



INTEGRATING ROUTINE IMMUNIZATION INTO COMMUNITY HEALTH SERVICES IN GUINEA

**Challenges and Opportunities
for Improving Coverage and Equity**



This report was commissioned by the Health Systems Strengthening Accelerator (the Accelerator) to better understand the systemic challenges to implementing the Guinean Ministry of Health’s National Community Health Policy to improve routine immunization coverage and equity. The Accelerator is a five-year global initiative (2018–2023) funded by the U.S. Agency for International Development (USAID) and the Bill & Melinda Gates Foundation. It provides technical support to address a range of health systems strengthening challenges to ensure the development of sustainable, country-led institutions for continuous strengthening of health systems. The ultimate goal is to help countries and development partners develop new strategies, partnership models, and approaches to support countries on their journey to self-reliance.

Submitted to

USAID

Prepared by

Results for Development

1111 19th Street, NW, Suite 700
Washington, DC 20036

 Click on each entry to jump to that section.

Abbreviations and Acronyms	4
Executive Summary	5
Introduction	6
Objectives and Methods	7
The Health System and Its Key Actors	9
Guiding Policy	9
Health System Structure	9
Expanded Program on Immunization	10
National Directorate of Community Health and Traditional Medicine	12
Community Health Workers and Community Mobilizers	12
Immunization Performance	12
Improving Immunization and Community Health Performance Through Integration	14
Leadership, Coordination, and Governance	14
National Level	14
Subnational Levels	15
Coordination Challenges and Opportunities	16
Financing	18
EPI	18
DNSCMT	18
Coordination Challenges and Opportunities	19
Human Resources	19
EPI	19
DNSCMT	20
Coordination Challenges and Opportunities	21
Service Delivery	22
Coordination Challenges and Opportunities	22
Communication and Social Mobilization	23
Coordination Challenges and Opportunities	23
Monitoring and Evaluation	23
EPI	23
DNSCMT	24
Coordination Challenges and Opportunities	24
Logistics	24
Coordination Challenges and Opportunities	25
Conclusions and Recommendations	26

ANSS	National Health Security Agency (<i>Agence Nationale de Sécurité Sanitaire</i>)
CHW	Community health worker
DHS	Demographic and Health Survey
DNGELM	National Directorate of Major Endemics and Disease Control (<i>Direction Nationale des Grandes Endémies et de la Lutte contre la Maladie</i>)
DNSCMT	National Directorate of Community Health and Traditional Medicine (<i>Direction Nationale de la Santé Communautaire et de la Médecine Traditionnelle</i>)
DTP	diphtheria-tetanus-pertussis
EPI	Expanded Program on Immunization
GNF	Guinean franc
ICC	Interagency Coordinating Committee
JICA	Japan International Cooperation Agency
NGO	nongovernmental organization
PHC	primary health care
POSSav	Civil Society Platform to Support Health and Immunization (<i>Plateforme des Organisation de la Société Civile pour le Soutient à la Santé et à la Vaccination</i>)
RECO	community mobilizer (<i>relais communautaire</i>)
USAID	U.S. Agency for International Development
WHO	World Health Organization

EXECUTIVE SUMMARY

This report presents the results of a study to better understand the challenges of implementing Guinea's 2017 National Community Health Policy to improve immunization coverage.¹

Despite the efforts of the Guinean government and its partners, the country has made little progress in improving routine immunization coverage since the Ebola outbreaks of 2014–2016, and progress has been further disrupted by the COVID-19 pandemic. In 2020, for the fifth year in a row, only 47% of children received three doses of diphtheria-tetanus-pertussis (DTP) vaccine, and 38% of children were “zero-dose” (no doses of any routine vaccination, commonly estimated based on children who received no doses of DTP). Various evaluations have identified the primary drivers of low immunization coverage in the country: low-quality services at the grassroots level, lack of qualified staff, low community commitment, insufficient funding, insufficient coordination of partner activities, and weak leadership among district management.

The report draws on a rapid desk review of key documents; 23 individual and group interviews with government officials, community health workers (CHWs), and other key stakeholders at the national and subnational levels; and subnational dialogue on immunization in the towns of Kindia and Dubreka, including about 30 representatives from community health centers, Guinea's Expanded Program on Immunization (EPI), CHWs, and women role models in each district.

The key findings are as follows:

- EPI considers community engagement crucial to improving immunization coverage and equity at all levels, but no explicit strategies are in place to ensure collaboration with the Ministry of Health's National Directorate of Community Health and Traditional Medicine (*Direction Nationale de la Santé Communautaire et de la Médecine Traditionnelle*, or DNSCMT).
- Lack of coordination between EPI and the DNSCMT results in missed opportunities in terms of personnel, supervision, financing, planning, and community engagement.

The study found that Guinea's National Community Health Policy plays a vital role in improving immunization coverage at both the national and subnational levels and that several opportunities exist to integrate community health and immunization. But due to poor coordination between EPI and the DNSCMT, immunization coverage remains low. Better coordination is urgently needed, through a framework that will allow EPI to achieve its objectives and better involve CHWs and community mobilizers in EPI's programs and activities.

INTRODUCTION

From 2014 to 2016, an Ebola epidemic in Guinea with wide-reaching economic, health, and social consequences highlighted the fragility of the country’s health system. One consequence of the epidemic was a decline in health service utilization, especially in rural areas. According to the Demographic and Health Survey (DHS) of 2012 and 2018,^{2,3} the proportion of pregnant women receiving four prenatal visits decreased from 57% in 2012 to 37% in 2018, and the proportion of fully vaccinated children fell from 37% in 2012 to 30% in 2018.

Following the epidemic, the government of Guinea took action to transition from a health system led and managed at the central, national level to one that decentralizes power, decision-making, funding, and other responsibilities to subnational administrative levels. These changes have taken the form of policies and national strategies that are intended to improve health services, particularly primary health care (PHC) and health outcomes. Examples of these policies include the National Health Development Plan (2015–2024),⁴ which is accompanied by a Strategic Plan (2018–2022) and an Operational Plan (2018–2020) to guide implementation and uptake.⁵ The National Community Health Policy, which adds significantly to decentralization in the community health system, was developed in 2017 and is being implemented concurrently with other decentralization reforms.^{6,7,8} Among other provisions, this policy calls for decentralized oversight and decision-making on resource allocation, staff deployment, and other planning and delivery functions.

In 2017, the National Assembly adopted the Revised Code of Local Authorities (Law AN 017), which transferred up to 14 competencies to municipalities, thereby strengthening the role of subnational levels in managing and providing health services, including for community health.

The government has also increased the proportion of its budget spent on health. From 2009 to 2019, the percentage of the general budget allocated to health increased from 1.6% to 6.2%.⁹ However, this is still below the 15% target set by the Abuja



Declaration on HIV/AIDS, Tuberculosis and Other Related Infectious Diseases, to which Guinea is a signatory.¹⁰ The increased funding has primarily been used to build new health facilities and recruit nearly 5,000 health workers.¹¹

Despite the efforts of the government and its partners, the country has made little progress in improving routine immunization coverage since the Ebola outbreaks, with progress being further disrupted by the COVID-19 pandemic. In 2020, for the fifth year in a row, only 47% of children received three doses of diphtheria-tetanus-pertussis vaccine (DTP), and 38% of children were “zero-dose” (no doses of any routine vaccination, commonly estimated based on children who received no doses of DTP).¹ Various evaluations have identified the primary drivers of low immunization coverage: low-quality services at the grassroots level, lack of qualified staff, low community commitment, insufficient funding, insufficient coordination of partner activities, and weak leadership among district management teams.

OBJECTIVES AND METHODS

A consultant engaged by the Health Systems Strengthening Accelerator conducted a situational analysis to identify known challenges of integrating community health workers (CHWs) into Guinea’s immunization activities and the root causes of disconnect between the immunization program and the National Community Health Policy.

The goals of the analysis were as follows:

- To identify, at the health system level, challenges affecting immunization coverage and equitable access to immunization in Guinea
- To identify challenges and opportunities related to coordination between EPI and the National Directorate of Community Health and Traditional Medicine (*Direction Nationale de la Santé Communautaire et de la Médecine Traditionnelle*, or DNSCMT)

- To understand how better integration of CHWs and community mobilizers (*relais communautaires*, or RECOs) into immunization efforts could help address the system-level challenges
- To identify barriers and opportunities related to integrating immunization into the community health platform

The analysis was conducted in December 2021 and January 2022 and included:

- A rapid desk review of policy documents, government reports, published literature, and gray literature
- Twenty-three individual and group interviews with the participants listed in Table 1, using questionnaires developed for each set of respondents on the topics indicated in the table*
- Subnational discussions on immunization in Kindia and Dubreka (two towns north of the capital, Conakry) on December 21 and December 26, 2021, respectively, which included about 30 representatives of community health centers, EPI, CHWs, and women role models in each district

TABLE 1		Interviewees
Affiliation	Title	Questionnaire Topics
DNSCMT	<ul style="list-style-type: none"> • National director • Head of Community Health Division • Partnership officer • Head of monitoring and evaluation • Section heads • Study managers 	<ul style="list-style-type: none"> • Relationship between the DNSCMT and other services • DNSCMT support plan for EPI • DNSCMT and national EPI operational issues • Causes of those issues • Role of CHWs in immunization and challenges in integrating them into national plans • Solutions offered by the DNSCMT

continued

*A Venn diagram was used as a visual aid to discuss the relationships between the immunization program and community health programs. Interviews were conducted at the DNSCMT and at the National EPI Coordination headquarters.

