

Country Profile: Senegal

Demographic Context

The population progressively increased from 15M to 17M 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 7% and 16% of the entire population respectively.

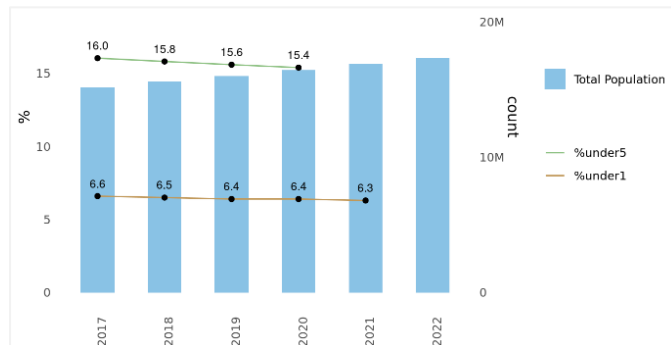


Figure 1: Population trends in Senegal

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 67 and 68 years.

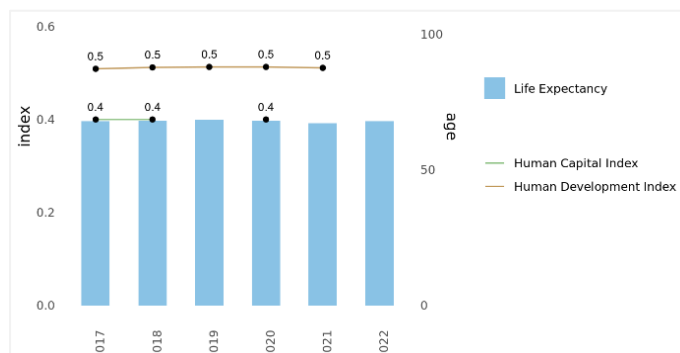


Figure 2: Development and Productivity Potential in Senegal

Economic Context

The Gross National Income Per Capita increased from USD 1350 to USD 1560 during the period of analysis. This matches the preparatory transition phase for GAVI eligibility (GAVI, 2022). The Tax to GDP ratio was between 16% and 18% between 2017 and 2022 (Figure 3). It thus met the regional 15% threshold for adequacy of financing public services.

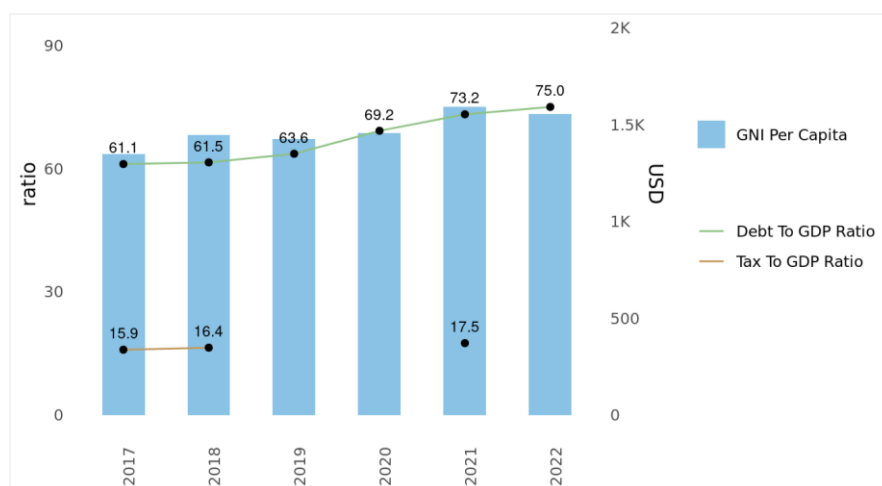


Figure 3: Economic Performance in Senegal

The Debt to GDP ratio increased from 61% and 75% during the period of interest hence breaching the LMIC threshold of 64% for debt sustainability and adequacy of financing public services beyond debt repayment.

Highlight

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

The relatively high Tax to GDP ratio in Senegal point to a fairly reliable tax administration system that ought to be strengthened to ensure fair, predictable and improved revenue mobilization to finance public services including health and immunization.

