



The Republic of Uganda

NATIONAL IMMUNISATION STRATEGY (NIS)

2022-2026

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Table of Contents

| | |
|--|-----------|
| Foreword..... | 3 |
| Preamble..... | 5 |
| Executive Summary | 6 |
| Programme Management and Finance | 7 |
| Geography of Uganda..... | 12 |
| Population | 12 |
| Health Indices | 13 |
| The Administrative Structure..... | 13 |
| The National Health system..... | 13 |
| The National Expanded Program on Immunisation (UNEPI)..... | 15 |
| National Vaccination Package..... | 16 |
| The Situational Analysis:..... | 17 |
| <i>Lessons from The EPI Review 2020</i> | <i>18</i> |
| Problem statement | 21 |
| Vision: | 21 |
| Mission: | 22 |
| Goal: | 22 |
| Objectives | 22 |
| Guiding Principles | 22 |
| Justification/Rationale | 24 |
| Historical Context | 27 |
| IMPLEMENTATION PILLARS OF THE STRATEGY | 28 |
| Annex 1: SWOT Analysis: Service Delivery | 68 |
| Annex 2: SWOT Analysis: Vaccine Supply Chain | 69 |
| Annex 3: SWOT Analysis: Finance and Management | 71 |
| Annex 4: SWOT Analysis: Communication and Advocacy | 72 |
| Annex 5: SWOT analysis: Surveillance, monitoring and evaluation | 73 |
| Surveillance | 73 |
| Monitoring and Evaluation | 75 |
| Annex 6: Monitoring and Evaluation Framework | 4 |

List of abbreviations

| | |
|--------|--|
| AEFI | Adverse Events Following Immunisation |
| BCG | Bacillus Calmette Guerin |
| CHAI | Clinton Health Access Initiative |
| cMYP | Comprehensive Multi Year Plan |
| DPT | Diphtheria Pertussis Tetanus |
| GVAP | Global Vaccination Action Plan |
| HPV | Human Papilloma Virus |
| HSSIP | Health Sector Strategic and Investment Plan |
| IEC | Information Education and Communication |
| ISS | Integrated Support Supervision |
| NIS | National Immunisation Strategy |
| ODK | Open Data Kit |
| REC | Reach Every Child/Community |
| RED | Reach Every District |
| UNEPI | Uganda National Expanded Program on Immunisation |
| UNICEF | United Nations Children's Fund |
| UVRI | Uganda Virus Research Institute |
| VPD | Vaccine Preventable Diseases |
| WHO | World Health Organization |

Foreword

Vaccination is one of the most superlative measures in the history of public health that have had tremendous impact on reducing the burden of infectious diseases and associated mortality. These health effects translate into positive economic results for the country by sidestepping the costs that would have been incurred in treatment of these diseases or the resulting associated disabilities.

Through UNEPI, Uganda has made huge steps towards increasing the number of people that get immunised against vaccine preventable diseases. Despite the exponential increase seen in vaccination coverage, there remains many people missing out on these lifesaving vaccinations. To counter the increasing number of missed populations we have developed this strategy with a vision of improving vaccination coverage and population health. This is the first National Immunisation Strategy (NIS) Uganda has developed and it will be for the next five years (2022 – 2026). The strategy is the first in the NIS format that has replaced the former comprehensive multi-year plan (cMYP).

The NIS builds upon comprehensive information generated from engagement workshops of the UNEPI program, previous cMYPs, EPI reviews and assessments, national and sub-national stakeholders' dialogues, as well as information from other essential reports and documents, including the third National Development Plan [(NDPIII) 2020/21 – 2024/25], IA2030 and regional IA goals. The processes will run along with the Ministry of Health Strategic Plan 2020/21 – 2024.

This NIS 2022-2026 seeks to address vaccine preventable diseases through integrated interventions and broader stakeholders' involvement with a hope that it will result into improved vaccination coverage, improved vaccine logistics and management, and reduction in RED/REC thereby contributing towards the attainment of the Sustainable Development Goals (SDGs).

Achieving the aspirations of NIS requires stronger collaboration and will be implemented through a partnership approach bringing together the Government of Uganda with its key ministries Ministry of Health (MoH) and Ministry of Finance

Planning and Economic Development (MoFPED), Development Partners, Implementing Partners, health providers as well as community groups and the public. The NIS has particularly come timely and will provide an opportunity to reverse problems of vaccine preventable diseases faced in Uganda and pave the way for gradual increase in local funding for vaccination.

Special thanks to our developmental partners including WHO, GAVI, UNICEF, CDC, CHAI and PATH for supporting the development of the NIS 2022 - 2026 for Uganda. I call upon all stakeholders to support and accelerate the implementation of the first National Immunisation Strategy as we strive to ensure that Uganda is free of vaccine preventable diseases while attaining both the National and International goals.

For God and My Country.

Hon Dr. Jane Ruth Aceng Ocerro

MP, Minister of Health

Preamble

The Uganda National Expanded Programme on Immunisation (UNEPI) has been in existence since 1983 with a mandate of ensuring that infants and women of child bearing age are fully immunized. In 1987, the programme was re-launched by His Excellency the President of Uganda with a call on the leaders to support immunisation services throughout the country. At that time, the average immunisation coverage was a paltry 34% and deficient of consistence and national outlook.

There have been many changes to UNEPI in recent years with additional vaccines being added to the UNEPI Schedule. In addition, there has been expansion to include life course vaccines and the growing number new vaccines being introduced after childhood is stretching the boundaries for the UNEPI program. The NIS therefore comes at a time as this to guide us to build on the strengths and identify areas for further improvement.

The NIS will articulate action areas to maintain the successful delivery of the UNEPI program, including addressing current issues to further improve national vaccination coverage and vaccine delivery. The NIS is consistent with the Immunisation Agenda 2030, which is a global strategy of leaving no one behind. The goal is to reduce mortality and morbidity from vaccine-preventable diseases for everyone throughout the life course.

This NIS has been designed to be practical, user-friendly and to clearly indicate the investment in the immunisation program that need to be done. I therefore, call upon all stakeholders at national and global level to support the implementation of first National Immunisation strategy.

Dr. Diana Atwiine
Permanent Secretary

Executive Summary

The National Immunisation Strategy (NIS) replaces the comprehensive Multi-Year Plan (cMYP) as a country-specific guiding tool for the planning, coordination and implementation of immunisation activities. The strategy clearly defines what is to be achieved in the next five years, in terms of the anticipated results and impact in accordance with UNEPI's vision, mission, goals and objectives. This strategy aims at ensuring that the national strategic priorities and activities improve and sustain immunisation coverage, disease surveillance and address outstanding recommendations from previous program reviews and assessments.

The National Immunisation System (NIS) was developed using a multi-pronged participatory approach that involved multi-level interactions between the content producing team and stakeholders at national and sub-national levels, as well as a comprehensive EPI review. A root cause/causal pathway approach of the situation analysis identified but not limited to the following emerging issues; High number of zero dose children close to 90,000 and under immunised children (45% of children between 12-23 months); Inadequate knowledge and training on EPI in the following EPI program aspects: Human Resource management skills, Strategic and micro planning, RED/REC strategy, Immunisation practice, optimization of service delivery, Cold chain and vaccine management; Community level resistance to vaccination in addition to an expiring National EPI Advocacy and Communication Strategy with its partial roll-out and delayed operationalization of Urban Immunisation Communication Plan (UICP) and; Low availability of vaccines at the last mile despite tremendous improvement of vaccine stock at National and subnational levels leading to frequent stockouts. The immunisation stakeholders produced a synthesis of the situational analysis in the form of strengths, weaknesses, opportunities and threats.

The findings from the root cause/causal pathway approach informed the development of corresponding strategic aims, according to the immunisation system components. The aims were expounded to strategic interventions, assessment

indicators and implementation time frame, thereby constituting the NIS implementation roadmap matrix.

In the NIS, the UNEPI components are detailed with issues affecting them and the strategic actions and interventions that need to be done:

Programme Management and Finance

- Strengthen coordination of stakeholders during development of annual district work plans to ensure partners work towards implementation of Government priorities as set in the NIS
- Strengthen collection, analysis and use of information from District Performance review meetings to inform performance improvement.
- Implement recommendations from previous assessments like the EPI review and to conduct additional assessments
- Establish, functionalize, and implement a comprehensive 5 year financing plan vaccine procurement deployment & introduction of new vaccines.
- Streamline funds flow from MOFPED to districts to ease access to and increase absorption of funds for EPI activities.
- Timely and accurate presentation of accountability by districts for funds received to improve funds absorption
- Review staffing norms for UNEPI so that the number of staff matches the current scope of work

COMMUNICATION AND ADVOCACY

- Develop SBC/ IEC materials with content that is informative, precise, comprehensible, age-specific, and geographically targeted to promote immunization literacy of all people.
- Utilize well profiled community and individual based hybrid of communication channels to ensure all targeted audiences are reached
- Disseminate vaccine health education messaging using oriented community and audience specific influencers through agreeable communication channels

- Study and profile different communities and individuals so as to develop audience specific messages:
 - In the right language,
 - through the right channels
 - utilize appropriate influencer to deliver the message

VACCINES SUPPLY CHAIN AND LOGISTICS

- Forecast of vaccination needs based on the National Population Estimates generated by Uganda Bureau of Statistics (UBOS) and used as the official source of population data in the country.
- Ensure safe storage of vaccines through investments in dry storage, cold chain and ultra-cold chain systems and infrastructure
- Extend delivery of vaccines and supplies from the central vaccine store to health facilities where they can easily be accessed.
- Design of a holistic LMIS that optimises, safety, reliability of immunisation services drawing from the success registered in the cold chain information system (CCIS)

SERVICE DELIVERY

- Improve planning and service organisation to increase access to zero-dose, under-vaccinated and missed communities.
- Provide high quality immunization services at all levels of the health care service delivery to ensure completion of immunization schedule.
- Provision of adequate infrastructure at health facilities to deliver quality immunisation services to reach all eligible populations.
- Provide comprehensive package of responsive immunization services in all parts of the country to reach the zero-dose, under-vaccinated and missed communities

- Expand the package of vaccine antigens by introducing and rolling out new vaccines to respond to emerging and re-emerging VPDs

SURVEILLANCE, MONITORING AND EVALUATION

- Strengthen surveillance system to be sensitive to detect, notify and track all suspected vaccine preventable diseases in a timely manner
- Adoption of E-systems to capture immunisation data track in order to improve quality that meets all the five standards of data quality.
- Ensure high quality, fit for purpose data to track progress, improve program performance and form the basis of decision making at all levels.
- Continue monitoring and documenting occurrence of side effects, and AEFIs in order to restore confidence of the public and do public education.

Introduction

In Uganda, vaccination against vaccine preventable diseases (VPDs) is a national priority that is entrenched in the National Development plan (NDP) III, Health sector strategic plan and the manifesto of the national resistance movement (NRM) party. It is a right for all persons in Uganda, and one of the key interventions under the human capital development program aimed at reducing morbidity, mortality and disability due to vaccines preventable diseases. Effective vaccination contributes towards the assurance for the right to health and life, thereby promoting survival, wellbeing, economic productivity and national development.

Government must therefore guarantee access to vaccines for all people in Uganda regardless of who they are, where they reside, what they believe in, their preferred ways of life. The vaccines should be available when the people need them, and at close proximity so that the process of vaccination does not leave no one behind. The national immunisation program, largely restricted to under one year vaccinations, now covers twelve diseases from the original six killer diseases. And the country is also set to introduce new vaccines to be dispensed in the second year of life or along the person's life course.

Over the last five years, the vaccination coverage indicators for most antigens have stagnated at about 90%, with dropout rates at 8% and 2.2% for zero dose children (children not being reached by the vaccination program). Furthermore, the proportion of fully vaccinated children has stalled at about 85% leaving partially vaccinated at a worrisome 15% of the target population. The accumulation of partially vaccinated and zero dose children weakens population immunity and results in frequent outbreaks of would-be controlled VPDs. For instance, in 2019 the cumulative number of zero dose and partially vaccinated children is thought to have resulted in 1,664,454 suspected cases of measles, with 29,103 patients admitted with symptoms of measles-rubella disease, and 586 related deaths in the country [HMIS]. For the same reason Uganda experiences outbreaks of measles at least every three years.

The Ministry of Health conducted EPI Review 2020 to identify factors affecting access to and coverage of vaccination services. The review identified lack of vaccines at some

service delivery points, irregular provision of vaccination services, unreliable vaccination data, inadequate program management capacity at all levels, ineffective risk communication and low and incomplete vaccination completion rates. The global vaccination agenda entered a new decade with the “Immunisation Agenda 2030- A Global Strategy to Leave No One Behind” (IA2030), which replaced the Global Vaccination Action Plan (GVAP). Uganda being part of the global vaccination agenda, needs to consolidate the hitherto attained gains in vaccination and map out new strategies to accelerate the realisation of the Immunisation Agenda 2030 up to and beyond the year 2030.

Therefore, the purpose of this National Immunisation Strategy (NIS) is to;

- i. Outline and build consensus on National Immunisation priorities.
- ii. Align emerging national and global priorities using the NDP III, SDGs, Immunisation agenda 2030 and Gavi 5.0.
- iii. Provide guidance on effective and accountable use of resources on agreed national priorities
- iv. Guide resource mobilisation, partner coordination, implementation and monitoring progress towards national and global priorities in the next 5 years.

Background

Geography of Uganda

Uganda is a land locked country in East Africa that lies along the equator and occupies a total area of 241,039, 550 square km; 18% of Uganda is covered by water bodies consisting of Lakes Victoria, Albert, George, Edward and other smaller ones, and traversed by rivers including the great river Nile. The rest of the land area is made up of mountains, plateaux, numerous small hills, valleys and extensive savannah plains. Uganda shares borders with South Sudan (North), Kenya (East), Tanzania and Rwanda (South) and the Democratic Republic of Congo (West). The country receives two rain seasons in a year with an all year-round temperatures ranging between 18^oC to 31^oC. The climatic conditions make Uganda conducive for a wide range of flora and fauna including disease causing agents.

Population

Between 2002 and 2021, the national population increased from 24.2 million to 42 million, resulting in an average annual growth rate of 3.03%. The population of Uganda is projected to increase to 48 million by 2025. The sex ratio is 94.6 males per 100 females, down from 101.9 in 1969 and the majority of the population (78%) lives in rural areas [1].

