minister responsible for preparing the draft budget edict and rendering of accounts for the provinces under the supervision of the Provincial Governor. This involves compiling financial data and projecting expenses and revenues. The Provincial MOF oversees cash flow within the province and decentralized territorial entities (ETDs) while ensuring compliance with the province's financial commitments and cash flow plans. In addition, the Provincial Minister of Planning ensures the alignment of the budget with the province's economic and social priorities, which they develop according to the provincial government's outlook. Thus, the provincial budget projection integrates the economic and social priorities included in the development action programs of the province and ETDs in accordance with the new Public Finance Law (LOFIP). For verification, the project passes through the Provincial Assembly, which examines, votes on, and adopts the budgets translated by budgetary edicts of the province and of the ETDs, which should be voted in equilibrium according to the LOFIP. The Central Government Audit Office ensures external inspection by checking the regularity of operations carried out by the authorizing officer and the Provincial Public Accountant in terms of revenue, expenditure, and treasury management. They also assist the Provincial Assembly in monitoring budget execution at both provincial and ETD levels through chambers of accounts in different provinces.

3.2.2 BUDGET EXECUTION AND REPORTING PROCESS AT THE HEALTH ZONE LEVEL

Once the budget is enacted, budget execution goes through these four main stages in the HZs:

i. ***Expenditure initiation****:* Any need related to the operation of the HZs must be expressed in writing based on a document[32] issued by the requesting service according to the budget lines made available to it, included in the commitment plan published by the Ministry of the Budget or in the HZ's expenditure estimates.

ii. ***Expenditure liquidation:***[33] To liquidate funds, it is essential to draw up a payment request form or Requisition. The payment request form (Annex 2) is drawn up based on the appropriate requirements, approved, and signed by the Administrative Manager and Health Zone Medical Chief or Chief Medical Officer.

iii. ***Expenditure authorization:*** Once authorization has been done by the head of the HZ, which is the authorizing authority, the payment voucher is sent to the finance or accounting department and then forwarded to the cash register office for payment.

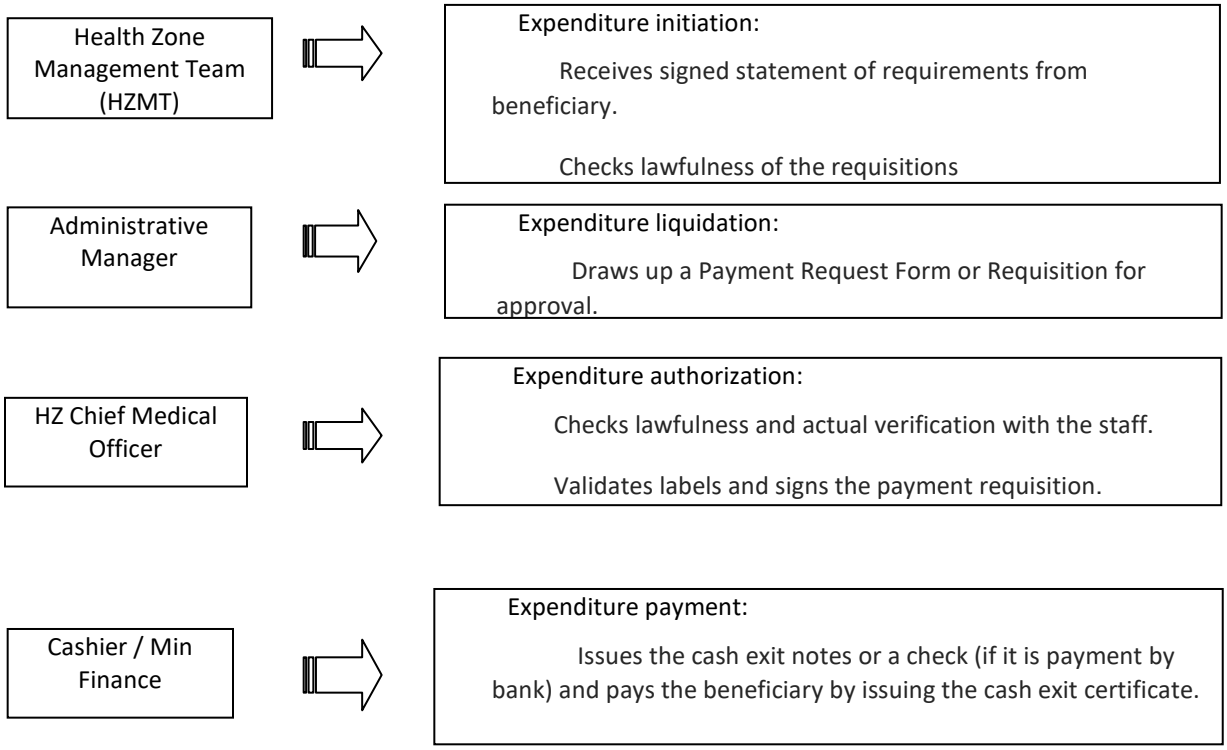
iv. ***Expenditure payment:*** Given the payment request, the cashier issues the cash exit note or a check (if it is payment by bank) and pays the beneficiary by issuing the cash exit certificate.

[32] This document contains (i) a signed statement of requirements, (ii) a Signed Payroll Statement, (iii) a pro forma invoice or procurement record for purchases and payment for services, and iv) the Terms of Reference. The commitment takes the form of a document called the "Commitment Bond."

[33] The process of converting expenditures (or spending) into a form that allows for the settlement or accounting of these expenses.

At the national level, unlike the provinces and HZs, the expenditure chain is computerized from start to finish. To determine whether public money has been used correctly, one can read the general accounting office report. This office is responsible for controlling the management of the public funds. In principle, it must publish its report every year (article 180 of the Constitution).

Figure 3: Steps in the Standard Expenditure Circuit at the HZ Level



Source: Public Expenditure Circuit Procedural Manual (2003)

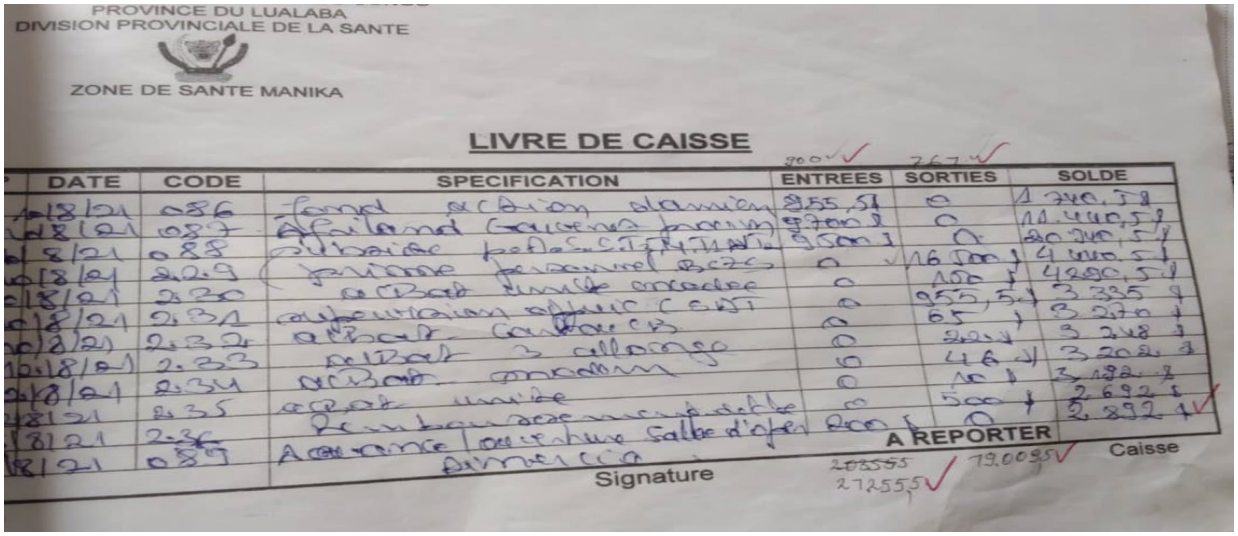
Expenditure data flow was observed as seamless, as reporting guidelines appear to be well known and uniform throughout the country. In some cases, the reporting guidelines have been communicated in writing, but more often it is common knowledge. It was observed that there was a disconnect between budget lines and the activities being funded in HZ reporting. Additionally, HZs translated the budget lines into sub-activities in the units' operational plans. For example, the fuel budget line in the finance law was translated into several sub-activities in the operational plans for different supervision by health programs. It was not possible to follow up, for example, to see if the fuel is used for the collection of vaccines at the central level, etc. At the time of reporting, the amount spent on the fuel budget line will be entered without further detail. These reports did not indicate the program or activity for which the fuel was used. This makes it difficult to monitor all operational expenditure financed by the national budget.

