

Country Profile: Uganda

Demographic Context

The population progressively increased from 40M to 47M between 2017 to 2022 as shown in **figure 1**. Infants aged below 12 months and those below the age of 5 years accounted for less than 8% and 18% of the entire population respectively.

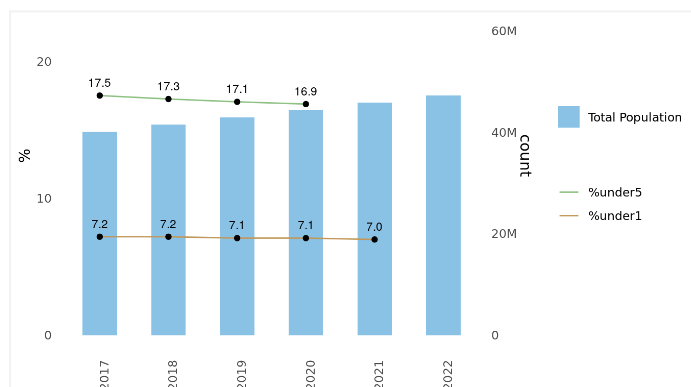


Figure 1: Population Trends in Uganda

During the same period, the Human Development Index remained at 0.5, an average performance on individual longevity, education and income capabilities (**Figure 2**). The Human Capital Index remained at 0.4, which was below average in terms of the expected productivity of future generations owing to deprivations related to health and education. This implied that children born during the period would attain only 40% of their productivity potential. The life expectancy at birth remained between 62 and 63 years.

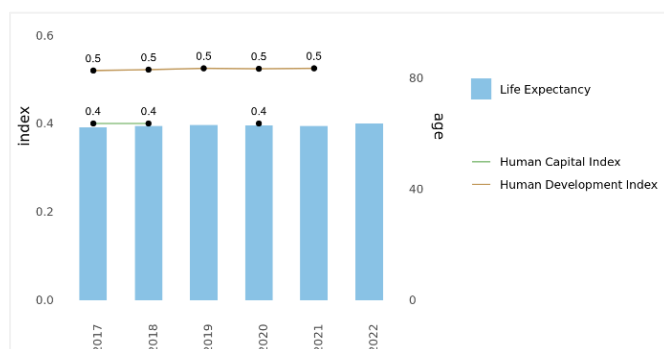


Figure 2: Development and Productivity Potential in Uganda

Economic Context

The Gross National Income Per Capita increased from USD 750 to USD 870 during the period of analysis (**Figure 3**). This matches the initial self-financing phase for GAVI eligibility (GAVI, 2022). The Tax to GDP ratio was between 12% and 13% between 2017 and 2022. This was below the regional 15% threshold for adequacy of financing public services.

The Debt to GDP ratio spanned between 34% and 51% during the period of interest hence breaching the EAC threshold of 50% for debt sustainability and adequacy of financing public services beyond debt repayment.

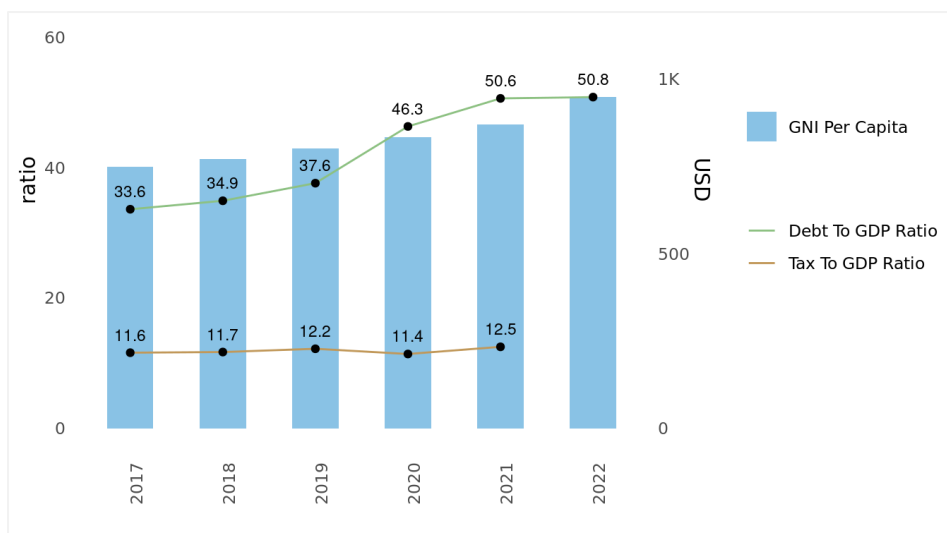


Figure 3: Economic Performance in Uganda

Highlight

The rising debt levels in Uganda beyond the regional threshold highlights potential risk of debt repayments crowding out expenditures on other essential public services including health and immunization.

