Memorandum on Republic of Uganda Programme Audit report

The attached Gavi Audit and Investigations report sets out the conclusions of the programme audit of Gavi's support to Uganda's Ministry of Health executed through its Uganda National Extended Programme on Immunisation (UNEPI). The audit was conducted between 25 October and 9 November 2021.

The audit team reviewed the MoH's management of Gavi's in-kind support and technical assistance to the immunisation programme during the three-year audit period 1 January 2016 to 30 June 2021. Specifically, the audit covered Uganda's use of Gavi's contributions delivered as vaccines, immunisation supplies and cold chain equipment, as well as shipments of COVAX vaccines received during the ten-month period to October 2021.

The report's executive summary (pages 3 to 5) sets out the key conclusions, the details of which are set out in the body of the report:

1. There is an overall audit rating of "**Ineffective**," which means that, "multiple significant and material issues were noted. Internal controls, governance and risk management processes are not adequately designed and are not generally effective. The nature of these issues is such that the achievement of objectives is seriously compromised."

2. In total, twenty-three issues were identified in the following areas: (i) Programme management and oversight; (ii) Vaccine supply chain management; (iii) Immunisation data quality and use; (iv) Financial management; (v) Procurement and fixed assets management; and (vi) Programme sustainability.

3. To address the risks associated with the findings, the audit team raised twenty-four recommendations, of which twelve were rated as high risk.

4. Key findings were that:

    a. The design and operation of the programme oversight mechanisms resulted in limited effectiveness of governance structures, and delayed the transition of the Financial Monitoring Agent role, to its role of focusing on subnational assurance and capacity building. There were delays in implementing the required internal audit activities, a number of programme activities planned for 2018 and 2019 were not completed as planned and were rolled forwards;
    b. Supply chain decisions regarding the forecasting, distribution, and estimates of wastage rates were sub-optimal. This was due to the vaccine logistic management information system which was inadequate, including significant errors and there being

no data quality assurance processes in place. A reporting system which was run in parallel, also was erroneous and prone to glitching. Another system, recently installed in 2021 was not adequately configured as part of its data migration process and therefore could not be relied upon for decision-making;

c. Vaccine management practices were inadequate including: non-compliance with "earliest-expired first-out" principles; lack of adherence to standard operating procedures at subnational levels; incomplete and inaccurate stock records; absence of physical stock counts; and the build-up of medical waste as funds for incineration were not used;
d. There were inaccuracies in the immunisation data reported and weak data governance processes. Errors were identified in the documentation, collation, monitoring and reporting of data. Although the data quality improvement plan included several data quality initiatives, following on from the 2016 data quality assessment, progress in implementing this plan was insufficient;
e. The budgeting and financial management processes were compromised, resulting in the low absorption of grant funds. The submission of accountabilities and justification of programmatic advances by both districts and the MoH were often overdue.
f. Questioned expenditures totalling USD 635,743 were identified, consisting of unsupported (USD 4,256), inadequately supported (USD 40,836) and ineligible expenditures (USD 15,753). There were also significant unliquidated advances (amounting to USD 574,898);
g. The MoH did not have a sustainability plan in place with regards to funding its central-level immunisation team, instead relying upon Gavi to finance these expenditures. The costs included seventeen fulltime project staff, as well as top-up allowances for three civil servants.

5. By the end of October 2021, Uganda had received 12.4 million doses of Covid-19 vaccines supplied by COVAX. Several good practices were noted in the management of the Covid-19 vaccination programme, although there were some delays in entering the resultant data into the immunisation data system. Shortages in Covid-19 vaccines due to shipment delays, were observed, but were promptly resolved by December 2021. There were no significant expirations of Covid-19 vaccines at the time of the audit, given that this was an early stage of the pandemic response.

During 2022, the findings of the programme audit were discussed with the Ministry of Health who accepted the audit findings, acknowledged the weaknesses identified, and committed to implement a detailed management action plan. In July 2023, Gavi wrote to the government requesting reimbursement for USD 424,110, an amount which was determined to be misused. This was largely in alignment with the audit's findings, other a portion of the unjustified advances which was considered to be recoverable.

Gavi Secretariat continues to work with the government to ensure the above commitments are implemented, and to agree on how to make the programme whole, pending receiving their commitment.

Geneva, July 2023

PROGRAMME AUDIT REPORT

The Republic of Uganda
November 2021

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1. Executive Summary

1.1. Audit opinion

Overall audit opinion:

The audit team assessed the Ministry of Health's management of Gavi support during the period 1 July 2016 to 30 June 2021 as **"Ineffective"** which means, "Internal controls, governance and risk management practices are not adequately designed and/or are not generally effective. The nature of these issues is such that, the achievement of objectives is seriously compromised."

Through our audit procedures, we have identified high risk issues relating to: programme management and oversight; vaccine and supply chain management; immunisation data management; budgeting and financial management and programme sustainability. To address the risks associated with the issues, the audit team raised 24 recommendations, of which 12 (50%) were rated as high risk. The recommendations need to be addressed by implementing remedial measures according to the agreed management actions.

1.2. Summary of key audit issues

** The audit ratings attributed to each section of this report, the level of risk assigned to each audit finding and the level of priority for each recommendation, are defined in annex 3 of this report.*

1.3. Summary of issues

Through our audit procedures, we identified high risk issues relating to programme management and oversight, vaccine and supply chain management, immunisation data management, budgeting and financial management and programme sustainability. To address the risks associated with the findings, the audit team raised 24 recommendations, of which 12 (50%) were rated as high risk. The recommendations need to be addressed by implementing remedial measures. The detailed issues are included in Section 4 of this report.

Programme management and oversight

The Inter-agency Coordinating Committee (ICC) is responsible for overseeing and taking strategic decisions on matters relating to the immunisation programme. The effectiveness of the ICC's oversight was hindered by delays in implementing resolutions, several of which remain outstanding. Out of a sample of 16 core resolutions passed by the ICC between November 2018 and 30 June 2021, five were implemented, three were ongoing and eight had not commenced by the time of the audit. The dashboard for tracking ICC resolutions was incomplete and the owners of respective actions were not indicated, impeding effective follow-up. Some of issues discussed at the ICC were effectively repeating a prior discussion held at the Technical Co-ordinating Committee (TCC) level, also the ICC was not provided with a summary of discussions and recommendations by the TCC.

Activities from approved annual workplans were not completed. While the Covid pandemic adversely affected the implementation of work plans for 2020 and 2021, a number of activities planned for 2018 and 2019 were not done and had been rolled forward. There were also pending Grant Management Requirements (GMRs) with five partially implemented and one not yet started. These and various recurring issues from other audits and reviews indicated that the Ministry of Health (MoH) needed to put in place a mechanism to follow-up recommendations.

There were delays in implementing internal audit activities as required by the GMRs, with the internal audit department not presenting any plans or carrying out any audits during the period. There was also no evidence of collaboration between the Internal Audit team and the Financial Monitoring Agent (FMA) on their respective risk prioritisation and work scheduling.

There were weaknesses in implementing and transitioning the FMA role. At district level, there was no evidence that the FMA had strengthened or trained districts on their work planning and reporting mechanisms. Although activity and financial management guidelines were developed and distributed, there was no evidence that these were disseminated to decentralised levels and local governments, including health accountants. There was also no evidence that the FMA assessed districts' capacity needs. In addition, from the audit team's review of 14 FMA reports completed between mid-2017 and mid-2021, it was noted that at least five issues were repeatedly raised across multiple reports. However, there was no analysis of the underlying root causes, nor were any solutions proposed for how to resolve these issues.

Gaps in the design and operationalisation of both programme management and oversight mechanisms resulted in limited effectiveness of governance structures, and delays in transitioning the FMA assurance role from an "augmentation of weak financial management structures at national level", to "focusing on assurance and capacity building at subnational levels".

Vaccine supply chain management

The national medical stores (NMS) used an excel-based stock management tool (SMT) as the primary stock register. The stock register had significant errors: several receipts and issuances were omitted, incorrect quantities were recorded (for example, by confusing vial and dose numbers) and no proper quality assurance process was in place, with stock entries not being reviewed and corrected prior to generating reports for decision making. An electronic reporting system (MACS ERP) run in parallel also had data errors, and this system would regularly crash when reports were run. Another oracle-based system recently launched in 2021 was expected to be more stable, however it was not yet adequately configured as part of the data migration process. Overall, none of these systems provided the necessary accurate and reliable data for decision making, and the various data sources used were not reconciled.

Various gaps were noted across the team's site visits, including inadequate cold chain storage capacity at the national medical stores (NMS), district vaccine stores (DVS) and health facility (HF) levels, and capacity constraints were aggravated due to additional space needed to store Covid-19 vaccines. Vaccine stockouts were observed at all levels of the supply chain for three antigens (Penta, PCV, and Rota). At the level of HFs, intermittent stockouts of routine immunisation vaccines occurred ranging for periods from one to 51 days. In other districts and HFs, overstocking was noted. The NMS had no visibility over the actual consumption of vaccines to inform its decision making, since it lacked an effective logistics management information (LMIS) system, to provide a consolidated view on stock holdings and for reporting to Gavi and UNICEF. Further, Gavi-funded vehicles were not used to augment the vaccine distribution process at subnational levels, as intended.