TABLE 1**Interviewees**

Affiliation	Title	Questionnaire Topics
EPI national level	<ul style="list-style-type: none"> • National EPI coordinator • Communication officer • Data management officer • Monitoring and evaluation officers 	<ul style="list-style-type: none"> • Relationship between EPI and other Ministry of Health support services • DNSCMT and national EPI operational issues related to integrating CHWs into immunization programs • Causes of those issues • Solutions proposed by EPI • Causes of the immunization dropout rate among children at the national level • Causes of low immunization coverage of children under age 5
Partners	<ul style="list-style-type: none"> • World Health Organization (WHO) • UNICEF • Jhpiego 	<ul style="list-style-type: none"> • Observations on DNSCMT/EPI coordination in Guinea • Challenges and opportunities for integrating CHWs into immunization programs • Solutions proposed by the partners
Regional health directorate, Health Directorate of the City of Conakry Health District	<ul style="list-style-type: none"> • Regional director • EPI focal point • Community-based surveillance (regional) • Communication officers 	<ul style="list-style-type: none"> • Relationship between the DNSCMT and EPI focal points • Problems with implementing immunization activities
Health district	<ul style="list-style-type: none"> • Prefecture health director and the district management committee • EPI focal point • Community-based surveillance (regional) • Data managers • Community leader 	<ul style="list-style-type: none"> • Difficulties and opportunities encountered in the use of CHWs for mass and routine vaccination activities
EPI officers	<ul style="list-style-type: none"> • Mayor of the communes and his team • President of the Health and Hygiene Committee • Heads of health centers • Leads of EPI activities in health centers • Data manager 	<ul style="list-style-type: none"> • Difficulties and opportunities encountered in the use of CHWs for mass and routine vaccination activities • Causes of this difficulty between the two
CHWs, RECOs	<ul style="list-style-type: none"> • CHWs • RECOs • Members of the Health and Hygiene Committee • Presidents of the district • Child guardians • Community leaders 	<ul style="list-style-type: none"> • Level of engagement in immunization and reasons for any lack of engagement • Difficulties and opportunities encountered in promoting immunization in communities

THE HEALTH SYSTEM AND ITS KEY ACTORS

Guiding Policy

Article 15 of the Guinean Constitution recognizes health as a fundamental right.¹² The National Health Policy of 2014 aims to improve the health of the Guinean population. Specifically, it aims to 1) reduce mortality and morbidity related to communicable, noncommunicable, and emergent diseases, 2) improve health at all stages of life, and 3) improve the performance of the national health system. The National Community Health Policy, adopted in 2017, sets out a vision in which everyone in Guinea is healthy, economically and socially productive, and has universal access to quality health services and care.¹ It is inspired by the vision set out in the Poverty Reduction Strategy, which aims in the long term to establish an efficient, accessible, and equitable health system capable of fulfilling the right to health of all, especially the most vulnerable.¹³ It is based on a PHC approach whose operations reside at the health district level. The implementation of this policy is guided by the principles of efficiency, people-centered care and integrated services, results-based management, decentralization, and partnership.

Health System Structure

The organizational and functional structure of the Guinean health system is defined by Decree No. D/2011/061/PRG/SGG of 2011.¹⁴ It has three levels of care:

- **National (central) level.** This level includes the minister of health's cabinet, the General Secretariat of the Ministry of Health, four national health directorates, and 10 health programs focused on controlling specific diseases, such as tuberculosis, HIV/AIDS and sexually transmitted infections, and malaria.
- **Regional (intermediate) level.** This level provides technical and logistical support to the prefectural health directorates. The country has eight regional health directorates, including the Health Directorate of the City of Conakry.



- **Health district (peripheral) level.** This includes all health care services provided at health posts, health centers, and prefectural hospitals, which fall under the technical supervision of the prefectural health directorate. Guinea currently has 38 prefectural health directorates, including five communal health directorates in the city of Conakry.

Health centers provide vaccinations, curative primary care, prenatal care, family planning services, and assisted childbirth. The supplementary care package for prefectural hospitals covers specialized care such as general surgery, pediatrics, and obstetrics/gynecology. Regional hospitals offer a similar package of care services as prefectural hospitals, and some also offer specialty care in areas such as cardiology, diabetology, or pulmonology. Prefectural and regional hospitals do not provide immunization services; however, efforts to expand immunization services from health centers to regional and prefectural hospitals is underway, including by installing solar-powered refrigerators and hiring immunization staff. National hospitals offer tertiary services divided into various specialties and are involved in training and research activities.

Other health providers outside the public health sector include:

- **Formal, private for-profit and nonprofit providers.** These include clinics run by nongovernmental organizations (NGOs) and 41 clinics and 106 practices run by religious denominations.

- **Informal private providers.** This sector is developing rapidly and in a poorly controlled way. Although these providers increase access to services, the fees they charge are highly variable and unregulated, and little information is available on the quality of their services.
- **Traditional medicine providers.** This sector is an integral part of PHC and is often patients' first point of contact with the health system, especially in rural areas.

vaccine-preventable diseases by improving routine immunization coverage. In Guinea, EPI works within the Ministry of Health's National Directorate of Major Endemics and Disease Control (*Direction Nationale des Grandes Endémies et de la Lutte contre la Maladie*, or DNGELM) at the national, regional, and prefectorial levels to ensure efficient and equitable vaccine distribution, provide technical support for implementation of activities, and improve immunization surveillance. (See Figure 1.)

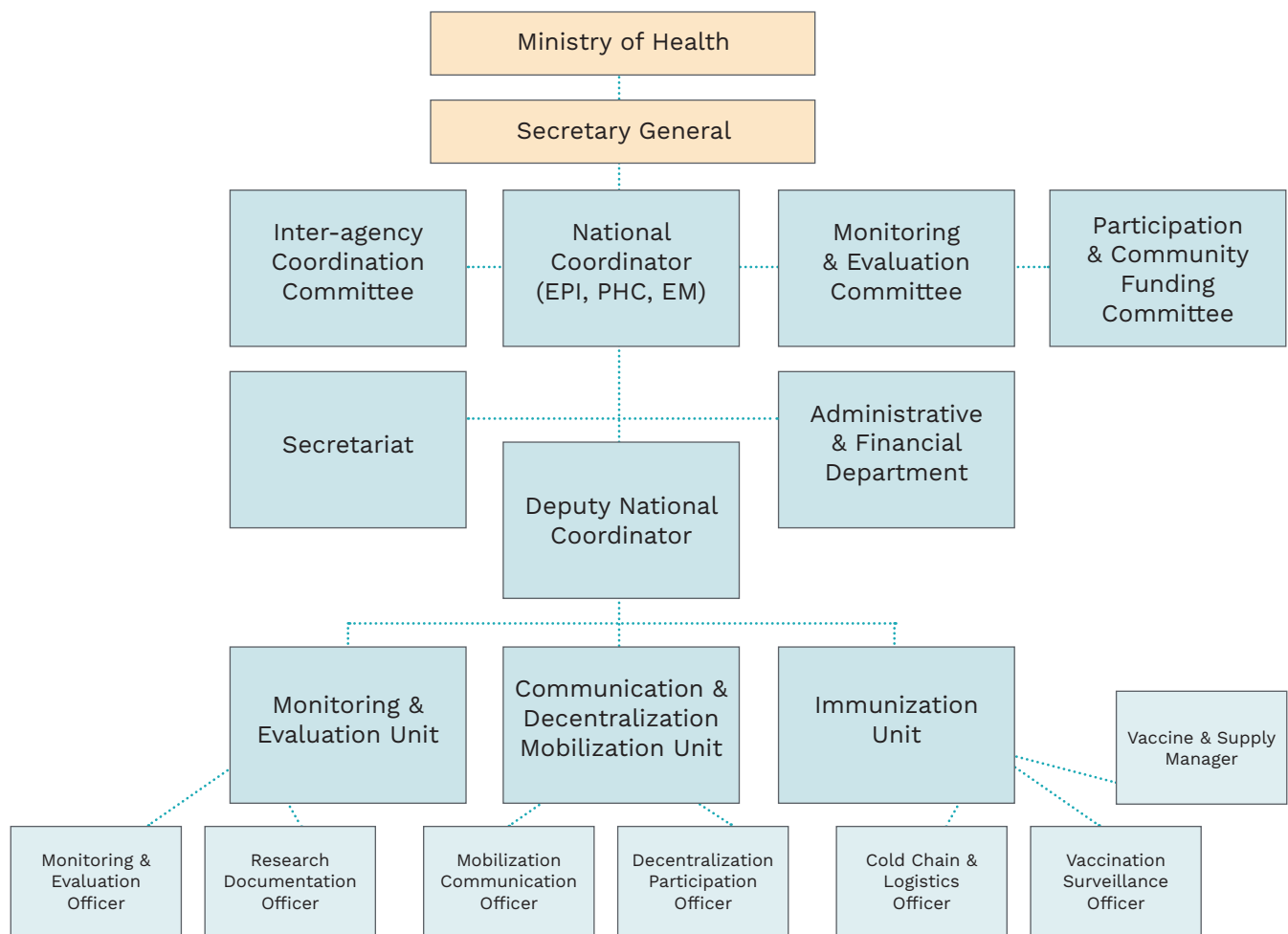
EPI conducts immunization activities at all levels of the country's health system, as follows:

- **National level:** EPI is organized into national coordination, administrative, and financial services and three technical units (immunization; communication, decentralization, and social mobilization; and monitoring, evaluation, and research).

Expanded Program on Immunization

WHO initiated EPI in 1974 with the goal of strengthening national vaccine programs, supply, and delivery and to ensure access to all relevant vaccines across the globe. In 1988, Guinea adopted EPI guidelines for developing and expanding immunization activities, with the goal of controlling

FIGURE 1 Organization of EPI at the National Level in Guinea



- **Regional level:** Coordination of the program is carried out by the regional health directorates. They are responsible for supporting the planning, training, and supervision of staff at the district and health center levels.
- **Health district level:** This EPI level is supervised by prefectural directorates and health centers, which are ultimately responsible for coordinating and implementing immunization activities, including training and supervising health center personnel to ensure the distribution of vaccination services to the target populations in the district.
- **Community level:** The health center is the primary operational level of vaccination activities and ensures the provision of vaccination services to the population. Management of the program at this level resides with the head of the health center, supported by the EPI agent and the Health and Hygiene Committee.

The prefectural health directorate and health centers also conduct communication and monitoring activities.