This is further compounded by the low tax revenues implying the need for more efficient tax administration within Uganda.

A strengthened tax administration in Uganda would help mobilize more resources for public goods such as health and immunization.

Health System Context

The top 3 causes of death amongst the general population were Neonatal conditions, Lower Respiratory Tract Infections and HIV/AIDS. Preterm birth complications, birth asphyxia, malaria, pneumonia and diarrhea were the main causes of under 5 mortalities.

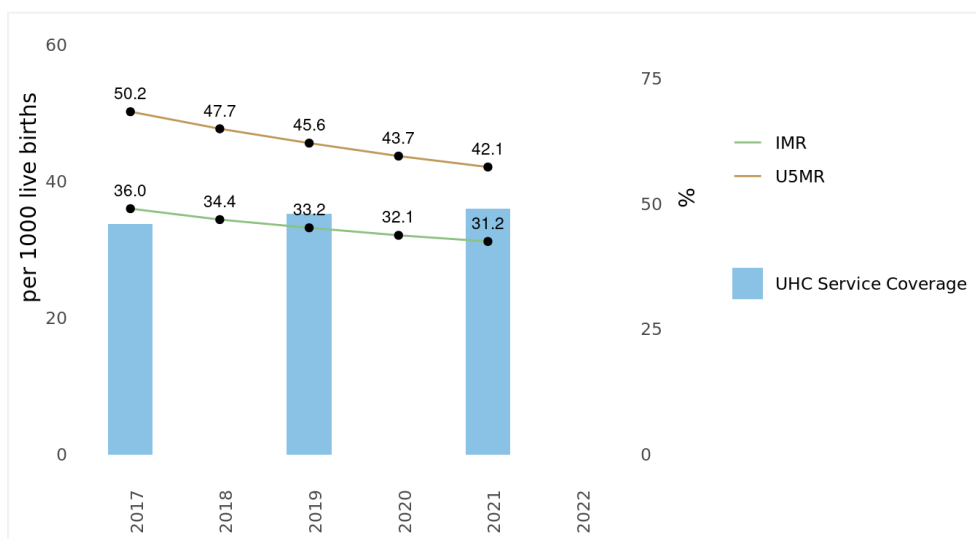


Figure 4: Health System Performance in Uganda

There was a steady decline in both the Infant and Under Five Mortality Rates over the period of analysis. The Infant Mortality Rate (IMR) declined from 36 to 31 deaths per 1000 live births, while the Under Five Mortality Rate declined from 50 to 42 deaths per 1000 live births as shown in **figure 4**.

The UHC Service Coverage Index in 2021 was 49% implying that half of the population in Uganda had access to quality essential services including reproductive, maternal, newborn and child health, infectious diseases, and non-communicable disease services.

Health Financing Context

Government spending on health was at 1% of the GDP which was markedly below the minimum of 5% recommended for progression towards UHC(McIntyre et al., 2017). The per capita spending on health was between USD 30 and USD 35 across the years, which was below the recommended per capita target of USD 86(McIntyre et al., 2017). Further, the government expenditure on health relative to other sectors declined from 4% to 3%, which was below the 15% Abuja target (**Figure 5**).



Figure 5: Health Financing Trends in Uganda

Donor Financing and Out of Pocket (OOP) spending was the most significant sources of funding for health in Uganda. Donor funding accounted for between 41% and 44% of health financing, OOP spending accounted for 36% to 38%, while government funding accounted for less than 20% of all health funding during the period of analysis (**Figure 6**).