Table 1: The population projects for the strategic period 2022-2027:

| Population | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 |
|-----------------------------|------------|------------|------------|------------|------------|------------|
| Total population | 44,212,800 | 45,562,000 | 46,930,900 | 48,317,300 | 49,718,200 | 51,130,800 |
| Under 1 year | 1,901,150 | 1,959,166 | 2,018,029 | 2,077,644 | 2,137,883 | 2,198,624 |
| Productive age non-pregnant | 7,958,304 | 8,201,160 | 8,447,562 | 8,697,114 | 8,949,276 | 9,203,544 |
| Pregnant | 2,210,640 | 2,278,100 | 2,346,545 | 2,415,865 | 2,485,910 | 2,556,540 |
| Under five | 9,063,624 | 9,340,210 | 9,620,835 | 9,905,047 | 10,192,231 | 10,481,814 |

Health Indices

The health indices in Uganda improved steadily between 1988-2016. During the period, infant mortality rate reduced from 98 per 1,000 live births to 42 per 1,000 live births, child mortality reduced from 188 per 1,000 live births to 60 per 1,000 live births. Concomitantly, the average life expectancy at birth increased from 45 to 62 years (UDHS2016)[2].

The significant improvements observed in infant and child mortality are largely attributable to the introduction of effective vaccines against pneumonia, diarrhoea, measles and neonatal tetanus – conditions that were the leading causes of childhood morbidity and mortality. These vaccines include Haemophilus influenza A, Pneumococcal Conjugate vaccines against pneumonia, Rotavirus vaccines against severe forms of diarrhoea, Measles containing vaccines against measles and Tetanus toxoid/ Tetanus Diphtheria against tetanus. With future introduction of malaria vaccines and the second dose of measles vaccines, morbidity and mortality in children is expected to reduce further.

The Administrative Structure

Uganda is a decentralised country consisting of 146 districts, one Capital City Authority, and 11 cities. The country is further subdivided into 322 counties, 1,488 sub-counties, 7,553 parishes and 58,197 villages/Local Council 1 (LC1s). The village/LC1 forms the smallest political-administrative unit. The counties/constituencies form 214 “health sub-districts” in the country. The health system works together with the education system and by the end of 2019, Uganda had 56 accredited universities and 3 institutes that award degrees, about 2,995 secondary schools and over 20,305 primary schools.

<https://www.education.go.ug/wp-content/uploads/Abstract-2017.pdf>

The National Health system

The national health system comprises both public and private sectors. The number of health facilities (public, private and private not for profit) in Uganda now totals 6,937.

Of all the health facilities, 45.16% (3,133) are Government owned, 14.44% (1,002) are Private and Not for Profit (PNFP) while the remaining 40.29% (2,795) are Private for Profit (PFP) and 0.10% (7) are community-owned facilities. The private health sector includes the "Private Not for Profit" (PNFP) providers largely owned by religious organisations and the "Private for Profit" (PFP) which operate as business enterprises owned by corporations or individuals [3].

The provision of health services in Uganda is under the overall leadership of the MoH which is responsible for policy guidance, strategy development, standards setting, guidelines development, capacity building, resource mobilisation, and support supervision. The National Referral and Specialist services are delivered by the National Referral Hospitals (NRHs), Specialised Hospitals and Regional Referral Hospitals (RRHs). Districts on the other hand led by the District Health Teams (DHTs), are responsible for decentralised delivery of Primary Health Care services through Health sub-districts (HSDs), General Hospitals, Health Centres IV, III, and II working alongside Village Health Teams at the village level to deliver community health services.

Immunisation is part of the essential health services provided at all levels of health care service delivery and it includes out reaches within health facilities' catchment areas. Delivery of immunisation services is the responsibility of urban and district local governments, Coordinated and Supervised by the DHTs or their equivalents, whilst the implementation is by health sub-districts, and respective health facilities. The local governments manage resources for immunisation through micro planning, identification and deployment of teams of vaccinators to provide services at fixed and outreach sites, distribution of vaccines and accessories to the health facilities through the last mile principle, conducting demand generation through social mobilisation, monitoring, support supervision and finally accountability of allocated resources. Health facilities plan and conduct immunisation services, manage vaccine supplies and report individual level immunisation data to the district including adverse events following immunization (AEFIs). The districts clean and collate immunisation data

before sending to the national level through the health management information system (HMIS).

The governance and management of the decentralised health system is the responsibility of the two levels of government, i.e., the districts' local governments and sub county lower local governments. The oversight of services delivery at every level is provided by elected political leaders (committees of the councils) and the appointed governance bodies (facility management committees or boards). The governance committees provide oversight, and are a platform for people to participate on matters of health in line with the principals of Primary Health Care.

Every governance body has an administrative unit that provides administrative support to mobilise and manage resources at that level. At the District level, the District Health Office with support from the Chief Administrative Officer manages the implementation of health programs as guided by the National Health Policy and Health Sector Strategic Plan and the National Development Plan III. The National Immunisation Strategy will be one of the policy instruments to support implementation of immunisation services at the national and the district level.

The National Medical Stores is mandated by the NMS Act 207 to procure, store and distributed vaccines and health supplies to public health facilities, while the Ministry of Health ensures the resources required for the purchase of vaccines and supplies are mobilised. The government procures BCG, Polio vaccines and meets its co-financing obligation with GAVI for DPT-Hep-Hip, Rota, PCV, IPV, and Measles-Rubella vaccines. On a monthly basis, the NMS distributes vaccine to districts vaccines stores which in turn distributes them to the last mile.

The National Expanded Program on Immunisation (UNEPI)

UNEPI is a division in the Ministry of Health under the Department of National Disease Control. It is responsible for planning, guiding implementation and monitoring of immunisation services in Uganda.

The logistics of vaccine and related items is centrally managed by the National Medical Stores (NMS) who are responsible with support from UNEPI supply chain

and logistics committee, for forecasting, procurement, storage and distribution to the last mile. Furthermore, working with the local government cold chain teams, they coordinate through the reverse cold chain approach, the retrieval of waste material from the vaccination exercise that cannot be safely disposed off in the districts, for safe centralised disposal.

National Vaccination Package

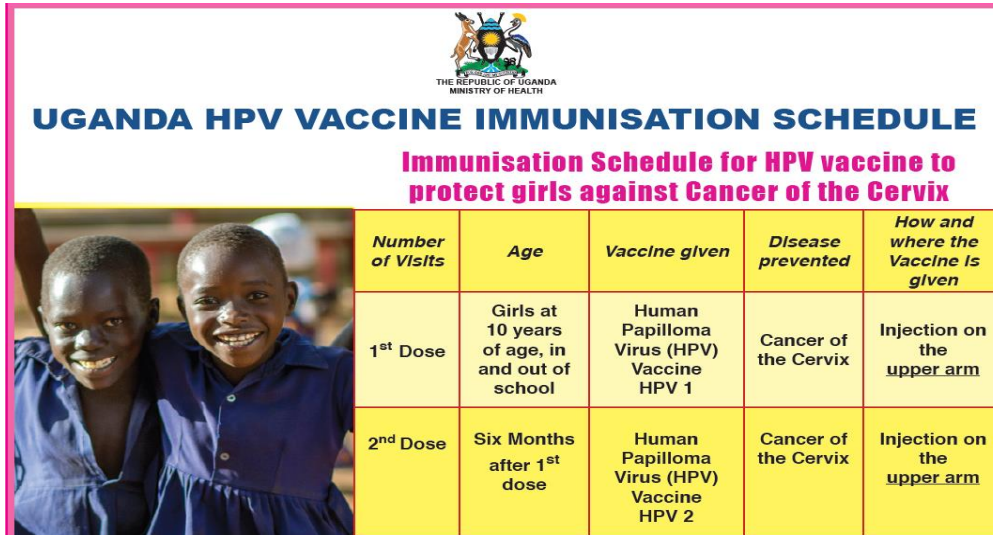
The current childhood immunisation schedule consists of 12 recommended vaccines which are provided to the targeted persons at no cost at the point of vaccination. The current Immunisation Schedule provides Immunization against 12 diseases namely: Hepatitis B, Diphtheria, Tetanus, Pertussis (whooping cough), Haemophilus influenza type b (Hib) disease, Polio, Pneumococcal, Rotavirus, Measles, Rubella, Human papillomavirus (HPV), Tuberculosis (Figure 1).

| Vaccine/ Antigen | Dosage | Doses | Min. Interval per dosage | Min. Age at Start | Mode of Administration | Site of Administration | Storage Temperature (°C) | Remarks |
|--------------------------------|---|-------|---|---|------------------------|---|--------------------------|-------------------------------|
| BCG | 0.05ml up to 11/12 0.1ml after 11/12 | 1 | N/A | At birth or first contact after birth | Intra dermal | Rt. Upper arm | +2 to +8 °C | Only use diluent provided |
| DPT-HepB- Hib | 0.5 ml | 3 | 4 weeks | At 6 wks or first contact after 6 weeks | IM | Lt thigh upper outer aspect | +2 to +8 °C | Do not freeze |
| Hep B birth dose | 0.5 | 1 | None | At birth or within 24 Hours after birth up to 7 days | IM | Intramuscular, Outer Upper Aspect of Left Thigh | +2 to +8 °C | Do not freeze |
| OPV | 2 drops | 3 | 4 weeks | At birth or after 6 wks | Oral | mouth | +2 to +8 °C | It is not altered by freezing |
| IPV | 0.5 ML | 2 | 8 Weeks | 6 Weeks | IM | Intramuscular, right upper thigh | +2°C to +8°C | DO NOT FREEZE |
| Rotavirus vaccine | 1.5 ml | 2 | 4 Weeks | 6 Weeks | Oral | Mouth | +2 to +8 °C | Do not freeze |
| Yellow Fever | 0.5 | 1 | None | 9 Months | IM | Intramuscular, Upper right Arm | +2 to +8 °C | It is not altered by freezing |
| Measles- Rubella | 0.5ml | 2 | 9 Months | 9 months | Subcutaneous (SC) | Lt Upper Arm | +2 to +8 °C | Only use diluent provided |
| PCV | 0.5ml | 3 | 4 weeks | At 6 wks or after 6 weeks | IM | Rt. Thigh upper outer aspect | +2 to +8 °C | Do not freeze |
| HPV | 0.5ml | 2 | 6 months | 10 year old girls in school and in the community | IM | Upper arm | +2 to +8 °C | Do not freeze |
| Tetanus Toxioid diphtheria(Td) | 0.5ml | 5 | Td1- First contact with WCBA, Td2 dose after 4 weeks, Td3 Dose after 6 months , Td 4 dose after 1 year, Td 5 dose after 1 year. | First contact with pregnant or women of child bearing age (15-49 years) | IM | Upper arm | +2 to +8 °C | Do not freeze |

Figure 1: Routine immunization schedule for children under 1 year, Uganda

The successful delivery of these vaccines has led to the reduction and close to elimination of several VPDs with some like Rubella, Measles and Diphtheria – these diseases are almost unknown to the current generation of parents and young medical workers. In addition to under 1-year immunisation, Uganda also provides

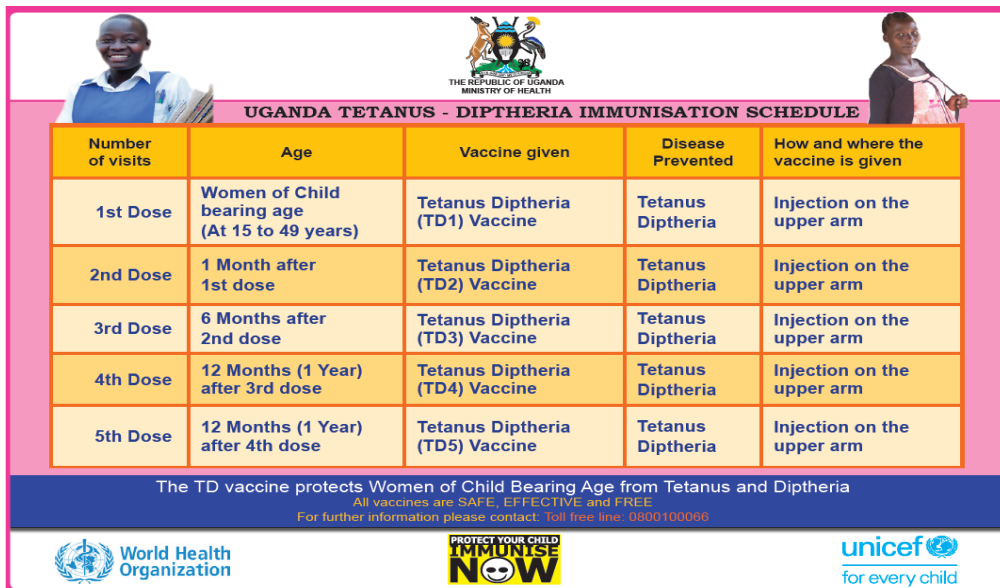
vaccinations against human papilloma virus (HPV) for girls aged 10 years in and out of schools to protect them against cervical cancer (figure 2) and tetanus-diphtheria to women of childbearing age to protect them and their future babies against tetanus and diphtheria (figure 3).



The poster features the Ugandan coat of arms and the Ministry of Health logo at the top. Below the title, there is a photograph of two young girls in school uniforms smiling. The table below details the immunisation schedule.

| Number of Visits | Age | Vaccine given | Disease prevented | How and where the Vaccine is given |
|----------------------|--|---|----------------------|------------------------------------|
| 1 st Dose | Girls at 10 years of age, in and out of school | Human Papilloma Virus (HPV) Vaccine HPV 1 | Cancer of the Cervix | Injection on the upper arm |
| 2 nd Dose | Six Months after 1 st dose | Human Papilloma Virus (HPV) Vaccine HPV 2 | Cancer of the Cervix | Injection on the upper arm |

Figure 2: Immunisation schedule for HPV vaccine for girls aged 10 years in Uganda



The poster features the Ugandan coat of arms and the Ministry of Health logo at the top. It includes photographs of a male health worker and a pregnant woman. The table below details the immunisation schedule for women of childbearing age.

| Number of visits | Age | Vaccine given | Disease Prevented | How and where the vaccine is given |
|------------------|--|---------------------------------|-------------------|------------------------------------|
| 1st Dose | Women of Child bearing age (At 15 to 49 years) | Tetanus Diptheria (TD1) Vaccine | Tetanus Diptheria | Injection on the upper arm |
| 2nd Dose | 1 Month after 1st dose | Tetanus Diptheria (TD2) Vaccine | Tetanus Diptheria | Injection on the upper arm |
| 3rd Dose | 6 Months after 2nd dose | Tetanus Diptheria (TD3) Vaccine | Tetanus Diptheria | Injection on the upper arm |
| 4th Dose | 12 Months (1 Year) after 3rd dose | Tetanus Diptheria (TD4) Vaccine | Tetanus Diptheria | Injection on the upper arm |
| 5th Dose | 12 Months (1 Year) after 4th dose | Tetanus Diptheria (TD5) Vaccine | Tetanus Diptheria | Injection on the upper arm |

The TD vaccine protects Women of Child Bearing Age from Tetanus and Diptheria
 All vaccines are SAFE, EFFECTIVE and FREE
 For further information please contact. Toll free line: 0800100066

Logos for World Health Organization, UNICEF, and 'PROTECT YOUR CHILD IMMUNISE NOW' are displayed at the bottom.