At the national level, EPI is further supported by advisory bodies, including the Interagency Coordinating Committee (ICC), the National System for Health Information and Management, and the Commission on Community Participation and Financing. It is also supported by the National Committees for Certification of Polio Eradication, the Adverse Events Following Immunization Committee, and the Technical Advisory Group for Immunization. Communication and community mobilization are further supported by civil society organizations.

Table 2 lists EPI’s objectives as defined in Guinea’s 2016–2020 Comprehensive Multi-Year Plan.¹⁵

TABLE 2		GUINEA’S EPI Objectives (2016-2020)	
Component	Objectives		
Routine immunization	<ul style="list-style-type: none"> • Increase coverage of fully immunized children (DTC3-Hepb3/Hib3 and VAR) from 53% to at least 90% at the national level and to 80% in all 38 health districts in an equitable manner. • Introduce new vaccines against pneumococcus, rotavirus, human papillomavirus, measles, Ebola, and others as relevant in all health districts. 		
Supplementary immunization activities	<ul style="list-style-type: none"> • Expand coverage of supplementary immunization activities for polio, measles, meningitis, yellow fever, and tetanus to reach at least 95% of the targeted population. 		
Data management	<ul style="list-style-type: none"> • Provide quality and timely data in at least 90% of health districts. 		
Effective vaccine management	<ul style="list-style-type: none"> • Increase effective vaccine management at all levels from 37% to 80% to assess, monitor, and improve vaccine supply chains. • Develop and implement a biomedical waste management plan that follows WHO and environmental standards. 		
Surveillance of EPI target diseases	<ul style="list-style-type: none"> • Achieve acute flaccid paralysis surveillance indicators for polio eradication. • Achieve indicators for surveillance of measles, yellow fever, meningitis, and pertussis and elimination of maternal and newborn tetanus. 		
Communication	<ul style="list-style-type: none"> • Ensure that 90% of individuals and communities understand the value of vaccines and demand vaccination as a right and a responsibility. 		
Program management	<ul style="list-style-type: none"> • Improve coordination, leadership, governance, and resource mobilization structures at all levels from 2017 to 2020. 		

National Directorate of Community Health and Traditional Medicine

Primary and preventive health care, particularly in rural areas, has been a priority for Guinea since it signed on to the Alma Ata Declaration in 1978.¹⁶ Since the Ebola epidemic, national health strategies have focused on strengthening community health strategies, including by creating linkages to traditional medicine, to achieve health system strengthening and resiliency.¹ The National Community Health Policy is implemented at all levels of Guinea's health system:

- **National level:** The DNSCMT is responsible for overall implementation of the National Community Health Policy, including developing standards and procedures, ensuring strategic planning and coordination, guiding research and development of strategies and messages, producing and harmonizing communication materials, ensuring monitoring and evaluation, and developing management and training tools.
- **Regional level:** At this level, activities are to be integrated into annual work plans in line with the national strategic plan. Regional health sector coordination committees are responsible for coordinating implementation and monitoring of the region's health development plan.
- **Health district level:** At this level, activities are to be integrated into annual work plans in line with the national strategic plan. The prefectural Health Sector Coordination Committee is responsible for coordinating implementation and monitoring of the district's health development plan.
- **Community level:** Each commune's Health and Hygiene Committee, supported by health personnel and local authorities, is responsible for ensuring community involvement at all stages of planning, implementation of community activities, and monitoring of health program implementation. The commune's Health Sector Coordination Committee is responsible for coordinating community-based activities. Community forums are to be regularly organized with the involvement

of civil society organizations and community leaders.

The implementation of the National Community Health Policy requires alignment with the development and implementation of the Ministry of Health's Community Health Strategic Plan, Health District Development Plans, Local Community Development Plans, and the Operational Action Plans of the Basic Health Structures.

Community Health Workers and Community Mobilizers

The National Community Health Policy also prioritizes the recruitment, training, and salaried payment of CHWs and RECOs. These roles are typically supported by donor-driven vertical programs or contracted by district health offices. The National Community Health Policy stipulates that CHWs are to provide immunization-related services such as advocacy, communication, and tracking infants lost to follow-up, but this is not always the case. CHWs do not vaccinate children.

IMMUNIZATION PERFORMANCE

An analysis of immunization coverage data since 2007 reveals a coverage pattern that can be broken into four phases. (See Figure 2.)

- **From 2007 and 2011,** access to the health system was relatively high and, on average, climbing, as demonstrated by bacille Calmette-Guérin (BCG) vaccine coverage increasing from 84% in 2007 to a peak of 93% in 2010 and one dose of DTP (DTP1) coverage increasing from 76% in 2007 to a peak of 86% in 2010. Less progress was seen in third-dose vaccines, with third dose of DTP (DTP3) coverage stagnating at 63% in 2007 and 2013, with few variations in between. These trends indicate an increasing DTP1 to DTP3 dropout rate during this same period, from 13% in 2007 to a peak of 22% in 2010.

- **From 2011 and 2013**, before the start of the Ebola epidemic, immunization coverage already began to fall. By 2013, coverage for BCG, DTP1, and DTP3 was 71% (22-point fall from peak), 64% (22-point fall from peak), and 50% (14-point fall from peak), respectively.
- **In 2014**, the start of the Ebola epidemic resulted in an average 5-point fall across all antigens except tetanus toxoid 2+ (TT 2+), which lost 31 points of coverage.
- **In 2015**, coverage improved by an average of 3 points across all antigens except TT 2+ (which dropped another 8 points) and has remained nearly stagnant ever since. Six vaccines, including DTP3, measles-containing-vaccine first-dose (MCV1), oral poliovirus vaccine type 3 (OPV3), and inactivated poliovirus vaccine (IPV), have achieved coverage between 47% and 48% every year since 2015.

TT 2+ has been an important coverage success story in Guinea, maintaining relatively high coverage over time except during the Ebola epidemic, from which it recovered substantially to 84% in 2020. This achievement reflects the country’s progress toward achieving regional targets for the elimination of maternal and neonatal tetanus. BCG coverage is

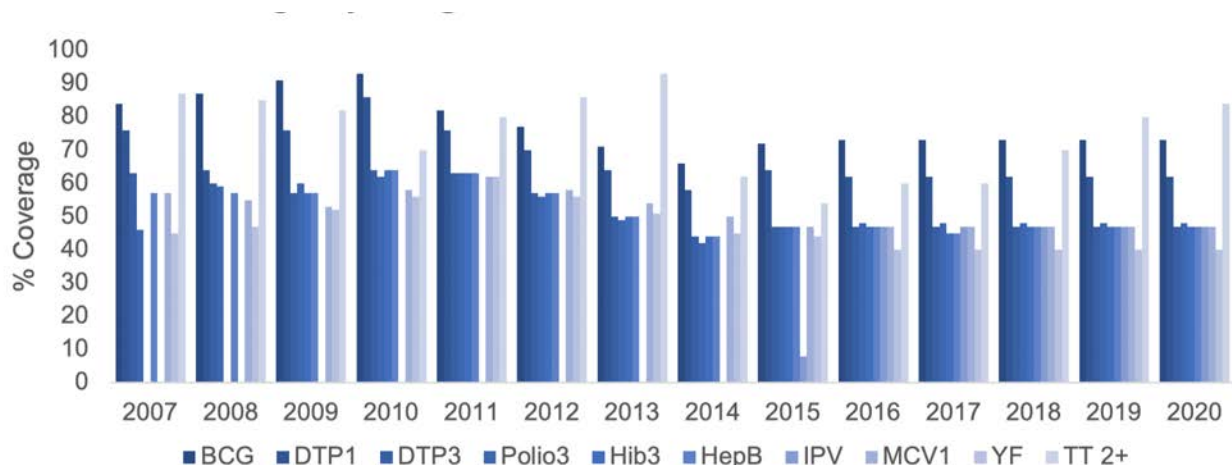
also relatively strong, at 73% in 2020. The country did not see a drop in coverage for any antigen in 2019-2020 with the onset of the COVID-19 pandemic, and TT 2+ coverage increased by four points during that period.

Inequity in immunization coverage is high. According to WHO/UNICEF estimates, 38% of children were zero-dose in 2020, having received no doses of DTP¹⁷

In 2018, 55% of children in the lowest income quintile were zero-dose (and 74% underimmunized, having not received DTP3), compared to just 19% who were zero-dose (and 55% underimmunized) in the highest income quintile. In rural areas, 45% of children were zero-dose, compared to 21% of children in urban areas. The highest proportion of zero-dose children were found in the Labe region (59%) and the lowest in Conakry (23%).³

These trends reflect high overall mortality and lack of access to the health system despite government efforts to improve health system strength and resiliency since the Ebola epidemic. Guinea’s under-5 mortality rate of 99 deaths per 1,000 live births is above the sub-Saharan regional average of 76 deaths per 1,000 live births.¹⁸ Many of these deaths are due to preventable causes, including vaccine-preventable diseases.¹⁹

FIGURE 2 Vaccine Coverage by Antigen (2007-2020)



Source: World Health Organization (WHO), United Nations Children’s Fund (UNICEF), 2021. *WHO and UNICEF Estimates of Immunization Coverage: 2020 Revision*. Geneva, Switzerland / New York, NY: WHO/UNICEF.

IMPROVING IMMUNIZATION AND COMMUNITY HEALTH PERFORMANCE THROUGH INTEGRATION

Through interviews and community discussions, respondents were asked to identify the root causes of challenges within the health system as well as important health system assets on which the immunization program and the National Community Health Policy could build through integration. The factors they identified are summarized in the following sections.