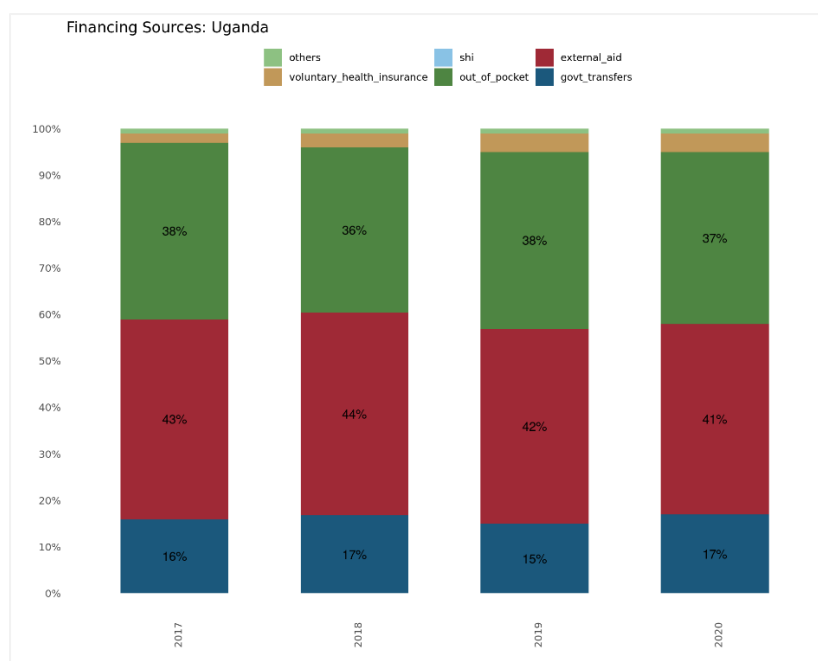


Figure 6: Health Financing Sources in Uganda

Highlight

The low UHC service coverage index highlights the need for system wide improvements to facilitate access to quality essential healthcare in Uganda.

The high dependence on donor funding limits the transition to domestic financing of health and immunization, and further threatens sustainability of immunization services.

The high dependence on OOP payments poses a significant risk of financial hardship among the population as they seek for care. Strengthening pooling mechanisms in Uganda would help reduce OOPs.

Increased government allocations are therefore essential to guarantee sustainability of health services, including immunization services.

Immunization Coverage

Except for the 1st Measles dose coverage that increased throughout the period, BCG, DTP1, and DTP3 coverage in Uganda declined between 2017 and 2022 (**Figure 7**). Measles 2 coverage remained low at 49% in 2022. There was no data available for measles 2 coverage prior to 2022.

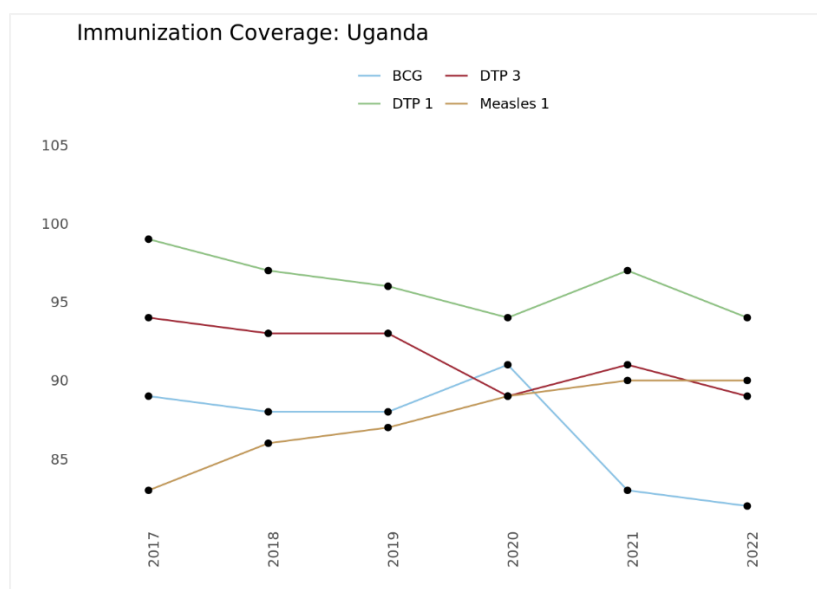


Figure 7: Immunization Coverage in Uganda

Overall, lower income groups had significantly higher under five mortality rates, and relatively higher immunization coverage (**Figure 8 & 9**). There was a gap of more than 30 deaths per 1000 live births among the under-fives between the wealthiest and poorest income groups.