There were inconsistences and discrepancies in stock records, which prevented tracking whether First Expiry First Out principles were complied with at decentralised levels. Also, there was a lack of adherence to vaccine standard operating procedures (SOPs) at the DVS and HF levels.

From the audit team's visits to various DVS, it noted that six out of 14 (43%) of these had a cold chain equipment (CCE) preventative maintenance plan in place which was not followed. Moreover, there was no evidence of routine and preventative maintenance being performed for 12 out of 14 (85%) DVSs and 25 out of 34 (74%) HFs visited.

A build-up of immunisation waste (used vials and sharps) was observed at various levels, due to an absence of funds to properly dispose of hazardous materials. This resulted in reports of waste being openly burned or buried. Funds provided by Gavi to procure seven incinerators were not used. Support supervision structures were weak, resulting in the inability for recurring recommendations to be followed-through.

The weaknesses observed in the vaccine supply chain management processes may result in missed vaccination opportunities and could impact on the country's contribution to attaining the Gavi 5.0 strategy of reaching everyone with immunisation.

Immunisation Data Management

There were inconsistencies in the immunisation administrative coverage reported via the health information system. A comparison between the number of doses issued by NMS and the administrative coverage across four regions (135 districts) demonstrated that the absolute quantities of pentavalent immunisations reported between 2016 and 2020 was consistently higher than the quantities of vaccines issued in those years.

The health facilities visited in the audit reported significantly higher numbers of vaccinations when compared to physical doses used for at least one of the three antigens sampled. Significant differences ranging from 15% to 95% were noted across all of the facilities inspected. From a review of primary immunisation records (e.g., tally sheets, monthly reports and the vaccine control books), weaknesses were identified in the health facilities' immunisation data documentation, validation, verification, and collation.

Following a 2016 Data Quality Assessment (DQA), a Data Quality Improvement Plan (DQIP) was developed in 2017. The updated report on the implementation of the DQIP activities showed that three (9%) interventions had been completed, eleven (34%) were partially done and in progress, 10 (31%) were not implemented, and a further eight (25%) were reflected as implemented, but without any confirmation in support of this.

There was no evidence to indicate that immunisation data was used for programme decision-making and performance improvement. There was poor follow-through on the issues noted and identified: (i) time bound actions were not developed; (ii) review reports were not developed and (iii) no follow-up on issues' implementation following these being discussed in the Data Improvement Teams review meetings. Hence, the immunisation data performance feedback mechanisms were insufficient and inconsistent, to enable data-driven decisions or continuous improvement of data quality generated at service delivery levels.

The gaps noted in the collection or reporting of data and a lack quality assurance over the results reported, may result in unreliable immunisation data, adversely impacting upon future programming decisions.

There was a delay in the phase one deployment of the "Smart Paper Technology" (SPT) system, and its trial adoption by selected districts was inadequately planned, including lapses in establishing suitable mechanisms for data quality assurance, ownership, and interoperability with DHIS2. Although an assessment to review lessons learned was planned, this was not done prior to initiating phase two – which began shortly after the audit. This suggests an opportunity was missed to course correct for known risks and design issues identified in the pilot, prior to the system being further deployed.

Budgeting and Financial Management

There were gaps in the budget monitoring and reporting system. There was no evidence demonstrating any programme budget monitoring was performed by the Uganda National Expanded Programme on Immunisation (UNEPI) - Gavi Project Accountant. Suitable mechanisms were not in place to confirm that districts' expenditures were in accordance with their approved work plans, given that the process of reviewing district accountabilities was not well documented. At the central level, an analysis of budget-versus-actual was performed for 2020 and 2021, but earlier budget-versus-actual analyses were not available on file.

The Government of Uganda's Integrated Financial Management System (IFMIS) system was designed to record government expenditure in accordance with the cash basis of accounting and was therefore not able to monitor programme advances to districts and individuals for the period under review. Outstanding amounts were monitored using manual spreadsheets even though this process was error prone. In addition, the Project Accountant did not perform an aging analysis of the advances and there was no process to escalate and follow-up outstanding amounts. At the district level, the accountants were unable to generate a Gavi-specific report from the IFMIS system, because the projects' module was configured at the central level.

The submission of accountabilities and retirement of advances by districts, MoH institutions and staff was often late, resulting in the accounting of advances being significantly delayed. As of 30 June 2021, the total HSS unliquidated advances at national level amounted to USD 574,898 of which USD 393,265 was significantly overdue, as it related to 2019 and 2020. The audit team also reviewed cash transferred to the districts amounting to UGX 1,399,998,363 (USD 383,561) representing 4% of the total expenditure. The team questioned a total of UGX 222,085,993 (USD 60,845) of the district level expenditures as detailed in Table 1 below.

Based on the audit team's review of budgeted activities and approved work plans, it was noted that UNEPI had accumulated a significant pipeline of activities totalling USD 7.1 million. Although approved, initiation of these activities was delayed and they had not been executed by end of June 2021. While some of the more recent delays can be attributed to the Covid-19 pandemic, 44% and 36% of activities for 2018 and 2019 respectively had not started as planned and had been carried forward each year.

Gaps in the design and operating effectiveness of the budgeting and financial management processes resulted in low absorption of grant funds, coupled with delays in the implementation of activity plans and inability to meet programme objectives within the allotted time. As a result, Gavi had to grant a no-cost extension up until June 2023, in order for the programme to catch-up on its missed objectives. This had a subsequent knock-on effect in delaying the country's future portfolio programming application and alignment with the Gavi 5.0 objectives. For future activities falling within Gavi's 5.0 strategic period, it is important for the work plans, disbursements and the country's financial year to be properly aligned.

Programme Sustainability concerns

UNEPI and MoH did not have a sustainability plan in place with regards to funding its central-level immunisation team. Instead, the government continued to primarily rely on Gavi to fund these expenditures, totalling approximately UGX 1.6 billion (USD 448,000) per year. This covered the cost of seventeen full-time project staff, as well as top-up allowances for three civil servants in the UNEPI team. In addition, the basis for paying additional salary increments to these project staff was not supported by the completion of performance reviews, as required. In future, the execution of the immunisation programme might be negatively impacted should this support cease, unless key personnel and institutional memory is absorbed into the national system. Future funding requirements, staffing arrangements and sustainability planning should be reviewed as part of Gavi's full portfolio planning process.

COVAX Facility support from Gavi

By end of October 2021, Uganda had received 12.4 million doses of Covid-19 vaccines supplied by COVAX. The audit team noted some good practices in the management of these doses such as: the creation of Covid-19 task team at national and subnational levels; regular reporting of vaccination and stock data; low wastage; procurement of ultra-cold chain equipment; and increased security on receipt, storage and during vaccine transportation at all levels. There were also some challenges due to the ultra-cold chain (UCC) requirements. NMS and the country managed this in the short term by renting suitable UCC and freezer space from other entities to store Pfizer and Moderna vaccines. Covid-19 vaccination data was entered into the District Health Information Systems 2 (DHIS2) Covid module, with the system helping to generate immunisation certificates. The audit team noted that there were backlogs in the entry of Covid-19 data into DHIS2. The country experienced some short-term stock outs of Covid vaccine second doses due to delayed shipments from COVAX, but this was promptly addressed by providing additional doses in December 2021.

1.4. Financial consequences of audit findings

The table below summarises amounts questioned by the audit team:

Table 1– Summary of expenditures questioned by the audit team, by category in USD:

Category of questioned expenditures	Amount questioned (UGX)	Amount questioned (*USD*)	% of total amount tested	Details (report reference)
Unliquidated advances (national level)	2,098,377,476	*574,898*	18.2%	4.4.4
Ineligible expenditure (district level)	57,500,000	*15,753*	0.5%	4.4.2
Unsupported expenditure (district level)	15,533,252	*4,256*	0.1%	4.4.2
Inadequately supported expenditure (district level)	149,052,741	*40,836*	1.3%	4.4.2
Total expenses questioned	**2,320,463,469**	***635,743***	**20.1%**	

Out of the total questioned expenditure, UGX 100,846,250 (USD 27,629) was related to Gavi funds initially disbursed to WHO, subsequently sub-contracted to various districts in order to execute MR campaign activities. See details in issue 4.4.2.

1.5. Cash balances as of 30th June 2021

Table 2 – Gavi funds disbursed to the MoH, but which were still unspent at central level as of 30th June 2021, by grant:

Grant	Balance of unspent funds (*USD*)
Health Systems Strengthening 2 (HSS2)	*701,430*
Performance based Funding (PBF)	*236,747*
Coverage & Equity (C&E)	*1,728,044*
Total	***2,666,221***

The country was holding significant cash balances at the end of the 2020/21 financial year. This was due to delays in implementation of approved programme activities as detailed in issue 4.1.1.

2. Objectives and Scope

2.1. Audit Objective

In line with the respective programme agreements and with Gavi's Transparency and Accountability Policy, all countries that receive Gavi's support are periodically subject to programme audit, for which the primary objective is to provide reasonable assurance that the resources were used for intended purposes in accordance with the Gavi agreed terms and conditions, and that resources were applied to the designated objectives.

As a result, the audit team assessed the various processes and programme management arrangements governing Gavi's support (vaccines and cash grants) for which the respective entities were responsible, so as to assess if: the coordination and implementation arrangements are effective, the existing grant oversight mechanisms provide continuous and reliable assurance on Gavi's investments, the financial management and procurement processes support the timely utilisation and accountability of Gavi grant funds and the vaccine supply chain management and immunisation data systems are effective.