Figure 3: Immunisation schedule for tetanus-diphtheria for childbearing women in Uganda

The Situational Analysis:

The situation analysis of the NIS 2022-2027 is derived from the EPI Review 2020 which is a separate reference document and the SWOT analysis matrix attached in the annex.

Lessons from the EPI Review 2020

The Ministry of Health with support from WHO and Gavi undertook *the EPI review in 2020* to assess the performance of the program through literature review, interviews with key stake holders at the policy and implementation levels.

The EPI Review made the following recommendations:

- Scale up, and sustain the development of integrated annual work plan in all districts.*
- ❖ *Streamline oversight structures at UNEPI and at the districts to avoid overlaps between the various immunisation partners.*
- ❖ *Strengthen the use regional referral structures (EPI-IDSR) and the Open Data Kit (ODK) to conduct sub-national supportive supervision.*
- ❖ *Align UNEPI organisation structure with that of MoH, and harmonise differences in staffing norms between ministries of health, public service and local government.*
- ❖ *Complete the EPI pre-service curriculum and cascade EPI pre-service training to all health facility levels.*
- ❖ *Finalise the establishment of the national immunisation Fund for routine and new immunisation services.*
- ❖ *Introduce new vaccines as guided by NITAG.*
- ❖ *Government to provide reliable energy source for cold chain equipment through connections.*
- ❖ *Strengthen national vaccines and supplies forecast.*
- ❖ *Strengthen the RED/REC strategy to address zero dose and under-immunised children.*
- ❖ *Popularise the One Health strategic plan to strengthen the coordination of surveillance activities at national and sub national levels.*
- ❖ *Customised demand generation interventions and strengthen the implementation of the risk communication strategy.*
- ❖ *Introduce, integrate and strengthen Electronic means for data capture, transmission and usage at all levels.*
- ❖ *MoH to work with Ministry of Education and Sports (MoES) to expand the coverage of HPV through the School Health Programme.*

- ❖ *Integrate COVID-19 messages, supplies and logistical components within the routine immunisation programming.*

Emerging issues:

The emerging issues from the EPI review 2020 and the SWOT analysis forms the basis of the actions needed in the National Immunisation Strategy 2022–2027. The critical program outcomes are;

- a. Reduced numbers of Zero Dose and partially vaccinated children
- b. Missed communities are mapped and reached

To achieve these program outcomes, efforts have been made to ensure that the national immunisation strategic priorities and activities will improve and sustain the broader immunization landscape, through improvements in coverage, disease surveillance as well as address outstanding recommendations from previous program reviews and assessments. These priorities are in line with the Global Immunisation Agenda 2030, regional strategic plans, the NRM manifesto, as well as the overall NDP III whose goal is to increase household incomes and improve the quality of life of Ugandans. And as such, the priority areas have been arranged under the following sections:

1. Service delivery and demand creation:

- a. Improving equitable access to vaccination by target population through better organisation and management of EPI services at all levels
- b. Improving customer experience during vaccination sessions through: routine appraisal and adoption of preferred communication channels, ensuring of comfort and convenience at service areas, cleanliness, reduced waiting time, explanation of anticipated side effects and indication of next appointments.
- c. Implementing new vaccines introductions as recommended by NITAG in synch with global strategies.

2. Communication and demand generation:

- a. Improving the technical content of EPI messages to align within the people segments, needs, and geographically divergent areas.
- b. Aligning and sending the messages through the most appropriate and popular channels, by persons viewed credible to the population segments.

3. Vaccines logistics and Cold supply chain:

- a. Forecasting of vaccine needs over the strategic period guided by the national population projections and consumptions patterns.
- b. Investing in better management of the last mile delivery of vaccines.
- c. Expanding the range of cold chain storage temperature and space for vaccines at the national, regional, district and facility levels.
- d. Investing in logistics management information system (LMIS) that facilitates stock management and visibility at all levels of the health system.

4. Program management:

- a. Better planning and coordination of EPI activities and stakeholders for efficient use of EPI resources.
- b. Improving support supervision and performance reviews to support governance of the program.
- c. Develop a transition plan to more of government funding to allay threats to sustainability due to over reliance on donor funding for purchase of vaccines and salaries for program staff.
- d. Pegging transfer of EPI funds to districts to status of accountability was defeating the original objective of facilitating vaccination teams. Alternative mechanisms of funding and accountability need to be sought
- e. Capacity building for care (Immunisation in Practice and Midlevel Management for Immunisation) at all levels of the health system
- f. Alignment of UNEPI structures to its functions and ensure that staffing recruitments are by the government.

5. Monitoring and evaluation:

- a. Strengthening the capacity for surveillance of VPDs and AEFI at all levels.
- b. Digitising EPI data for improving data quality and reporting.
- c. Automate data use for program management and supporting financial transactions and accountability.

Problem statement

The vaccination coverage for all childhood vaccination has steadily improved and stands above 90% for all antigens with DPT1 at 103%. However full vaccination coverage stands at 85% (DHIS2 2021); 2.2% of children never received a single vaccine dose (Zero dose), and 15% are partially vaccinated. A build-up of zero-dose and partially vaccinated children erodes population immunity that increases vulnerability of communities and susceptibility of children to vaccine preventable diseases (VPDs).

Access to vaccination services is generally high at 97% for DPT1. Most (80%) vaccinated children in Uganda are vaccinated through static vaccination points in health facilities while 20% are through outreaches. There are children (2.2%) (Zero Dose) and communities (missed communities) who are not reached by the primary health care model in use of static and outreach immunisation, and therefore, keeping track of the vaccination status of target populations is an important coverage parameter.

Under pinning the constraints to access and utilisation of available immunisation services are; socio-cultural barriers, gaps in information as well as physical barriers to immunisation service points. These constraints are more magnified in peri-urban and poor communities, upscale gated communities, Island communities, mountainous regions, sparsely populated areas, communities with insecurity, and migrant populations. And these constraints affect access and utilisation of vaccination for all target groups including adult vaccination during epidemics and outbreaks.

Vision:

A population free of priority vaccine preventable diseases in Uganda

Mission:

To reduce the public health importance of morbidity, mortality and disability due to priority vaccine preventable diseases (VPDs); improve health and productivity

Goal:

Every child and priority population at risk of Vaccine Preventable Disease is fully vaccinated.

Objectives

1. Provide equitable access to and create demand for immunisation services
2. Ensure availability of effective vaccines and supplies, and appropriate storage.
3. Monitor and evaluate program performance, occurrence of VPDs and AEFI
4. Manage program resources and provide guidance for better EPI outcomes

Values

The right to highest attainable level of health (right to health)

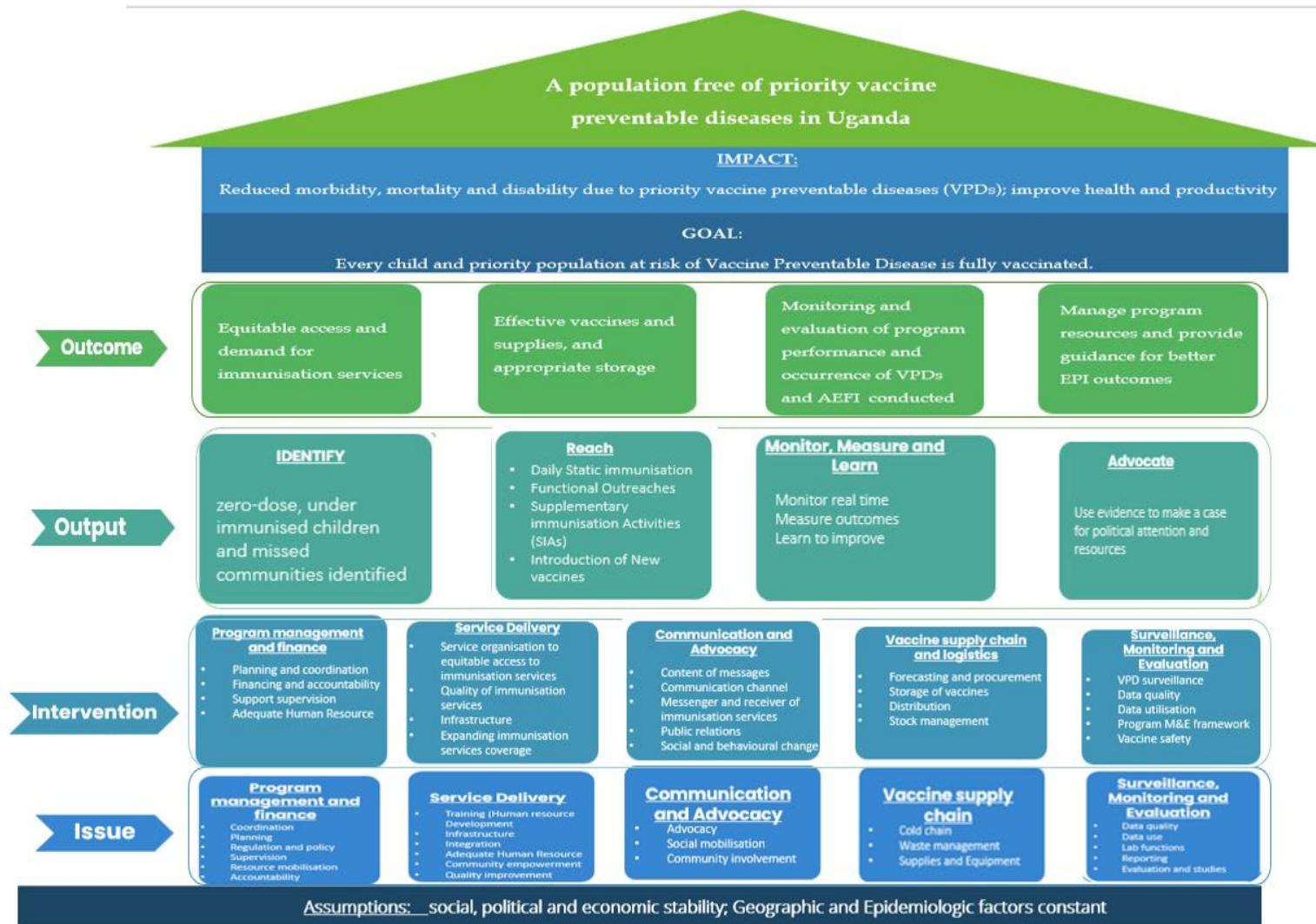
- Solidarity
- Equity
- Respect of cultures and traditions of the people of Uganda
- Professionalism, Integrity and ethics
- Participation
- Accountability

Guiding Principles

1. *People centered planning* that responds to the needs of the individuals and communities. The design, management and delivery of immunization services will address barriers to access due to age, location, social, cultural and gender related factors.
2. *Country owned programming* that relies on district level performance and accountability for targets and resources respectively.

3. *Partnership based alignment of efforts* to maximize impact through efficient use of resources and coordinated actions.
4. *Data guided generation of evidence* for decision making at all levels of the health system.

The theory of change



Justification/Rationale

Within an expanding global immunisation landscape coupled by the need to sustain previous gains achieved through the massive investments into the national immunisation program, there is need for a plan that align the country's priorities to the Immunisation Agenda 2030 (IA2030), regional strategic objectives as well as the country's national development plan (NDP III). According to the NDP III for the years 2020/21 to 2024/25, vaccine coverage before the first year of life is still low at 78%, and the plan aims to increase it to 95% (NDPII). Policy objective 3 of the third National Health Policy 2021 involves the improvement of immunization coverage with quality and safe vaccines, and introduction of newer vaccines based on epidemiological considerations, so as to attain 100% completion rate before 1 year. This is also reflected in the Ministry of Health Strategic Plan 2020/21 - 2024/25. Uganda is part of the global vaccination agenda. The global vaccination agenda entered a new decade with the **"Immunization Agenda 2030 – A Global Strategy to Leave No One Behind"** (IA2030) replacing the Global Vaccination Action Plan (GVAP) to address key challenges in immunization over the next decade.

In applying the core principles of IA2030, immunization programmes are expected to address coverage and equity gaps by tracking zero-dose children and engaging representatives of local communities and local health providers in designing interventions tailored to these groups.

A country-specific National Immunization Strategy (NIS) is required to guarantee appropriate planning, coordination, and implementation of immunization activities at country level. The overarching goal of the NIS is to consolidate the multiple and often parallel plans into a single NIS so as to ensure consistency across the plans and to align the different strategies with the overall National Development Plan. The NIS replaces the hitherto widely used the Comprehensive Multi-Year Plan for Immunization (cMYP) guidance and tool. Although the cMYP guidance and tool are generally considered technically sound and useful, the above-mentioned changes in

the global political landscape have led to the guidance being updated for the following reasons:

- Firstly, as IA2030 replaces the GVAP for the new decade, and regional immunization plans are revised to align with IA2030, the new strategic focus on issues such as **equity, data quality, surveillance, and demand for vaccination**, needs to be reflected in countries' national immunization strategies.
- Secondly, to respond to the call for a **more integrated primary health care system**, guidance in the new document will support countries' initiatives to improve integration at the service delivery level by involving health planning and budgeting focal points in the NIS development process.
- Thirdly, providing a **simplified method for resource requirement estimation** will foster increased country-ownership in countries' national immunization strategies and reduce the need for external support to complete a complex costing exercise.

And lastly, negotiating a **realistic budget** during the development of the NIS will contribute to countries' national immunization strategies being implemented more effectively.

General Context:

The National Immunisation Strategy is developed as an operational policy instrument to provide detailed guidance to health care workers, managers, leaders and stakeholders while planning, mobilising resources, implementing and appraising the immunisation services in Uganda. It is developed to help fulfil the provisions for immunisation in the Health Sector Strategic Plan and the National Development Plan III. Immunisation is one of the most effective public health interventions that produces immediate to medium term results. Vaccines are one of the key interventions for child survival. They prevent mortality, morbidity and disability from vaccines preventable disease including cancers of the liver, cervix, and epidemics and pandemics.

Economic Context

Infectious diseases on the national vaccination program are those that have heavy economic impact. They often result into death, severe disease requiring hospitalisation, prolonged illness or permanent disability. Similarly, the disease either have no definitive treatment, take long to complete treatment or are simply expensive for the individuals, families and the country to afford.

Preventing the occurrence of the VPD contributes to socio economic development through savings. Direct out of pocket expenditure by individuals and families, time lost by individuals and families during care, expense by government on treatment and rehabilitation, heavy burden of the health system, human cost of bereavement and the cost on burial can be saved through timely and complete vaccination programs. These savings can be used in other productive sectors of the economy by families or the country as envisaged in the NDP III.

Socio-Political Context

Between 1962 and 1970, vaccination of infants against poliomyelitis and tuberculosis were being implemented and generally led by NGOs and partners. The country became one of the first in Africa to be certified for smallpox eradication in the early seventies. However, due to political and civil unrest in late 1970s and early 1980s, the immunisation services collapsed leading to rampant occurrence of vaccine preventable disease such as Polio, and Measles.