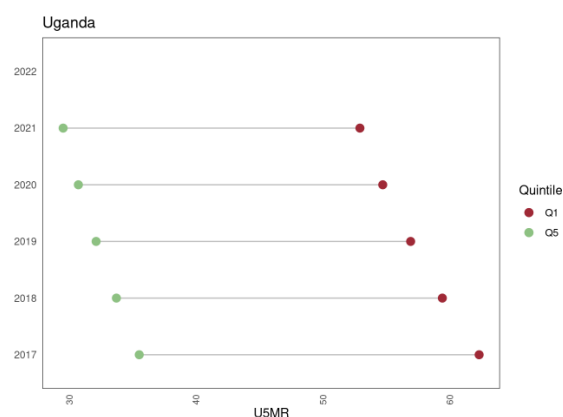


Figure 8: Equity Analysis of U5MR in Uganda

The coverage for DTP3 and MCV2 was generally low in Uganda. The coverage gap for MCV 2 across the income groups was low; 4 percentage points in favor of the poorest income groups (**Figure 9**).

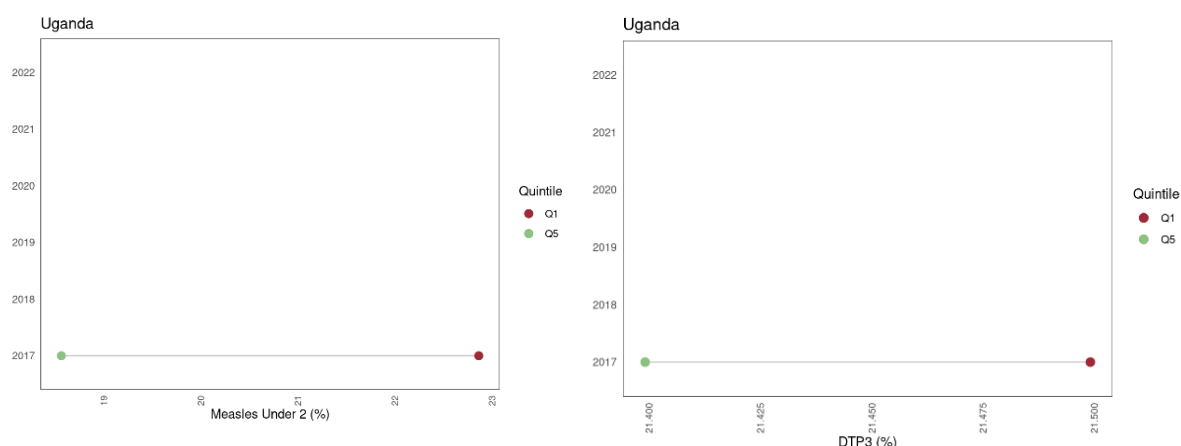


Figure 9: Equity analysis of immunization coverage in Uganda

Highlight

The generally low immunization coverage in Uganda, coupled with high levels of under immunized children highlight the urgent need for targeted campaigns to improve immunization coverage across the country.