The team also reviewed the relevance and reliability of the internal control systems relative to the accuracy and integrity of the books and records, management and operational information; the effectiveness of operations; the physical security of assets and resources; and compliance with national procedures and regulations.

The current report, which was prepared based on selected information and documentation provided to Gavi's audit team, cannot be considered as definitive for the entire amount of expenditures incurred during the audit period.

2.2. Audit Scope and Approach

In July 2013 the Ugandan Ministry of Health, the Ministry of Finance and Gavi signed a Partnership Framework Agreement. An audit covering the period 1 July 2016 to 30 June 2021 ("the audit period") was conducted in accordance with this Agreement's provisions (articles 20 and 23 of Annex 2). Over this five-year period, Gavi provided resources totalling USD 226,608,878, in the form of cash grants totaling USD 55,188,955, and vaccines and supplies totaling USD 171,419,923 (see Table 3 below). The country's financial year starts on 1st July and ends on 30th June, however, Gavi disbursements for the audit period were recorded by calendar year. Furthermore, as at the end of October 2021, the country had also received a total of 12,401,750 doses of COVID-19 vaccines (various products including: AstraZeneca, Sinovac, Moderna, Pfizer, Johnson & Johnson and Sinopharm). As per table below

Table 3: Gavi disbursements to Uganda by calendar year as of 31 December 2020 in USD

		Amounts in scope					
Cash grants	**2000 -2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**Total (in USD)**
HSS	*12,846,203*	*1,551,576*	*2,023,922*	*1,237,996*	*11,464,898*	*13,704,622*	*42,829,217*
INS	*1,207,299*						*1,207,299*
ISS	*9,230,520*						*9,230,520*
Men. A – op. costs		*4,366,265*					*4,366,265*
MR Catch-up campaign op. costs					*11,181,873*		*11,181,873*
Operational costs				*349,355*			*349,355*
Vaccine Introduction Grants (VIG)	*4,165,500*			*1,400,591*	*1,538,576*		*7,104,667*
CCEOP			*1,994,722*		*4,647,750*	*(283,948)*	*6,358,524*
Yellow Fever Diagnostics						*10,757*	*10,757*
Total (Cash)	***27,449,522***	***5,917,841***	***4,018,644***	***2,987,942***	***28,833,097***	***13,431,431***	***82,638,477***
Total (Vaccines)	***226,741,734***	***46,034,992***	***24,476,590***	***36,660,563***	***40,058,512***	***24,189,266***	***398,161,657***
Total (Vaccines + Cash)	***254,191,256***	***51,952,833***	***28,495,234***	***39,648,505***	***68,891,609***	***37,620,697***	***480,800,134***

Table 4: Total Gavi cash disbursements to Uganda by recipient (2016 to 2020 calendar years) in USD

Recipient	Amount USD
WHO	*16,620,566*
UNICEF SD	*11,573,575*
Ministry of Health	*10,110,622*
UNICEF and MoH (CCEOP)	*6,358,524*
UNICEF SD HSS funds	*6,954,634*
Other payments and adjustments	*1,978,535*
Financial Monitoring Agent (EDES)	*1,592,499*
Total cash	***55,188,955***

2.3. Conduct of Audit Engagement

Between 25 October and 9 November 2021, the Gavi audit team reviewed expenditures incurred by the MoH (UNEPI) both at national and subnational levels. The team reviewed transactions totalling USD 3,160,569 covering 32% of the total expenditure.

The team visited 14 district health directorates and district vaccine stores, and 34 health facilities and conducted a review of the vaccine supply chain management at the National Vaccine Store. It also held discussions with Gavi Alliance partners and key in-country stakeholders during the audit scoping and fieldwork phase. See Annex 4 for the list of sites visited by the audit team.

2.4. Progress on previously identified audit issues

Gavi's audit unit conducted a prior programme audit in 2015. This second programme audit, conducted in 2021, noted some improvements in areas such as programme management and oversight, vaccine and supply chain management, procurement management, financial management and monitoring and evaluation. However, several prior audit issues were not yet fully addressed including: (i) delayed retirement of programme advances (ii) advances not tracked in the financial management system (IFMIS) (iii) vaccine management weaknesses, such as gaps in stock data.

While some controls and mitigating actions had been considered and/or designed in response to the prior issues, these actions were not yet fully implemented or the design of the controls did not adequately address the nature of the risks presented at the national and/or subnational levels. Additional details are included in this report's section 4 on audit issues.

2.5. Exchange rates

Most cash and in-country expenditures were incurred using the Uganda Shilling (UGX). For information purposes and as part of the summary of this report, overall total amounts were reflected in United States Dollars (USD). For the expenditures reviewed, the rate applied was based on the average bank rate provided in comparison with the prevailing Bank of Uganda rate at the time of conversion from USD account to Uganda Shillings. The overall exchange rate equated to UGX 3,650 against USD 1.00.

3. Background

3.1. Introduction

The Republic of Uganda has an estimated population of 45.7 million. According to the United Nations Development Programme, the country ranks 159 out of 189 in the human development index and is ranked 142 out of 180 on the corruption perception index. The country's GDP per capita was estimated to be USD 817 in 2020.

The country still faces challenges with its health sector workforce; there were just two physicians, nurses and midwives per 10,000 population which is below WHO's recommended 23 health workforce ratio.[1]

The national health system is made up of the public sector that consists of all the Government of Uganda owned health facilities, and the private sector that has Private Not for Profit, Private Health Practitioners, and Traditional and Complementary Medicine Practitioners. The provision of health services in Uganda is decentralised with districts and health sub-districts taking the lead in managing health services. These services are provided across an infrastructure broadly comprising of two National Referral Hospitals, 14 Regional Referral Hospitals, more than 100 General Hospitals, and various Health Centres from level four down to level two (HCIV, HCIII, HCII) and Village Health Teams.

Administratively, there are four regions in Uganda, 135 districts, and over 5,229 health centres. Of these 2,867 health centres are operated by the government, 874 operated by non-governmental organizations (NGOs), and 1,488 private facilities. Health service delivery is organized at three levels – national, regional and district. Districts are further divided into several sub-counties and incorporate a community-level health delivery system.

3.2. National entities involved in implementation of grant activities

At the national level, the Ministry of Health (MoH) maintains policy setting, planning and coordination. Service delivery is done through the Uganda National Expanded Program on Immunisation (UNEPI), under the Department of National Disease Control within the Directorate of Clinical and Community Services. UNEPI is responsible for overall coordination and planning for immunization services across the country.

The National Medical Stores (NMS) is primarily responsible for the vaccine receipts, inbounds and outbounds, procurement, central level storage and inventory control and long-haul distribution to the district vaccines stores and maintenance of cold chain equipment in the country.

The districts and health sub-districts are responsible for planning, management, and delivery of the EPI services through the implementation of the overall district health plan. Communities are charged with mobilising and supporting EPI activities and ensuring that all target populations are reached.

Uganda currently operates a 3-tier system supply chain comprising of the National Medical Stores (NMS) embedded within the National Medical Stores, 135 District Vaccine Stores (DVS) and over 6,000 Health facilities. Every month, the NMS delivers vaccines to the DVS based on pre-set and forecasted targets, while each DVS manages "last-mile" distribution to individual health facilities. There are plans to revise the current 3-tier system to a 4-tier system with the introduction of distribution points within each district, to make it easier for the health facilities to access vaccines given current last mile challenges. Annex 5 details the current and proposed system design.

Gavi's funds are managed by the UNEPI programme and Gavi has funded various positions to support the programme in grant management. Beginning 2012, Gavi engaged a Monitoring Agent. In April 2017, the Agent's mandate changed into the role of a Financial Management Agent, including a monitoring and capacity building role.

3.3. Good Practices and improvements since the last audit

The Ministry of Health has an established ICC and TCC, with clear terms of reference. The National Immunisation Technical Advisory Group is also functional, with relevant stakeholders including civil society and church-based organisations. There is appropriate Government engagement, as evidenced by the leadership of the ICC and TCC, with government representatives occupying six out of 10, and eight of 17 of those committees' positions, respectively. The country has also made significant progress in addressing its

[1] Global Health Observatory data, WHO

GMRs. The Government has also shown its commitment by keeping up to date on its co-financing obligations associated with Gavi supported vaccines.

There is continuous engagement of various stakeholders and establishment of strategies such as engagement of religious and cultural leaders and schools, to mobilise people for supplementary immunisation activities. This has been critical in supporting the Covid-19 vaccination roll-out. Their involvement and consultation by MoH structures and its leadership on the Covid-19 response has led to prompt decision-making on the allocation and use of vaccines.

External assurance arrangements were in place, with the Office of the Auditor General (OAG) auditing Gavi's grants since 2012. As at the time of our audit in November, the FY-2020/2021 audit had also commenced.

Financial Management guidelines for districts relating to Gavi grants were developed and rolled out. The country has also developed comprehensive policies and guidelines including the National Policy Guidelines on Immunisations.