Budget spending reporting was done by recording the financial transactions in the summary journal of the income and expenditure book. The following are expenditure reporting tools:

(i) **Keeping the summary journal of receipts by the accountant:** This is to record in the journal the accounting and financial operations that have caused the funds inflow, and the procedure is as follows: (i) Check the numbering of the cash receipts; (ii) verify that the amounts in figures and letters are matched; (iii) record the information in the revenue summary journal daily, given the cash receipt and revenue voucher; and (iv) classify the cash receipt in chronological order.

(ii) **Keeping the summary journal of expenses by the accountant:** This journal contains the following details: date of expense paid and incurred; budget code charged; operational expense description; amount debited or incurred for the expense; amount credited or paid for the expense; and outstanding balance (see Figure 4). This means recording in the journal of expenses the accounting and financial operations that caused the disbursement of funds based on the supporting documents, and the procedure is as follows: (i) Verify the authenticity and compliance of the exit certificate; (ii) check that the amount in numbers and letters on the release voucher is correct; (iii) apply the payment request form and the cash release voucher chronologically; (iv) record the cash outflow voucher in the expenditure journal (grouping of expenditure by nature); and (v) file the cash release voucher with its appendices in an ad hoc binder. All the journals are then aggregated and submitted to the provincial level for analysis and feedback.

Figure 4: Example of Summary Journal of the HZ Expenses


PROVINCE DU LUALABA
DIVISION PROVINCIALE DE LA SANTE
ZONE DE SANTE MANIKA

LIVRE DE CAISSE

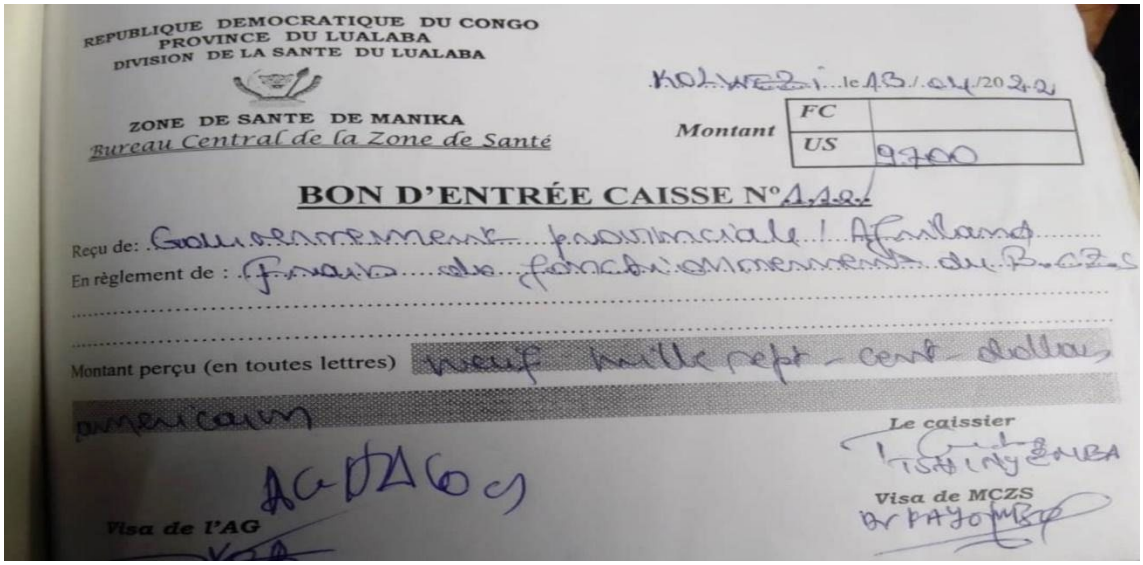
DATE	CODE	SPECIFICATION	ENTREES	SORTIES	SOLDE
		A REPORTER			

Signature

Caisse

(iii) **Keeping the cash register report**: At the end of each week or month, the preparation of a report on the collection and disbursement of funds is drawn up at the cash level only. It is necessary to ensure better monitoring of the collection and disbursement of funds (cash/bank). The procedure to be followed in the preparation of the cash report is as follows: (i) Enter the balance of the previous week on the Balance line at the beginning of the week; (ii) on the entry side, record the total of the receipts for the week as well as the other entries; (iii) under the Exit heading, record the total number of exit vouchers for the week; (iv) clear the balance; (v) print, sign, and file the report and forward a copy to management (see Figure 5).

Figure 5: Example of Cash Register Receipt

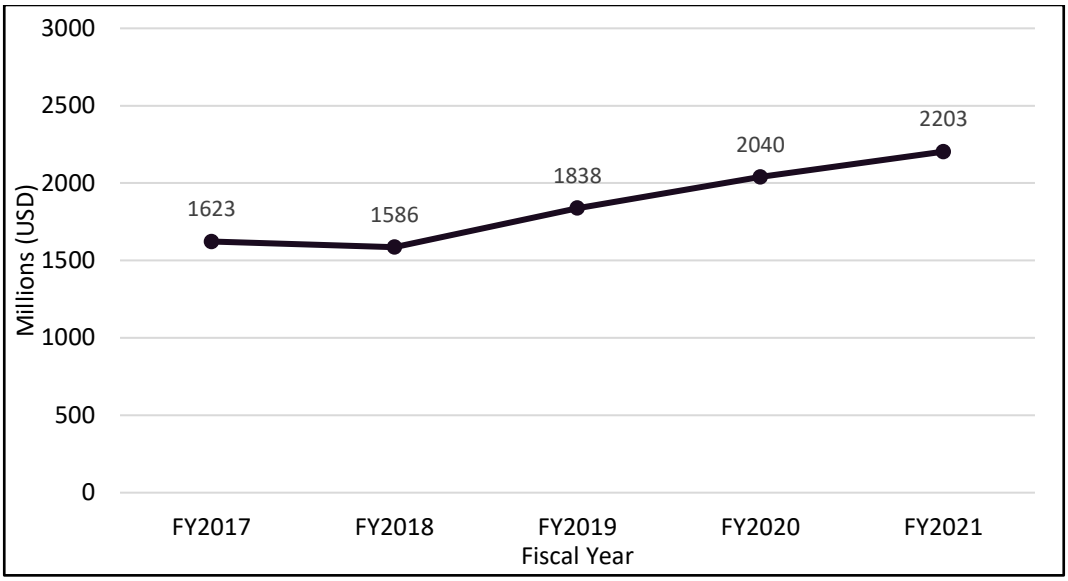


3.3 Objective 3: Analysis of Operational Expenditures for Immunization

3.3.1 TOTAL HEALTH EXPENDITURE 2017 TO 2021

Health sector spending in DRC has been on a steady increase. Since FY2017, health sector total expenditure has increased from US$1.6 billion to US$2.2 billion. In FY2021, there was an increase of 35 percent. Figure 6 below shows the trends in health expenditures.