Immunization Financing

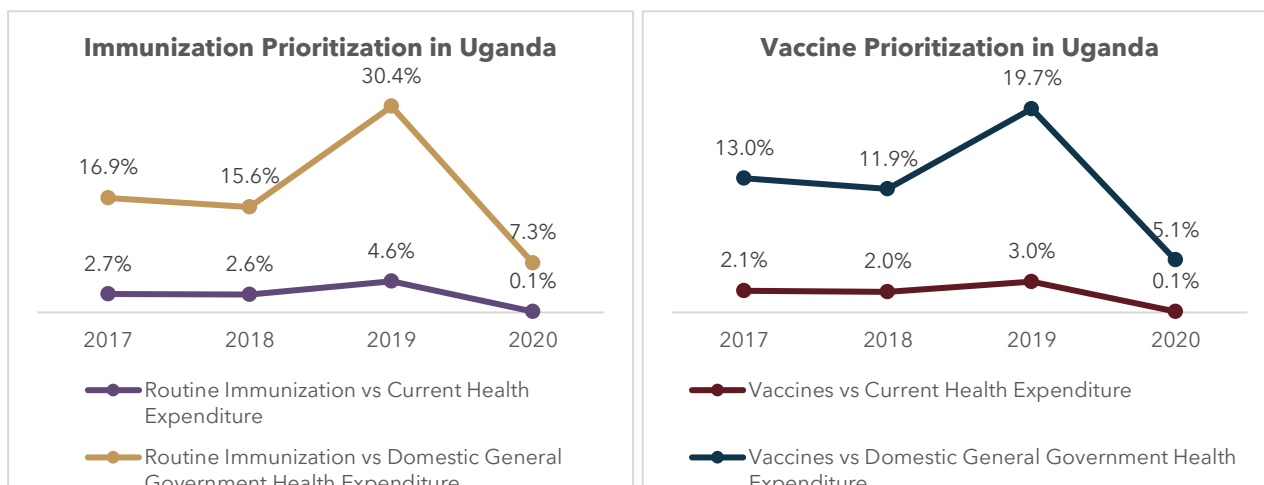


Figure 10: Prioritization of Immunization and Vaccines in Uganda

Expenditures on Routine Immunization in Uganda progressively declined during the period of study. Routine Immunization accounted for between 0.1 and 5% of the respective Current Health Expenditures; and between 7% and 30% of the Domestic General Government Health Expenditures between 2017 and 2020. Vaccine related expenditures accounted for less than 3% of the CHE, and between 5% to 20% of the Domestic General Government Expenditures (**Figure 10**).

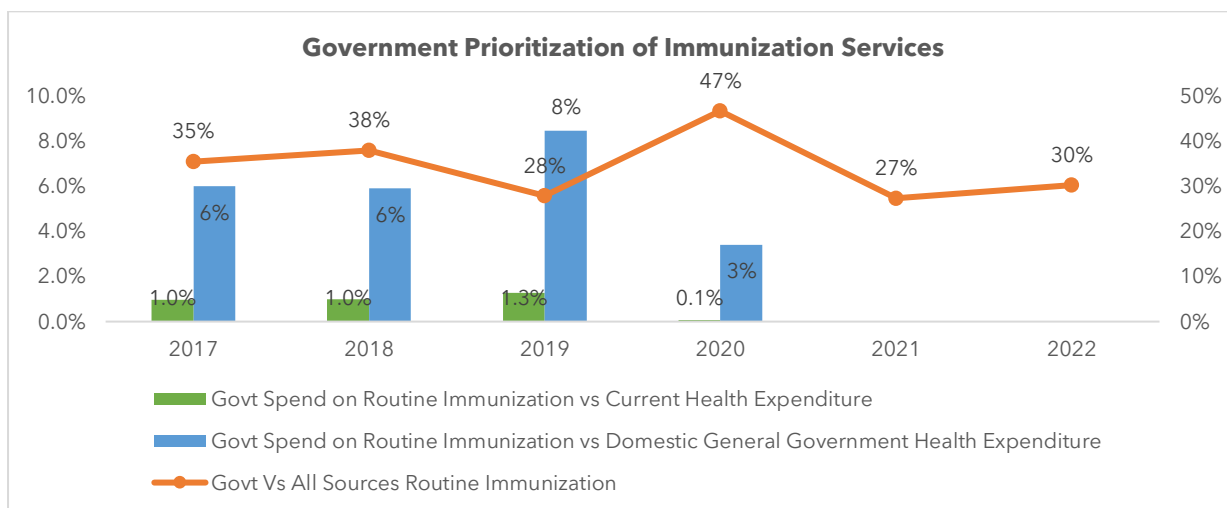


Figure 11: Government Prioritization of Immunization in Uganda

Government funding as a source of immunization financing fluctuated between 27% and 47% between 2017 and 2022. This accounted for less than 2% of Current Health Expenditures and below 8% of the Domestic General Government Health Expenditure (**Figure 11**).