In 1981, with increasing vaccine availability WHO under resolution WHA81 encouraged countries to establish a National Expanded Programme on Immunisation to coordinate and expand the vaccination against the killer diseases. Against this background, the Uganda National Expanded Program on Immunisation (UNEPI) was established and launched in 1983 to consolidate the fight against the six killer diseases; Polio, Leprosy, Tuberculosis, Tetanus, Pertussis and Diphtheria. Due to the civil wars and governance challenges of the early 1980s in the country, the program could not be effectively implemented in all parts of the country, leading to its relaunch in 1987 after the return of civil order in most parts of the country.

Since 1986, the NRM government has always demonstrated high commitment to prevention of disease and progressive development of the immunisation program. UNEPI was established in 1983, but launched in 1987, and relaunched in 1997 and further revitalised in 2002 to ensure the program delivered to reduce occurrence of vaccines preventable diseases and the associated morbidity and mortality.

Accompanied by other health systems reforms, investments in health infrastructure and human resources for health, increasing recurrent budgets to local governments, the program saw steady increase in DPT3 coverage from 14% in 1986 to 92% in 2021, infant mortality reduced from 98/1000 live births in 1988 to 42/1000 live births in 2016, child mortality from 195/1000 live births in 1988 to 65/1,000 live births in 2016.

The Government continued to restructure the program for better performance. The standalone UNEPI is now fully integrated into MoH and National Medical Stores processes. The program now runs a vaccination portfolio of 14 vaccines in 2022 up from six vaccines against the six killer diseases in 1986 in addition to other vaccines often deployed against outbreaks Cholera, Ebola, Meningitis, Covid-19 among others. The government with support from partners has upgraded the vaccines infrastructure to ensure quality and availability of the vaccines close to the population. In line with its commitment to developing the vaccination program, government meets its obligations on vaccines financing for traditional vaccines, co-financing for new vaccines and contributing to the global vaccines alliance as a donor to finance the Gavi 5.0 strategy.

Furthermore, government is committed to support research and development of vaccines in the country. It has created incentives for vaccines production and technology transfer.

Historical Context

When UNEPI was established, its operations were largely partner led and partner financed. It operated like a parastatal and ran an independent logistics system, an information system at a time when the national health information system was weak.

In 1993, the parliament of Uganda established the National Medical Stores to manage medical logistics including vaccines by an act of parliament.

The Ministry of Health implemented the provisions of the act by centralising procurement of medicines, vaccines and supplies. To this end a report to guide the integration of vaccines logistics and supplies and cold chain maintenance was sponsored. To date, the transition of vaccines logistics and cold chain functions to the National Medical Stores is now complete and UNEPI was restructured to align with its core roles to limit its operations on policy, guidance, planning, coordination, capacity building, quality assurance, supportive supervision and monitoring of the national immunisation program.

Environmental Context

Vaccines are a critical tool for the battle against emerging and re-emerging infections, and Global Health Security Agenda. Vaccines will play important role in international health regulation and control of bacterial infections in the future in the context of increasing resistance to current antimicrobial drugs by pathogens. In the context of climate change; seasonal disease patterns, shifting the timing, duration and pattern of transmission of known pathogens like malaria, the role of vaccines will become more prominent than ever.

Vaccination programs can pollute the environment. The vaccines waste bottles, syringes, needles, polythene and paper packs, the coolants in fridges, and obsolete fridges require safe disposal. Ministry of Health has undertaken a program to retrieve and dispose obsolete equipment and replace them with new and environmentally sound Direct Solar Driven fridges. Ministry is investing in incinerators for the management of medical waste besides outsourcing waste management.

IMPLEMENTATION PILLARS OF THE STRATEGY

SERVICE DELIVERY

The objective of service delivery is to increase equitable access to vaccination services against priority vaccines preventable diseases. It is expected that the vaccination

coverage of priority populations at risk has increased. There is therefore need for the Zero dose, partially vaccinated children and all other eligible populations to be vaccinated with quality vaccines. This objective will be implemented through four pillars: Access, Coverage, service organisation, quality and infrastructure

[Pillar 1: Service organisation for Equitable access to Immunisation Services](#)

Issue:

Better vaccine service organisation and management is needed for equitable access to immunisation services. In Uganda, 40% of children who missed a vaccine had visited a health facility for other reasons, but missed the opportunity to be vaccinated because children are not screened routinely for immunisation status and vaccination is not provided on daily basis. In all districts, at least one vaccination outreach is planned per parish per month to increase access to immunisation for communities that are far from health facilities. However, such outreaches are sometimes not fully implemented or closely monitored.

Furthermore, the current organisation and management of immunisation services is not responsive to the peculiar service needs of urban settings, island and mountainous communities, resulting in inequitable access to immunisation services by such communities (missed communities). Also, the current design of immunisation programs is not adequately aligned to respond to the needs of – life in informal, high density and underserved peri-urban settlements. Mobile urban communities and high end ‘gated’ communities who prefer private service that may not be offering immunisation services on the other hand may also result into missed communities in urban areas.

The missed opportunities for vaccination and unimplemented but planned vaccination outreaches to some communities, and challenges faced in urban immunisation result into poor vaccination coverage, accumulation of Zero dose and partially vaccinated children, and susceptibility to outbreaks of VPDs.

General poor service organisation and poor management of health facilities, implementation of policy guidance and planned activities result into reduced access to vaccination. For instance, 40% of staff time is lost to absenteeism, and health staff in a number of districts only work for two weeks per month exacerbating staff shortage. This leads to the failure to implement all

planned outreaches, and poor screening of children in health facilities for immunisation status using IMNCI guidelines thus reflecting the broader health system weakness.

Statement:

In order to sustain the current gains in immunisation coverage, increase access to zero-dose, partially-vaccinated and missed communities, MoH commits to improving immunisation service organisation, and improved management of service delivery

Strategies:

- i) Promote daily immunisation services in all health facilities to ensure service availability
- ii) Promote the use of IMCI to reduce on missed opportunities in health facilities (OPD) by vaccinating children due for immunisation through screening for vaccination status.
- iii) Institutionalise micro planning for hard to reach areas
- iv) Ensure implementation and monitoring of all planned vaccination outreaches
- v) Develop and implement urban immunisation guidelines
- vi) Strengthen public-private partnership for immunisation services

Outcome

- Reduced number of zero dose and under immunised
- Equitable access to immunisation services

Indicators

- Number of zero dose, under immunised and missed communities reached

Pillar 2: Quality of Immunization Services

Issue:

Utilisation (access and drop outs) of immunization services is affected by service quality. Besides technical quality consideration, client experiences, adequacy of vaccine stocks, conducive space for conducting immunization services, comfort, cleanliness and waste

management in the services area, waiting time, among others are even more important in determining the perceived quality of the immunisation service provided.

The quality of immunization services is perceived by sections of the public as suboptimal sighting poor waste management systems, crowded service areas, poor interpersonal communication by health workers, and inadequate health worker skills in providing vaccine information including anticipated side effects and mitigation measures.

Clients who perceive or experience poor service may not return for the subsequent services. Current data shows that about 15% of children who start vaccination do not complete their immunisation schedules, making it difficult to achieve vaccination targets. The high dropout rates are compounded by a largely paper-based tracking system which is insufficient for effective identification of under-vaccinated.

Statement:

In order to ensure every child completes their immunization schedule and good client experience, the Ministry of Health is committed to improving the quality immunization services at all levels of the health care.

Strategies:

- i) Build capacity of health workers on vaccination service delivery, (immunisation in Practice)
- ii) Enhance the existing defaulter tracking system including digitization
- iii) Support and integrate vaccination waste management at all levels
- iv) Support health workers to improve client experience at vaccination service points through better information, education and communication
- v) Strengthen support supervision and mentorship of health workers

Outcome;

All eligible population are fully vaccinated as per the immunisation schedule

Indicator

Proportion of districts achieving a dropout rate of less than 10%

Pillar 3: Infrastructure for improved quality of Immunisation Services

Issue:

Adequate infrastructure offers a conducive environment for provision of good quality immunization services. Infrastructure includes a network of health facilities, space to conduct vaccination at the health facility, space for cold-chain technology, transport logistics, furniture, electricity, and water, among others.

Notable infrastructure gaps have been observed to hinder the provision of quality immunisation services. Some health facilities lack comfortable, adequate space and furniture to conduct immunization services occasioned by the increasing number of antigens to deliver and the ever-increasing population that need immunization services. In addition, the EPI survey reported that 83% of the surveyed districts reported not having adequate transport to provide immunization services, including outreach programs. Furthermore, for facilities that are not connected to the national electricity grid, there was reported unreliable power and power outages. All these gaps constrain the optimal delivery of immunization services to reach the zero-dose, under-vaccinated and missed communities.

Statement:

The Ministry of Health (MOH) is committed to provision of adequate infrastructure at health facilities to deliver quality immunisation services to reach all eligible populations.

Strategies:

- i) Define the ideal immunization infrastructure needed at all levels, and document level of compliance per facility/ district.
- ii) Align facilities and outreach infrastructure according to the above set standard to improve client comfort.
- iii) Ensure availability of transport facilities to deliver EPI services to all communities.
- iv) Ensure reliable sources of power

Outcomes

- Improved infrastructure to deliver quality immunisation services
- Improved client satisfaction with Immunization infrastructure.

Indicator

- Proportion of Health facilities with adequate space to provide immunisation services

Pillar 4: Expanding Immunization Services Coverage

Issue:

The vaccination coverage in Uganda is relatively good, with 90% coverage of eligible persons for all antigens on the national schedule. In terms of package, a total of 13 antigens responding to VPDs are currently provided. However, other antigens to control emerging and re-emerging VPDs have been recommended for introduction and are yet to be introduced into the national program including. These include; second dose Measles-Rubella vaccines, Yellow Fever vaccines, IPV2, Hepatitis birth dose vaccine, Malaria, Meningitis-A, and Tetanus-Diphtheria (TD). Other vaccines like Meningitis vaccines, cholera vaccines, Ebola vaccines and COVID 19 vaccines are currently used under outbreak situations. New vaccines need to be introduced whilst maintaining or even improving on good coverage of existing ones.

Statement:

The MOH commits to expanding the package of vaccine antigens by introducing new vaccines to the current package and rolling out new vaccine types to respond to emerging and re-emerging VPDs, whilst maintaining good coverage of the existing ones.

Strategy:

- i) Sustain geographical coverage of all antigens to achieve equity
- ii) Implement targeted outreaches for hard-to-reach and missed communities
- iii) Introduce and rollout new vaccines/ antigens in a phased manner

- iv) Implement vaccination campaigns to close immunity gaps
- v) Institutionalise ICHDs and PIRI to catch up with vaccination schedules for children and vaccination targets for health facilities
- vi) Conduct supplementary immunization activities (SIAs) to boost immunization coverage.

Outcome:

- All eligible population vaccinated with age-appropriate vaccines/antigens

Indicators:

- Number of new vaccines introduced successfully
- Proportion of age specific groups receiving vaccines.

COMMUNICATION AND ADVOCACY

To ensure uptake of immunisation services, correct, timely and targeted information must be provided to the public about the diseases targeted for vaccination in the country. The disease presentation and their effects on health at individual, family, community and the country level need to be explained. Adequate information must equally be provided about the vaccines, how they work and the anticipated after side-effects for parents and individuals to make informed consent as well as managing misinformation and disinformation. Communication objectives will be achieved through three pillars of: content of the messages, channels of communication, the source of information and the recipient

[Pillar1: Content the messages on vaccination and immunisation](#)

Issue

Most health messages are Blanket or non-tailored information that is not responsive to the diverse needs of the target audiences leading to inadequate knowledge on safety and protective effects of vaccines. This ultimately leads to pockets of communities who have not received the right messages on immunisation resulting into lower uptake of vaccination in these specific groups or completely missing certain communities.

Statement:

Develop Social behavioural change/ Information, Education, Communication (SBC/IEC) materials with content that is informative, timely, precise, comprehensible, age-specific, and geographically targeted to promote immunization literacy of all people.

Strategy:

- i) Develop well researched, pretested messages and all-inclusive regional and language specific IEC materials.
- ii) Develop fact-based messages suitable for intended audience highlighting vaccine benefits and expected side effects to facilitate well informed decision making.
- iii) Strengthen mechanisms for evidence generation to guide development of targeted interventions for promotion of immunisation services.
- iv) Target content to audiences and communities with poor coverage and low vaccine acceptancy groups to understand and address their concerns.
- v) Establish a mechanism for identifying community concerns, tracking, monitoring and dealing with rumours on vaccines and immunization.
- vi) Increase the languages used in the IEC materials and media information used in the country

Outcome:

- Improvement in vaccine and immunization public literacy, acceptance and behavioural change towards the service.

Indicator:

- Number of different communication materials and messages researched, developed, pretested, printed and distributed.
- Percentage of immunization literate individuals and communities.
- Percentage increment in vaccination uptake in hitherto low uptake communities.

- Number of additional languages from the current adopted in the IEC materials translation and media information dissemination.

Pillar 2: Communication channel

Issue:

Immunisation program relies mainly on interpersonal communication through the local government structures (LCs, VHT, Health workers, local leaders and selected influencers) to deliver messages about routine vaccination, outreaches and campaigns. The current channels used result into a “One-size-fit-all model” comprising of: Mass media (Radio/Television), print and electronic media, but some of these cannot be accessed by all individuals. Ultimately, these communication channels become less effective in transferring information and lead to a lack of information and continued mis-information about vaccines. The program will therefore explore non-conventional methods of communication for immunisation.

Statement

Ministry of health will expand its communication channels to include a hybrid of communication channels and ensure all targeted audiences are effectively reached.

Strategy:

- i) Profile the options for communication channels by region/location, population segments to determine the best approach; These will include, Mass media, community audio towers, megaphones, digital-online, print media and deliberate focus on social media army/influencers on immunization.
- ii) Utilize health and non-health community structures and institutions to reach out to different targets with immunisation messages; slums, remote areas, age specific audiences, schools to trigger behavioural change and practice
- iii) Use targeted messages for routine year-round communication activities of immunisation and campaigns that will intensify communication, social mobilization and advocacy activities, Supplemental Immunisation Activities (SIAs), African Vaccination Week and Integrated Child Health Days.

Outcome:

- Improved usage/coverage of approved communication channels within geographies and audiences.

Indicator:

- Proportion of audience-specific channels crafted.
- Number of people who access information through the communication channels.
- Proportion of messages sent through these high population reaching channels.

Pillar 3: The Messenger of immunisation information

Issue:

Communities respond to messages when they trust and have confidence in the source of the information and the messenger. Vaccination in most health facilities is left to junior staff who may not explain and adequately respond to the needs of the care givers.

Influential individuals in communities beyond health staff can facilitate the spread of correct immunisation messages and thus influence behaviours within a population. Therefore, identification of the right messenger is important for the information to be better received.

Statement:

Ministry of health will strengthen health education for vaccination using both health and non-health actors to disseminate vaccine health-education messaging.