Leadership, Coordination, and Governance

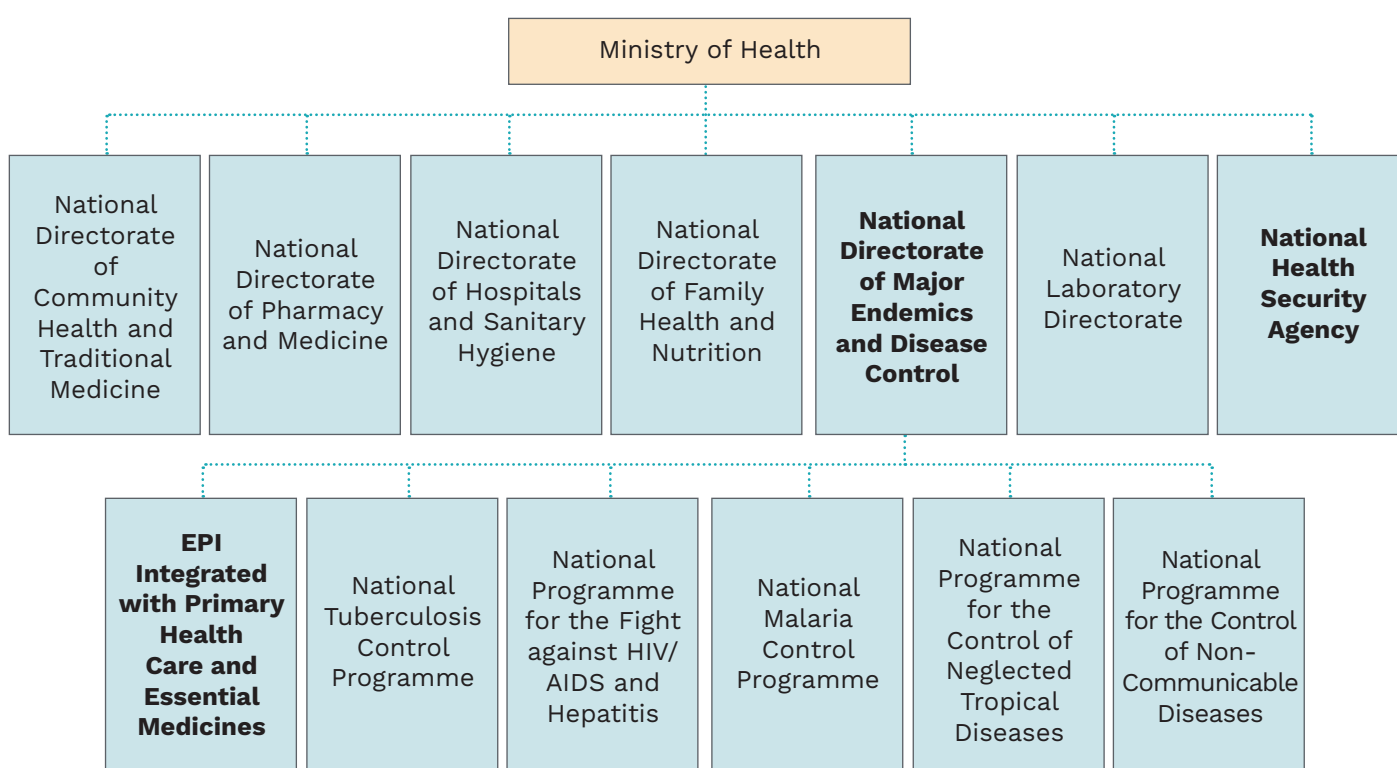
National Level

Figure 3 depicts the organization of the directorates and programs under the Ministry of Health and highlights those involved in immunization and community health.

At the national level, the community health program is led by the DNSCMT, which is responsible for implementing government policies on community health and traditional medicine and ensuring monitoring and evaluation. The DNSCMT's responsibilities include:

- Drafting laws and regulations relating to community health and traditional medicine and ensuring their implementation
- Developing community health and traditional medicine policy and program documents
- Defining standards and procedures for community health and traditional medicine

FIGURE 3 Organization of Select Ministry of Health Directorates and Programs



- Participating in the organization of primary preventive care, particularly vaccination and sanitation programs
- Contributing to building communities' capacity to provide basic health services
- Promoting traditional medicine and certifying traditional practitioners
- Developing partnerships between grassroots health services and communities, and between public services and traditional medicine
- Helping to mobilize resources for community health and traditional medicine programs and projects
- Organizing supervision and evaluation of community health and traditional medicine activities
- Participating in national, subregional, and international meetings dealing with community health and traditional medicine issues
- Ensuring the rational use of the resources made available for the program
- Advocating with multilateral and bilateral partners and the private sector to increase funding for the program
- Establishing a statistical database on PHC, including immunization, epidemiological surveillance of EPI target diseases, and indicators on the sustainability of basic health facilities
- Contributing to the training of health actors involved in implementing PHC
- Ensuring the implementation of the Global Immunization Vision and Strategy
- Ensuring oversight of the program through the evaluation, financial control, and monitoring of activities
- Ensuring continuous improvement in the quality of services

- Supporting PHC implementation research

Meanwhile, EPI Integrated with Primary Health Care and Essential Medicines sits below the DNGELM. It coordinates implementation of primary health care throughout the country. Its responsibilities include:

- Developing a PHC coverage plan and ensuring its implementation in the field
- Helping to define standards for activities, staff, and equipment in basic health facilities
- Ensuring the coordination and supervision of program activities at the central level (technical units) and at decentralized levels (health care administration)
- Liaising between partners, other departments, and the Ministry of Health
- Ensuring the mobilization and distribution of resources for program activities at national and subnational levels
- Promoting the gradual integration of PHC components in collaboration with other relevant departments of the Ministry of Health in all decentralized structures

Although EPI has had primary responsibility for immunization since the Ebola epidemic, it partially shares this responsibility with the National Health Security Agency (ANSS), which is also under the Ministry of Health and manages outbreak response and new vaccine introduction.

Subnational Levels

At the regional and health district levels, responsibility for coordinating, implementing, and monitoring health activities and the National Community Health Policy lies with the regional technical committees, prefectural technical committees, sub-prefectural technical committees, and community councils. The National Community Health Policy also outlines a plan to improve community participation and inform local planning and budgeting at the lowest levels:

- **Village level:** The village health committee is responsible for holding forums to monitor health activities. Community associations, CHWs, RECOs, service providers, and community leaders are invited to participate to identify and discuss health problems affecting the community and mobilize resources.

- **Municipal level:** Monthly technical meetings are to be held in health centers to collect and analyze information from community health interventions. CHWs, RECOs, health workers from the local health post, and local NGOs are invited to participate to identify problems and mobilize resources.
- **Sub-prefectural level:** The municipal council is responsible for producing a sub-prefectural monitoring summary every six months that includes the results of health activities and plans to solve problems. Health workers, CHWs, RECOs, and representatives of village health committees, civil society organizations, and community platforms are invited to participate.

Immunization activities are discussed in these forums along with other health activities.

The National Community Health Policy also calls for strengthening local governance mechanisms because low engagement of women and young people in health decision-making processes and the lack of an oversight committee for universal health coverage at the community level have been noted as concerns.

Coordination Challenges and Opportunities

At the national level, EPI and the DNSCMT significantly overlap in their immunization service delivery roles. The DNSCMT is charged with participating in the organization of PHC, promoting community ownership of health activities, helping to mobilize local resources for health, and monitoring and evaluating community health services (including immunization). EPI is charged with defining activities, staff, and equipment for basic health facilities, coordinating program implementation at the subnational levels, mobilizing and distributing resources, integrating PHC activities, training PHC staff, and monitoring and evaluating health programs.

However, these two programs are under separate directorates, with no formal coordination mechanisms that focus on the role of the community health program or CHWs in immunization. Respondents noted that despite EPI's efforts to improve routine immunization

coverage and its alignment with Guinea's national policies and the DNGELM, coordination between EPI and the DNSCMT is weak or absent. This prevents harmonization of immunization efforts relating to community health, especially integration of immunization into the community health program.

A review of policy documents and the statements of respondents revealed a lack of explicit strategies to ensure collaboration between EPI and the DNSCMT, despite that fact that EPI considers community engagement at the national, regional, and prefectural levels to be essential to improving immunization performance in Guinea. No body at the national level is charged with fostering dialogue between EPI and the DNSCMT on integration or the ongoing activities of EPI and CHWs, even though both programs sit on the Ministry of Health's Cabinet Council.

Respondents reported that this lack of coordination leads to missed opportunities in terms of staffing, supervision, funding, planning, and community engagement.

EPI's shared leadership of immunization with the ANSS creates another coordination challenge, with EPI officials reporting difficulty compiling data and coordinating activities between both agencies.

To improve coordination, these programs could build on strong existing coordinating platforms for immunization and community health. These include:

- **Interagency Coordinating Committee for EPI.** This committee, chaired by the minister of health, discusses all activities related to EPI. Its members include EPI's main external partners—Gavi, the Vaccine Alliance; WHO; UNICEF; U.S. Centers for Disease Control and Prevention; AMP Health; Civil Society Platform to Support Health and Immunization (*Plateforme des Organisation de la Société Civile pour le Soutient à la Santé et à la Vaccination*, or POSSaV), Bill & Melinda Gates Foundation; Japan International Cooperation Agency (JICA); Rotary International, USAID; International Committee of the Red Cross, Helen Keller International, World Bank, United Nations Population Fund, and United Nations Development Program—as well as representatives of the national directorates of the Ministry of Health and other ministries.

The ICC meets quarterly to analyze and monitor the progress of EPI activities. Plans are underway to elevate the level of ICC decision-making by involving high-level state officials (ministers, secretaries general, advisers, national directors, and so on) and representatives of partner institutions and civil society organizations. The ICC is committed to forging strong partnerships by mobilizing and coordinating national and international contributions and resources to support child welfare.

- **POSSaV.** This platform brings together civil society partners to advocate for immunization and the prevention and treatment of neglected tropical diseases. It also promotes accountability and transparency in health care and immunization.
- **Technical Advisory Group for Immunization.** This group was formed in 2018 to guide the minister of health and EPI managers in defining and implementing national vaccination policies and strategies.
- **Coordinating committees for polio.** These include the Polio Expert Committee, the National Certification Committee for the trivalent to bivalent OPV switch, and the Polio Containment Task Force.