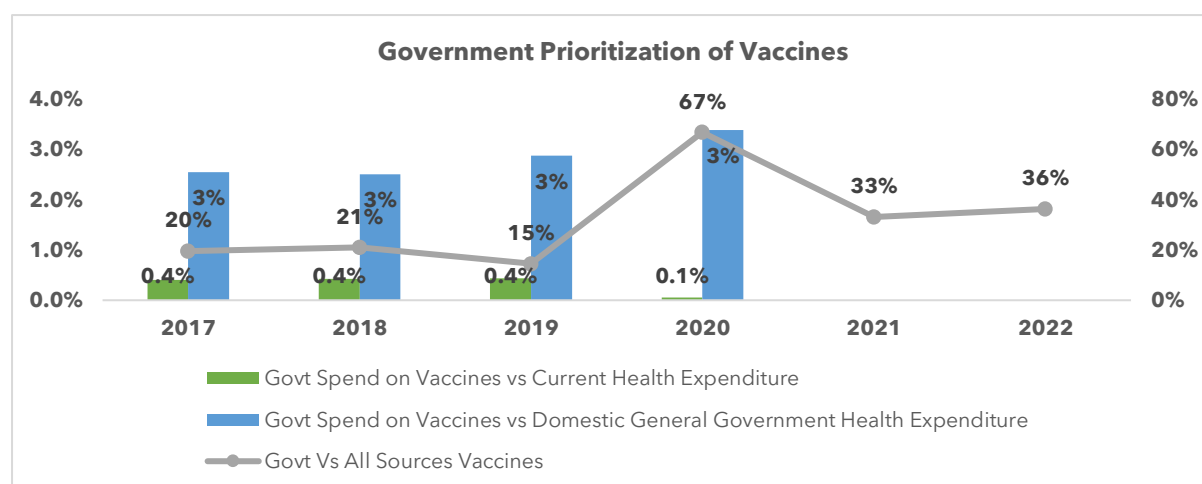


Figure 12: Government Prioritization of Vaccines in Uganda

Government funding as a source of vaccination financing progressively increased from 20% to 67% between 2017 and 2022. This accounted for less than 0.5% of Current Health Expenditures and below 5% of the Domestic General Government Health Expenditure (**Figure 12**).

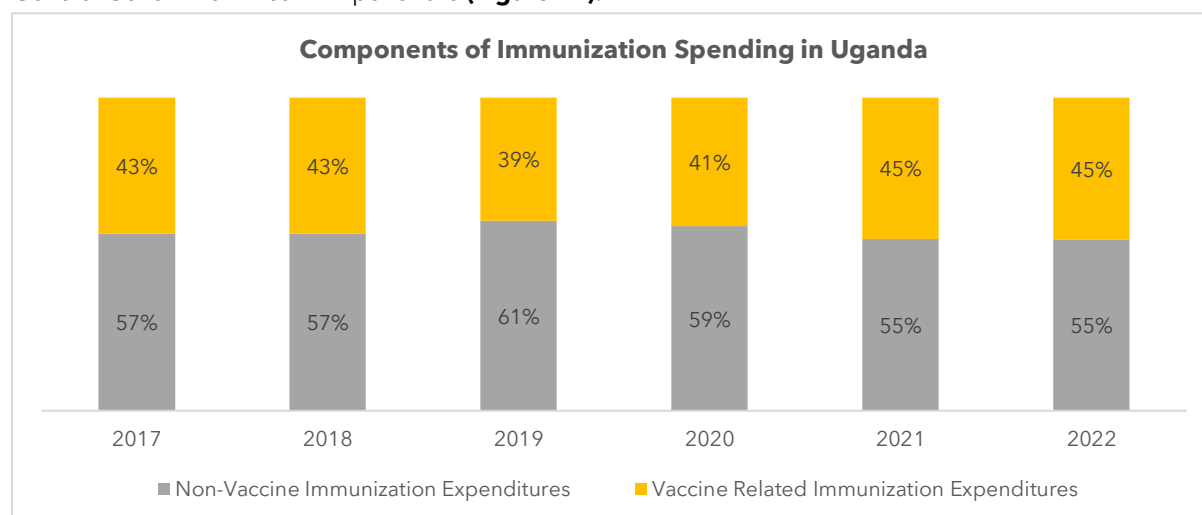


Figure 13: Components of Immunization Spending in Uganda

Procurement of Vaccines accounted for between 39% and 45% of the immunization expenditures in Uganda between 2017 and 2022 (**Figure 13**).