Health System Context

The top 3 causes of death amongst the general population were neonatal conditions, lower respiratory tract infections and Ischemic Heart Disease. Neonatal disorders, Diarrheal diseases, Respiratory infections and Malaria were the main causes of under 5 mortalities.



Figure 4: Health System performance in Senegal

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 46 to 39 deaths per 1000 live births, while the Under Five Mortality Rate declined from 33 to 29 deaths per 1000 live births as shown in **figure 4**.

The UHC Service Coverage Index in 2021 was 50% implying that half of the population in Senegal 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 between 1% and 2% 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 increased from USD 58 in 2017 to USD 77 in 2020, 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 was about 6%, which was significantly below the 15% Abuja target **(Figure 5)**.

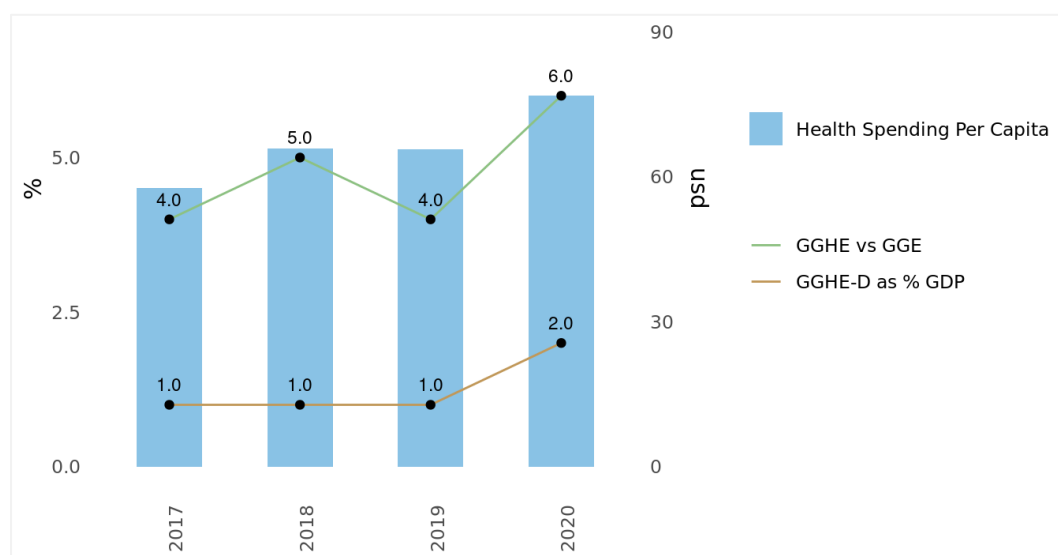


Figure 5: Health Financing Trends in Senegal

Out of Pocket (OOP) spending was the most significant source of funding for health in Senegal. This was followed by Government funding (18% to 28%) and donor funding which accounted for between 16% and 20% of health financing. Social Health Insurance accounted for less than 7% of all health financing during the period of analysis **(Figure 6)**.