Strategy:

- i) Appropriately stratify influencers to suit specific audiences, communities and regions
- ii) Build their communication skills and knowledge on Immunization.
- iii) Disseminate immunization and audience specific messages/content to the influencers ensuring they understand it and able to effectively communicate it to their audiences.

- iv) Engage local government health and non-health structure, education system, religious and cultural leaders.
- v) Advocate for prioritization of staffing of immunization departments with suitably qualified staff.

Outcome:

- Improved receipt and acceptance of approved immunization messages by the audience

Indicator:

- Number of influencers identified and oriented on Immunization and vaccines.
- Number of messages and content disseminated through the identified influencers.
- Proportion of population reached up the influencers.
- Proportion of Immunization departments manned by suitably qualified medical workers.

Pillar 4: The Receiver of immunisation services

Issue:

In order to influence uptake of information, practice and behavioural change, there is need to study the: individual and community profiling of the message content, channels of communication, intrinsic and extrinsic enabling factors before dissemination. Most of the immunisation communication messages do not pass through such elaborate processes leading to inappropriate content, poor choice of channels and none impact messengers being used when delivering immunization messages. This might negatively affect peoples' attitudes towards immunisation and vaccines by the certain communities.

Statement:

The Ministry of Health will ensure due process in profiling different communities and individuals to ensure audience specific messages, in the right language, through the right channels and utilizing appropriate influencer.

Strategy:

- Appropriately study and profile different individuals, communities and regions to understand how they expect messages to reach them.

Outcome:

- Improved receipt and acceptance of approved immunization messages by the audience
- Improved vaccine uptake, and reduced drop out.

Indicators:

- Proportion of communities and regions profiled on how messages can appropriately reach them.
- Number of communities that have received messages through their preferred communication channels.
- Vaccination uptake rates

PROGRAMME MANAGEMENT AND FINANCE

The programme management and finance objective is to build the EPI capacity at national, regional, district and community levels to plan and manage EPI resources and processes and account for results and resources for better outcomes. The objective will be implemented through 4 pillars; planning and coordination, financing and accountability, support supervision and addressing human resource requirements.

Pillar 1: Planning and coordination

Issues 1: coordinated planning with Local Governments

Effective coordination of all stakeholders in the development of the EPI work plan, results in a smooth and efficient application of the work plan to achieve the desired output by the program. Lack of adequate coordination of the stakeholders has resulted in failure of districts to attain desired outputs as stated in the EPI work plan. This is caused in part, due to the fact that EPI

is not part of the planning process at the district level and there is no transparency of funds received for immunization activities from the different donors at districts.

Statement

Ministry of health will strengthen coordination of stakeholders during development of annual district work plans to ensure that partners work towards implementation of Government priorities as set in the NIS

Strategies/actions/interventions

- i) Engage District/Regional stakeholders in meetings to disseminate the NIS and map Partners' contributions.
- ii) Provide annual technical assistance to districts on development and effective implementation of EPI work plans.
- iii) Utilize stakeholders' meetings to disseminate guidance and tools on work plan development and agree on activities to include in the district annual work plans.
- iv) Provide annual indicative planning figures to Local Governments for incorporation in work plans and budgets.
- v) UNEPI to participate in quarterly Performance Reviews and provide feedback on the district EPI annual work plans.
- vi) Hold district/ regional stakeholders' meeting to disseminate the NIS and map effort to respective partners.

Outcome

- Alignment of district annual work plans to the National Immunization Strategy.
- Improved work plan performance in the districts.
- Reduction in the number of the unimmunized and under-immunized children.
- Increase in immunization coverage in hard to reach communities.

Indicators

- Proportion of districts that develop and submit annual work EPI plans.

- Proportion of districts holding performance review meeting on quarterly basis.

Issues 2: Performance reviews

UNEPI is supposed to use information from performance review meetings to improve performance. However, the Information from District EPI Stakeholders'/performance review meetings is not synthesised and analysed at the National level to inform performance improvement. This results into the formulation of generic non-district specific solutions to district challenges.

Statement

Ministry of health will strengthen collection, analysis and use of information from District Performance review meetings to inform performance improvement.

Strategies/actions/interventions

- i) Assign/designate a focal person from M&E at the national level to review, synthesize and report on the discussions from the stakeholder meetings at the district level
- ii) Develop and disseminate guidelines for conducting district stakeholder and performance review meetings.
- iii) Prepare and disseminate to management analysed information from district performance review meetings to guide decision making.
- iv) Explore more involvement of the regional referral hospital community health departments in coordination of EPI activities in the region.

Outcome

- Information from district EPI performance is used to inform performance improvement plans
- District/Regional performance review meetings are conducted regularly.

Indicators

- Proportion of districts that hold all the planned performance review meetings
- Number of reports summarising issues from districts performance review meetings submitted to the MoH.

- Proportion of reports/items identified from reports from performance review meetings that are followed up with the districts

Issues 3: Program Governance

The EPI division has multiple oversight structures that oversee the implementation of program activities and how they contribute to the overall objectives of the ministry. However, these multiple oversight structures have led to duplication of effort and mandates.

Statement

UNEPI to implement recommendations from previous assessments like the EPI review and to conduct additional assessments, if necessary, with the objective of streamlining oversight over the EPI program. In addition, the program shall continue to advocate for streamlining of the various governance structures for purposes of improving efficiency and reducing duplicity.

Strategies/actions/interventions

- i) Implement recommendations from previous assessments
- ii) Obtain Technical Assistance to conduct additional related assessments.
- iii) Institute Monitoring and Evaluation component in tracking compliance with recommendations and guidance from governance structures.
- iv) Advocate for streamlining of governance structures for efficiency.

Outcome

- Streamlined and effective oversight over the EPI program

Indicators

- Number of governance structures for the EPI Program
- Proportion of governance meetings held on schedule
- Proportion of actions from the meetings followed up.

Pillar 2: Financing and accountability

Issue 1: Financing

Immunization program is engaged in ensuring that all eligible people in the nation receive all WHO mandated vaccines as and when they fall due, facilitated by the GOU and aided by partner funding where necessary. The current status however points out the heavy reliance on donor funding for EPI, as 90% (~US\$ 487.5M) of EPI activities are funded by donors (vaccines and operational costs). This greatly threatens sustainability of the EPI program in case of sudden halt of funding.

Statement

Ministry of Health will establish, functionalize, and implement a comprehensive financing plan for the next five years considering cost for vaccine procurement and deployment, and introduction of new vaccines.

Strategies/actions/interventions

- i) The NIS will be costed and be used for lobbying and advocacy for additional funding from GOU.
- ii) Ensure more efficient funding modalities to disburse funds to districts such as results based financing are adopted to enhance performance for immunization.
- iii) Source Technical assistance (TA) to study and document a roadmap on EPI functionality with increasing local financial contribution over the next 5 years.
- iv) Advocate for the establishment of a national immunisation fund that will take custody of all immunisation related funds.

Outcome

- Increased GOU financing plan for EPI
- Increase in the proportion of EPI costs covered by GoU.

Indicators

- Financing plan indicating total costs of the EPI Program for the next five years.
- Proportion of EPI costs funded by GOU
- Proportionate increase in the funding from GoU over the years
- Number of contingency plans developed to manage a reduction in donor funding.

- Functional immunisation fund established.

Issue 2: Accountability

On a quarterly basis, EPI is meant to disburse funds to the districts to implement EPI activities: quarterly for routine immunization and twice for Integrated Child Health Days. However, due to delays in releases of program funds to the districts and delays in accessing funds by the health facilities, EPI has been able to make only two fund disbursement to the districts per year. These delays have negatively affected the rate of utilization of funds at District Level which has led to low absorption of funds.

Statement

Ministry of health will streamline funds flow directly from MOFPED to districts to ease access to and increase absorption of funds for EPI activities.

Strategies/actions/interventions

- i) Disbursement of funds through GOU scheduled quarterly releases to address delayed access to funds by the district.
- ii) Inclusion of EPI donor funds in the overall district budgets during the annual budgeting cycle.

Outcome

- Improved absorption of funds
- Timely access to funds
- Improved work plan and budget performance

Indicators

- Proportion of planned funds disbursed to districts in a timely manner.

Issue 3: conditional release of quarterly funds

When districts receive funds from the EPI programme, they are supposed to avail completed accountability/implemented immunization activities before they are replenished with more funds. However, districts have challenges in providing accountability on time which has

resulted into late or none disbursement of additional funds after the initial release. This leads to low absorption of funds and failure to achieve intended objectives. The delayed submission of accountabilities could also be a pointer to possible misuse of funds and or submission of incorrect accountabilities.

Statement

The Ministry will ensure timely and accurate presentation of accountability by districts for funds received to implement EPI activities in order to improve funds absorption and enhance value for money.

Strategies/actions/interventions

- i) Disbursement of funds through GOU scheduled quarterly releases to address delayed access to funds by the district.
- ii) Enforce the use of e-cash for payment of implementers at sub-national level.
- iii) Provide district specific support and orientation to district staff in order to address challenges.
- iv) Carry out routine forensic audit of funds to assure value for money.

Outcome

- Improved absorption of funds
- Timely accountability for advances
- Increase in the funds disbursed to districts
- Attainment of value for money

Indicators

- Percentage of funds unaccounted for compared to total disbursements.
- Proportion of the planned disbursements effected during the Financial Year
- Number of forensic audits carried out.

Pillar 3: Support supervision

Issue: Effectiveness of supervision

With effective support supervision at all levels, there is proper planning and coordination of the EPI activities and better-informed decision-making during activity implementation. However, currently there is ineffective routine support supervision at the regional, district and health sub district levels which has hindered continuous improvement in the implementation of EPI activities.

Statement

Ministry of Health will improve the effectiveness of routine support supervision of EPI activity implementation at all levels and use the findings to inform future activity planning and implementation.

Strategies/actions/interventions

- i) Develop an integrated annual support supervision work-plan for National and Sub-national levels
- ii) Strengthen the supervision capacity of the EPI Regional Focal persons at Regional Referral Hospitals
- iii) Conduct sub-national support supervision using available tools like ODK.
- iv) Develop an online platform to track supervision activities done at the national and sub-national levels.
- v) Utilization of support supervision data for feedback.
- vi) Develop a database of accredited supervisors at Regional and National Level.
- vii) Conduct regular trainings of Supervisors/Trainers (ToT).
- viii) EPI regional focal persons to liaise with partners in different regions to address district specific issues.

Outcome

- Evidence based decision making
- District specific interventions
- Skilled and knowledgeable implementers (Supervisors)

Indicators

- Proportion of the planned supervision visits carried out.

- Proportion of the expected reports submitted at district, regional and national level [e.g. through ODK].
- Number of trainings for accrediting supervisors done.
- Number of accredited supervisors.

Pillar 4: Human Resource

Issue 1: Midlevel managers training

Human resources play an important role in ensuring that the objectives of EPI are attained through proper delivery of services to all stakeholders. The EPI programme has not been regularly training staff in management and coordination at national and lower levels, hence the low capacity of the program to effectively manage the implementation of EPI activities.

Statement

Ministry of health will strengthen capacity of program staff at national level for the management and coordination of EPI activity implementation both programmatic and financial.

Strategies/actions/interventions

- i) Conduct training needs assessment
- ii) Develop a training plan including the development of training materials
- iii) Implement the training plan
- iv) Deploy immunization modules on the Ministry of Health online platform

Outcome

- Skilled and Knowledgeable staff
- Stronger capacity of UNEPI to match growing scope
- More effective supervision of activity implementation.

Indicators

- Proportion of staff trained
- Number of training modules uploaded on the platform

- Revised organized structure and Number of positions filled

Issue 2: Restructuring UNEPI

UNEPI as a division, has a clear organization structure that shows different cadres of staff and their reporting lines. The current structure was designed to deliver on UNEPI's mandate based on the scope of the previous 5 years. Presently, however, the scope for UNEPI has increased in terms of number of vaccine antigens, number of districts (from 130 to 146) and number of grants. This increment in scope has overburdened the present team and negatively affected their performance in implementing EPI activities. On the other hand, as the service scope has grown, so has the need for better communication both internally and externally. Due to the same limitations, the division has not seen the human resources component match the need.

Statement

Review staffing norms for UNEPI so that the number of staffs matches the current scope of work and streamline internal and external communication from the division

Strategies/actions/interventions

- i) Review the UNEPI structure, staffing norms and terms of reference as guided by Ministry of Public service to ensure sustainability even without donor funding.
- ii) Streamline EPI collaboration with other technical departments (Advocacy & Health promotion, Quality Assurance, Communication)
- iii) Develop and implement a staff performance management system
- iv) Advocacy for increased GoU funded staff to fill any vacant positions.
- v) Develop a communication strategy and grow this portfolio in the division.

Outcome

- Stronger capacity of UNEPI to match growing scope
- Improved work plan performance
- Improved absorption of funds
- Improved staff performance.
- Improved communication both internal and external

Indicators

- Proportion of UNEPI staff funded by GoU.
- Proportion of staff whose performance reviews are regularly done.
- Proportion of activities aligned to the communication strategy.

VACCINES SUPPLY CHAIN AND LOGISTICS

Introduction

The supply chain encompasses all the people, activities, infrastructure, resources, and planning necessary to ensure vaccines stay safe and effective and reach the target population promptly. Strong supply chains are a prerequisite to improving immunisation coverage and equity, and they contribute to reduced child mortality. An effective immunisation supply chain is key in ensuring adequate vaccine supplies, timely procurement, storage, distribution, proper vaccine stock management, utilisation monitoring and safe waste management. The aim is to reduce mortality and morbidity by increasing the availability and accessibility of quality, safe and efficacious lifesaving vaccines and related supplies at the points of service delivery in Uganda. The supply chain objective of the NIS is supported by four pillars; forecasting and procurement, storage of vaccines, distributions, stock management, reverse logistics and waste management,

Pillar 1: Forecasting & Procurement

Issues:

For effective vaccine forecasting, estimation of costs and procurement, accurate population estimates/ information is required. Currently there is a challenge of inaccurate forecasting because there are no clear population estimates to use for forecasting. Varying population estimates of choice for use while forecasting demand for vaccines, has led to wrong estimates for co-financed funds culminating into a likely risk of default on payment. Subsequently, there have been sub-optimal stock levels affecting the routine availability of vaccines and disruption

of service delivery. There is therefore the need to forecast vaccine needs based on the National Population Estimates generated by Uganda Bureau of Statistics as a standard.

Statement

The ministry of health will forecast vaccines based on the National Population Estimates generated by UBOS as the official source of population data in the country, and ensure timely procurement of all vaccines needed for the country.

Strategies/ actions/ interventions

- i) Forecast vaccine needs of the country between 2022 and 2027 based on the National Population Estimates generated by UBOS.
- ii) Include an indicative table for the forecast to also inform the financing need – 5year split by government, GoU co-financing and Gavi.
- iii) Generate GOU financial obligation in time for inclusion in the national budget and engage the relevant structures at MOH and MoFPED.
- iv) Periodic monitoring of stock levels to avert possible stock-outs and overstocking.
- v) Liaise with Ministry of Finance to assure timely disbursements of GOU co-financing obligations to facilitate vaccine procurement.
- vi) Prepare an annual procurement plan and ensure its implementation.