Highlight

There is significant donor dependence for immunization financing in Uganda. This threatens sustainability of immunization services. Progressive increments in government financing of health and immunization will help mitigate against donor dependence and financial hardship among households as they seek for immunization services.

Recommendations towards improving immunization services in Uganda.

1. **Vaccine Supply and Cold Chain Management:** Increase vaccine production and distribution, improve cold chain infrastructure, and implement effective waste management mechanisms.
2. **Access and Geographic Barriers:** Establish mobile immunization clinics, increase the number of healthcare workers, and improve transportation infrastructure.
3. **Vaccine Hesitancy:** Increase public awareness through targeted campaigns, engage with community leaders, and provide accurate information about vaccines.
4. **Healthcare Workforce Shortages:** Increase the number of trained healthcare workers, provide adequate training and supervision, and incentivize healthcare workers to work in rural areas.
5. **Socioeconomic Factors:** Increase public awareness through targeted campaigns, provide free or subsidized vaccines, and improve access to education and healthcare.
6. **Data Management and Monitoring:** Improve data collection and management systems, establish a centralized database for immunization data, and provide training for healthcare workers on data management.
7. **Cultural and Religious Factors:** Engage with religious and community leaders, provide accurate information about vaccines, and address cultural and religious beliefs that discourage vaccination while developing culturally appropriate immunization programs.
8. **Inadequate Government Funding:** Increase government funding for immunization programs, establish a predictable funding mechanism, and reduce dependence on external donors.
9. **Health System Weaknesses:** Improve healthcare infrastructure, establish efficient logistics and supply chain management, and strengthen health system governance.

Recommendations towards improving immunization financing in Uganda.

1. **Inadequate Government Funding:** Increase budget allocation for immunization programs, prioritize immunization spending, and improve budget transparency.
2. **Dependency on Donor Funding:** Diversify funding sources, establish predictable long-term partnerships with donors and private sector, and develop contingency plans for funding fluctuations.
3. **Financial Mismanagement:** Improve financial management systems, establish accountability mechanisms, and increase transparency in financial reporting.
4. **High Cost of Vaccines:** Negotiate favorable vaccine prices with manufacturers, explore alternative negotiated procurement mechanisms, prioritize vaccines based on cost-effectiveness, and incentivize domestic manufacturing of vaccines.
5. **Supply Chain Costs:** Increase budget allocation for supply chain logistics, improve cold chain infrastructure, and establish effective waste management mechanisms.
6. **Human Resource Costs:** Increase incentives for healthcare workers involved in immunization delivery, provide adequate training and supervision, and incentivize healthcare workers to work in rural areas.
7. **Healthcare Infrastructure Costs:** Increase budget allocation for healthcare infrastructure, prioritize infrastructure development in underserved areas, and establish public-private partnerships for infrastructure development.
8. **Health Insurance Coverage:** Expand health insurance programs to cover immunization costs, establish public-private partnerships for health insurance, and increase awareness of health insurance benefits.
9. **Economic Challenges:** Strengthen Public Finance Management systems, establish contingency plans for economic fluctuations, prioritize immunization spending during recessions, and increase public-private partnerships for immunization financing.
10. **Advocacy & Awareness:** Increase public and political awareness of the importance of immunization, engage with community leaders and stakeholders, and establish advocacy campaigns for immunization financing.
11. **Coordination & Accountability:** Strengthen central and decentralized immunization coordination among government agencies, donors, and implementing partners, with stronger accountability mechanisms to ensure funds are used effectively.
12. **Data and Monitoring:** Increase funding for data collection, monitoring, and evaluation of immunization programs, strengthen the centralized database for immunization data, and provide training for healthcare workers on data management.

References

GAVI. (2022). *Gavi Alliance Eligibility and Transition Policy Version 4*. <https://www.gavi.org/types-support/sustainability/eligibility>

McIntyre, D., Meheus, F., & Rottingen, J. A. (2017). What level of domestic government health expenditure should we aspire to for universal health coverage? *Health Economics, Policy and Law*, 12(2), 125-137. <https://doi.org/10.1017/S1744133116000414>