Figure 6: Health Sector Expenditure Trends

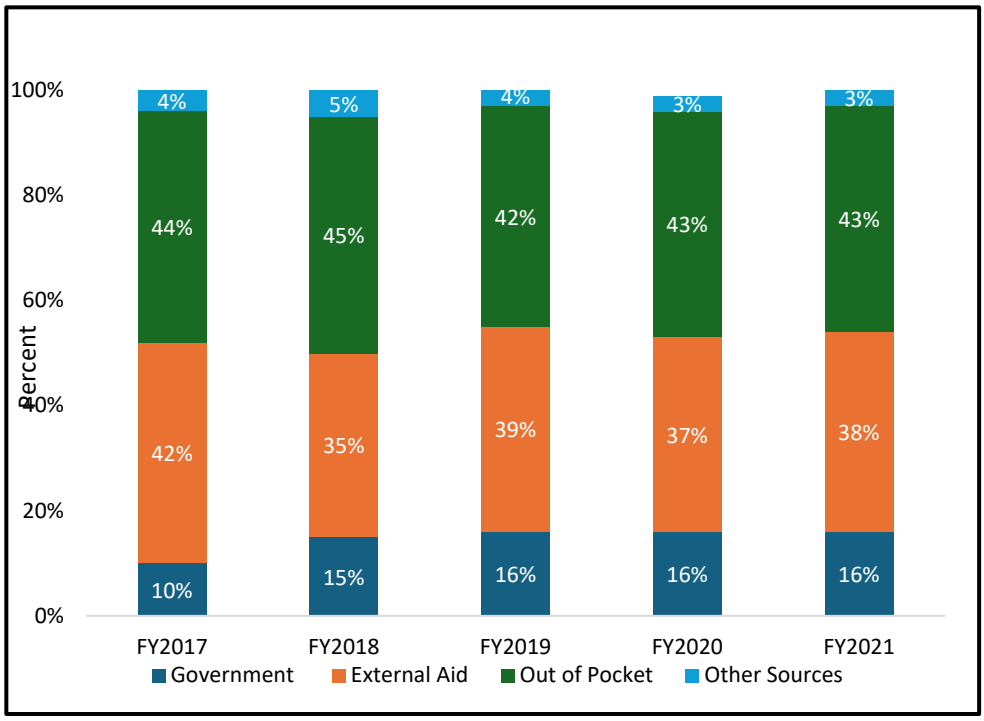


Source: NHA report 2021

Despite robust policies and the government's commitment to improving universal health coverage, health remains largely household- and donor-dependent—Out of Pocket payments accounted for between 43 percent and 44 percent of all health financing, while donor funding accounted for between 38 percent and 42 percent

(see Figure 7) for the period FY2017–FY2021. This was followed by government funding, which accounted for less than 20 percent of all health financing. Other sources accounted for less than 5 percent of health financing during the period.[34]

Figure 7: Health Financing Sources 2017–2022



Source: NHA report 2017–2021

DRC's per capita spending has remained well below the international threshold target of US$86 per person.[35] Analysis of the NHA 2021 report shows that DRC has not even reached a third of this threshold: Its total health expenditure per capita was US$25.54 (22% of the average of US$86.00 per capita per year) in FY2021, the most recent year of reported data. Further, the average share of government budget allocation to health between FY2003 and FY2021 was 7.3 percent,[36] far below the Abuja Declaration of Heads of State and Government, which recommended that signatory states allocate at least 15 percent of their budgets to the health sector (see Figure 8).[37]

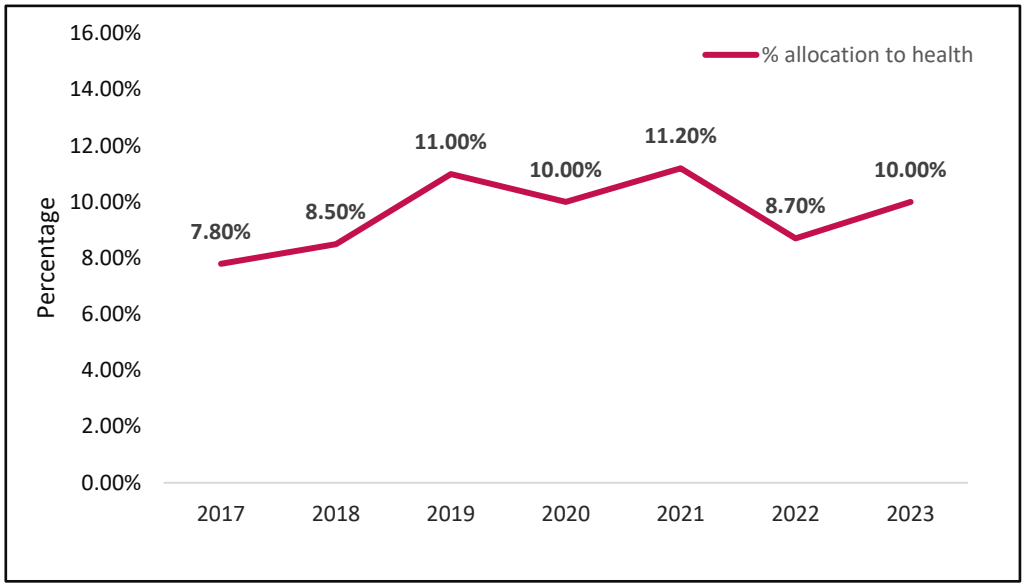
[34] MSPHP. 2021. *Comptes Nationaux de la Santé (CNS), 2018*. Published in 2022.

[35] The target threshold of $86 per capita per year remains a benchmark used by the Centre on Global Health Security Working Group on Health Financing Target (Chatham House Target) on health system financing in low-income countries to promote universal access to primary care.

[36] MSPHP. 2022. *Comptes Nationaux de la Santé (CNS), 2018*.

[37] *Abuja Declaration and Framework for Action on HIV/AIDS, Tuberculosis and Other Infectious Diseases in Africa*. April 27, 2001. https://www.ppdafrica.org/docs/policy/abuja-f.pdf.

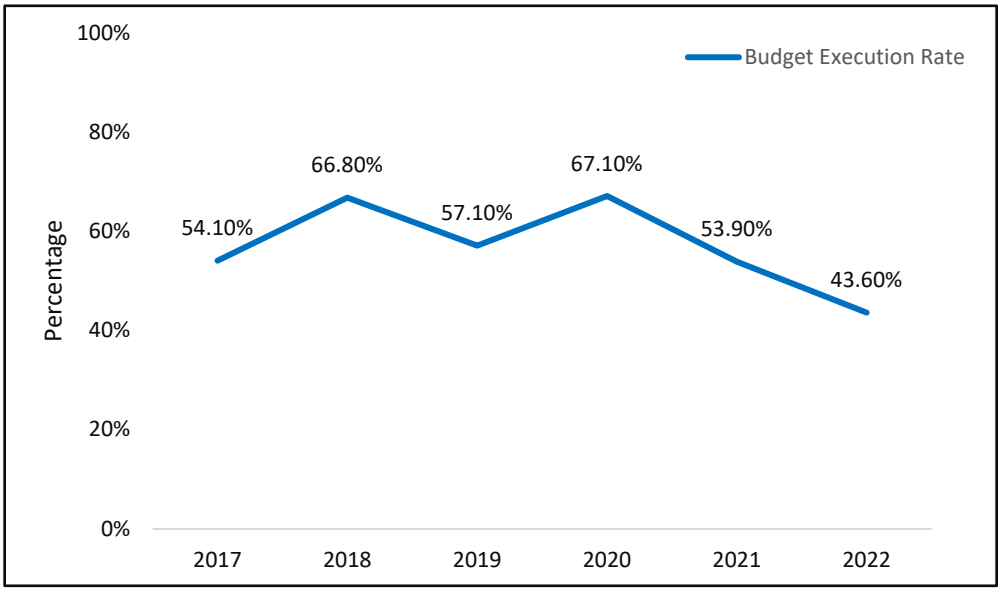
Figure 8: Share of Health Budget Allocation



Source: Ministry of Budgets, budget monitoring reports from 2003 to 2023, DRC, Kinshasa

The health sector is still lagging behind in the execution of its allocated budget. The execution rate for allocations to the health sector fell from 67.1 percent in FY2020 to 53.9 percent in FY2021 (see Figure 9). If the health sector had spent its full budget allocation each year, its expenditure would have almost doubled over this period. Among the internal factors contributing to the state budget's low execution rate at the Ministry of Finance (MOF) level is the insufficient technical and institutional capacity such that it leads to considerably delays in the disbursement of resources. At the MOF level there is often a gap between budget forecasts (too optimistic) and budget revenues.[38]

Figure 9: Budget Execution Rate



[38] World Bank. *Congo, Democratic Republic of DRC Health Financing Reform for UHC [Universal Health Coverage]: Fiscal Space Analysis*. June 2021. http://documents1.worldbank.org/curated/en/548211630002377389/pdf/Congo-Democratic-Republic-of-Health-Financing-Reform-for-UHC.pdf.