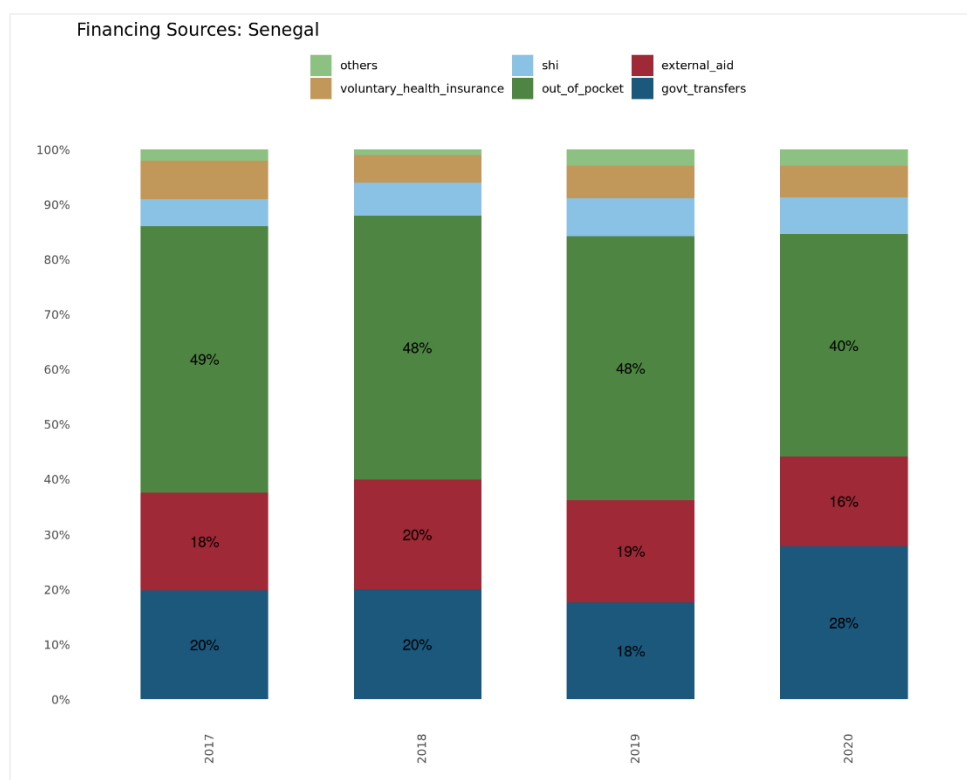


Figure 6: Health Financing Sources in Senegal

Highlight

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

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 Senegal would help reduce OOPs.

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

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

Immunization Coverage

Overall, the national immunization coverage rates showed a decline from 2019 particularly MCV 1 and DTP 1, which suggests challenges in access possibly due to contextual factors such as COVID-related restrictions (**Figure 7**). Measles 2 coverage increased from 59 to 75% during the period of analysis.

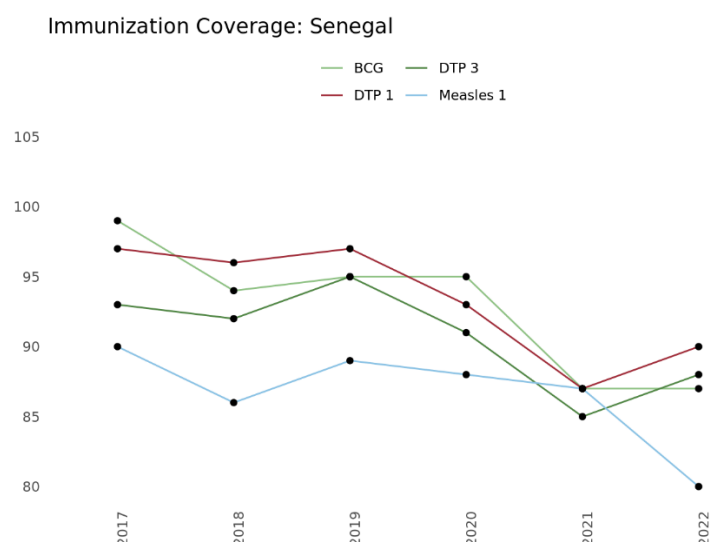


Figure 7: Immunization coverage trends in Senegal

The under-five mortality rates for low-income households were twice those of high-income households across the years (2017-2021) as in figure 8. The immunization coverage rates were higher among high-income households compared to low-income households. These findings indicate income-related inequities.

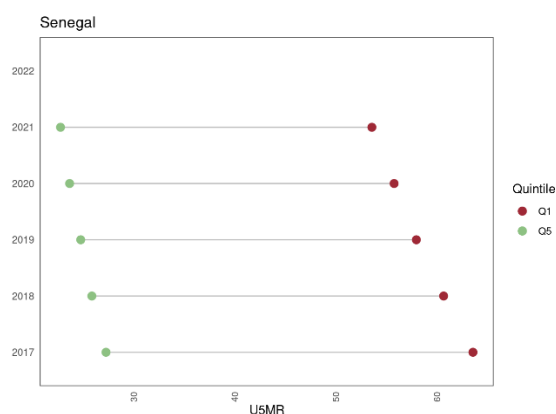


Figure 8: Equity analysis of U5MR in Senegal

The coverage for DTP3 and MCV2 was generally higher among the high-income groups in Senegal. The coverage gap for MCV 2 across the income groups increased from 8 to 20 percentage points; while for DTP 3 increased from 10 to 20 percentage points in favor of the wealthiest income groups (**Figure 9**).