Vaccine distribution at national level has improved with the support of Gavi. The NMS currently has a fleet of refrigerated trucks, consisting of 17 x 20 tonne and 2 x 8 tonne vehicles, which are used to deliver vaccines to the DVS. During transit, vaccine temperature is maintained using cool boxes, the trucks' own refrigerated internal system and temperature tags and vaccine vial monitor (VVM) status is checked on arrival. The distribution from NMS to DVS is also covered by the NMS' comprehensive insurance for goods in transit. At the DVS level, vaccine distributions to the health facilities typically use vehicles funded by Gavi (e.g., pick-ups and motorcycles) as available.

There was also a cold chain equipment (CCE) maintenance team in place at the central level, and a maintenance plan was in the process of being implemented. There were also advanced plans for the expansion of five regional DVS cold-storage facilities, endowed with walk-in cold-room storage capacity at Mbarara, Fort-portal, Lira, Arua and Mbale. Several good practices were noted during the audit and pictorial evidence has been included as annex 21.

3.4. Key Challenges

Though the Government has trained a considerable number of health workers over the years, the deployment and retention level of its health workforce remains a challenge, especially in rural areas. The distribution of community health nurses in relation to the targeted number of children for vaccination is spread unevenly across the country. As many as 39% of districts reported health worker vacancy rates greater than 35% in 2016. The existing pool of skilled human resources at central and district/health facility level also worsened, following the creation of new districts since 2016, and to date more than 25 districts have been created, all requiring additional personnel.

3.5. Operational Challenges due to the Covid-19 pandemic

Uganda declared a national public health disaster in March 2020 and imposed restrictions including the banning of gatherings of more than 20 people, restrictions on movement between districts and the closure of public and private education institutions. International borders were shut from March 2020 to September 2020 and again in April 2021 to limit the importation of Covid-19 cases. Additional lockdown measures were introduced in June 2021. Movement constraints, the partial closure of government offices and shutting educational institutions had an impact on the Gavi-funded programme activities.

As noted in 3.4 above, human resource challenges impacted on the delivery of routine immunisation activities, as the limited MoH capacity was also requested to support Covid-19 vaccine planning and implementation since March 2021. Noting these challenges, where applicable the audit team have acknowledged their impact on planned programme activities.

In addition to the tightening of human resources in the health sector, there has also been a strain on the availability of capacity in the cold chain to manage Covid-19 vaccines. While the country received such products with different storage requirements, outside of the NMS ultra-cold chain storage at subnational levels was lacking. While this challenge was not unique to Uganda, the logistics are more complex to ensure that Covid-19 vaccines are kept at the correct temperature to maintain their potency. Vials of Covid-19 vaccines do not have a VVM indicator and the lack of UCC at sub-national levels means that the Pfizer vaccine (which requires ultra-cold chain) when distributed from the NMS are on a "ready-to-use" basis.

4. Audit Issues

4.1 Programme management and oversight

4.1.1 The TCC and ICC need to improve oversight over grant Implementation

Context and Criteria

Following the Programme Capacity Assessment of June 2016, the Government and partners constituted an Immunisation Country Coordination (ICC) mechanism and Technical Coordinating Committee (TCC) to oversee the national immunisation programmes, with clear Terms of Reference (ToRs) and oversight responsibilities, including relations with the Health Policy Advisory Committee (HPAC) and the Ministry of Health to avoid duplication of roles. As stated in the ToRs, the roles and responsibilities of the ICC include: *"operationalisation of the Immunisation Fund and mobilisation of resources; provision of strategic guidance and oversight for immunisation performance to ensure sustainable coverage and equity of immunisation services in compliance with the Immunisation Act; provision of strategic oversight and guidance over the Immunisation fund to ensure transparency and accountability to all stakeholders; mobilisation of financial resources for immunisation activities to improve sustainability of the resources for immunisation; and enhancement of the immunisation profile*."

The ToRs of the TCC include "*review of all operational workplans and budgets; conceptualisation of all EPI MoUs for recommendation to Government of Uganda (GoU), partners and ICC; participation in meetings and conferences, monitoring and reporting on governance issues; and review of programme assurance reports among other duties"*. Issues of operational policy are presented and discussed at the TCC, endorsed and thereafter presented to the ICC for final decision. The ICC was established to make strategic programme decisions for implementation by UNEPI management and other MoH supporting functions. Strategic and financial issues once brought to the ICC for discussion and approval, are forwarded to Gavi or other immunisation donor(s). As per section 6.3 (v) of the ToRs, the UNEPI management is required to follow up and implement the ICC's decisions and maintain a coordination dashboard to track progress.

Condition

We noted the following gaps in the oversight roles:

Core resolutions passed by the ICC were not implemented or followed up in a timely manner – Less than half of a sample of sixteen core resolutions passed by the ICC between November 2018 and 30 June 2021 had been implemented. Specifically, five (31%) were implemented, three (19%) were ongoing and eight (50%) had not yet started as of November 2021. On average, it took 581 days between the ICC making its resolutions and implementation beginning, with a range spanning a minimum of 29 and maximum of 1,085 days. Eight out of the sixteen resolutions were discussed in more than two ICC meetings with no progress or follow up. The resolutions which were not implemented or were significantly delayed included critical issues affecting grant implementation such as NMS' visibility over vaccines across the health system (down to health facilities), and the procurement of incinerators. See details in Annex 5. This is because the coordination dashboard was not maintained as required in the ToRs.

Duplication of discussions in TCC and ICC – We noted that operational issues were discussed at both the TCC and ICC meetings as detailed in Annex 6. This was contrary to expectations, given that the ICC's primary role was to approve and pass resolutions based on the TCC's prior operational discussion and recommendations. However, only one of eleven ICC meetings involved a TCC report submitted to the ICC for review and consideration. Thus, many ICC meetings resulted in repeating detailed discussions that had already happened in the TCC rather than to acknowledge a summary of prior TCC deliberations. In effect, there was significant overlap between TCC and ICC meetings. Furthermore, in four out of the seven TCC resolutions reviewed, the ICC had already decided before an operational issue had been discussed at the TCC, questioning the sequencing and timeliness of TCC discussions.

Recommendation 1

UNEPI management should:

- Develop a coordination dashboard to track the implementation and follow up of the ICC's directives. This dashboard should indicate an owner and timeframe for the purposes of accountability during subsequent ICC meetings;
- Ensure that reports of the EPI TWG and TCC discussions and conclusions are promptly prepared and submitted to the ICC for strategic guidance to minimise duplication of subsequent discussions;
- Include a workplan tracking tool that indicates which activities are delayed, carried forward from previous years to enable the ICC to prioritise activities annually. Any de-prioritisation should be acknowledged and signed off by the ICC; and
- Review compliance to ICC resolutions annually and report any non-compliance issues to ICC in a timely manner

4.1.1 The TCC and ICC need to improve oversight over grant Implementation

Delayed implementation resulting in the deferral of work plan activities – Between 2018 and 2021, on average 36% of the planned activities were not started. Annual work plans are tracked and reviewed by the EPI TWG every quarter. However, this issue, and the resolution of root causes affecting the delays of annual work plan implementation was not formally presented to the ICC/TCC for strategic guidance.

Table 5: Status of ICC/TCC workplan Tracking

Annual work plan activity tracking	2018	weighting %	2019	weighting %	2020	weighting %	2021 (as at 30 June)	weighting %
Completed	52	40%	45	46%	35	52%	24	28%
On-going	22	16%	18	18%	9	13%	36	41%
Not commenced	58	44%	35	36%	23	34%	27	31%
Number of activities	**132**	**100%**	**98**	**100%**	**67**	**100%**	**87**	**100%**

Source: UNEPI AWP Quarterly Review reports (2018-2021)

Root causes

- Resolutions passed were not time bound and there were several instances where actions were not assigned an owner for implementation and follow up.
- There was no evidence on file indicating that prior resolutions assigned to owners were tracked, updated and accountabilities maintained; and
- A number of activities were delayed so as to prioritise the response to Covid-19. However, no guidance or resolution was provided by the ICC directing which activities should be put on hold, so as to release resources towards the pandemic.

Management Comments

MoH maintains an Action Plan to track ICC resolutions. This will be further strengthened to include owners and timeframes. The action plan will be presented at subsequent meetings of the ICC for accountability and to obtain in put on resolution of bottlenecks affecting implementation of delayed action points.

However, going forward, UNEPI will prepare brief report from the TCC discussions summarizing key inputs and conclusions from the TCC and submit it to the ICC for strategic guidance.

The EPI Workplan is tracked on a quarterly basis in meeting attended by all key stakeholders including Health Development Partners. The report from this meeting indicates delayed activities and activities recommended to be carried forward. Going, forward this report will be presented to the ICC for strategic guidance and obtain input from the ICC on how to improve efficiency in the implementation of activities.

The Terms of Reference for the annual assessment of the performance of the ICC will include the review of compliance to ICC resolutions.

Risks/ Impact/ Implications

Inadequate oversight may impact on the ability of the programme to achieve its objectives and increase the likelihood of financial loss if payments are made without the required approvals.

Responsibility

Grants Coordinator UNEPI

Deadline

30 December 2022.

4.1.2 Grant Management Requirements and other recommendations from various reviews are still outstanding

Context and Criteria

Gavi carried out a Programme Capacity Assessment (PCA) of the MoH in June 2016, covering the following programme management areas: financial management including evaluation of the funding mechanism; and vaccine and cold chain management. The PCA process concluded by agreeing on a set of Grant Management Requirements (GMR) with the MoH on 10 March 2017.