At the subnational levels, immunization is discussed at regional, prefectural, and sub-prefectural health coordination meetings. But participants in the discussions in Kindia and Dubreka noted that those discussions were the first time that CHWs, RECOs, immunization staff, the heads of health centers, and women community representatives had been brought together for a focused discussion on immunization. They also noted that closer collaboration at the district level was needed to improve the planning of routine immunization activities, transparency, trust in the immunization program, and communication on issues like stockouts. Participants also noted that failure to engage CHWs and RECOs in planning for immunization campaigns, which is often rushed in response to outbreaks, hinders success and can damage community trust in the immunization program.

Participants said that immunization activities should ideally be planned collaboratively by the heads of health centers, CHWs, RECOs, EPI agents, and local community leaders. This would also allow CHWs and RECOs to better engage with other important advocates for immunization, such as local political authorities and religious leaders. Participants noted the need for a formal framework to guide community engagement in immunization at all levels and reward a community's strong immunization performance in terms of reaching zero-dose children and achieving high coverage. They also noted the lack of significant policy and strategy guidance on urban immunization and said they wanted guidance from the national level on how to reach these areas and on the role of CHWs and RECOs in immunization in these communities. The DNSCMT is working to review and extend the original National Community Health Policy to include urban areas, which would create an opportunity to integrate CHWs and RECOs into urban immunization services.

Participants noted the importance of emphasizing to immunization staff at all levels that the National Community Health Policy is a strategy that all programs are responsible for helping to implement—not a *program* that is the sole responsibility of the DNSCMT. They also noted insufficient ownership and monitoring of the National Community Health Policy on the part of regional, prefectural, and communal immunization actors, resulting in low utilization of CHWs for immunization.

Financing

As mentioned earlier, from 2009 to 2019 the percentage of Guinea's government budget allocated to health increased from 1.6% to 6.2%,⁹ but it remained far below the 15% target set by the Abuja Declaration.⁹ Current government initiatives to improve financing for health include implementing the national compact to achieve universal health coverage, signed in 2016,²⁰ increasing subsidies for health facilities, gradually increasing the share of the budget allocated to health to 10%, strengthening the consultative framework with technical and financial partners, mobilizing financial resources from the mining sector, and imposing taxes on mobile telephone companies and tobacco and petroleum products. Following a steep increase in out-of-pocket spending, from 49.76% in 2016 to 67.12% in 2018, that figure has fallen to 59.22%, according to the most recent World Bank report from 2019, although it remains high.²¹

EPI

The national EPI is highly dependent on funding from external partners, and vaccines are typically acquired through funding from non-reimbursable donations. Since 2011, Gavi and the national government have provided most of the funding for routine immunization vaccines. Cold chain equipment and supplies are primarily funded by the government, UNICEF, JICA, Rotary International, and WHO. A Gavi Health Systems Strengthening grant supports strengthening of immunization systems in 21 priority health districts. Efforts are underway to mobilize additional resources for EPI and vaccines, but respondents report that efforts often remain sidelined or delayed.

As part of a policy aimed at gradually financing the supply of vaccines from domestic resources, WHO's Vaccine Independence Initiative was introduced in 2005 through an agreement between the Guinean government and UNICEF. However, the country experienced a sociopolitical crisis from 2009 to 2013 that disrupted implementation of the initiative. Nevertheless, according to WHO, from 2013 to 2020 government expenditure on vaccines for routine immunization increased from 174,000 USD to 366,532 USD.²²

Guinea has honored all of its Gavi co-financing commitments for vaccines, although funding disbursements are often delayed.

Respondents noted that EPI has had difficulty mobilizing sufficient resources to fill funding gaps so gains in immunization coverage over the past decade can be maintained. Participants in the discussions in Kindia and Dubreka noted that expected funding for health services often does not reach the health district level, resulting in lack of payments for CHWs and EPI agents and frequent stockouts of supplies.

DNSCMT

Through decentralization, control over financial resources for health is gradually shifting to the subnational levels. This involves transferring management and implementation responsibilities and developing financial management capacities at these lower levels. The goal is for local authorities to make significant health financing commitments, but local authorities currently have access to few resources and their budgets go primarily to the salaries of contracted staff.

In addition to grants from the national level and subnational budgets, community health services benefit from:

- External donor and partner resources
- Donations and legacy gifts from local citizens, members of the Guinean diaspora, and charities
- Innovative financing arrangements with telephone and mining companies and taxes on tobacco, alcohol, and carbon

Respondents noted that households indirectly finance some costs of preventive services, including immunization, through a cost recovery system whereby health centers fund some of their operating expenses through fees for curative care and the sale of essential drugs. Since the implementation of a policy to provide free access to certain services, including obstetric and malaria care, health centers have had difficulty fully financing their operating and outreach costs.

The National Community Health Policy notes the need to address several urgent financial barriers to successful implementation, including low levels of community financial resources and low access to essential family services, resulting in high catastrophic spending by rural households and lack of local mechanisms for income generation.

Coordination Challenges and Opportunities

External financing disbursements for subnational immunization and other health activities are managed by the Program Management and Coordination Support Unit. Respondents noted that a frequent cause of delayed release of funds to subnational levels is the submission of immunization budgets to the national development budget in the incorrect format by program managers. Respondents also noted a need to train program managers in budget development. Improved coordination at the national level between the Program Management and Coordination Support Unit, EPI, and the DNSCMT may help address the challenges to timely budget approval and release of funds.

The government has stated that a high priority for immunization financing is the mobilization of local resources for immunization. It recently created the National Financing Agency for the Financing of Local Authorities, which is responsible for collecting sectoral budget allocations for local governments and ensuring their enrollment in the Local Development Fund for local health and development purposes, including immunization and community health.²³ At the same time, respondents at the local level note the need for increased national support for immunization service delivery given the severe resource constraints at the local level.

Human Resources

EPI

EPI, at all levels, is staffed partially by full-time government employees and partially by contractors hired by EPI with financing from partners.

Respondents noted that staff are insufficient at all levels in terms of both quality and quantity, particularly in rural areas. Many staff left the national EPI following the country's military coup in 2021.

The government is implementing a staff recruitment plan, but no training plan is yet in place for staff at the national level.

Within health facilities, immunization activities are implemented by EPI agents. These are trained health workers who are contracted by the district health office or trainees who work under the supervision of the head of the health center.

The responsibilities of EPI agents include:

- Implementing fixed and advanced immunization strategies
- Monitoring the stock and proper storage of vaccines
- Collecting, analyzing, and reporting immunization data
- Liaising with the government and other actors in the event of an outbreak

However, many EPI agents lack formal training in immunization. Supervision of EPI staff is conducted through semi annual visits from the central level to the regions and districts, quarterly visits from the region to the districts, and monthly visits from the districts to the health centers. Respondents noted supervision challenges, including lack of qualified staff on the district and regional supervision teams and insufficient guidance and support from supervision teams (perhaps linked to lack of training and capacity).

Respondents identified several crucial areas of need in order to increase routine vaccination coverage:

- Improving supervision, training, and mentoring of immunization staff
- Ensuring that all relevant staff are using the most up-to-date guidelines
- Providing financial literacy training for relevant staff so they can complete immunization budgets on time and avoid delays in releasing funds
- Recruiting additional immunization staff at all levels
- Ensuring timely payment of EPI agents

DNSCMT

The community health program is implemented at the national, regional, and health district levels by DNSCMT staff; regional health directorates; and prefectural health directorates, health centers, and health posts, respectively. At the lowest level, two categories of community workers implement the National Community Health Policy: CHWs and RECOs, who report to CHWs.

CHWs are trained health workers recruited by the community and made available to health centers under the supervision of the head of the health center. They are contracted by the municipality and receive monthly pay of 1.2 million GNF. Their responsibilities include:

- Providing technical support to RECOs, particularly in managing simple cases of malaria, diarrhea, and respiratory infections
- Analyzing activity sheets/registers or RECO notebooks to identify problems and propose corrective measures
- Preparing reports
- Participating in the implementation of advanced strategies for immunization
- Reporting communicable diseases

RECOs are contracted by municipalities and receive monthly incentive pay of 450,000 GNF. Their responsibilities include:

- Sensitizing families and communities on the importance of preventive health practices, including immunization and use of health facilities
- Registering births, deaths, and pregnancies
- Searching for children who have been lost to follow-up for vaccination
- Providing some preventive health services, such as prenatal and postnatal care, distribution of oral contraceptives, and screening for malnutrition
- Providing community advice on revenue-generating activities
- Reporting communicable diseases
- Providing integrated management of childhood diseases

CHW and RECO incentives are funded by the government or partners, as shown in Table 3. The biggest funder is the Global Fund to Fight AIDS, Tuberculosis and Malaria, which funds CHWs and RECOs in 78 municipalities. When CHWs are funded by partners, they are often focused on supporting specific disease programs.

Supervision of CHWs and RECOs is provided at least monthly by the head of the health center or other health center staff, in collaboration with partners.

TABLE 3 Partners Supporting Community Health

Partners	Number of Municipalities	Period	Number of Prefectures
UNICEF	40	2018–2022	24
Jhpiego/USAID	11	2019–2021	3
Global Fund	78	2019–2022	8
World Bank / Doctors Without Borders	53	2020–2022	8
Gavi	32	2021–2023	3
Global Fund / Support Program for Strengthening the Health System (PASA2)	43	2020–2022	6
Total	257	0	

Source: DNSCMT

The supervisor uses a checklist to assess whether objectives set by the CHWs and communities have been met.

A key challenge for the implementation of the National Community Health Policy has been delayed government payment of incentives for CHWs and RECOs, which results in low morale and high staff dropout rates. In 2021, only 73% of municipalities were covered by CHWs and RECOs, and only 43% and 44% of RECO and CHW posts were filled, respectively, resulting in a gap of 1,119 CHWs and 11,318 RECOs. The lowest coverage is in Conakry (0%), Boké (18%), and Nzérékoré (26%), and the highest is in Mamou (over 80%), as shown in Table 4. RECO participants in this study said they often went three to six months without receiving payment.