Outcome

- Zero stock-outs of all vaccines at National level
- Adequate financing for all vaccines
- Procured vaccines adequate for need

Indicators

- Proportion of vaccines planned for procurement received according to the procurement plan.
- Proportion of budgeted Co-financing paid out timely.
- Number of emergency orders made due to inadequate stocks.

Pillar 2: Storage of vaccines

Issues

Vaccines need to be stored under recommended temperature from manufacturer to point of use. Although the country's needs for cold chain to store vaccines on a monthly basis is fully met nationally, there are inequities within the country at sub-national level. There is inadequate storage capacity in selected districts for both vaccines and the dry supplies. This is exacerbated by introduction of new vaccines like COVID-19 vaccine that are high volume, further straining the existing capacity. Furthermore, the cold chain system has obsolete technology that needs to be phased out but also inadequate human resource capacity in selected districts to manage the cold chain system.

Additionally, there is inadequate ultra-cold chain capacity at the national level and it is non-existent at regional levels. We therefore need regional capacities for ultra-cold chains at this level so as to accommodate the volumes needed for the next five years for new antigens that will be added such as MR2, YF, Malaria, etc).

Statement

The Ministry of Health will ensure safe storage of vaccines through investments in dry storage, cold chain and ultra-cold chain systems. As a norm, there is the need for the continued use of the cold chain maintenance and rehabilitation plan to guide the process of replacement, expansion, and extension of cold chain equipment in the country.

Strategies/ actions/ interventions

- i) Continuous review and update of the CCE maintenance and rehabilitation plan and ensure every district and health facility has adequate cold chain storage space by 2025.
- ii) Conducting a nationwide gap analysis on the coverage of DVS structures and carry out inventory updates for all storage equipment at sub-national levels.
- iii) Invest in cold chain in the areas where it is deficient and also ultra-cold chain in the regional levels.

- iv) Conduct re-fresher training in stock and vaccine management at the sub-district level.
- v) Expand human capacity for maintenance and technical repairs across different levels.

Outcome

- Vaccines stored under recommended temperature from manufacturer to point of service delivery.
- Inventory of cold and dry storage facilities across the country.
- Adequate cold chain infrastructure country-wide.

Indicators

- Number of Ultra cold chain facilities established at regional level
- Proportion of districts with adequate cold chain facilities according to the gap analysis.
- Proportion of cold chain breach alerts received and addressed.

Pillar 3: Distribution

Issues

The current model of vaccine distribution operates on a three-tier monthly basis from the Central vaccine stores to the 136 districts to health facilities. Despite improvement in supply chain planning at CVS level, challenges like late and irregular delivery of vaccine supplies to the last mile continue to prevail. Currently, through the NMS, vaccines have been delivered on a monthly basis to all districts in the country. But the challenge that remain outstanding is that distribution stops at District Vaccine Stores requiring a new effort to take vaccines to the facilities and such an effort has been irregular and insufficient. At the end, there is continued stock outs of vaccines at the health facility level despite vaccines being available at the district stores. Noted challenges in the distribution of vaccines include inadequate and or dedicated transportation, insufficient cold chain transportation, geographical terrain, remote areas, and district management shortfalls, among others. This results into the inequitable access of

vaccines and hence missed opportunities and communities. This therefore calls for effective, secure and safe distribution mechanisms to mitigate the challenges highlighted hitherto.

Statement

The ministry of health will ensure delivery of vaccines and supplies from the central vaccine store to the lowest service delivery points in districts.

Strategies/ actions/ interventions

- UNEPI to conclude and prepare for adoption, the proposed last-mile vaccine delivery model.
- Support the cold chain teams in the districts carry out their mandate towards the last mile delivery.
- Establish a monitoring system for vaccine movement to the final destination in real time, and carry out timely intervention when needed.
- Explore non-government organisations/agencies involvement in vaccine delivery and distribution.

Outcome

- Equitable access of vaccines and vaccine related logistics.
- Timely delivery of vaccines and vaccine materials to the last mile
- Real time tracking system established and functionalised

Indicators

Proportion of health facilities reporting vaccine stock outs whilst the same are available in the district.

Pillar 4: Stock management

Issues

Currently there is no reliable standalone logistics management information system that provides end-to-end visibility in the EPI supply chain which include: Supplies forecasting, CCE reporting and management, distribution, and stock management. The current paper-

based vaccine stock control books and cards do not allow one at a managerial level to know the stock status in real time and this system cannot also be used to forecast beyond the district level.

Statement

Drawing from the success registered in the cold chain information system (CCIS) the ministry commits to designing a LMIS that provides real time visibility of vaccines and related supplies country-wide.

Strategies/ actions/ interventions

- i) Digitalisation of the stock management system, from the health facility level, district to the national level.
- ii) Build capacity of Health workers in line with the developed LMIS including Cold chain technicians, District medicine store managers, District Health Officers, Assistant District Health Officers-MCH, District Biostatisticians, Health sub-district managers, EPI facility focal persons, among others
- iii) Advocate for all districts to recruit qualified District Cold Chain Technicians.
- iv) Generate and share regular reports from a functioning LMIS for corrective action.

Outcome

- Existence of a comprehensive LMIS that handles, stock management including management of expiries and other waste, temperature monitoring, distribution, forecasting, CCE inventory management and maintenance and provides for a consolidated KPI dashboard.
- Reduced stock outs of vaccines at facility level.
- Health workers trained.

Indicators

- Functional consolidated LMIS.
- Functional KPI dashboard evidenced by reports.
- Number of HWs trained in the LMIS.

SURVEILLANCE, MONITORING AND EVALUATION

Introduction

The Ugandan national health surveillance system has a structured integrated disease surveillance system backed by public health laboratory services at national and sub-national levels. The case-based integrated disease surveillance system is sensitive; however, there are delays in the reporting, notification and lab analysis at sub-national level leading to low performance. However, there is a well-established and functional system for collection, processing, storage, retrieval and dissemination of health information for decision-making despite such a system being marred by several challenges. The system has been built in Uganda, and will progressively evolve from a completely paper-based system to digital with the introduction of Smart Paper Technology (SPT). It is anticipated that the SPT will be used to routinely monitor the vaccination coverages. A significant number of public health facilities (98%) use HMIS system to make timely reports on monthly basis, however determining zero dose persons remains a challenge. Generally, data quality has remained a challenge, with discrepancies between what is reported at national level and what can actually be traced in the facility registers, and particular the outreach data. Besides, even the generated data is rarely utilised by managers for decision making, largely due to inability or reluctance to navigate the existing dashboards where the data is stored.

The objective of this section will be achieved through 5 pillars i.e. VPD surveillance, Data quality, data use, program M&E framework and vaccine safety

Pillar 1: VPD surveillance

Issues 1: health systems capacity

The ministry of health has established an integrated surveillance system to detect occurrence of diseases of public health concerns and these are reported to the ministry of health on a weekly basis. The 2020 EPI national immunization program review showed that only 34% of the health facilities that were assessed had adequately trained persons responsible for surveillance activities. This capacity gap leads to ineffective VPD surveillance system and support

functions (e.g. workforce, laboratory, monitoring and evaluation) in detecting, notifying, tracking and reporting suspected VPD in time.

Statement

The ministry will strengthen the surveillance system by increasing the sensitivity to detect, notify and track all suspected vaccine preventable diseases for timely response.

Strategies/ Actions / Interventions

- i) Capacity building of the health workers in surveillance at all levels.
- ii) Ensure availability of tools to support case-based surveillance on VPDs; case definitions, reporting and investigation tools for facility-based and community surveillance.
- iii) Support sentinel surveillance against Rota virus disease, invasive bacterial diseases, streptococcus pneumonia, Haemophilus influenzae.
- iv) Strengthen regional IDSR teams to support surveillance mentorship and investigations to all districts.
- v) Integrate routine immunization and surveillance into the updated curriculum for health professional bodies and tutors.

Outcome

- Improved knowledge and practices in VPD detection.
- Sentinel surveillance sites for VPD surveillance established.

Indicator

- Percentage of health workers trained.
- Number of sentinel sites established.
- Number of VPDs regularly monitored for response
- Number of Districts achieving their surveillance targets

Pillar 2: Data quality

Issue: poor data quality

Tracking and decision making for program planning and service delivery is supported by accurate and high-quality immunisation data. The program has a data quality improvement plan which guides data quality endeavours. This plan includes methods to store and protect data, and people responsible for implementing the plan. However, the current data being collected does not meet all the five standards of data quality (Validity, Integrity, Accuracy, Reliability and timeliness). This is caused by inaccurate population estimates that affect tracking of the coverage targets, and use of paper-based tools that limit tracking for defaulters. This results into the centre and or the districts to make decisions based on an inaccurate account of the actual scenario.

Statement:

The ministry of Health will adopt E-Systems to capture and digitise immunisation data to improve data quality; *Validity, Integrity, Accuracy, Reliability and Timeliness*

Strategies/ Actions/ Interventions:

- i) Build capacity of health workers on data collection, reporting, analysis and use.
- ii) Digitalisation of EPI data to generate electronic EPI register.
- iii) Ensure adequate EPI data tools.
- iv) Strengthen district data improvement and assessments teams.
- v) Strengthen continuous national and sub national support supervision.
- vi) Identify Technical assistance for digitisation of EPI data.

Outcome:

- Improved data quality.
- Established national electronic EPI register.

Indicators:

- Percentage of districts reporting Timely data (Target 95%).
- Percentage of districts reporting consistent data (Target 100%).
- Percentage of districts reporting complete data (Target 95%).

- Percentage of districts reporting accurate data (target 95%).
- Presence of an electronic EPI register.

Pillar 3: Utilization of EPI Data

Issues: Data use/utilization

The Immunisation data is captured through District Health Information System (DHIS2) for monitoring program performance, accountability and defaulter tracking. However, the system captures aggregate immunisation data thus limiting the capacity of the health workers to track the vaccination status of an individual, follow up of defaulters and identification of zero dose individuals in the community.

Statement

Automate the digital EPI register for tracking vaccination status, program performance, evidence-based decision making and performance-based payments.

Strategies/ Action/ Interventions:

- i) Ensure performance indicators are auto generated from DHIS2 and displayed on EPI dashboard.
- ii) Introduction of e-registration of the new born to facilitate tracking of vaccination status to completion.
- iii) Generate list of defaulters and zero dose persons for follow up by VHTS/ LCs.
- iv) Establish e-bulletin on Routine Immunisation performance for disseminating information to key stakeholders.
- v) Identify Technical assistance for automation of EPI data.

Outcome

Evidence based decision making

Indicators:

- Proportion of facilities with updated monitoring charts.
- Reduced zero dose and drop-out rate in districts.
- Proportion of districts holding regular quarterly performance review meetings.

- Number of publications in the different platforms.
- Proportion of districts with functional e-registers for the new born.

Pillar 4: Program M&E framework

Issues: Irregular review and monitoring of the M&E framework

The program develops a five-year Monitoring and Evaluation (M&E) framework from which annual frameworks are extracted to monitor objectives and desired results as planned. However, multiyear EPI plan 2016/21 was not approved and therefore the M&E framework was not developed to guide reviews at all levels (National, regional and district level)

Statement:

Develop the M&E framework to monitor and evaluate the NIS 2022/27 to ensure the objectives of NIS are achieved

Strategies/ Action/ Interventions:

- i) Develop and use the M&E framework to monitor the implementation of the National Immunisation strategy.
- ii) Regular update of the M&E plan and framework.
- iii) Conduct programme evaluations/surveys to guide implementation.

Outcome:

- Improved program performance as per the developed M&E framework.

Indicators:

- Proportion of activities implemented versus planned.
- Proportion of performance reviews conducted versus planned.

Pillar 5: Vaccine safety

Issues: Monitoring AEFIs

Experiences of people vaccinated need to be captured to document side effects and pick very rare Adverse Events Following Immunisation (AEFIs) in order to restore confidence of the

public but also to do public education. Such a task should be spear-headed by frontline health workers or such people that interface with immunisation information on a daily. However, the awareness among the front-line health care workers and their vigilance to collect data and report AEFIs regularly is low as evidenced by system data over time.

Statement:

Continue monitoring and documenting occurrence of side effects, and AEFIs in order to restore confidence of the public and do public education.

Strategies/ Actions/ Interventions:

- Build capacity among health workers and communities on the need to report occurrence of AEFIs.
- Regular reviews of the weekly and monthly HMIS reports to verify cases of AEFI reported (Discrepancy in DHI data and case reporting).
- Provide AEFI guidelines, case reporting forms and digitalize reporting.
- Strengthen the AEFI committee at national level and investigation of serious AEFI cases to aid provision of feedback to districts.

Outcome:

- Improved reporting and case investigation of AEFI cases

Indicators:

- Proportion of health workers trained.
- Number of health facilities reporting.
- Number of AEFI cases assessed against those that are reported

LINKAGES TO EXISTING STRATEGIES, POLICIES, REGULATIONS AND LEGISLATIONS

International Linkages

The NIS has linkages to existing strategies, policies, regulations and legislation specifically SDGs, IA2030 and Gavi 5.0.

The NIS is rooted in the SDGs of ensuring “healthy lives and promotion of the well-being at all ages” through goal Goal3. It is focusing on strengthening and achieving financial sustainability of national immunizations programs; eliminating measles and rubella; addressing vaccine hesitancy; tailoring immunization programs to reach underserved groups and investing in research and development.

The NIS rides on the principles of the “Immunization Agenda (IA) 2030, the global strategy to leave No One Behind” in furtherance of the SDG. In applying the core principles of IA2030, the NIS will address coverage and equity gaps by, planning and service organization to increase access to zero-dose, under-vaccinated and missed communities and enhance active tracking of these children.

The NIS is well aligned with GAVI 5.0 strategy of “leaving no one behind” with particular attention to; New vaccine introduction, increasing equity, program sustainability and assuring healthy vaccine markets. The NIS will be the starting point of the full portfolio planning for Gavi 5.0. Accordingly, at least five new vaccines will be introduced over the next five years in addition to, focusing on Zero dose, partially vaccinated and missed communities.

National Linkages

The NIS draws from the existing national strategies, policies, regulations and legislation e.g. the 1995 Uganda Constitution, the Immunisation Act-2017, Public Health Act and Children’s Statute.

The 1995 Uganda Constitution under the bill of rights provides for all Ugandans to enjoy rights and opportunities and access to education, health services, among other social services. The Public Health Act, the Immunisation Act-2017, Children’s Statute, the National Development Plan III and the Health Sector Strategic Plan further provide the enabling policies and laws on health.

The NIS is designed to use the EPI platform to strengthen the Primary Health Care system by 2030, and increasing access to nationally coordinated services for communicable and non-communicable disease / conditions prevention and control in

line with the Health Sector Strategic Plan. The NIS has provided for increased access particularly to the Zero dose and underserved populations, and introduction of new vaccines including those referred to in the HSSP.