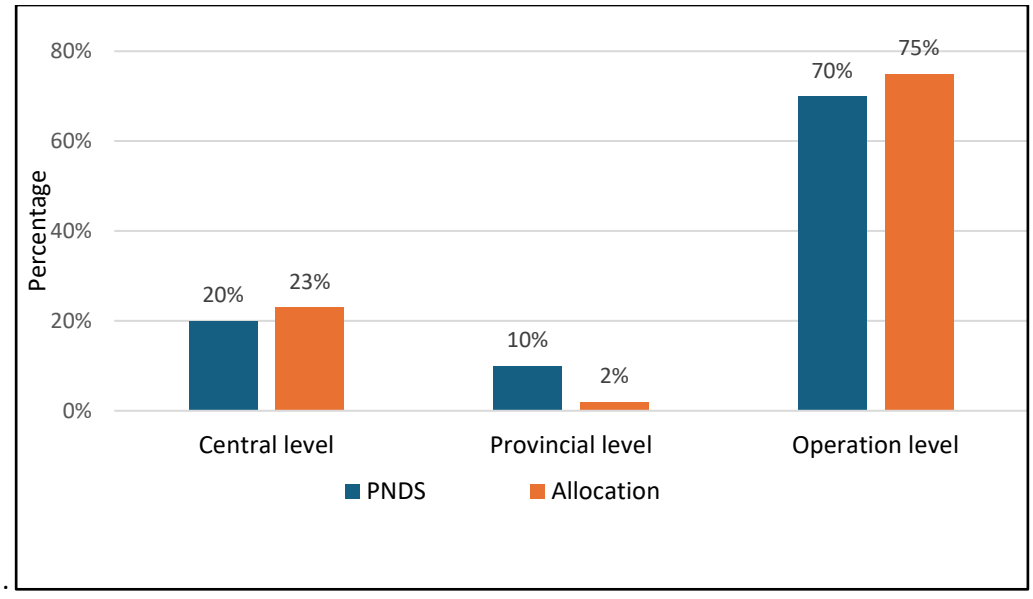
3.3.2 BREAKDOWN OF TOTAL HEALTH CARE EXPENDITURE BY LEVEL OF THE HEALTH CARE PYRAMID

The constitution states that "*40% of national revenue collected in each province shall be transferred or disbursed to them*." This is the process known as retrocession. In addition, a further 10 percent must be allocated to a compensatory investment fund (National Equalization Fund) to ensure a more equal development between provinces.[39] However, at present revenues are not allocated in accordance with the constitution requirement, leaving the provinces with budget deficits.[40]

The funds raised for health are allocated to the three levels of the health system, namely: (i) the national or central level, (ii) the provincial level, and (iii) the operational level, including HZs, hospitals, and health centers (see Figure 10). Table 4 below shows the evolution of the allocation of financial resources for health from FY2017 to FY2021 by level of the health system in the DRC. It shows that between FY2017 and FY2021, the bulk of health care spending (75%) was carried out at the operational level, followed by the central level with 23 percent. The provincial level remained virtually unchanged at 2 percent. At the operational level, expenditures were distributed as follows: 44 percent of funds were allocated to General Referral Hospital, 30 percent to Health Centre, and 1 percent to the Health Zone Office.

The standard adopted in the PNDS 2011–2015 proposes allocating 20 percent to the central level, 10 percent to the provincial level, and 70 percent to the operational level. Figure 6 below shows that, by FY2021, the central and operational levels had been allocated resources above the minimum threshold set by the standard, while the provincial level has been underfunded. Funding at the central level is essentially used for health system governance activities (remuneration, meetings, reviews, etc.), to the detriment of support and supervision activities in the provinces. The low level of funding at the provincial level has prevented the provincial health department from carrying out its support and supervision missions in the HZs.[41]

Figure 10: Allocation of Resources by Level of the Health Pyramid in FY2021



Source: NHA report 2017–2021

[39] World Bank, 2021, *Fiscal Space Analysis*.

[40] World Bank, 2021, *Fiscal Space Analysis*.

[41] MSPHP. 2022. *Comptes Nationaux de la Santé (CNS), 2018*.

Table 4: Allocation of Financial Resources by Level of the Health Pyramid from 2017 to 2021 in USD

Level	2017		2018		2019		2020		2021	
1. Central level	455,831,383	28%	412,166,295	26%	441,322,235	24%	408,301,580	20%	505,909,664	23%
2.Provincial level	24,999,793	2%	47,557,649	3%	36,776,853	2%	28,935,563	1%	45,139,200	2%
3.Operation level	1,141,788,231	70%	1,125,531,037	71%	1,379,131,984	74%	1,602,354,057	79%	1,652,379,132	75%
- HZ office	14,290,829	1%	31,705,100	2%	18,388,426	1%	13,804,856	1%	15,221,532	1%
- General referral hospital	588,952,417	36%	570,691,793	36%	827,479,190	45%	937,479,995	46%	973,907,063	44%
- Health center	538,544,984	30%	538,986,694	34%	533,264,367	29%	651,069,206	32%	663,250,537	30%
Total health expenditure	1,622,619,407		1,585,254,981		1,857,231,072		2,039,591,200		2,203,427,996	

Source: NHA report 2017-2021

3.3.3 IMMUNIZATION FUNDING BY THE GOVERNMENT

Regarding immunization financing, the EPI is mainly funded by the Congolese government and traditional immunization donors: WHO, UNICEF, USAID and Gavi, the Vaccine Alliance. Rotary International, the European Union, and many other donors are also funding the EPI in the DRC at the HZ level.[42] Every five years, the EPI develops a plan called the Comprehensive Multi-Year Plan that includes an estimation of vaccine needs, cold chain supplies, and other immunization-related equipment necessary to sustain the immunization program for the designated timeframe.

At the national level, DRC has a dedicated budget line item for immunization. This budget line is primarily used for the procurement of vaccines through the co-financing arrangement with Gavi. There are no budget provisions for RI operational costs, such as those related to cold chain equipment maintenance, spare parts procurement, or supervision visits from the HZs level to health centers; however, certain budget lines were observed in the FY2021 and FY2022 budgets in relation to RI operational activities support. Within these national health budget lines, immunization constituted approximately 2 percent of the domestically financed health budget, which included multiple immunization-specific line items that cover vaccine supplies, Gavi co-financing requirements, staff salaries/allowances, and fuel/transport. External assistance for immunization remains off-budget.[43]

Further, during FYs 2021, 2022, and 2023 the budget allocation for immunization showed a progressive trend of US$16.4 million (3.1% of the health budget), US$19.7 million (2.2%) and US$20.3 million (2.3%) respectively (Table 5). Despite these modest allocations, disbursements have not always been satisfactory.

Table 5: Immunization Government Funding at the National Level FY2020–FY2022[44] in USD

Indicator	FY2020	FY2021	FY2022
Total government budget (millions)	5,258	7,695	10,093
Total health budget (millions)	527.0	858.2	873.5
Total EPI budget (millions)	16.4	19.7	20.3
% of national budget allocated to the health sector	10.02%	11.15%	8.65%
% of EPI in health budget	3.1%	2.2%	2.3%
% of EPI in the overall national budget	0.31%	1.84%	1.44%

Sources: 2022, 2021, 2020 DRC health accounts.

In contrast, the Provincial Government Finance Act does provide budget for RI operational activities, but only 11 out of 26 provinces (42%) carry them out, and they do so irregularly. For instance, it was observed that Lualaba province's HZs have benefited from provincial subsidies for RI operational activities (three times in FY2021 and four times in FY2022) while the HZs of Kasaï Oriental province were not subsidized in FY2021 and FY2022, but they did incur RI operational expenses from funding from OOP from the health centers.[45] As a result of little or

[42] MSP DRC. *Plan Pluri Annuel Complet du PEV de la République Démocratique du Congo, 2015-2019 en RDC.*

[43] Griffiths, Ulla K. et al. 2020. "Budget Line Items for Immunization in 33 African Countries." *Health Policy and Planning* 35(7): 753–764. https://doi.org/10.1093/heapol/czaa040.

[44] Conversion rate: US$1 = Congo franc 2,792 as per April 11, 2024.