Ideally, CHWs will one day receive additional non-monetary incentives, such as vocational training, continuing education, and attractive living and working conditions.¹ But the National Community Health Policy is currently focused on financing and resource issues to improve the quality and retention of CHWs and RECOs as well as the quality of training institutions.

Coordination Challenges and Opportunities

The responsibilities of EPI agents, CHWs, and RECOs in immunization service delivery overlap, as

shown in Figure 4. But coordination is lacking at all levels to ensure clarity of immunization roles and responsibilities, adequate training of all actors, and integrated supervision of immunization activities.

Respondents noted that CHW and RECO knowledge of immunization was low, particularly around vaccination schedules, interpersonal communication strategies, and the Child Recovery Strategy for those lost to follow-up. In some cases, this may partly stem from the low knowledge and capacity of local immunization staff. As a result, CHWs' ability to meet the following vaccination responsibilities is particularly weak or nonexistent:

- Conducting a census of children up to age 5
- Following up with children who have dropped out of the immunization schedule
- Promoting immunization services
- Preserving vaccination cards

On the other hand, respondents noted that EPI agents have low knowledge of the National Community Health Policy, making it difficult for them to understand and support CHWs and RECOs in immunization. Furthermore, supervision of EPI agents and CHWs is often done by separate actors, making it difficult to solve problems related to immunization activity and data collection.

Region	2021 Population	Target		Number of RECO		Number of CHWs		Gap		Coverage	
		RECO	CHW	Operational	In progress	Operational	In progress	RECO	CHW	RECO	CHW
Mamou	897,518	1,381	138	108	1,018	11	105	256	22	81%	84%
Faranh	1,156,311	1,779	178	87	1,324	9	136	368	22	79%	82%
Kankan	2,409,867	3,707	371	648	1,850	65	185	1,209	121	67%	67%
Kindia	1,916,276	2,948	295	915	584	96	59	1,449	140	51%	53%
Nzérékoré	1,938,227	2,982	298	249	526	25	53	2,207	220	26%	26%
Labé	1,219,391	1,876	188	263	601	26	60	1,012	102	46%	46%
Boké	1,330,079	2,046	205	368	0	37	0	1,678	168	18%	18%
Conakry	2,039,725	3,138	314	0	0	0	0	3,138	314	0%	0%
Total	12,907,394	19,858	1986	2,638	5,902	269	598	11,318	1,119	43%	44%

Source: DNSCMT (translated from French)

Service Delivery

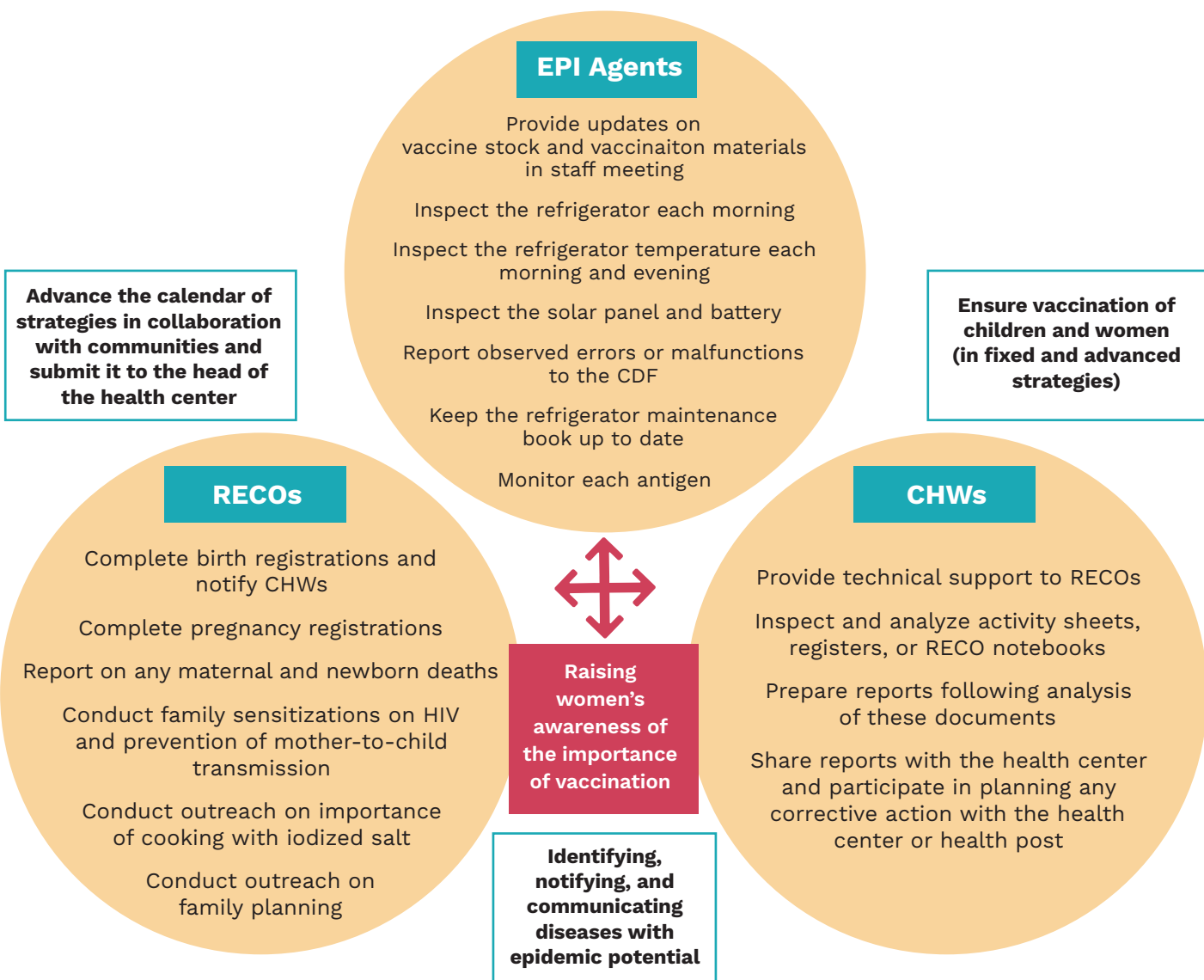
The National Community Health Policy notes that a primary challenge in reaching populations with health services is lack of access to quality, equitable, and person-centered basic health services.

EPI staff respondents reported that, in addition challenges related to poor planning and coordination of immunization activities, lack of qualified staff in rural areas, insufficient financial resources to support advanced strategies, insufficient supervision, and poor data quality, other key factors affecting access to immunization services include:

- Insufficient vaccination sessions
- Missed vaccination opportunities
- Geographic barriers to health center access in rural areas, including poor road conditions and remoteness of communities such as fishing camps, hamlets, and makeshift mining camps

Although routine vaccination is supposed to be free in Guinea, one respondent reported instances of EPI agents charging fees. The respondent stated that this practice may be partly due to the fact that most EPI agents are trainees with limited incomes.

FIGURE 4 Immunization Responsibilities of EPI Agents, CHWs, and RECOs



Coordination Challenges and Opportunities

The breakdown in communication around service delivery between CHWs/RECOs and EPI agents is a key challenge. Respondents from the immunization program reported that they frequently arrive in villages for outreach sessions only to find that the village is empty because the community was not informed by the RECO of the vaccination schedule. This is particularly an issue when the vaccines are lyophilized (freeze-dried), as they tend to expire before the community arrives. On the other hand, CHWs and RECOs involved in the community discussions reported that they were often not included in the planning of immunization activities, which would allow them to provide support.

The use of CHWs and RECOs is crucial to reaching populations in geographically remote areas with basic health services. Close coordination between immunization staff and CHWs/RECOs can help identify and follow up with children in these locations. CHWs and RECOs can also provide valuable feedback to EPI agents about challenges that communities face in accessing services.

Communication and Social Mobilization

EPI in Guinea has three communication strategies: advocacy, social mobilization, and communication for behavior change. While EPI staff at the national level and in regional or district health offices play a role in advocacy, much of the responsibility for social mobilization and communication for behavior change falls to the health centers, EPI agents, CHWs, RECOs, and social mobilizers. These actors are responsible for engaging community leaders and conducting communication activities such as radio spots, megaphone announcements, posters in health facilities, and home visits. Social mobilizers are specifically trained to provide support during mass community activities when an insufficient number of RECOs are available. Responsibility for financing the routine immunization communication plan falls to communities and health centers.

Respondents noted that EPI at the national level does not have a formal communication plan. The national EPI does not regularly engage the press, and a plan to create a national network of

journalists to support immunization has not been implemented. EPI does not have sufficient budget at the national level to support these activities.

Coordination Challenges and Opportunities

Respondents noted that key challenges in this area include:

- Insufficient staff trained in communication for immunization, including interpersonal communication, mass communication, and advocacy strategies
- Insufficient supervision and training for CHWs and RECOs in communication activities
- Low engagement of CHWs and RECOs in immunization activities generally

Although responsibility for communication falls to health centers, they rarely have a routine immunization communication plan in place.

Monitoring and Evaluation

EPI

EPI coverage estimates are based on administrative vaccination data, regular surveys such as the DHS or Multiple Indicator Cluster Survey, and external program reviews. The coverage estimates vary significantly by data source. These sources frequently put administrative coverage of DTP3, OPV3, and varicella at 95% or higher, compared to official WHO/UNICEF estimates of less than 70%.²⁴ From 2011 to 2017, administrative coverage was significantly lower than estimated coverage by at least 10 percentage points. In 2016, a vaccination coverage survey showed a 30% difference between administrative and survey coverage.²⁴ These discrepancies indicate low data quality, and respondents cited a lack of staff at the national level for data monitoring and surveillance (particularly in the EPI Surveillance Unit). Health facilities frequently report significantly different coverage for antigens that are delivered at the same time, such as BCG and OPV1, which are both given at birth and should have similar coverage.

Immunization data are collected in registers and notebooks in health facilities, typically by CHWs and/or EPI agents.