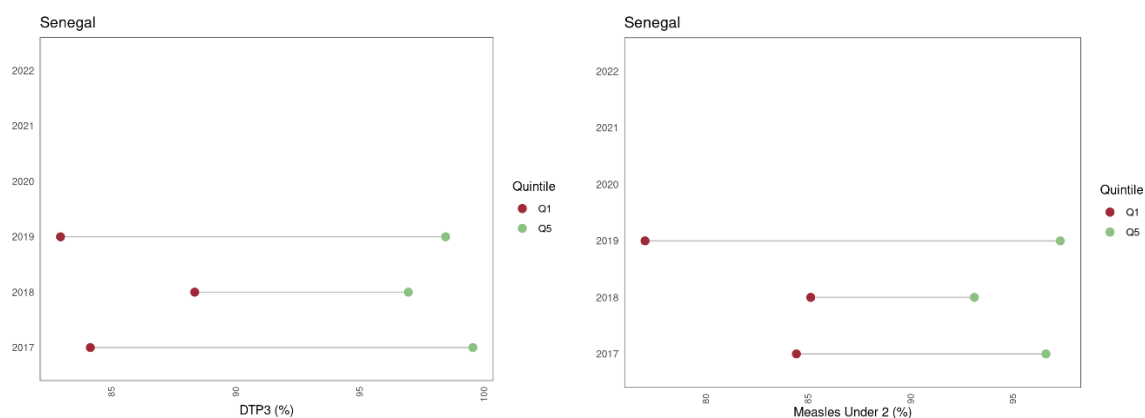


Figure 9: Equity Analysis of Immunization Coverage in Senegal

Highlight

The decline immunization coverage, and rising inequality in coverage necessitate intentional equity enhancing approaches to increase and sustain access to the essential vaccines in Senegal.

Immunization Financing

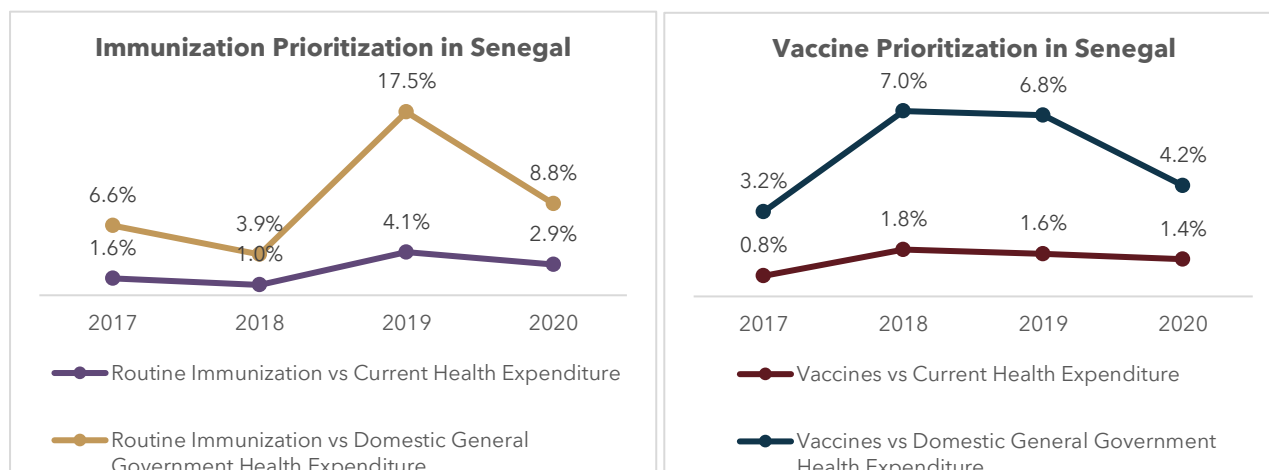


Figure 10: Prioritization of Immunization and Vaccines in Senegal

Expenditures on Routine Immunization in Senegal progressively increased during the period of study. Routine immunization accounted for between 1% and 4% of the Current Health Expenditure; and between 4% and 17.5% of the Domestic General Government Health Expenditures between 2017 and 2020. Vaccine related expenditures accounted for less than 2% of the CHE, and between 3% to 7% of the Domestic General Government Expenditures (**Figure 10**).