[45] MSP DRC, Ministère de la Santé Publique. 2022, 2021, 2020. *Plan Pluri Annuel*.

no flow of operational funds from the national level to the peripheral level, health centers mainly depend on their own capacity (financial, human resources, transportation) to travel to the HZ to collect vaccine orders, using funds from fee recovery or personal funds to cover their operational costs (90% of their running costs).[46] In addition, facilities are asked to contribute to the HZ costs, so that the system is characterized by an odd reverse funding flow system known as "*la pompe*" or bottom-up.[47]

Central budget transfers to provinces and external assistance provide the majority of provincial health funding, with provincial-level local resource mobilization contributing relatively little to the total provincial health sector resource envelope.[48] There are, however, great variations; for example, Kinshasa and Kasaï Oriental provinces respectively allocate 31 percent and 33 percent of their total amount to health, while other regions such as Kwango and Lualaba allocate less than 10 percent.[49] On average, provinces allocate 18 percent of their central government transfer to health, primarily used for wage and capital expenditures; operational costs to facilities—those funds available to support activities like RI—are funded separately through discretionary funding received through a separate transfer.[50] The insufficiency of these operational costs, coupled with low budget execution rates—half of provinces executed less than 46 percent of their health budget in 2017, with some as low as 20 percent[51]—has led to challenges in achieving routine immunization goals despite substantial external financial support from Gavi and other external funders. Further, the suboptimal budget execution at the provincial and HZ level for broader health sector activities, including immunization, impede the ability to deliver timely and high-quality health services.[52]

3.3.4 ANALYSIS OF OPERATING EXPENDITURE AT THE HEALTH ZONE LEVEL

The study found that budget transfers from the provincial government are less than 0.5 percent of the budget allocated to the HZs. From the selected sample, it is only in the HZs in Lualaba province where the provincial government subsidized operational immunization activities at the HZs. In FY2021 the amount allocated to the HZs was US$30,000 each, while in FY2022, the amount allocated was US$40,000 each. The analysis showed that internally generated revenue within the health centers was also used in paying for the transport of vaccines from the central warehouse offices to the health centers.

The analysis found that operational expenditure on vaccination varied from 4.7 percent to 13.8 percent of the total provincial budget allocation in FY2022 and 3.2 percent to 12.9 percent of the provincial subsidy in FY2021 for HZs in Lualaba province. On the other hand, operational expenditure on vaccination in HZs in Kasaï Oriental provinces, which was incurred using local generated revenue, varied between 4.7 percent and 4.8 percent of the allocated budget, as can be seen in Table 6. Kanzenze HZ had incurred the most (13.8%) in operational costs on vaccination, followed by Manika HZ (12.9%) in FY2022. Nzaba HZ and Lubilanji HZ were the lowest at 4.8 percent and 4.7 percent respectively, for the same period.

Table 6: Comparison of Immunization Operational Budgets and Expenditures by HZs in USD

		2021	2022		

[46] MSP RDC, 2018, *Stratégie de Financement de la Santé pour la Couverture Sanitaire Universelle en RDC*.

[47] Fox, Sarah, Sophie Witter, Emily Wylde, Eric Mafuta, and Tomas Lievens. 2014. January. "Paying Health Workers for Performance in a Fragmented, Fragile State: Reflections from Katanga Province, Democratic Republic of Congo. *Health Policy and Planning* 29(1): 96–105.

[48] Barroy, Hélène et al. 2014. *Investing in Universal Health Coverage: Opportunities and Challenges for Health Financing in the Democratic Republic of Congo*. World Bank. https://openknowledge.worldbank.org/handle/10986/23880.

[49] World Bank, 2021, *Fiscal Space Analysis*.

[50] MSP RDC. 2018. *Plan National de Développement Sanitaire 2019-2022*.

[51] MSP RDC. 2018. *Plan National de Développement Sanitaire 2019-2022*.

[52] PEV. 2019, February 19. *Revue de la première année de mise en œuvre du plan d'urgence pour la relance de la vaccination de routine Plan Mashako*.

Province	Health zones	Budget allocation to the HZ	Ops. expenditure	Budget allocation to the HZ	Ops. expenditure	Actual expenditure as % of budget 2021	Actual expenditure as % of budget 2022
Lualaba	Kanzenze	$30,000	$4,149	$40,000	$5,528	13.8%	13.8%
Lualaba	Manika	$30,000	$951	$40,000	$5,160	3.2%	12.9%
Kasaï Or	Nzaba	$2,880	$140	$2,880	$140	4.8%	4.8%
Kasaï Or	Lubilanji	$ 3,240	$152	$3,240	$152	4.7%	4.7%

Source: Health zones book of accounts FY2021 and FY2022.

Further, this assessment found a large difference in variation in total operational costs (transport for vaccines, internet connections, printing of tools, fuel for generators, fuel for supervision, per diem for supervision, transport for community health workers [CHWs]) by HZs, with the lowest operational costs at Nzaba HZ (US$280 for the two fiscal years), followed by Lubilanji HZ (US$304 for the two fiscal years), then Manika HZ (US$6,111 for the two fiscal years), and finally Kanzenze HZ (US$9,677 for the two fiscal years) as shown in Table 7.

Table 7: Breakdown of Cumulative Operational Expenses on Vaccination in USD for FY2021 and FY2022

Provinces /Operation Cost	Transport for Vaccines	Communication: Internet connections	Printing of Tools	Fuel for Generator	Fuel for Supervision	Per-diems for Supervision	Transport for CHWs	Total
Lubilanji HZ(USD)	$219	$20	$20	0	$45	0	0	$304
Nzaba HZ (USD)	$190	$20	$10	$60	0	0	0	$280
Manika HZ (USD)	0	$260		0	$951	$4,900	0	$6,111
Kanzenze HZ(USD)	$1,313	$294	$20	0	$4,200	$1,750	$2,100	$9,677

Source: Health zones book of accounts FY 2021 and FY2022.

The costs of supervision for both fuel and allowances were the main cost-driving line item for HZs receiving subsidy from the provincial level, accounting for between 61 percent and 85 percent of operational costs on vaccination. Also as shown in Figure 8, the main cost driver for HZs using internally generated revenue for vaccination was vaccine transportation from the warehouses to the health facilities, accounting for between 68 percent and 75 percent of operational costs on vaccination.

3.2.5 TOOLS FOR CAPTURING ROUTINE IMMUNIZATION OPERATIONAL EXPENDITURE

In general, the public financial management (PFM) practices followed at the national level should be followed at the subnational level by the HZs. The MOF has a legal framework which defines the rights and responsibilities of both national and subnational units. The country PFM legal framework defines the:

- Authority of subnational entities to gather and hold on to revenue, including the sorts of revenue gathered at the subnational level, the laws or formula governing revenue sharing, and revenue collected at the HZ level.
- Revenue transfer system, including the types of transfers and sources of funding.
- Reporting requirements from the subnational to the central level and whether subnational must use a central-level-mandated financial management information system or can choose their system; and
- Relationship of subnational budgets to the national or consolidated budget.

The national budget expenditure reporting system is a comprehensive system that details budget, revenue, expenditure control, debt, asset and resource management, human resources, payroll, accounting, financial reporting, and auditing. The HZ budget expenditure reporting system follows the national-level budget reporting system. Every transaction entered into the system is posted to the general ledger (an electronic system from the provincial and the central level and a paper-based system from most of the HZs), starting with the allocation of budget funds and down to payments for goods and services. All transactions are simultaneously posted to the general ledger and appropriate sub-ledgers following the rules in the standardized account chart. In addition to the general ledger, the reporting system includes (i) budgetary accounting, (ii) accounts payable, (iii) accounts receivable, and (iv) a control mechanism to ensure that sufficient cash is allocated for an expense and that the allocation matches the approved budget before a commitment to purchase is made.

At the HZ level, there exist general PFM tools that are supposed to capture RI operational expenditure, namely: entry voucher booklet, exit voucher booklet, cash book, and budgeted action plan (see Table 8 and Annex 2).

Table 8: Tools to Capture Operational Expenditure for Immunization

No	Tool	Function
1.	Entry voucher booklet/ payment request form	● This form is used to request payments or release of funds to support certain operational activities from the HZs.
2.	Exit voucher booklet/checkout voucher template	● This form confirms cash release or withdrawal of money from the HZs.
3.	Cash book/bank book	Form used for: ● Recognition of cash inflow for cash register receipts, remittance slips, and bank statements. ● Recording accounting operations for bank book/bank account and cash book/bank & cash. ● Monthly audit and closing of accounts for bank reconciliation and physical cash inventory.
4.	Budgeted action plan	● Monthly/annual financial report for status of implementation of the budget.

These tools are populated in real time; however, they do not explicitly show the linkage between expenditure and immunization operational activities. For instance, cash expenditure or supervision could be done without indicating whether supervision of immunization activities or integrated supervision of zones' activities is involved. The same applies to the purchase of fuel and the per diem of supervisors on supervisory visits. The

tools are used to capture immunization expenditures more generally and are labeled based on the budget function as follows: supervision, purchase of fuel, transport of vaccines, per diem of community outreach, etc.