The data are then uploaded by a data manager to information technology tools for processing and transferring to the district, regional, and national levels. Although campaign data are reviewed at the local level before transmission, routine immunization data are not regularly reviewed and discussed at this level. DVDMT and DHIS2 systems have been implemented at the regional and district levels, but they are not fully used due to insufficient training.

Monitoring takes place at all levels through regular data collection, analysis, interpretation, dissemination, and feedback. This is conducted through EPI supervision visits conducted annually at the regional level, quarterly at the district level, and monthly at the health facility level. These visits focus on data quality but do not discuss using data to make decisions.

In addition, surveillance focal points meet quarterly to review data, with support from the central level. Health center representatives note that the monthly feedback meetings do not always take place due to lack of budget.

DNSCMT

CHWs develop monthly reports based on the activities reported by RECOs in their administration area. The compiled reports are sent to the health centers, which further compile them for submission to the districts.

The National Community Health Policy states that addressing issues related to the lack of timely and high-quality health information is critical. Monitoring (collecting, analyzing, validating, transmitting, reporting, and discussing data) is to be carried out on a monthly, quarterly, or half-yearly basis depending on the level of the health system. At the health district level, these activities involve members of the district management team, health workers, members of the Sanitation and Hygiene Committee, CHWs, RECOs, members of village health committees, NGOs, and partners, and they are followed by feedback from communities. In addition, program reviews that are carried out quarterly, semi annually, or annually at all levels take a broader look at the implementation of interventions at the community level.

However, participants noted that health facilities rarely have accountability frameworks through which they can monitor the implementation of health activities, including activities carried out by CHWs and RECOs.

Respondents noted potential appetite for introducing mobile technologies to allow CHWs and RECOs to more efficiently transmit community data to health facilities and higher levels of the health system.

Coordination Challenges and Opportunities

Participants noted that lack of coordination on immunization data collection, particularly at the local level, is an important challenge for addressing immunization data discrepancies. They particularly stressed missed opportunities for using CHWs and RECOs to improve target population estimates, given their detailed knowledge of their communities.

Participants said that a key step for improving immunization data is to establish standard frameworks and procedures for coordination and review of monitoring data at the facility level. They recommended that all facilities create accountability frameworks for monitoring the performance of all health activities, including immunization and activities conducted by CHWs and RECOs. They also recommended holding standardized immunization data review meetings at the facility level before data are transmitted to the district; this would help identify and address data discrepancies such as differences in reported coverage of BCG and OPV1.

Supervision is another area where coordination would likely improve data quality. As shown in Figure 5, data collection through registers and other tools maintained by CHWs and RECOs is supervised by different people and on different schedules than the DHIS2 and DVDMT data reporting by health centers and regional and district health offices. Respondents said lack of coordination of these supervision and monitoring activities makes it difficult to identify and address immunization data quality issues.

FIGURE 5 Supervision Schedules for EPI and the Community Health Program



Logistics

EPI works with UNICEF to forecast the number of vaccines needed annually per antigen. Resupply is done semi annually at the central level, quarterly at regional depots, and monthly at the prefectural level and in health centers.

Cold chain storage capacity is inadequate at the subnational level. In Guinea’s second Gavi Cold Chain Equipment Optimization Platform application in 2016, it reported that 278 health venues lacked any cold chain storage capacity, including 190 health posts, 83 health centers, and five district health offices.²⁵ In health centers with refrigerators, 10% of those refrigerators were inoperative due to malfunctions and 8% did not meet quality and performance standards. District health offices lack operating budgets for cold chain equipment maintenance and fuel. Vehicles for transporting vaccines, vaccinators, and supervision teams are often missing or broken down. Community discussion participants reported that health centers have not received funds from the national level to purchase computer equipment and consumables for several years. Insufficient coverage of refrigerators in private and faith-based facilities prevents engagement of the private sector in immunization.

Interviewees and community discussion participants reported that stockouts of vaccines and syringes are common at all levels. Self-locking syringes and safety boxes have been out of stock since May 2021, and stockouts of DTP and OPV vaccines are common. EPI respondents reported that the main causes of stockouts include:

- Insufficient quantity or qualification of logistics staff in rural health centers
- Insufficient storage capacity at all levels
- Insufficient means of transport
- Poor supply chain tracking and information systems, resulting in high incidence of vaccine expiration

The National Community Health Policy notes that low availability of medicines, equipment, infrastructure, and other health technologies in community health facilities is a key challenge that must be addressed to ensure the success of the policy.

The aforementioned logistical constraints posed a challenge during the rollout of COVID-19 vaccines in Guinea, which was a recipient of vaccines distributed through the COVID-19 Vaccines Global Access (COVAX) initiative; however, capacity at storage centers was quickly filled by 25 solar refrigerators funded by COVAX and 69 solar refrigerators and five ultra-low-temperature freezers funded by the Japanese government.

Coordination Challenges and Opportunities

Respondents noted that frequent disruptions in vaccine and immunization supplies are particularly demotivating for CHWs and RECOs, who feel that they lose the community’s trust when they encourage people to travel for miles to receive vaccination services only to find that the services are not available. Closer coordination between immunization staff and CHWs/RECOs could help improve the forecasting of vaccine and supply needs by supporting the quantification of target populations and better communication around stockouts.

CONCLUSIONS AND RECOMMENDATIONS

The findings of this study show that Guinea's National Community Health Policy plays a vital role in improving the country's immunization coverage at both the national and subnational levels and provides several opportunities for community health and immunization integration. However, due to poor coordination between EPI and the DNSCMT, Guinea's immunization coverage remains low, prompting an urgent need to improve coordination through a framework that will allow EPI to achieve its objectives and better involve CHWs and RECOs in its programs and activities.

One priority is establishing formal coordination mechanisms and strategies between EPI, the DNSCMT, and ANSS around immunization. To that end, the national government can build on strong existing partnerships and coordinating mechanisms for health, including the ICC, POSSaV, and the Technical Advisory Group for Immunization. Establishment of these coordinating mechanisms and strategies for immunization planning and implementation at the local level is also essential for improving transparency, communication, and trust with communities.

Ensuring the timely release of funds for immunization and community health to all levels, including for paying CHW, RECO, and vaccinator salaries, is also critical to the complete implementation of the immunization program and community health strategy. Addressing bottlenecks in funding flows will require a coordinated effort at all levels, including strengthening national-level commitment to allocating funds to these activities, building the capacity of budget managers to submit budgets in the correct formats at subnational levels, and improving the capacity of local governments to access, generate, and manage revenue. The recent creation of the National Financing Agency for the Financing of Local Authorities is an important first step in improving financial management at the lowest levels, but a truly comprehensive effort will need to include all levels of government.



At the facility and community levels, CHWs, RECOs, and EPI agents all play key roles in engaging and vaccinating communities. Effort is needed to ensure that all of these actors are adequately trained in immunization, the community health strategy, and communication skills; that they understand their role in providing immunization services and collecting immunization data; and that they are adequately supervised in a coordinated manner. It will also be essential to ensure the availability, motivation, and payment of these staff across the country, particularly in rural areas. Better coordination among all of these actors is essential for building community trust in the immunization program by ensuring that vaccination activities and challenges (such as stockouts) can be communicated to communities in advance. Better coordination can also lead to better-quality immunization data and their use in decision-making. In this regard, effort is also needed to establish frameworks and coordination mechanisms for reviewing monitoring data at the facility level and ensuring their quality before they are passed on to higher levels.

Given Guinea's strong commitment to increasing and improving the integration of CHWs into immunization work and the opportunity the country has to contribute to evidence on successful integration models, we make the recommendations detailed in Table 5.

TABLE 5

Recommended Actions

Function	Health System Level	Recommendations
Leadership, coordination and governance	National	<ul style="list-style-type: none"> Establish a coordination committee for EPI and the DNSCMT at the national level to improve identified coordination challenges between the immunization program and the community health strategy. Appoint an EPI focal point in the DNSCMT. Hold regular meetings of coordinating bodies at all levels. Integrate vaccination as a top priority in the updated National Community Health Policy. Encourage health facilities to create accountability frameworks for monitoring the performance of all health activities, including immunization and the activities conducted by CHWs and RECOs.
	Regional	<ul style="list-style-type: none"> Hold regular monitoring and evaluation meetings for EPI plans. Create regional and prefectural consultative committees between EPI and civil society organizations that focus on immunization service delivery.
	Health district	<ul style="list-style-type: none"> Strengthen the leadership and coordination capacities of district management teams and heads of health centers to manage immunization teams in the field. Hold monthly joint planning meetings with all immunization stakeholders (heads of health centers, EPI agents, CHWs/RECOs, and community and religious leaders). Renew and revitalize the health and hygiene committees.
Financing	National	<ul style="list-style-type: none"> Ensure the regular payment of CHW salaries and RECO stipends.
	Regional	<ul style="list-style-type: none"> Involve the DNSC in managing funds allocated to communication, to better monitor the activities of CHWs and RECOs during implementation of immunization activities.
	Health district	<ul style="list-style-type: none"> Strengthen qualifications of immunization staff in rural areas. Strengthen the capacity of local managers for budgeting for immunization. Engage health facilities in bottom-up budget planning.

continued

Function	Health System Level	Recommendations
Human resources	National	<ul style="list-style-type: none"> • Develop harmonized supervision tools, including supervision dashboards, for health centers to monitor CHW/RECO immunization activities. • Expand CHW and RECO coverage to all 342 communes in Guinea. • Strengthen staffing of regional health directorates and prefectural health directorates to support immunization services by conducting trainings and coordination with civil society organizations that can provide support.
	Regional	<ul style="list-style-type: none"> • Strengthen the capacity of the district management team to use supervision tools. • Conduct monthly integrated supervision of staff engaged in immunization. • Organize training sessions for CHWs, RECOs, and Health Area Development Committee members on routine immunization.
Service delivery	National	<ul style="list-style-type: none"> • Engage civil society organizations in planning immunization activities. • Encourage health facility involvement in budgeting at the national level for immunization services.
	Regional	<ul style="list-style-type: none"> • Engage community leaders, CHWs, and RECOs in planning and implementing immunization activities.
	Health district	<ul style="list-style-type: none"> • Establish community-based audits of immunization activities, including monthly verification of immunization and outreach activities by the community. • Strengthen staff training in social mobilization for health, including immunization.