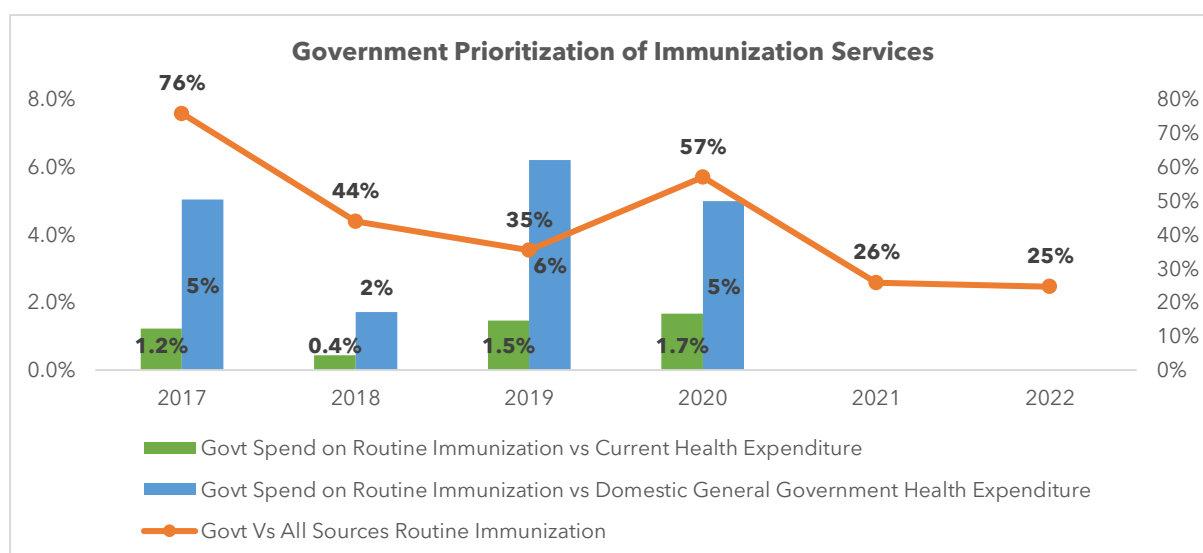


Figure 11: Government Prioritization of Immunization

Government funding as a source of immunization financing declined from 76% to 25% between 2017 and 2022. This accounted for less than 2% of Current Health Expenditures and below 6% of the Domestic General Government Health Expenditure (**Figure 11**).