Generally, it was hard to track detailed expenditures on immunization activities based on the national budget implementation and reporting system at the facility, including the HZ level. At the HZ level, the current financial management system does not make it possible to link budget allocation and health expenditure because the budget headings in the provincial budget do not detail the activities for which the expenditure must be incurred.

3.3.6 OPPORTUNITIES AND GAPS IN USING PUBLIC FINANCIAL MANAGEMENT TOOLS TO CAPTURE ROUTINE IMMUNIZATION OPERATIONAL COSTS AT THE HEALTH ZONE LEVEL

At the health facility level, all operational expenses, including for RI, are recorded in different financial registers and sent monthly to the HZ administration. HZs then forward compiled health facility and HZ operational expenses data to the provincial level, and provincial reports are then sent to the central level in Kinshasa. The capture of these expenses at the HZ level is carried out exclusively through a paper-based system. At the central and provincial level this data is captured through both paper-based and electronic systems. At each of the receiving levels, this data is analyzed and validated, and feedback is provided to the sharing level.

The infrastructure in some provinces and HZs does not allow reliable internet access, so all financial records are paper based. Despite this limitation in using the paper-based financial system to track RI expenditure, certain strengths were observed with this system:

- This system has facilitated data capture on expenditure in HZ where the information and communication technology (ICT) infrastructure is inadequate or absent.
- The existence of standardized tools and reporting processes has facilitated ensuring the paper-based tools are up to date and well maintained.
- Clear segregation of duties exists within the HZMT on authorization and budget execution; this validation check has enhanced control of funds.
- There is a clearly defined flow of expenditure information and feedback mechanism from the HZ to the central level.

While there are wide variations in operational expenditure on immunization from one HZ to another, the pattern is clear: The paper-based financial management information system at the HZ level faces certain challenges that prevent effective monitoring of expenditure such as:

1. Lack of budget accountability: The paper-based system makes it almost impossible to track RI expenditure and achieve peer-to-peer review. This is caused by:
   - Poor alignment of budget execution at the HZs with domestic resources allocated
   - Multiple financial tools for collecting similar information, leading to entry errors
   - Inadequate skilled technical personnel in the administrative departments directly involved in public procurement
2. The system lacks adequate validation rules for the expenditure at the HZs level, which can improve quality of financial information for decision making.
3. Data delays: the lack of reliable (electronic) communication instruments delays the transmission of financial information between different levels of the health system for evidence-based decision making in RI planning and budgeting.

The high dependency on use of manual systems for reporting expenditure activity data makes the reporting process equally heavy at the HZ and health facility level, as there are many registers with too many fields to be filled, and some of the tools and reports have duplication.

4.CONCLUSIONS AND RECOMMENDATIONS

Financial sustainability for RI programs will require that resources are made available in the right amount and at the right time and place to implement the planned activities and eventually achieve the targeted health benefits.[53] At the national level, a dedicated budget line item for immunization is in place and mainly caters for the procurement of vaccines through the co-financing arrangement with Gavi. There are no budget provisions for RI operational costs, such as those related to cold chain equipment maintenance and supervision visits from the HZ level to health center. More granular and robust budgeting for all elements of RI, which protects resource allocation down to the HZ and facility level, and more streamlined and flexible budget execution processes are possible steps to ensure the operating costs of RI immunization are adequately financed in the DRC. For this to be operationalized, the MOH should digitize the development of program budgets from the HZ level to the national level. This will aid the MOH in monitoring budget execution for RI, allowing for routine monitoring of RI and health expenditures and strengthening accountability of the MoH in relation to the Ministries of Budget and Finance. Digitization of will also help streamline the RI operational elements that should be captured by each province during the planning and budgeting process.

Central budget transfers to provinces and external assistance provide the majority of provincial health funding, with provincial-level local resource mobilization contributing relatively little to the total provincial health sector resource envelope.[54] On average, provinces allocate 18 percent of their central government transfer to health, primarily used for wage and capital expenditures; operational costs to facilities—those funds available to support activities like routine immunization—are funded separately through discretionary funding received through a separate transfer.[55] The Provincial Government Finance Act provides a budget line for RI operational activities, but only 11 out of 26 provinces (42%) carry them out, and they do so irregularly. As a result, little or no operational funds flow from the national level to the peripheral level. Health centers mainly depend on their own capacity to travel to the HZ to collect vaccine orders, using funds from fee recovery or personal funds to cover their operational costs (90% of their running costs).[56] The insufficiency of these operational costs coupled with low budget execution rates—half of provinces executed less than 46% of their health budget in 2017, with some as low as 20%[57]—have led to challenges in achieving routine immunization goals despite substantial external financial support from Gavi and other external funders. Further, there is a weak correlation between allocations by province, population, and provincial needs. In principle, provinces with the weakest health indicators should receive more per capita funding to be able to catch up. However, the provinces with the lowest health indicators also have a low budget allocation. The criteria for allocating resources to the provinces and the HZs should be redefined by including criteria of equity and efficiency.

Conversely, the analysis showed that the existence of a budget line item was associated with increased spending. The operational expenditure on vaccination varied between 3.2 percent and 13.8 percent of the total provincial subsidy in Lualaba, compared with Kasaï Oriental provinces—incurred through local generated revenue—which varied between 4.7 percent and 4.8 percent, compared with other health activities. This significance in variation in percentage of budget utilization is due to there being no objective criteria for spending within the HZ and the lack of effective program-based budgeting.

[53] ThinkWell and WHO. 2022. *Is Decentralization Friend or Foe to Agile Public Financial Management in Health? Findings from Burkina Faso, Indonesia, Kenya, Mozambique, Nigeria, the Philippines, Uganda, and the United Republic of Tanzania*. Washington, DC: ThinkWell.
[54] Barroy, Hélène et al. 2014, *Investing in Universal Health Coverage*.
[55] MSP RDC, *Plan National de Développement Sanitaire 2019-2022*.
[56] MSP RDC, *Stratégie de Financement de la Santé.*
[57] MSP RDC, *Stratégie de Financement de la Santé.*

At the health facility level, all operational expenses, including for RI, are written down in different financial registers and sent monthly to the HZ administration. HZs then forward compiled health facility and HZ operational expenses data to the provincial level, where provincial reports are then sent to the central level in Kinshasa. The capture of these expenses at the HZ level is carried out exclusively through a paper-based system. At the central and provincial level, this data is captured through both paper-based and electronic systems, because the infrastructure in some provinces and HZs does not allow reliable internet access, so all financial records are paper based. While there are wide variations in operational expenditure on immunization from one HZ to another, the pattern is clear for all HZ: The paper-based system at the HZ level faces challenges that prevent effective monitoring of expenditure.

The assessment identified limited human resource skills, multiple financial tools for collecting similar information, and inadequate ICT infrastructure that includes weak internet connectivity in the HZs and health facilities as the main gaps hindering efficient and effective monitoring of RI operational expenditure. The outcome of this is over-reliance on paper-based data collection systems, which are frequently used parallel to the electronic systems, especially on the provincial and national level.

The multiple reporting tools for collecting similar information creates the perception that expenditure data capture is burdensome, and therefore expenditure data capture-related activities at the HZ and health facilities level are often sacrificed during busy periods or when there are competing priorities. While there is an unquestionable need for capture of expenditure data within all levels of the health system, the extensive use of multiple paper-based reporting tools puts a burden on the health workforce. Therefore, the parallel PFM paper-based tools—besides HZs' and facilities' reporting of immunization coverage data—increase the reporting burden and increase the risk of errors and confusion among HZ and facility staff. Furthermore, for routine expenditure tracking to be undertaken effectively, expenditure data and immunization coverage data need to be linked at the facility level.

Based on these study insights, we propose the following practical recommendations to selected stakeholder groups in DRC as to how they can streamline and strengthen tracking of routine immunization operational expenses financed by the government budget, at the HZ level. The recommendations are also designed to provide a starting point for discussion among the stakeholders.