Several reviews have been held to assess progress in implementing the GMR recommendations, including additional recommendations issued thereafter. Specifically, these reviews helped to ensure that the Gavi grants' fiduciary arrangements were adequate and that programmes were implemented in a cost-effective, transparent and efficient manner.

Per the Grant Management Requirements, the MoH was required to follow up on recommendations made by the external auditors, internal auditors and the Gavi Programme Audit for submission to Gavi and for internal dissemination across the MoH.

Condition

Out of the thirteen GMRs, seven have been implemented, five have been partially implemented and one has not yet been implemented. Below is a summary of the current status of the six GMRs that are ongoing.

Table 6: Current status of the six outstanding GMRs

GMR	Updates
ICC assessment Conduct periodical performance assessments of the ICC to ascertain that it is functioning as expected.	CHAI is in the process of soliciting for funds to conduct these assessments. No definite timelines have been set when the implementation of this GMR will begin.
TCC assessment Conduct periodical performance assessments of the TCC to ascertain that it is functioning as expected.	
Filling of vacant positions Government should provide its plans for filling all vacant approved UNEPI posts and recruit staff to fill the vacant positions in the approved UNEPI structure.	The Deputy EPI Programme manager position has been vacant since 2017. At the end of our review, we noted that the two monitoring and evaluation staff supported by Gavi under the UNEPI programme had also resigned.
IFMIS Installation and configuration Tailor IFMIS to ensure all advances from Gavi funds are fully managed and accounted for.	During the period under review (July 2016 to June 2021), advances to the districts could not be tracked in the IFMIS system. Beginning 1 July 2021, disbursements to districts were tracked as advances. However. a) The system does not provide aging analysis. b) The tracking was done in editable manual excel spreadsheets. c) Reconciliation errors at the start of 1 July 2021 remain. The person responsible for the configuration did not have necessary access rights to clean up the opening balances.

Recommendation 2

UNEPI management should:

- Proactively coordinate with the different ministries and partners to ensure that the pending GMRs are implemented;
- Ensure that recommendations are prioritised and followed up using a tracker linked to the ICC dashboard; and
- Enable an escalation mechanism to ensure adequate follow up of the long outstanding items and these should be adequately monitored by the ICC and TCC to ensure timely and effective implementation.

Management Comments

MoH prioritises the implementation of GMRs and has made significant progress in this area as indicated in the Program Capacity Assessment. We have summarised below our comments on each of the outstanding GMRs:

a) TCC and ICC Assessment

MoH requested CHAI to perform the assessments. This activity has not progressed due to delay in securing funding from Gavi. The Ministry will now explore other options of performing this assessment.

b) Filling of Vacant Positions

MoH is working with the Ministry of Public Service to fill the vacant position of Deputy EPI Program Manager. However, an officer from within UNEPI was identified and assigned the duty of a Deputy PM as we await to appoint a substantive Deputy PM. Additionally, to strengthen the Program capacity, MoH has deployed additional human resources in the Program that include: 2 Senior Medical Officers and 2 Nursing Officers.

MoH advertised the monitoring and evaluation positions that became vacant in November 2021. The recruitment process was completed, and 2 officers were appointed.

GMR	Updates
Internal audit – MoH approval of internal audit plan consented by ICC and mechanisms put in place to address the recommendations and the follow up.	During the period of review, Gavi grants were not covered within the MoH internal audit plan. An audit plan for the Gavi grants has now been submitted to TCC and ICC for approval as a result of this programme audit review.
Vaccine and cold chain management Strengthen and develop an appropriate logistics management information system to allow better analysis of logistics data for decision making, and forecasting**.**	The LMIS (Oracle ERP) which tracks the medicines in the warehouse and consumption at the health centre was installed but challenges were experienced in its roll out. NMS then reverted to the MACS ERP system whose visibility is only at NMS. The SMT submitted for review was also found to be inaccurate. See Finding 4.2.3

In addition to the GMRs, a number of recommendations are pending from several reviews such as the 2016 Gavi Programme Audit, Office of the Auditor General (OAG) annual audits and various FMA findings. The UNEPI programme did not have a tracker in place for the period audited, though it was developing one in conjunction with the FMA as of November 2021. The tracker under development was an action log of recommendations and did not assign responsibility for actions and did not indicate the timelines for when issues were first raised, and by when they are to be resolved.

At the finalisation of this audit report, a tracker was completed by the FMA and includes the issues in this report.

c) IFMIS Installation and configuration

MoH uses the IFMIS to process all payments and transactions funded under the Gavi Program. The Advance Module was activated but entry of data in the system was hampered by the high turnover of staff in the position of the Project Accountant. All advances to districts and individuals are now being captured in IFMIS. The Program is working with MoFPED to reconcile opening balances and develop an ageing analysis report. For the period 2016 to June 2021, the advance module was not fully activated in the IFMIS as indicated in the GMRs. However, MoH tracked all advances to Districts and individuals using MS Excel Advance Ledger and no Advances were expensed before review and retirement of accountabilities.

d) Internal Audit

MoH will engage the Internal Audit Department to submit annual IA workplans and ensure that Gavi grants are reviewed by the Internal Audit Department as per workplan.

e) LMIS

The GMR on LMIS was linked to the proof of Concept for the Last Mile, which Pilot took place and could not be scaled up because it was not sustainable.

As part of the process of development of the SCM strategy proposals for streamlining LMIS system were considered. An appropriate system will be implemented once the strategy is approved.

Action Plan for tracking Audit Recommendations

MoH maintains an action plan to track and monitor Audit and other assurance recommendations. The Program will work with the FMA to improve the tracker and develop a mechanism for prioritising implementation of recommendations**.**

Escalation mechanism: UNEPI shall request the FMA to include the ageing of resolutions in their quarterly reports so that those resolutions that remained unimplemented for more than 3 months are brought to the attention of the Chair ICC for her action.

Root causes	Responsibility	Deadline
• Four of the five pending GMRs require intervention and coordination with other Ministries and partners in order for them to be progressed and implemented (e.g., as CHAI for the assessments, the Ministry of Finance for IFMIS and the Ministry of Public Service for UNEPI's recruitment of the Deputy Manager). • Absence of a mechanism to escalate re-occurring issues in order to ensure that suitable measures are in place to ensure their implementation. • A process to prioritise the recommendations so as to determine which should be focused and followed-up first, was not done.	Grants Coordinator UNEPI	31 December 2022

Risks/Impact/Implications Failure to comply with the GMRs may result in the delaying, suspending or termination of Gavi's funding and consequently lost opportunities for the country (as stated in the signed grant agreement). Outstanding audit issues indicate that unresolved internal control weaknesses may remain potentially undermining programme implementation and grant performance.		

4.1.3 The internal audit assurance mechanism is not working effectively

Context and Criteria

The 2016 Programme Capacity Assessment (PCA) resulted in GMR requiring the MoH to formulate an annual internal audit plan, for approval by the ICC.

Additionally, the FMA's contract required it "*to ensure that risk-based audits are performed in a timely manner and audit recommendations are addressed by MoH. This included ensuring that: Gavi funded programme was included in the Internal audit work plan; Risks were identified and communicated to the internal audit department for incorporation in their risk assessment and audit programme; Internal audit reports were reviewed, and an action plan developed for the implementation of internal audit recommendations and confirmation that the internal audit reports are considered by the TCC and ICC.*"

Condition

We noted the following weaknesses relating to the internal audit processes:

Internal audit activities were not planned before September 2021 – During Gavi's audit planning undertaken in September 2021, the audit team was informed that the internal audit department had not presented plans or carried out any audits during the period. Afterwards, the Internal Audit department prepared plans for the financial years 2019/2020 and 2020/2021 but these had not been approved by the Health Sector Audit Committee by November 2021.

Planned audit activities were not done – The internal audit team undertook a review between Gavi's planning mission in September and its audit execution in October. While it was agreed in principle that the internal audit department would share its findings with the Gavi audit team once complete, in order to avoid duplication, this did not occur.

Furthermore, the Gavi audit team was unable to validate that the Internal Audit completed its expenditure review at the district level following receiving an advance of USD 16,551 for that purpose.

Additionally, the internal audit plan included a review of the construction component of the Gavi grant in its scope. However, there was no evidence of that such a review took place.

Lack of collaboration with FMA – There was no evidence that the Internal Audit team and the FMA collaborated on their risk prioritisation and scheduling of work, in order to limit any overlap and to complement audit coverage when developing and executing their respective plans.

Recommendation 3

The MoH's Internal Audit department should:

- Collaborate with the FMA when developing its annual risk-based audit plan including the Gavi grants, and for this plan to be formally approved by the Health Sector Audit Committee, and forwarded thereafter to Gavi; and
- Promptly share with Gavi all assurance reports and completed reviews, as required by the GMR.

Management Comments

Going forward, the IA department will submit its internal audit plans to the Health Sector Audit Committee for review and approval, and thereafter share them with Gavi.

The IA working with the FMA will strengthen their collaboration going forward through sharing and discussing identified risks, reports, and plans.

UNEPI will share the July-December 2021 Internal Audit report with Gavi by end of April 2022. However, for the subsequent reports, UNEPI will share the reports with Gavi within 45 days after the end of this semester (6 months).