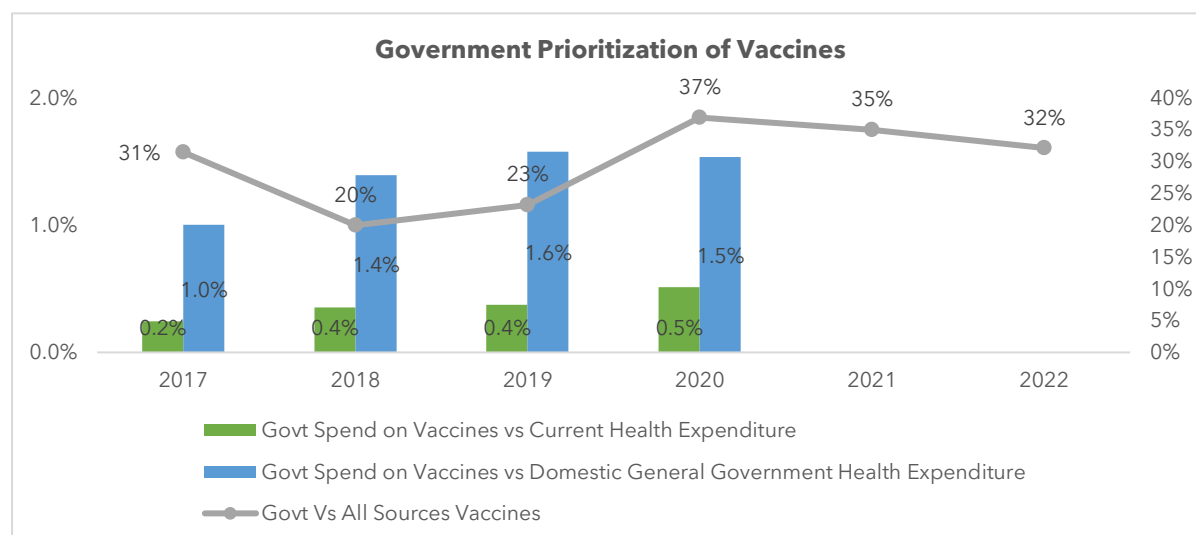


Figure 12: Government Prioritization of Vaccines in Senegal

Government funding as a source of vaccination financing progressively increased from 20% to 37% between 2017 and 2022. This accounted for less than 0.5% of Current Health Expenditures and below 2% of the Domestic General Government Health Expenditure (**Figure 12**).

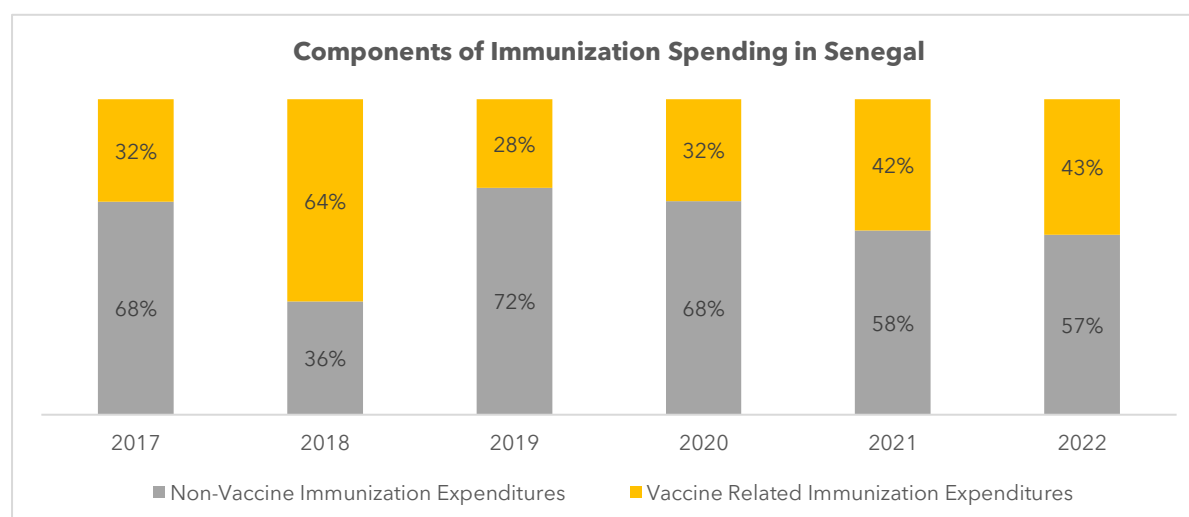


Figure 13: Components of Immunization Spending in Senegal

Though fluctuating, procurement of vaccines accounted for between 28% and 64% of the immunization expenditures between 2017 and 2022 in Senegal (**Figure 13**).

Highlight

There is significant donor dependence for immunization financing in Senegal. 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 Senegal.

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. **Security Challenges:** Increase security in conflict-prone areas e.g., Sahel, provide adequate protection for healthcare workers, and establish contingency plans for immunization services.
7. **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.
8. **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.
9. **Inadequate Government Funding:** Increase government funding for immunization programs, establish a predictable funding mechanism, and reduce dependence on external donors.
10. **Health System Weaknesses:** Improve healthcare infrastructure, establish efficient logistics and supply chain management, and strengthen health system governance.

Recommendations towards improving immunization financing in Senegal.

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>