continued

Function	Health System Level	Recommendations
Communication and social mobilization	National	<ul style="list-style-type: none"> • Produce educational materials for immunization (IEC/ C4D materials) • Create a website and produce EPI newsletters. • Document good practices for EPI communication efforts. • Develop and implement a multi-sector communication plan on immunization. • Strengthen the involvement of regional civil society organizations in social mobilization for vaccination.
	Regional	<ul style="list-style-type: none"> • Develop regional and prefectural communication plans for routine immunization. • Bring the regional and prefectural EPI communication officer under the supervision of the DNSCMT. • Train EPI agents in interpersonal communication techniques for immunization.
	Health district	<ul style="list-style-type: none"> • Strengthen the capacity of heads of health centers to conduct communication for immunization. • Support CHWs and RECOs in developing communication plans for routine immunization. • Train community leaders (imams, priests, and pastors) on communication for routine immunization. • Ensure prompt feedback to lower levels on surveillance data.

continued

Function	Health System Level	Recommendations
Monitoring and evaluation	National	<ul style="list-style-type: none"> • Ensure the availability of computers for data management at the regional and district levels. • Establish a single framework for monitoring implementation of CHW/RECO immunization responsibilities. • Engage in quality analysis of data reported by the health district level.
	Regional	<ul style="list-style-type: none"> • Conduct integrated monitoring and evaluation of EPI and DNSCMT services at all levels. • Use CHW and RECO knowledge to improve estimation of target populations for vaccination.
	Health district	<ul style="list-style-type: none"> • Hold regular data review meetings at the health facility level with CHWs, EPI agents, and heads of health centers to analyze and review data to identify and address data quality issues before transmission to higher levels. • Ensure regular reporting of EPI data by CHWs and RECOs. • Reduce the occurrence of stockouts at the health district level by strengthening the supply of vaccines, updating the Stock Management Tool to improve stock monitoring, and increasing the availability and use of computers for data management at the regional and health district levels.
Logistics	National	<ul style="list-style-type: none"> • Strengthen the supply of vaccines to vaccination points in rural areas, and address the lack of vaccine stock at the national level by ensuring that the government meets its commitments to co-finance vaccines.
	Health district	<ul style="list-style-type: none"> • Coordinate with CHWs and RECOs to improve communication to communities about stockouts.

REFERENCES

1. Direction Nationale de la Santé Communautaire et de la Médecine Traditionnelle. 2017. *Politique Nationale de Santé Communautaire*. Conakry, Guinée: Ministère de la Santé. <https://osc-guinee.org/ressource/politique-nationale-de-sante-communautaire/>.
2. Institut National de la Statistique of Guinée (INS), ICF International. 2013. Guinée: *Enquête Démographique et de Santé et à Indicateurs Multiples (EDS-MICS) 2012*. Conakry, Guinée / Calverton, MA: INS / ICF International. <https://www.strategiesconcertees-mgf.be/1848/>.
3. Institut National de la Statistique of Guinée (INS), ICF International. 2019. *Enquête Démographique et de Santé en Guinée 2018*. Conakry, Guinée / Calverton, MA: INS / ICF International. <https://www.unicef.org/guinea/rapports/enqu%C3%AAted%C3%A9mographique-et-de-sant%C3%A9-2018>.
4. Ministère de la Santé. 2015. *Plan National de Développement Sanitaire (PNDS) 2015–2024*. Conakry, Guinée: Ministère de la Santé. <https://osc-guinee.org/ressource/plan-national-de-developpement-sanitaire-pnds-2015-2024/>.
5. African Development Bank (ADB). 2018. *Guinea: Country Strategy Paper 2018–2022*. Abidjan, Côte d'Ivoire: ADB. <https://www.afdb.org/en/documents/document/guinea-country-strategy-paper-2018-2022-107425>.
6. Kolie D, Delamou A, van de Pas R, et al. 2019. 'Never let crisis go to waste': post-Ebola agenda-setting for health system strengthening in Guinea. *BMJ Glob Health*. 4(6):e001925. doi: 10.1136/bmjgh-2019-001925.
7. Ministère de l'Administration du Territoire et de la Décentralisation. 2017. *Programme National d'Appui aux Communes de Convergences*. Conakry, Guinée: Ministère de l'Administration du Territoire et de la Décentralisation.
8. van de Pas R, Kolie D, Delamou A, Van Damme W. 2019. Health workforce development and retention in Guinea: a policy analysis post-Ebola. *Hum Resour Health*. 17(1):63. doi: 10.1186/s12960-019-0400-6.
9. World Bank. 2022. DataBank: Domestic general government health expenditure (% of general government expenditure) - Guinea. World Bank website. <https://data.worldbank.org/indicator/SH.XPD.GHED.GE.ZS?locations=GN>. [January 30, 2022.] Accessed December 1, 2022.
10. Organisation of African Unity. 2001. *Abuja Declaration on HIV/AIDS, Tuberculosis and Other Related Infectious Diseases*. Abuja, Nigeria. <https://aidswatchafrica.net/documents/2001-abuja-declaration/>.
11. Kolie D, Van De Pas R, Delamou A, etc. 2021. Retention of healthcare workers 1 year after recruitment and deployment in rural settings: an experience post-Ebola in five health districts in Guinea. *Hum Resour Health*. 19(1):67. doi: 10.1186/s12960-021-00596-x.
12. Article 15. In: *Guinea's Constitution of 2010*. 2018. Washington, DC: Constitution Project. <https://www.justiceguinee.gov.gn/wp-content/uploads/2018/09/Guinea-Constitution-2010-English.pdf#page=7>.



13. African Development Bank (ADB), African Development Fund (ADF). 2011. *Republic of Guinea Country Strategy Paper 2012–2016*. African Development Bank. Abidjan, Côte d'Ivoire: ADB/ADF. <https://www.afdb.org/en/documents/document/2012-2016-guinea-country-strategy-paper-26339>.
14. Ministère de la Santé. 2011. *Décret D/2011/061/PRG/SGG du 2 mars 2011*. Conakry, Guinée: Ministère de la Santé.
15. Ministère de la Santé. 2016. *Plan Pluri Annuel Complet, 2016-2020*. Conakry, Guinée: Ministère de la Santé. Récupéré sur Gavi, the Vaccine Alliance: <https://www.gavi.org/country-documents/guinea>.
16. World Health Organization (WHO), United Nations Children's Fund. 1978. *Alma-Ata 1978: Primary Health Care: Report of the International Conference on Primary Health Care*. Geneva, Switzerland: WHO. <https://www.who.int/publications/i/item/9241800011>.
17. World Health Organization (WHO). [n.d.]. Immunization data portal. WHO website. <https://immunizationdata.who.int/listing.html?topic=&location=>. Accessed July 2022.
18. US Agency for International Development (USAID). 2021. *Impact Brief: Guinea: Saving Lives and Improving Health Outcomes in Guinea through Increased Access to Contraceptives*. Washington, DC: USAID. https://www.usaid.gov/sites/default/files/documents/GuineaImpactBrief_03-04-21.pdf.
19. World Health Organization (WHO). 2019. *Rise, Respond, Recover: Renewing Progress on Women's, Children's and Adolescents' Health in the Era of COVID-19*. Geneva, Switzerland: WHO. <https://apps.who.int/iris/handle/10665/349920>.
20. Universal Health Coverage Partnership (UHCP). 2017. « Un événement majeur » : La signature du compact national de la santé en Guinée [news article]. Guyana: UHCP; August 14, 2017. <https://extranet.who.int/uhcpartnership/news/un-evenement-majeur-la-signature-du-compact-national-de-la-sante-en-guinee>. Accessed December 1, 2022.
21. World Bank. 2022. DataBank: Out-of-pocket expenditure (% of current health expenditure) - Guinea. World Bank website. <https://data.worldbank.org/indicator/SH.XPD.OOPC.CH.ZS?locations=GN>. [January 30, 2022.] Accessed December 1, 2022.
22. World Health Organization (WHO). [n.d.]. Immunization data portal: Immunization expenditure for Guinea: 2013–2020. WHO website. https://immunizationdata.who.int/pages/indicators-by-category/finance.html?ISO_3_CODE=GIN&YEAR=. Accessed July 2022.
23. IAMGOLD. 2018. *Note Succincte sur le Dispositif du Fonds de Développement Economique Local (FODEL)*. Toronto, Canada: IAMGOLD. <https://resources.wusc.ca/wp-content/uploads/2019/02/Session-6-Regional-Forum-WAGES-2018-documentation-support.pdf>.
24. World Health Organization (WHO), United Nations Children's Fund (UNICEF). 2021. *WHO and UNICEF Estimates of Immunization Coverage: 2020 Revision*. Geneva, Switzerland / New York, NY: WHO/UNICEF.
25. Gavi, the Vaccine Alliance. 2016. *Demande de Soutien de la Plateforme d'Optimisation de la Chaîne du Froid, Septembre 2016 (Uniquement)*. https://www.gavi.org/sites/default/files/document/2020/CCE%20OP%20Guinee_2016_vfk.pdf.

Contact Information

USAID

USAID missions and country representatives interested in buying into the Accelerator project should contact Jodi Charles, USAID Agreement Officer's Representative, at jcharles@usaid.gov.

Accelerator

Other interested parties should contact Nathan Blanchet, Accelerator Project Director, at nblanchet@r4d.org.

This report was made possible by the support of the American people through the United States Agency for International Development (USAID). The contents are the sole responsibility of the authors and do not necessarily reflect the views of USAID or the United States government.



@AccelerateHSS



<https://www.facebook.com/accelerateHSS>



accelerateHSS@r4d.org



HEALTH SYSTEMS
STRENGTHENING
ACCELERATOR

AccelerateHSS.org



BILL & MELINDA
GATES foundation