One of the challenges with timely completion of internal audits has been the understaffing in the Internal Audit Department. MoH has many departments but few auditors. It would help to alleviate this challenge if Gavi supported MoH to recruit an internal auditor.

Root causes

- Sub-optimal grant oversight by the Health Sector Audit Committee (HSAC)
- Absence of mechanisms to ensure that accountabilities are maintained with respect to the implementation of decisions and assurance activities.

Risks/Impact/Implications

A lack of assurance over grants creates the possibility for internal control weaknesses not being remediated or remaining undetected.
Without proper coordination, there may be duplication of effort by the various assurance mechanisms.

Responsibility

Grants Coordinator

FMA

Assistant Commissioner Internal Audit.

Deadline

31 December 2022

4.1.4 Financial monitoring agent (FMA) role is not fully implemented

Context and Criteria

Section 3, "Scope of the Gavi FMA arrangement" in the FMA contract with Gavi, states the following as some of the major responsibilities of the FMA: *"Funds flow arrangements – verify that funds flow arrangements are in line with the MoU and GoU regulations. Check that disbursements to and within Uganda are effectively and efficiently managed; Procurement – to ensure that: procurement planning and specifications are properly done, procurements by MoH are made in accordance with PPDA Act and regulations, TPPAs (UNICEF) procures and delivers on time, procured items are properly recorded and distributed to intended beneficiaries, there are no duplication of procured items, and value for money is obtained on all procurements; Financial Management and Assurance: this will cover the following: pre-approval of expenditure above UGX 5 Million or below if FMA considers them to be of high risk, support the implementation of partner led activities, perform expenditure validation and reporting, monitor and support MoH to absorb grant funds, optimize the implementation of IFMIS, update financial management guidelines, monitor implementation of selected activities at central and district level and support MoH to prepare and submit finance reports on time; Internal and external audit arrangements – to ensure that risk-based audits are performed in a timely manner and audit recommendations are addressed by MoH; Grant management: Work with the MoH to develop and implement a grant management system that ensures effective selection, contracting, monitoring and accountability of the sub recipients; Capacity building: work with the MoH to develop and implement a Capacity Building Plan and strategy. Strengthen the capacity of UNEPI to manage Gavi Grants by providing support in development of tools, guidelines and providing on job coaching and mentoring in the areas of planning and budgeting, financial management, grant management and procurement. The FMA will also propose milestones for transitioning from a hands on role and perform pre-approval of funds requisitions above an agreed threshold to ensure that payments are in line with the budget and are in all other respects compliant with the grant requirements."*

Condition

Planning, budgeting, and coordination **–** At central level, the FMA was involved in the development of assumptions and costing of workplans. While useful support to the MoH, there is a risk of a perception of role conflict given that the FMA will be less able to provide objective oversight and self-review this process. At a district level, there was no evidence that the FMA trained districts on strengthening their work planning and reporting mechanisms. Although activity and financial management guidelines were developed, printed and distributed, there was no evidence that these were disseminated to the lower levels and to local governments, including health accountants. This was because subnational levels were not required to sign off on receipt of guidelines. Furthermore, no assessment was conducted as to whether these guidelines were properly understood and applied by the sub-national personnel.

Capacity building in financial management **–** There was no evidence on file to indicate that the FMA undertook work in assessing the districts' capacity needs. Equally, there was no record of training activities being designed or conducted to address any capacity needs. From the field visits conducted by the audit team, there was no document on file evidencing that financial capacity building activities were undertaken in any of 14 districts visited. Further, only two of the 14 districts could demonstrate that a review of their expenditure occurred. The FMA indicated that it undertook such expenditure review, but these visits were not consistently documented. There was also a lack of clarity on the role of the FMA at district level with some districts expecting FMA to collect supporting documents and retire their advances.

Pre-approval of payments **–** We noted that payments amounting to UGX 5,235,486,524 (USD 1,434,380) were processed between 2017 and 2020 without first receiving the FMA's pre-approval. Moreover, these payments were settled inclusive of VAT, contrary to the PFA prescriptions on taxes. However, the taxes were claimed back and refunded.

Tracking procurements made by Third-Party Procurement Agents (TPPA) **–** The FMA was required to fast-track procurements made by the TPPA, to ensure timely provision of specifications by MoH/UNEPI for delivery as per signed MOUs. While the FMA reported on TPPA delays, there was no mechanism established at MoH to address the root causes of delays and escalate them for faster decision making. Consequently, delays in procurements including significant value transactions up to USD 1,532,108 were included in several reports but FMA did not identify root causes or possible solutions.

Funds disbursement and funds absorption **–** There were some improvements in the disbursement of funds to districts. The FMA has supported UNEPI in assuring that subsequent disbursements are conditional upon the receipt of supporting documents for prior advances. There remains an opportunity for the FMA to propose solutions in how to address long outstanding advances. We were unable to determine if the FMA followed through by focusing its visits to those districts with long outstanding advances. There was also no evidence of the FMA's involvement in the sub-national budgeting process, including proof that budgets sent to district level were formally approved.

Recommendation 4

We recommend that:

- A mechanism be put in place to monitor and track performance of the FMA periodically to ensure timely accountability. Targets for milestones to be achieved should be set regarding the capacity building role to facilitate measurement of progress made.
- The FMA ensures that all activities done are well documented with relevant proof to be able to demonstrate existence of adequate support.

Management Comments

Going forward, the FMA working with the Ministry will ensure that district staff sign off as evidence of receipt of financial management guidelines.

The FMA will continue to work with MoH to explore options of strengthening accountability of funds disbursed to districts.

The IA working with the FMA will strengthen their collaboration going forward through sharing and discussing identified risks, reports and plans.

The transition arrangements have delayed due to a high turnover of staff within UNEPI. The FMA is discussing with Gavi country team and UNEPI on the transition arrangements to finalise the transition plan by 31 March 2022.

Going forward the FMA reports will include root causes and will work with UNEPI to ensure that sustainable solutions are developed.

Internal Audit – There was no record evidencing that the FMA and the IA collaborated closely, so as to ensure that the Internal audit work plan provided a reasonable coverage at district level of the Gavi grants. More detail on this issue in finding 4.1.3 ***Transition from "hands-on" role –*** Gavi signed its first contract with the FMA in April 2017 following the conduct of the initial programme audit and programme capacity assessment. The contract specified for a short-term "hands-on" role for the FMA, to help close capacity gaps that had been identified at national level. A subsequent contract was offered in 2019, specifying that the FMA transition over to a "hands-off" role, so as to ensure continuity at the national level, and to focus increasingly on providing additional assurance at the sub-national levels. The importance of following through with this transition was stressed, so as to ensure the necessary separation between performing the financial management role and providing assurance. From the audit team's review, it was noted that this reorientation has not transpired, as the FMA continued in a "hands on" role with no concrete plan for the transition. ***Reports prepared by FMA did not include a root cause analysis of issues*** – The audit team reviewed 14 reports completed by the FMA between Q2 2017 and Q2 2021. It was noted that at least five issues were repeated across several reports (up to 7 such reports). However, no analysis of the underlying root causes was provided, nor solutions for how the issues could be resolved. Some of the issues noted were complex, and will require additional analysis so as to craft and implement a suitable sustainable solution – example of such issues included: the low absorption of funds, delays in budgeting, delayed procurements, NMS procurement delays, etc.	The Ministry will work with the Gavi Secretariat to track and monitor the FMA performance on a quarterly basis.	
Root causes One possible cause of the issue was the limited feedback provided by Gavi. While the FMA submitted quarterly reports, there was limited evidence of validation and further inquiry thereon from Gavi. Additionally, Gavi was required to review the FMA's role, but this was not formally done prior to renewing the FMA's contract. Other root causes were contextual. While decision making is done at central level, operationalisation happens at district level. Some operational decisions have also been decentralised and suitable solutions would require innovative approaches to be piloted at the district level based on operations within that district. The FMA has not completed a district-level assessment to indicate which districts would benefit from specific innovations, such as the implementation of mobile payments for certain activities to accelerate the retirement of programme advances. At a national level, there was high turnover in the accounting staff in the past which affected continuity of capacity building activities. The current project accountant has been in post for two years, but the role has not yet evolved to incorporate key tasks, such as the retirement of advances and budget preparation. The FMA has not yet formalised a process for systematic documentation of work done. As such, it was difficult for the FMA to provide documentary evidence when requested.	Responsibility FMA Grants Coordinator Program Manager	Deadline 31 December 2022
Risks/Impact/Implications The above weaknesses may impact on the FMA's effectiveness, in how it renders its contractual assurance activities.		

4.2 Vaccine supply chain management

4.2.1 Immunisation supply chain policy and associated governance structures need to be finalised, approved and implemented

Context and Criteria

Effective immunisation supply chains require an enabling environment encompassing policy, stewardship, finance, infrastructure and human resources. The national immunisation supply chain policy provides an end-to-end perspective and road map of the entire supply chain. It focuses on the in-country level activities, from the arrival of vaccines at the port of entry or the national strategic stores (NMS), all the way to the immunisation sessions conducted at health facilities. Policy implementation requires competent and dedicated managers that are: adequately skilled, accountable, motivated, and empowered, including supply chain personnel at all levels of the supply system to ensure appropriate service delivery.