ROLES AND RESPONSIBILITIES OF STAKEHOLDERS

The implementation of the National Immunization Strategy (NIS) will be led by the Ministry of Health and the District Local Governments at the national and sub national levels respectively in partnership with: the UN Agencies, Multilateral and Bilateral Agencies, National and International NGOs, local communities, the private sector, community-based, faith-based, cultural organizations and other non-state actors as key stakeholders as guided by the roles and responsibilities as detailed below;

Local Governments: The Plan recognized the primary role of local governments with regard to health service delivery. Local governments will plan, guide implementation, supervise, monitor service delivery, reporting and account for results and resources to the Central Government and partners.

Local communities: In this context, local communities refer to communities as defined by villages and parishes according to the Local Government Act 1998 or as amended. Local communities participate in immunization as beneficiaries of immunization services, as community health workers under the community health program, providing guidance to health teams during microplanning and implementation.

Central Government: Government, through the MoH, will take centre stage in the development, management and governance of the NIS. The ministry will support the development of standards, guidelines, and provide technical support supervision. It will also look into resource mobilization and accreditation of health facilities to provide immunisation services.

Development partners: Partners support government to achieve the objectives of the NIS and their roles would constitute: provision of technical assistance, financial and material resources. The MoH works with partners to mobilize resources and better

coordinate implementation of interventions, including monitoring and evaluation to achieve results at scale.

Private Sector: The private sector is a key player in increasing access to health services in general, more so in urban setting. This NIS gives credence to the role of private health facilities to immunization in urban areas where they are dominant. Such private health facilities are expected to comply with the regulations laid down for health service delivery. Similarly, community vaccination outreach services can be provided by or contracted to this sub-sector of stake-holders in the absence of a public health facility.

Non-state actors: CBOs, NGOs, FBOs, and cultural organisations will help raise resources and civic awareness and mobilisation for immunisation. They will also keep actors, policy makers and regulators in check for the effectiveness of immunisation services including the; quality, access, coverage and equity. Also, community vaccination outreach services can be provided by or contracted to this sub-sector of stake-holders in the absence of a public health facility.

IMPLEMENTATION FRAMEWORK AND STRATEGIES FOR PARTNERSHIP

Immunisation program has a number of stakeholders hence the need for a clear implementation and partnership frameworks to ensure effective leadership, coordination and compliance to the provisions of the strategy. The program is a division under the National Disease Control and the program structure, structures for coordination, structures of governance and collaborations with other government parastatals as detailed below.

The UNEPI organogram

The structure of the division (the program) is aligned to the functions of the program. It is headed by the Program Manager who is responsible for the overall program management and reports to the Commissioner National Disease Control. To support

its technical programs, the Division has the Deputy Program Manager who is responsible for service delivery pillar of immunisation services. He leads a team of four senior Medical and four Nursing Officers. Each Senior nursing and medical officer is responsible for a particular vaccine preventable disease, a geographical region and a program management function. The M&E staff consist of an M & E officer and a Data Management Officer, who functionally report to the program manager and DPM directly. In addition, the grants management team includes the grants coordinator who is responsible for the program accountant, procurement and supply specialists, supply officer, procurement officer and four program assistants in charge of accountability, coordination, operations and requisitions.

The staffing structure of the immunisation program is attached as Annex XX. Note that the structure will be revisited in order to effectively deliver on the provisions of this strategy.

Program coordination structures

Due to the multi sectoral nature of immunisation programs, the program works through five committees aligned to the pillars of the immunisation program. The committees provide the platform for participation and collaboration with the relevant departments of MoH, government agencies, departments and immunisation partners.

| Structure | Role |
|---|---|
| 1) Service delivery committee, | |
| 2) Supply chain and logistics committee, | |
| 3) M&E and surveillance committee, | |
| 4) Communication committee, | |
| 5) Program management | |
| National Coordination Committee (NCC) | Monitoring immunization performance against national and international indicators and grants. |
| Other Technical working groups in the MoH | |

Collaborating government parastatals

| Structure | Role |
|-------------------------|---|
| National Medical Stores | Parastatal organization that manages procurement, storage, and distribution of vaccines and immunization supplies down to the district level. MoH provides the guidance in line with immunisation objectives. |
| National Drug Authority | Ensure vaccines and accessories are safe and efficacious meeting the WHO set quality standards. |

Immunisation Governance Structures

| Structure | Roles |
|--|--|
| Technical Coordination Committee (TCC) | Provides the technical inputs into policy matters for ICC and monitors the implementation of NIS |
| Immunisation Coordination Committee (ICC) | Provides policy level guidance to the program on immunisation. It consists of MoH, MoFED, MoES, Ministry of Local Government (MoLG), Civil Society, Development partners, WHO and UNICEF, chaired by the permanent Secretary and evaluates the implementation of NIS |
| Health Policy Advisory Committee | Ensures the alignment of the NIS with the Health Sector Development Plan, NDPII and global immunisation policies |
| National Immunisation Technical Advisory Group (NITAG) | Provides technical guidance for immunization programs, including policy guidance and implementation. Also coordinates technical activities such as Gavi applications and immunization-related research and monitoring initiatives. |

INFORMATION, EDUCATION, COMMUNICATION & DISSEMINATION

Implementation of the NIS requires deliberate efforts in awareness creation and popularization of the strategy to the key stakeholders and the strategic partners through training seminars, workshops, distribution of printed copies, and other social media platforms and the MoH website. The mainstream media will be provided excerpts as news elements.

The strategy will be launched in a national ceremony and the content will be explained to policy makers, managers, and health care leaders and the general public.

IMPLEMENTATION STAGES

The strategy will be disseminated, launched and distributed to the relevant ministries and all local governments. The strategy will be costed to guide resource mobilisation both nationally and globally. The strategy will inform all grants to support immunisation in the country. The guidance in the strategy will be applied in the local government planning cycle for compliance with the strategic directions. The M&E framework will be used for monitoring the program performance against the objectives of the strategy.

IMPLEMENTATION DRIVERS

The drivers of the implementation will include the mind-set change among health care workers, managers and leaders at all levels of the health system to manage for results. Financing of the NIS is critical to ensure that all children are vaccinated, activating the local government structure down to the village, parish levels, digitising individual immunisation registers and automating data use, having to invest in awareness creation in ways that outcompete social media misinformation, investing in cold-chain infrastructure to improve health system responsiveness to the needs of missed communities, zero-dose and partially vaccinated children.

FUNDING:

The NIS will be costed to guided resource mobilisation. This cost will be attached as **Annex XX to this strategy (to be completed after attaching the costing annex).**

MONITORING AND EVALUATION

The M&E Framework for the NIS will be developed to for measuring the effectiveness of implementation of the strategy by ensuring its intended benefits are being achieved.

The M&E framework will monitor the inputs, processes and the outputs, outcomes. Surveys will be sponsored either specifically for immunisation or generally for the health sector for assessing the impact of the strategy. Such surveys will include the UDHS, Immunisation Coverage surveys, and other academic research works. The M&E framework is attached to the strategy as Annex 6.

Feedback Mechanisms

UNEPI regularly monitors its performance through analysis of its data that is reviewed weekly. Striking performances are shared with key stakeholders as deemed appropriate. UNEPI will establish a Vaccination Bulletin that will go out regularly to provide feedback to the public and health care leaders, managers and workers. Regular feedback mechanisms have been established at all levels of the health system; national, regional, district and sub county level reviews. This will be a key deliverable of the M&E unit of the program.

Policy Reviews

Emerging evidence from monitoring, monthly, quarterly and biannual reviews, midterm and summative evaluations of the NIS, and surveys will be continuously gathered and assembled to inform policy reviews.

Annex 1: SWOT Analysis: Service Delivery

| Strengths | Weaknesses |
|--|---|
| <p>Routine immunisation services provided through static sites across most health facilities.</p> <p>Health facilities also conduct immunisation through outreaches.</p> <p>Integration of immunisation with other interventions such as growth monitoring, deworming, family planning for the caregiver, HIV / AIDS services, among others</p> <p>Districts and facilities have vaccination plans and guidance on conducting static and outreach immunisation sessions</p> <p>Implementation of catch up immunisation strategies like SIAs, ICHDs, PIRIs and MOVs.</p> <p>Existing plans for targeted outreaches to underserved communities.</p> <p>Involvement of communities in vaccination services through VHT, HUMC and Health Committees of local councils</p> <p>Skilled human resources for implementing EPI activities in facilities.</p> <p>Existing infrastructure in districts to support the implementation of immunisation activities</p> | <p>Low vaccination coverage below 95%</p> <p>Static sites not focusing on the life course approach and limited mainly to those under-one-year and less on those above.</p> <p>Increased workload at the vaccination sites worsened by addition of new antigens to the immunisation schedule.</p> <p>Low staffing to run immunisation package and increasing number of clients per session and</p> <p>Disruptions to continuity of other services at the facility if (the few) staff moved out for an outreach program.</p> <p>Demotivated staff and mobilisers due to delayed on non-payment of outreach allowances.</p> <p>Frequent staff turnover trained in EPI in private health facilities</p> |
| Opportunities | Threats |

| | |
|--|--|
| <p>Strong political will and commitment to immunisation</p> <p>Global interest in the control, elimination and eradication of diseases of public health importance</p> <p>Existence of private health facilities willing to provide vaccination services in under-served communities.</p> <p>Existence of the public private partnership policy for health to create an enabling environment for vaccination by private sector.</p> <p>Established community and local governments structures for mobilisation</p> <p>The school health program managed by MOES and MOH creates an enabling environment for vaccination in school settings</p> | <p>Emerging organised resistance movements within communities and countries towards immunisation</p> <p>Vibrant anti-vaccination campaigns and misinformation propagated by social media</p> <p>Accumulation of partially and unvaccinated children is a risk for VPD outbreaks</p> <p>Vertical funding streams with different incentive packages shifts staff time away from EPI service delivery.</p> <p>Disruption of immunisation services due to increasing risks of conflict (wars), natural disasters and pandemics</p> |
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Annex 2: SWOT Analysis: Vaccine Supply Chain

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| Strengths | Weaknesses |
|-----------|------------|

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| <p>Functional pillar coordination committee; Good partner engagement, and teamwork</p> <p>Existence of tracking system for immunization supply chain activities (dashboard).</p> <p>Qualified and committed staff to manage the supply chain system at UNEPI, NMS, and HSD Vaccine Stores.</p> <p>Existence of tools for stock management (both electronic and paper)</p> <p>Ongoing expansion and upgrading of cold chain capacities across the country</p> <p>The investments and installation of commodity safeguards e.g. fire extinguishers for DVS's</p> <p>Regular capacity Building of CCTs on EVM aspects</p> <p>Established procedures for procurement, receipt, storage, and distribution and refill orders by districts and documentation</p> <p>Existing mechanisms for distribution of vaccines and supplies to at all level</p> <p>Progressive effort in streamlining and integrating the immunization supply chain</p> | <p>Long response time to temperature excursions to save vaccines by district teams</p> <p>Incomplete reporting of monthly LMIS data from districts to facilitate central logistics planning.</p> <p>Long lead times for cold-chain maintenance following calls from facilities</p> <p>Fragmented capacity building and support supervision effort across partners</p> <p>Lack of a scheduled and induction program for staff handling vaccines.</p> <p>Inadequate monitoring of EVM KPIs and the sharing of dashboards.</p> <p>Limited focus on stock counts or balances during support supervision.</p> <p>Inadequate staffing gaps for Supply and cold chain management</p> <p>Late and irregular supply of vaccines from DVS to health facilities</p> <p>Irregular and delayed receipt of vaccines from DVS to health facilities resulting in stock-outs.</p> |
| <p>Opportunities</p> | <p>Threats</p> |

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| <p>Ongoing discussions among stakeholders to extend vaccine delivery beyond the DVS closer to service delivery units.</p> <p>Technological advances in supply chain (e.g., energy harvesting system, freeze free passive containers, solar driven cold rooms, ODK-X,)</p> <p>Collaboration with different institutions and players in the logistics and supply-chain space (NMS, NDA, NEMA and partners)</p> <p>Existing interest among partners to expand EPI Capacities to meet the increasing demand for vaccination and NVIs</p> <p>Continued partner support for rehabilitation and expansion of the cold chain system under GAVI CCEOP and HSS2 funding</p> <p>Forum for advocacy for regulatory processes in place</p> <p>Introduction of predictive maintenance system</p> | <p>Continued use of paper based LMIS limits visibility of stock balances at the lowest HF's</p> <p>Risk of falsified and substandard supplies data entering the supply chain</p> <p>Reliance on UNEPI fridges for storing;</p> <ul style="list-style-type: none"> - all pharmaceuticals that require cold chain and - new vaccine introductions is straining the current resource capacities <p>The high cost of cold chain procuring, maintaining and repairing cold chain capacities attained and required in the future is not sustainable.</p> |
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Annex 3: SWOT Analysis: Finance and Management

Financing is a central component of a successful national immunisation program. This section discusses the strengths, weaknesses, opportunities and threats financing of the EPI programme including sources of funds for EPI activities, adequacy and regularity of PHC funds.

| Strengths | Weaknesses |
|--|--|
| <p>Availability of funding from Government for purchase of traditional vaccines, co-financing obligation and new vaccines introductions.</p> <p>Use of Integrated Financial Management System to manage payments and reporting improves accountability</p> | <p>Delayed access to funds by districts for implementation of activities</p> <p>Lack or Delayed accountability for funds availed for vaccination to Districts, RRH, Sub recipients and MOH staff.</p> <p>Inadequate human resources to support the EPI growing scope (Vaccines, Districts and funds)</p> <p>Delays and non-payment of outreach allowances to health workers and mobilizers</p> |

| Opportunities | Threats |
|--|--|
| <p>Existence of global financing mechanisms to support elimination, eradication and control of VPDs</p> <p>Availability partners supporting EPI activities e.g.: UNICEF, CHAI, PATH, World Vision, Red Cross, WHO and other NGOs USAID, CDC.</p> | <p>Low funds absorption, misuse of funds, delayed or lack of accountability</p> <p>Heavy dependence on donor funding to facilitate service delivery</p> <p>Reliance on GAVI for the larger portion of expensive, co-financed vaccines</p> <p>Sustainability of the high cost of all vaccines on the immunisation schedule.</p> <p>Transition to middle income status or accelerated transition from Gavi</p> <p>Dropping of vaccines from the immunisation schedule in case of failure to finance the vaccines need.</p> |