Recommendations for DRC government leadership from national and provincial level (policy makers), e.g., MSPHP, Ministry of Budget, Department EPI, Parliament

- Improve the quality of available expenditure data at the provincial and HZ level. A notable challenge identified during this study, in particular for provincial and HZ analysis, was the availability and quality of expenditure data. It is essential to invest in improving this data, in particular by promoting the computerization of financial data and its use at the HZ level.
- Establish a routine data collection mechanism in the health system by: (i) developing a classification document in line with the immunization strategic plan and (ii) developing an Excel tool to support the immunization implementation activities routine tracking.
- Sensitize local authorities to capture financial information on resources allocated and spent on immunization activities.
- Strengthen the capacities of health personnel at the HZ level by providing them with the expertise required to enable them to effectively monitor, supervise, and audit financial information in the HZs.
- Strengthen human resource capacities through training for: (i) revenue and expenditure forecasts; (ii) keeping public accounts in double entry; (iii) monitoring of cash management; and (iv) financial reports analysis.
- Intensify dialogue or create a framework for regular consultation between the MSPHP and the MOF to set up more appropriate health expenditure monitoring tools with more description of the spending items.

- Increase health sector allocations to province level, and address bottlenecks in public financial management to improve financial disbursements and budget execution.

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Recommendations for public sector leaders at the HZ level, e.g., HZMT, Hospital Management Boards, frontline health workers

- Streamline procedures tracking of operating expenses and archiving of financial management tools for the national health strategic plan activities implementation, which will also include immunization operational activities.
- At the provincial health divisions and HZ, develop a database for the national health strategic plan implementation activities monitoring and evaluation, including on activities expenditure tracking with more detail and the source of funding for each activity.
- Create more standardized coding of operational expenses.
- Support the training of managers in the correct use of financial management and computerized tools.

5. REFERENCES

1. *Abuja Declaration and Framework for Action on HIV/AIDS, Tuberculosis and Other Infectious Diseases in Africa*. April 27, 2001. https://www.ppdafrica.org/docs/policy/abuja-f.pdf.
2. Africa Centres for Disease Control and Prevention (Africa CDC). 2023. "Africa CDC Renews Its Commitment to Reduce Vaccine-Preventable Diseases and Outbreaks in Africa." *Africa CDC,* July 4, 2023. https://africacdc.org/news-item/africa-cdc-renews-its-commitment-to-reduce-vaccine-preventable-diseases-and-outbreaks-in-africa/.
3. Ahanhanzo, Césaire Damien et al. 2015. "Determinants of routine immunization costing in Benin and Ghana in 2011." *Vaccine* 33 (Suppl. 1): A66-71. https://doi.org/10.1016/j.vaccine.2014.12.069.
4. Barroy, Hélène et al. 2014. *Investing in Universal Health Coverage: Opportunities and Challenges for Health Financing in the Democratic Republic of Congo*. World Bank. https://openknowledge.worldbank.org/handle/10986/23880.
5. Centers for Disease Control and Prevention. 2006. Vaccine Preventable Deaths and the Global Immunization Vision and Strategy, 2006–2015." *MMWR Weekly* 55(18): 511–515.
6. Fox, Sarah et al. 2014. January. "Paying Health Workers for Performance in a Fragmented, Fragile State: Reflections from Katanga Province, Democratic Republic of Congo. *Health Policy and Planning* 29(1): 96–105.
7. Gavi Staff. 2021. "The Zero-Dose Child: Explained." *Gavi,* April 26, 2021. https://www.gavi.org/vaccineswork/zero-dose-child-explained.
8. Griffiths, Ulla K. et al. 2020. "Budget line items for immunization in 33 African countries." *Health Policy and Planning* 35(7): 753–764. https://doi.org/10.1093/heapol/czaa040.
9. Kinshasa School of Public Health (KSPH). *Enquête de Couverture Vaccinale (ECV) 2021–2022*. 2021. Kinshasa, Democratic Republic of Congo.
10. Lame, Paul et al. 2023. "A Successful National and Multipartner Approach to Increase Immunization Coverage: The Democratic Republic of Congo Mashako Plan 2018-2020." *Global Health: Science and Practice* 11(2): e2200326. https://doi.org/10.9745/GHSP-D-22-00326. PMID: 37116931; PMCID: PMC10141424.
11. MSP 2016. Plan National de Développement Sanitaire 2016–2020: Vers la Couverture Sanitaire Universelle. Kinshasa, Democratic Republic of Congo: Ministère de la Santé Publique (MSP) de la République Démocratique du Congo.
12. MSP RDC (2016) Plan National de Développement Sanitaire 2016–2020: Vers la Couverture Sanitaire Universelle. Kinshasa, Democratic Republic of Congo.
13. MSP RDC (2016) Plan Pluri Annuel Complet du PEV de la République Démocratique du Congo, 2015-2019 en RDC.
14. MSP RDC (2018 unpublished) Analysis Report on the Implementation Situation of the 2018 Budget of the Ministry of Health, Internal Memo.
15. MSP RDC (2018) Plan National de Développement Sanitaire recadré pour la période 2019-2022: Vers la couverture sanitaire universelle.
16. MSP RDC (2018) Stratégie de Financement de la Santé pour la Couverture Sanitaire Universelle en RDC, Avril 2018.
17. MSP RDC (2020) Comptes Nationaux de la Santé (CNS), 2018. Published in 2020.
18. MSP RDC (2020) Plan Pluri Annuel Complet du PEV de la République Démocratique du Congo, 2020-2024 en RDC.
19. PATH. 2022. *Immunization Financing in Africa: Democratic Republic of Congo*. https://media.path.org/documents/CP-immunization-financing-DRC-240412.pdf.
20. EPI. 2019, February 19. *Revue de la première année de mise en oeuvre du plan d'urgence pour la relance de la vaccination de routine Plan Mashako*.

21. PDSS and PVSBG. 2017. Enquête de base pour le programme de financement basé sur la performance en République Démocratique du Congo. Kinshasa, Democratic Republic of Congo: Projet de Renforcement du système de santé pour améliorer les résultats de santé maternelle et infantile (PDSS) and Projet d'urgence relatif à la violence sexuelle basée sur le genre et la santé des femmes dans la région des Grands Lacs (PVSBG).
22. President's Malaria Initiative. *President's Malaria Initiative Democratic Republic of the Congo Malaria Operational Plan FY 2018.* 2017. https://www.pmi.gov/wp-content/uploads/2021/03/fy-2018-democratic-republic-of-the-congo-malaria-operational-plan.pdf.
23. Rémy, Vanessa, York Zöllner, and Ulrike Heckmann. 2015. "Vaccination: The Cornerstone of an Efficient Healthcare System." *Journal of Market Access & Health Policy* 3(1). https://doi.org/10.3402/jmahp.v3.27041.
24. République Démocratique du Congo, Ministère de la Santé Publique. *Plan Pluri Annuel Complet du PEV de la République Démocratique du Congo, 2020–2024 en RDC.*
25. Rodrigues, Charlene M. C., and Plotkin, Stanly A. 2020. "Impact of Vaccines; Health, Economic and Social Perspectives." *Frontiers in Microbiol*ogy 11:1526. https://doi.org/10.3389/fmicb.2020.01526. PMID: 32760367; PMCID: PMC7371956.
26. ThinkWell and WHO. 2022. *Is Decentralization Friend or Foe to Agile Public Financial Management in Health? Findings from Burkina Faso, Indonesia, Kenya, Mozambique, Nigeria, the Philippines, Uganda, and the United Republic of Tanzania*. Washington, DC: ThinkWell.
27. Vaughan et al. 2019. "The Costs of Delivering Vaccines in Low- and Middle-income Countries: Findings from a Systematic Review." *Vaccine* X 2: 100034. https://doi.org/10.1016/j.jvacx.2019.100034.
28. WHO. *Global Immunization Coverage 2021* (WHO Estimates of National Immunization Coverage; Data as of July 2022). https://www.who.int/news-room/fact-sheets/detail/immunization-coverage.
29. WHO. *WHO Recommendations for Routine Immunization—Summary Tables*. Last updated March 2024. https://www.who.int/teams/immunization-vaccines-and-biologicals/policies/who-recommendations-for-routine-immunization---summary-tables.
30. WHO Africa. 2020. "Deaths from Democratic Republic of the Congo Measles Outbreak Top 6000." *WHO African Region*, Jan. 7, 2020. https://www.afro.who.int/news/deaths-democratic-republic-congo-measles-outbreak-top-6000.
31. World Health Organization (WHO) and Global Polio Eradication Initiative. 2019. *Polio Endgame Strategy 2019–2023: Eradication, Integration, Certification and Containment.* https://polioeradication.org/wp-content/uploads/2019/06/english-polio-endgame-strategy.pdf.
32. World Bank. *Congo, Democratic Republic of DRC Health Financing Reform for UHC [Universal Health Coverage]: Fiscal Space Analysis*. June 2021. http://documents1.worldbank.org/curated/en/548211630002377389/pdf/Congo-Democratic-Republic-of-Health-Financing-Reform-for-UHC.pdf.
33. Wright, Jenna. 2015. *Essential Package of Health Services Country Snapshot: The Democratic Republic of Congo*. USAID and Health Finance & Governance Project. July 2015. https://www.hfgproject.org/essential-package-of-health-services-country-snapshot-the-democratic-republic-of-the-congo/.