Condition

The audit team reviewed the evolution and development of the country's immunisation supply chain policy initiated in 2019, against its alignment to Gavi's supply chain guiding principles, its implementation status and funding mechanisms, and noted the following observations:

Immunisation supply chain strategy document in draft – The architecture of the vaccine supply chain process as laid out, is in line with the WHO's recommended core principles of effective vaccine management. The following issues or challenges within the current vaccine supply chain were noted in the document with practical country specific solutions:

- ***"Last mile" delivery*** – a proposal was included to bring the NMS closer to health facilities through introducing distribution points within districts to enable access.
- ***Implementation of the CCE preventive maintenance plan –*** to reduce preventable breakdowns of cold chain equipment, as well as addressing the requirements of the national cold chain equipment optimisation platform (CCEOP) Gavi grant. Since 2017, Gavi has funded approximately USD 6.4 million of cold chain equipment, excluding additional equipment purchased under the prior HSS and campaign grants.

However, the development of this strategy has been delayed with several sections still remaining incomplete. This was attributed to the funding limitations for this activity, that was not included in the Gavi supported workplan for UNEPI. The immunisation supply chain strategy has not been presented to the TCC or ICC for review, approval and inclusion in annual work plans.

Based on the discussions with the UNEPI Programme team, it was noted that due to the current Covid-19 priorities, it is anticipated that this policy will be completed by the end of the first quarter 2022. As of November 2021, it was not yet clear how the operationalisation of the policy when finalised will be resourced and which elements would be prioritised.

Lack of collaboration between the "vaccine logistics and supply chain TWG" and the mainstream "national logistics working group" – UNEPI hosts a supply chain technical logistics working group composed of the Gavi alliance partners. Although we noted that one of the members of the EPI logistics working group is included in the mainstream "national logistics working group for essential medicines and health products", we did not see any documented mechanism for collaboration. This limited the opportunity for both groups to mutually coordinate their focus on securing funding for particular elements of the supply chain and to develop an overall vision for how to steer the supply chain towards optimising its structure for long-term sustainability.

Recommendation 5

UNEPI in collaboration with the NMS should:

- Prioritize the finalisation of the policy, including costing;
- Identify activities within this policy that require funding;
- Complete an implementation framework and roadmap;
- Share policy, framework and roadmap with the national logistics working group and the TCC/ICC for approval and incorporation into a funded work plan; and
- Implement a mechanism for coordination between the ICC, UNEPI logistics working group and the National logistics working groups to ensure accountability over the policy and long-term sustainability.

<table>
<tr><td>Root cause
• Lack of funding to finalise the development of the strategy
• Failure to include the strategy's development process as part of the UNEPI annual workplan
• Covid-19 disruption diverting scarce resources to focus on the pandemic</td><td colspan="2">Management comments
The final strategy and implementation framework will be shared with the EPI TWG, TCC and subsequently ICC by the end of Q2 2022.

This collaboration is documented in the ToRs for the Vaccine Management Committee which is a subcommittee of the NLWG.

The development of the Immunization Supply Chain policy is also an internal initiative. The Procurement and Logistics teams are still lobbying for financial support to fund the completion of the policy development.</td></tr>
<tr><td>Risk / Impact / Implications
The absence of a comprehensive immunisation supply chain strategy, which is approved and tracked using appropriate mechanisms, could result in the various vaccine supply chain components remaining fragmented due to a lack of direction, ownership and responsibility. Ultimately this impacts upon effectiveness, sustainability and continuity due to the lack of commitment, resulting in insufficient investment in critical supply chain components, as well as potential duplicated effort or funding from key stakeholders.</td><td>Responsibility
Procurement and Supply Chain Specialist</td><td>Deadline / Timetable
30 June 2023</td></tr>
</table>

4.2.2 Gaps in vaccine forecasting and demand planning

Context and Criteria

A national vaccine forecast helps determine the quantity and type of each antigen to be procured and delivered in fulfilment of agreed targets, coverage, allowable wastage rates, and milestones for the routine immunisation, SIA programme, as well the deployment of Covid-19 vaccines recently added to the programme. If the forecasting process is not well aligned or regularly reviewed, the country can face incidents of understocking resulting in missed immunization opportunities or conversely surplus stocks that could expire or be wasted.

Condition

The audit team conducted a review of the forecasting and demand planning processes and noted the following gaps:

Lack of visibility of actual consumption at health facility level – As noted in the supply chain strategy, the country does not currently have visibility over the actual level of vaccine consumption at its health facility level. Consequently:

- Issuances from the NMS were used as a proxy for consumption, due to the lack of suitable feedback data from health facilities, which is captured in an LMIS system.
- Actual wastage rates remain unknown, with the country instead using WHO estimates of wastage rates, which may be inaccurate.
- LMIS data fields were not interfaced with DHIS2, with the latter being limited to data on the number of vaccinations done. Furthermore, informative data triangulation exercises could not be undertaken due to missing data records.
- No feedback mechanism from the national to subnational level on supply chain data quality issues.

Low NMS stock levels at time of review of several antigens – The audit team's review of physical stock observed that the current inventory levels were not within the recommended min-max positions for 3 antigens (Penta, PCV, and Rota). Moreover, issuances were drawing from buffer stocks since the level of these vaccines were below the minimum three months. The central level stock of IPV was entirely depleted on the day of our visit to the NMS as detailed in Annex 8a (NMS stock status overview). Additional re-supply delivery dates were confirmed for Penta and IPV and NMS was still awaiting additional information regarding supplies of the other antigens. Low stock balances can be an indication of inaccurate assumptions used when forecasting demand and supply.

The UNEPI team, with support from the Alliance Partners, undertakes monthly reviews of the stock pipeline and monitors for adjustments to inflows and early call-up when stock levels are insufficient. However, throughout the period, no adjustments were made to amend for any forecasting inaccuracies resulting in low stock levels and sometimes stockouts.

From discussions with the NMS store team and based on the audit team's review of the forecasted quantities and actual NMS issuances of Penta to the DVSs (see Annex 8b), it was noted that for each year, actual issuances were always less than the quantities forecast. It was unclear how these variances were used in order to develop more accurate subsequent forecasts.

Root cause

Recommendation 6 –

UNEPI should:

- Review forecast assumptions and ensure that processes are put in place to strengthen the capture and recording of actual utilisation at health facility level, and transmission of this data to the centre.
- Institute a process to capture data on wastage of vaccines, for the country to develop its own rates as these play a critical role in the forecast outcome and accuracy

<table>
<tr><td colspan="2">

- The current forecast process is mainly target-based and did not incorporate data on actual demand and consumption at subnational levels.
- Absence of the country having its own wastage rate data, impacting on the forecasting exercise.

</td><td colspan="2">Management comments
The EPI Programme has included data elements on wastage and consumption in the DHIS2 system in order to improve reporting. Review of the data tools was done during April 2019. The use of the revised tools started in 2020.

This data will improve UNEPI's visibility on the actual consumption data by districts, which is the data that is preferred for forecasting. With this information, including wastage and expiries, the Program shall be able to forecast vaccine needs better.</td></tr>
<tr><td colspan="2">Risk / Impact / Implications

- Inaccurate forecast outputs can result in vaccine stockouts, leading to missed immunisation opportunities.
- The country's ability to meet its 5.0 zero-dose targets could be hampered due to inadequate stock.

</td><td>Responsibility
UNEPI Procurement and Supply Chain Specialist</td><td>Deadline / Timetable
30 June 2023.</td></tr>
</table>

4.2.3. Stock data management at national level needs improvement

Context and Criteria

Stock data management plays a vital role in the management of inventory, feeds into the forecasting, procurement, and demand planning processes. The data capture guidelines provide for quality assurances on collation, aggregation, and entry into the electronic data management systems before the data can be used to monitor key performance indicators.

Condition

Significant variances in SMT data – NMS uses the stock management tool (SMT) to report vaccine stock movement inflows and outflows to Gavi and Gavi partners. The audit team noted significant variances in the reconciliation of the SMT and ERP data.

Table 7: SMT vs stock data from supporting documents - Global reconciliation for financial years 2017 to 2021

Sampled (Vaccines & Commodities)	Presentation	2017-2018	2018-2019	2019-2020	2020-2021
Pentavalent vaccine (5 in 1)	(1 vial= 10 doses)	(3,516,070)	(3,132,850)	216,240	(66,000)
Pneumococcal Conjugate vaccine (PCV)	(1 vial = 4 doses)	(2,662,480)	(754,360)	195,200	(1,366,800)
Inactivated Poliovirus Vaccine (IPV)	(1 vial = 5 doses)	(733,000)	(1,389,700)	92,060	-
Rota Virus	(1 vial = 1 dose)	(535,850)	(3,692,400)	160,550	(324,000)
Human papillomavirus (HPV)	(1 vial = 1 doses)	(766,383)	(582,663)	176,110	89,602
Covid vaccines (COVAX – AstraZeneca)	(1 vial = 10 doses)	-	-	-	3,500

Note: The calculation is calculated stock data minus SMT data for the selected antigens. A negative stock variance means that that SMT had a higher balance of stock than was calculated using source data of issues and vaccine arrival forms. This results in a false sense of stock availability at NMS level meaning that if this data is applied in decision making, lesser quantities will be allocated to the country resulting in shortfalls.