Annex 4: SWOT Analysis: Communication and Advocacy

| Strengths | Weaknesses |
|---|--|
| <p>Strengthened policy landscape where the "The Immunisation Act, 2017 was signed into law"</p> <p>Leveraging global, regional and national immunisation related moments such as World Immunisation Week, Africa Vaccination Week and Integrated Child Health Days to create awareness at all levels.</p> <p>Trained personnel at all levels to drive the Advocacy, Communication, and Demand Generation activities.</p> <p>Availability of IEC materials targeting public and private health facilities, caregivers and community leaders</p> <p>Media involvement in EPI performance meetings at the District level</p> | <p>Current National EPI Advocacy and Communication Strategy (NEACS) will expire in 2023.</p> <p>Non-use of IEC materials. Despite the availability of IEC materials at the district and health facility levels, these materials were not optimally displayed in the health facilities.</p> |
| Opportunities | Threats |

| | |
|---|---|
| <p>Access to information on best practices in awareness creation in the context of urban immunization.</p> <p>Support from religious and cultural leaders</p> <p>Decentralized political and administrative structures at the District, Sub county, Parish and village can be used to deliver immunisation messages closer and equitably to households.</p> <p>Existence of Political and administrative staff in district administration mandated to mobilize communities for immunization</p> <p>Support from Health development partners, international and national NGOs, and CBOs and stakeholders at national and district levels</p> <p>Availability of informal influential structures which have potential to promote and mobilize communities for immunization services</p> | <p>Negative messaging from media and social media fuelling rumours and misinformation in some</p> <p>Lack of trust in safety of vaccines by some parents/caregivers</p> <p>Negative perception on the quality of public health facility services by elite population</p> <p>Competing socio economic priorities among urban residents affecting health seeking behaviour including vaccination of children.</p> <p>High cost of engaging community structure to mobilize for immunisation</p> <p>Resistant and hostile communities opposed to immunization including religious sects/cults</p> <p>Health and administrative system challenges arising out of structural problems affecting district level collaborations</p> <p>Gender dynamics that limit women's ability to decide and seek immunization services without permission from male partners</p> <p>Transient populations and seasonal migration complicating estimation of target populations for routine immunization services</p> |
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Annex 5: SWOT Analysis: Surveillance, monitoring and evaluation

Surveillance

| Strengths | Weaknesses |
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| <p>Existence of a manual registration system for keeping vaccination records (Child Registers)</p> | <p>Use of manual and paper-based Registers that limit the ability to identify and track children' immunisation status.</p> |
| <p>Availability of an updated IDSR guidelines that include surveillance on Vaccine preventable diseases and new vaccines</p> | <p>Irregular release of funds that affects the transportation of samples to reference laboratories</p> |
| <p>National Health Laboratory Net-Work that links lower level laboratories through a hub system to the National Public Health Reference laboratories and the Uganda Virus Research Institute backing national IDSR</p> | <p>Poor feedback to the health facilities on investigated cases from reference laboratories Irregular refresher training regarding AEFI surveillances.</p> |
| <p>Existing sensitive and functional environmental surveillance system to supplement AFP surveillance.</p> | <p>Lack of allocation of funds by districts in their annual work-plans and budget.</p> |
| <p>Presence of real-time surveillance and reporting mechanisms like m-Track system that is linked to the DHIS2 system.</p> | <p>Inadequate awareness, competencies and reporting by service providers, health professional bodies and community persons</p> |
| <p>Nationwide roll-out of the use of Open Data Kit (ODK) in Integrated Support Supervision (ISS) to monitor activities like active surveillance conducted at the sub-national level.</p> | <p>Limited availability of surveillance tools such as AEFI guidelines and case investigation forms at health facilities Irregular active surveillance activities for all VPDs due to inadequate funding, transport facilities, and limited supervision</p> |
| <p>Integration of Disease surveillance with other activities in the community once every quarter.</p> | <p>Weak community-based surveillance for prompt notification of cases</p> |
| <p>Availability of knowledgeable health workers responsible for surveillance with up-to-date job aides for VPD and AEFI surveillance.</p> | <p>Assigning surveillance to Focal Persons as opposed to Health Inspectors and Health Assistants causes surveillance work to suffer as assigned officers have competing priorities.</p> |
| <p>Collaboration between Health facilities and communities especially VHT in community-based surveillance</p> | |
| <p>Designated surveillance focal persons at the National, regional and sub-national levels and at each health sub district</p> | |

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| <p>Opportunities Existence of WHO guidelines on IDSR and Uganda has just revised and disseminated the third edition of the IDSR guidelines.</p> <p>The multi-sectoral approach of UNEPI and DHI working together on disease surveillance</p> <p>Existing support from partners for disease surveillance and</p> <p>Uganda’s political will and governance structures enhancing vaccine-preventable disease surveillance</p> | <p>Threats</p> <p>Heavy dependence on donors for facilitation of surveillance activities</p> <p>insecurity in some areas compromises surveillance activities</p> <p>Re-emergence of VPD outbreaks in the African region.</p> |
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Monitoring and Evaluation

| Strengths | Weaknesses |
|---|--|
| <p>Presence of staff responsible for data and records</p> <p>Data utilization at all levels. Analysed EPI data at the district level made available to the health facilities during quarterly review meetings.</p> <p>Operationalized response towards improving the vaccination coverage based on data reported</p> <p>Standard HMIS data recording and reporting tools at most health facilities</p> <p>Well-established data management system; with tools and well-trained personnel from the community to the National level</p> <p>Existence of the multiyear data quality improvement plan</p> | <p>Inadequate data recording and reporting tools characterized by stock outs for government-issued recording and reporting tools</p> <p>Challenges in the determination of catchment populations especially Health facilities in urban areas as the catchment population differed from the district catchment maps. As such, the majority of health workers do not know their target population.</p> <p>Data use for decision-making is a challenge at District and facility level</p> <p>Weak defaulter tracking system</p> <p>Inadequate funding for expanding data quality activities</p> |
| <p>Opportunities Donor support UNICEF, WHO, AFENET Child e-registration</p> | <p>Threats Limited budget allocation for the routine immunization tools and data improvement activities.</p> <p>Reliance on partner funded short term contract staff to manage sensitive M&E and Data Management functions in UNEPI</p> |

| RESULT CHAIN | INDICATORS | MEANS OF VERIFICATION |
|---|--|--|
| <p>Impact</p> <p>1.0 Reduction in the public health importance of morbidity, mortality and disability due to priority vaccine preventable diseases (VPDs); improve health and productivity</p> | <p>Impact level indicators</p> <p>1.1 Improved life expectancy at birth. 2.1 Improved DALYS. 3.1 Reduced outbreaks of VPDs</p> | |
| <p>Outcome</p> <p>1. Reduced number of zero dose/under immunized children</p> <p>2. Improved vaccine literacy and education</p> | <p>Outcome level Indicators</p> <p>1.1 Number of zero, under immunised and missed communities reached 1.2 Proportion of districts achieving a dropout rate of <10% 1.3 Proportion of HFs with adequate space to provide immunisation 1.4 Number of New vaccines introduced</p> <p>2.1 Number of different communication materials and messages researched, developed, pretested, printed and distributed. 2.2 Percentage increment in vaccination uptake I hitherto low uptake communities. 2.3 Proportion of audience- specific channels crafted.</p> | <p>1.1 Monthly progress reports 1.2 Special vaccination survey report 1.3 New vaccine logs</p> <p>2.1 SBC/IEC materials developed, printed and distributed. 2.2 Monthly and special campaign reports. 2.3 Profile and log of influencers engaged</p> |

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| | 2.4 Number of influencers identified and oriented on immunisation and vaccines | |
| 3.1. Increased GOU funding of immunisation activities | 3.1 Proportion of districts that develop and submit annual EPI work plans. | 3.1 Presence of annual work plans. |
| 3.2 Improved EPI accountabilities | 3.2 Proportion of districts holding quarterly performance review meetings. | 3.2 Quarterly performance review reports. |
| | 3.3 Proportion of action items/ points identified from districts' performance review meetings and followed upon. | 3.3 Log of action points with status |
| | 3.4 Financing plan indicating total costs for the EPI program. | 3.4 Financial estimates/ report for the EPI program. |
| | 3.5 Proportion of EPI costs funded by GOU. | 3.5 Increased GOU spending/budget allocation on EPI program. |
| | 3.6 Presence of a Functional immunisation fund. | 3.6 Operationalisation framework of the national immunisation fund. |
| | 3.7 Proportion of planned funds distributed to districts and accountabilities received. | 3.7 Activity and accountability reports. |
| | 3.8 Proportion of the expected reports submitted at district, regional and national level [e.g. through ODK]. | 3.8 ODK platform with a dashboard for supervision reports. |
| | 3.9 Proportion of Staff trained. | 3.9 Staff training reports. |
| | 3.10 Presence of a revised and organised structure with positions filled. | 3.10 UNEPI Organisation structure |
| 4.1 Zero stock outs of vaccine logistics. | 4.1 Proportion of vaccines planned for procurement | |
| 4.2 Adequate cold chain infrastructure nation wide | 4.2 Proportion of budgeted co-financing paid | 4.1 Vaccines and supplies (logistics) procurement plan. |
| 4.3 Functional LMIS | 4.3 Number of ultra-cold chain facilities established | 4.2 Budget allocations for EPI |
| | 4.4 Proportion of districts with adequate cold chain facilities | 4.3 Procurement reports for ultra-cold chain facilities. |
| | 4.5 Proportion of HFS reporting vaccine stock outs whilst vaccines are available at districts' stores | 4.4 Updated inventory of cold chain facilities in the country. |
| | 4.6 Existence of a comprehensive LMIS | 4.5 Routine stock in/ stock out reports. |
| | 4.7 Existence of a functional KPI dashboard | 4.6 Building and deployment reports for the LMIS |
| 5.1 Improved knowledge of VPD detection | 5.1. Percentage of HWs trained | |

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| 5.2 Improved data quality | 5.2. Number of VPD sentinel sites established | |
| 5.3 Evidence based decision making | 5.3. Number of districts achieving their surveillance targets. | |
| | 5.4. Percentage of districts reporting EPI data timely | |
| | 5.5. Presence of an electronic EPI register | 5.1 Staff training reports detailing the type of training |
| | 5.6. Proportion of HFs with updated monitoring charts | 5.2 Sentinel sites with established and filled staffing positions. |
| | 5.7. Number of publications in the different platforms. | 5.3 Monthly VPD surveillance reports |
| | | 5.4 Presence of an EPI-register |
| | | 5.5 Availability of printed monitoring charts. |
| | | 5.6 Publications log |

Outputs

Output Level Indicators

Daily and outreach immunisation reports
 Memorandums of Understanding (MoUs) with private entities

Approved SBC/IEC materials and messages.
 Approved community vaccination champions

Functional Immunisation fund
 E-payment/e-cash platforms available

Routine vaccine logistics forecasts
 Guidelines for last mile delivery model

Updated EPI curriculum
 Established sentinel sites
 e-register

Activity

Activity Level Indicators

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|-------------------------------------|--|---|---|
| Service Delivery | <ul style="list-style-type: none"> Conduct daily immunisation (static) and outreach immunisation. Strengthen public-private partnerships | <p>1.1 Proportion of HFs conducting daily (static) immunisation.</p> <p>1.2 Proportion of monthly planned outreaches done.</p> <p>1.3 Number of Private HFs serving as immunisation Out-posts (for outreach immunisation).</p> <p>1.4 Number of CMEs done targeting EPI activities.</p> <p>1.5 Proportion of planned Fund requisitioned and accountabilities</p> | <p>1.1 Duty Rosters.</p> <p>1.2 Outreach Immunisation rosters.</p> <p>1.3 Immunisation Out-posts (at private HFs).</p> <p>1.4 CME log at HFs.</p> <p>1.5 Monthly reports.</p> <p>1.6 Fund requisitions and accountabilities</p> |
| Communication and Advocacy | <ul style="list-style-type: none"> Research, develop, and test immunisation messages | <p>2.1 Number of research teams instituted and engaged.</p> <p>2.2 Number of recommendations translated into advocacy messages.</p> <p>2.3 Number of print, and other media engaged with routine EPI activities</p> <p>2.4 Number of community influencers identified and engaged</p> | <p>1.1 Publication log for research and recommendations.</p> <p>1.2 Audience specific messages crafted.</p> <p>1.3 SBC/IEC materials in various forms.</p> <p>1.4 List of HF/district or country wide influencers</p> |
| Programme management and Finance | <ul style="list-style-type: none"> Develop micro work plans Establish an immunisation fund | <p>3.1 Proportion of HFs that develop monthly micro work-plans.</p> <p>1.2 Proportion of districts reached with TA visits.</p> <p>1.3 Number of stakeholders' meetings conducted.</p> <p>1.4 Proportion of districts providing indicative figures to their local governments for main budgets and work-plans.</p> <p>1.5 Proportion of districts that hold quarterly performance review meetings.</p> <p>1.6 Number of governance meetings conducted.</p> | <p>1.1 Visible monthly work plans.</p> <p>1.2 TA reports.</p> <p>1.3 Minutes of stakeholders' meetings.</p> <p>1.4 Minutes and action points for performance review meetings</p> |
| Vaccine Supply Chains and Logistics | | <p>1.1 Presence of UBOS population projections.</p> <p>1.2 Number of vaccine and logistics forecast done.</p> | <p>1.1 Procurement plan.</p> <p>1.2 UBOS population projections.</p> |

- Forecast and procure
- Invest in cold chain & Adopt last mile model.

- 1.3 Number of GOU financial obligations included in the budget.
- 1.4 Presence of a CCE maintenance plan.
- 1.5 Proportion of districts adopting last mile model
- 1.6 Presence of a functional LMIS.

- 1.3 GOU financial obligations integrated in the national budget.
- 1.4 CCE maintenance plan.
- 1.5 Report on national wide gap analysis.
- 1.6 Refresher training report.
- 1.7 Ultra-cold installation reports.
- 1.8 Real time tracking system for vaccines distributed.
- 1.9 TOR for developing LMIS

Surveillance, Monitoring and Evaluation

- Integrate surveillance into EPI curriculum
- Digitize EPI data and reports

- 1.1 Number of HWs trained on surveillance.
- 1.2 Proportion of HFs with printed case-based surveillance tools.
- 1.3 Proportion of HFs oriented / mentored on IDSR.
- 1.4 Availability of an updated EPI curriculum.
- 1.5 Proportion of districts with staff trained on data collection, reporting and analysis.
- 1.6 Availability of a digital register.
- 1.7 Number of supervision visits conducted.
- 1.8 Availability of ToR to engage consultant for digital EPI register.
- 1.9 Number of e-bulletin published.
- 1.10 Availability of an updated M&E framework

- 1.1 CME/ training reports on surveillance
- 1.2 Printed tools for case-based surveillance.
- 1.3 Mentorship reports for IDSR teams.
- 1.4 Updated EPI curriculum.
- 1.5 Training reports on data collection, reporting and analysis.
- 1.6 Digital EPI-register.
- 1.7 Support supervision logs (registers) or ODK.
- 1.8 ToR for digitising EPI data.
- 1.9 EPI dashboard.
- 1.10 Lists of defaulters and zero dose persons.
- 1.11 e-bulletin.
- 1.12 updated M&E framework