ANNEXES

Annex 1: Evolution of The Main Health Accounts Aggregates from 2017 to 2021 in Million U.S. Dollars

Indicators (million US$)	2017	2018	2019	2020	2021	2022
Population (millions)	76.20	78.49	80.85	83.51	86.27	88.86
Total health expenditure per capita per year	21.29	20.2	22.7	24.4	25.5	28.4
Total health expenditure as a percentage of GDP	4.31%	3.97%	3.65%	4.39%	3.98%	4.34%
Current government health expenditure as percentage of total current health expenditure (CHE)	10%	15%	16%	16%	16%	ND
Household CHE as a percentage of total CHE	43.80%	45.36%	41.94%	43.19%	43.13%	40.28%
CHE of the rest of the world as a percentage of total CHE	42%	35%	39%	37%	38%	ND
CHE from other sources as a percentage of total CHE	4%	5%	4%	3%	3%	ND
Public health expenditure as percentage of GDP	0.41%	0.59%	0.60%	0.73%	0.65	ND

Sources: MSPHP 2022 health accounts report and MSPHP 2021 health financing mapping report 2020–2024. DRC.

Annex 2: Financial and Accounting Management Tools and Practices

THE BANK BOOK

A bank book records chronologically, on a day-to-day basis, all transactions that result in money coming in or going out of a bank account, whether by cash, check, or bank transfer. A bank book is a register in which the accountant records all the money movements in a bank account. An outflow of money from the bank must be justified by a supporting document (an invoice, a statement of claim, etc.). The authorized person must authorize it according to the levels based on a payment authorization by the bank. An inflow of money per bank must be materialized in the accounting by a remittance slip, a bank statement, or a history of bank account movements.

In the bank book, money receipts are recorded as a debit from the “Bank” account; cash outflows are recorded to the credit of this account on a day-to-day basis. An accounting document that causes money to be taken out of or entered in the bank must be numbered and arranged chronologically. For proper management of bank accounts, one bank book is required for each account, and there must be binders of accounting documents specific to each account. Transactions (records) in the bank books are closed monthly to prepare the monthly financial report.

For cash inflows (deposits, transfers and transfers received), the steps are as follows: (i) Receive the check, payment order, or credit notice/note; (ii) deposit the check with the bank for retainer against delivery of a remittance slip; (iii) send the copy of the check and the remittance slip attached to the cash release voucher to the accountant; (iv) record the check, payment order, or credit advice issued in the check register and in the bank book and (v) collect remittance slips, transfer orders, and transfers.

For cash outflow transactions (withdrawal of funds, transfers, and transfers made), the steps are as follows: (i) Deposit the check at the bank for payment; (ii) withdraw cash and bank statement from the bank after verification; (iii) deposit cash in the cash register; (iv) issue a cash entry voucher; (v) record the contact details and amount of the entry voucher in the cash book; (vi) attach the appendices (payment request form, withdrawal slip and check copy) to the copy of the cash entry form intended for the accountant; (vii) transmit the cash book attached to all appendices to the accounting officer; (viii) collect payment slips, transfer orders, and transfers; (xi) record in chronological order the amounts paid, transferred, withdrawn, and transferred; and (x) clear bank book balances.

Table 7: Bank Book Template

Bank book of bank account No.....

Month……

# Order of the operation	Date	Imputation	Item	Debit	Credit	Balance
Totals to be carried forward						

CASH BOOK

A cash book is presented in the same way as a bank book: first, cash receipts are debited in the cash book and cash outflows are credited on a day-to-day basis; second, an outflow of money must be justified by a supporting document (an invoice, a statement of claim, etc.) and must be authorized by the authorized person according to the levels based on a payment authorization by cash. Cash book transactions are closed on a monthly basis to prepare the monthly financial report.

To complete the cash book, the manager must follow the nine steps: (i) Draw up a cash outflow voucher in three copies based on the payment request form (authorizing the withdrawal); (ii) have the voucher signed by the beneficiary; (iii) count cash; (iv) hand over the cash to the beneficiary; (v) give a copy to the person receiving the cash; (vi) attach the supporting documents (authorizing the disbursement of funds) to the copy intended for the accountant; (vii) send the copy to the accountant; (viii) transcribe the elements of the voucher in the cash book; and (ix) keep and organize the stump books in chronological order.

Cash Book Template

Bank account cash book No.....

Month.....

# Operation order	Date	Imputation	Item	Debit	Credit	Balance
Totals to be carried forward						

EXPENDITURE AND REVENUE TRACKING SHEETS

To monitor the implementation of the budget, the health zone is advised to use the revenue and expenditure tracking sheets. It is these sheets that feed into the monthly financial report.

Revenue Tracking Sheet

Budget line:						
Amount provided in the original budget: ... Congolese franc						
Amount revised by budget amendment of the (date) .../.../: ... Congolese franc						
N° Order	Date	Item	Revenue (amount)	Cumulative revenue	Available balance	Implementation rate
1						
2						
There is as much need for scorecards as there are budget lines						

Expenditure Tracking Sheet

Budget line:						
Amount provided in the original budget: ... Congolese franc						
Amount revised by budget amendment of the (date) .../.../: ... Congolese franc						
N° Order	Date	Item	Expense (amount)	Cumulative Expenses	Available balance	Implementation rate
1						

2						
There is as much need for scorecards as there are budget lines						

PHYSICAL CASH INVENTORY

A physical cash inventory consists of counting and comparing the cash contained with the balance in the cash book. The balance in the cash book must match the money available in the cash register on the relevant date. In the event of a discrepancy, a justification must be provided by the person in charge of the cash register.

Cash Inventory Sheet

Cash: …….				Date :……	
		Cash book balance (= Theoretical inventory)			
		N°	Denomination	Number	Total
		1			
		2			
		3			
		4			
		5			
		6			
		Total Physical Inventory			
Auditor's Comments:					
……	…….	…….	……	Verified by :……	……

PAYMENT REQUEST FORM TEMPLATE

ZS Header
PAYMENT REQUEST FORM NO. ...../...../200X…
Beneficiary:
Amount in figures:
Amount in letter:
Pattern:
Imputation:

Made at..... the (date).....
Approved
Accountant
Allowed by Administrator Manager
Head of the Health Zone Doctor

CHECKOUT VOUCHER TEMPLATE

Health Zone.....AMOUNT	
CASH RELEASE VOUCHER	N° 0001
Mrs., Miss, Mr. ……	
Amount in full	
Purpose……	
Date……	
Cashier	Beneficiary

Annex 3: Budget preparation timetable

Period	Tasks to be performed	Responsible institutions
May	Budget Preparation Directives. Validating the macroeconomic framework	Budget Ministry (Minister's Office & Budget preparation and Monitoring Department). Macroeconomic Framework Committee.
June	Distribution of Budget Directives to line ministries.	. Budget Ministry
July	(i) Workshops on budget preparation, (ii) Preparing indicative budget ceilings, (iii) Disseminating indicative budget ceilings to ministries.	Line ministries. Budget Ministry Budget Ministry

July/ August	(i) Preparation of spending programs in line with ceilings. (ii) Missions to explain instructions and collect data. (iii) Submission of budget proposals to Budget Ministry	Line ministries and Institutions. Budget Ministry Line ministries and institutions.
August	Budget conferences. Distribution of budget allocations.	Budget Ministry and relevant departments. Budget Ministry
September	(i) Breakdown of budget allocations. Submission to Budget Ministry. (ii) Finalization of Government budget. Adoption by the government.	Line ministries and institutions. Budget Ministry (DPSB). Government
October	Draft Budget Law submitted to Parliament.	Government
October/N ovember	Review and approval of budget	Parliament
December	Budget law is promulgated	President

Sources: World Bank. Democratic Republic of Congo Public Expenditure Review (PER). March 2008