The NMS noted that the variances in stock data could be due to input errors in SMT. Our review noted the following errors in SMT data:

- ***Use of wrong units*** – NMS receives and issues vaccines stocks in vials as opposed to doses, while SMT and health facilities use doses for stock management. This means that before data is uploaded to the ERP, it is first converted manually using a spreadsheet. This led to conversion errors e.g., PCV taken as 10 doses instead of 4 doses
- ***Missing data*** – Data for issuances during April, May and June 2018 was missing and receipts for March 2021 were not completed.
- ***Returns of vaccines from subnational levels were not recorded in SMT*** – NMS uses a different code for incoming receipts (arrivals) and another code for returns from the lower tier for redistribution. These returns had been excluded from the SMT files resulting in errors in the SMT data.
- ***Non-existent data quality assurance processes –*** While SMT data requires manual data inputs, there was no review of data entered or reconciliation to source data. No data quality assurance process was observed for the generation of SMT reports.

Unstable MACS ERP system – The audit team undertook a similar reconciliation using data from the parallel MACS ERP system and noted that the variances observed (for the period 2020-2021) were significantly reduced for three of the six antigens. However, we could not carry out the analysis for earlier years using MACS ERP data to validate that the data in MACS ERP was accurate and complete. This was because the ERP system was unstable and crashed every time data reports were initiated. The system crashes were attributed to the ongoing data migration between MACS and Oracle ERP but could not be confirmed through our independent testing.

Unsuccessful launch of new inventory system – Plans were underway to replace the current MACS ERP system to the more robust Oracle ERP system funded by another development partner (USAID). The latter system is expected to have the capability to link the entire inventory control and provide visibility over stock from the NMS through DVS' and down to HFs, with real-time data connectivity with the capacity for online order management. However, the first attempt to migrate to a new system resulted in a system crash of the new ERP Oracle system due to unforeseen compatibility issues and system bugs. It was explained that the new system had not been thoroughly tested before the launch. A second data link-up attempt was planned for December 2021 extending into January 2022 for a full migration to Oracle ERP and we did not observe or test the data migration controls in place to address the system incompatibility issues as fieldwork ended in November 2021.

Recommendation 7

UNEPI and NMS should:

- Review the process for the generation of SMT reports and ensure that quality assurance review checks are done before submission of data to Gavi and other partners;
- Ensure that data migration completeness and accuracy tests are carried out in the new system to ensure a full migration;
- Institute a data quality assurance process for review and approval of system data; and
- Explore reporting to Gavi directly from the system in use to avoid multiple processes and manual input errors due to limited human resource capacity at NMS. This is especially as the new system should enable direct download of reports. This should be done in collaboration with the system development personnel funded by USAID.

Root cause	
The following are some of the root causes identified. • Absence of data quality checks for accuracy and completeness before SMTs are submitted • Data entry omissions from the Vaccine's Arrival Reports (VAR) to the SMT tools • Conversion errors from vial to doses given that NMS uses vials on receipts and issues while SMT uses doses when issuing to facilities. • Limited use of SMT for decision making at country level. SMTs are not relied upon for decision making and are only used for reporting and as such errors would go unnoticed.	Management comments The ERP installation was completed. Data migration will be completed by end of June 2022. According to the Project timelines, the project is still on track. Uganda uses the vaccine stock data that is extracted from the ERP. However, the Stock Management Tool is the Global Standard for reporting on Vaccine stocks as guided by Gavi, WHO and UNICEF. However, process of moving data from the ERP into the SMT is error prone. There is need for Gavi and WHO to agree on one source of data once the ERP system is operating effectively Data quality assurance mechanisms including reviews and sign off by the vaccines management subcommittee will be put in place to ensure accurate data while awaiting for the full installation of the ERP and the data migration. These recommendations provide an opportunity for the country to avoid multiple parallel reporting and to focus on the adopted ERP as the "single source of truth".

Risk / Impact / Implications	Responsibility	Deadline / Timetable
Allocations done with inaccurate data can result into shortfalls in stocks to the country further leading to missed vaccination opportunities at health facility level.	UNEPI Procurement and Supply Chain Specialist	June 2023

4.2.4. Vaccine distribution challenges experienced at district and health facility levels

Context and Criteria

In June 2014, the Gavi Board approved a revised five-year strategy to continue to build sustainable programmes and deliver on our mission to save children's lives and protect people's health by increasing equitable use of vaccines in lower-income countries. To realise this strategy, the availability of vaccines at the central, subnational and health facility level is critical.

Annex 2 of the PFA, Section A, subsection 20 states that *"the Government shall use the funds and vaccines and related supplies received from Gavi under a Programme for the sole purpose of carrying out the Programme Activities of such Programme."*

Condition

The audit team reviewed the mechanism used for distribution of vaccines including long haul (NMS to DVS) and last mile (DVS to HF). The country currently operates a 3-tier system, see Annex 7 (Current and proposed distribution models) for vaccines. NMS distributes vaccines monthly to 135 DVS stores across the country. From the DVS to health facility a mix of health facility own collection and district led deliveries takes place monthly and sometimes weekly to over 6,000 vaccination centres, dependant on cold chain capacity of the health facility. Plans are underway to move the system from a 3-tier to a 4-tier system through the introduction of pick-up depots within the districts to ease the current stress on last mile.

Stockouts at district and health facility vaccine stores **-** Low stock levels at NMS resulted in stock rationing with less delivered to the DVS. This resulted in the inability for DVS and HF to maintain minimum buffer stock levels and caused stock outs of antigens. 12 of 14 (85.7%) of DVS visited and 26 of 34 (76%) of HF visited reported a stockout of at least one of the sampled antigens (Penta, PCV, Rota and AZ) with a range of two to 61 days. HF stockouts ranged from one to 59 days. Stockouts of more than 30 days were noted at the Kasangati HC, Kagando HC and Kawaala HC visited as detailed in Annex 8d.

Inadequate utilisation of Gavi provided vehicles for vaccine distribution at subnational levels - All the 24 districts visited had been allocated Gavi funded vehicles and motorcycles under the HSS grant to support immunisation activities including last mile distribution. However, they reported challenges with the recurrent expenses associated with fuel and maintenance services. In some instances HF staff used their own resources for pick-up of vaccines where the Gavi funded vehicle was not made available. In one of the districts visited, Moyo District, the Programme vehicle had an accident more than a year ago greatly affecting the last mile distribution of vaccines.

Overstocking at district and health facility level - Overstocking was noted in one DVS (Yumbe) and one facility, Lapainat HF III, in Omoro district which had stock in hand for an average of six months against the set policy of 1 month's stock. This resulted in expiries as observed from our stock count at the facility. The expiries were not separated from the loose stock being dispensed increasing the risk of use of expired vaccines. Overstocking in Yumbe (for HPV) was attributed to vaccines for refugee camps which the DVS stored at the program facility.

Recommendation 8

UNEPI in collaboration with districts should:

- Ensure that the vehicles provided by the programme are utilised in vaccine distribution. This would include review of district budgets to ensure that fuel is adequately provided for;
- Implement the proposed 4-tier proposed system at the DVS level to ease the current stress and the long distances covered by the HF to collect vaccines; and
- Record and review stockout days at health facility level through the district supervisory visits to ensure stockouts are addressed in a timely manner.

Root cause • Inadequate storage capacity at the HF level resulting in frequents travels to the DVS cost e.g., in Kampala and Wakiso DVS noted that distributions take place weekly as opposed to monthly due to space limitations • Vehicles provided to support health systems strengthening including vaccine distribution at subnational level were not utilised as intended due to lack of fuel and/or prioritisation of other health interventions • Inadequate monitoring and supervision at district and health facility levels which resulted in lack of identification and resolution of supply chain logistical issues	Management comments MoH signed MOUs with districts on the rights of use for the Gavi funded assets handed over to Districts. The right of use agreement stipulate that Districts will be responsible for maintaining, fuelling, and utilising the assets for immunisation activities and other health related interventions. The health minister retaliated this position with a formal communication to all districts in December 2021. MoH will continue to monitor the implementation of the right of use agreement. The four-tier system is part of the initiatives in the draft SCM strategy. The system will deliver vaccines at the health sub districts and the buffer at the district vaccine stores. This system will be implemented after the strategy has been approved by the respective governance structures. The 4-tier system and work plans have been generated and costed, and the equipment required has been identified. We are working on a reprogramming request for funds already with UNICEF to procure the vans that will be used to operationalize vaccines last mile delivery. MoH will improve its stock monitoring framework using the DHIS2 system to resolve the issue of stock outs at lower health facilities. The interfaces in the DHIS2 for monitoring stock were reviewed to make sure that districts are able to report on stock status real-time. Whereas MoH signed a user agreement with the districts, the management of the day-to-day operations of the vehicles is the responsibility of the districts. Most of the fuel for operations of the Gavi procured vehicles given to districts is facilitated by PHC grant as well as locally generated resources at the district level.	
Risk / Impact / Implications Inadequate last mile distribution resulted in missed vaccination opportunities.	Responsibility Procurement and Supply Chain Management Specialist	Deadline / Timetable 30 June 2023

4.2.5 Stock management practices at sub national level are inadequate

Context and Criteria

Section 29 subsection 34.0-4 of the NMS operations manual version 2.1 requires that NMS maintains adequate inventory control procedures and reports the current stock reports for all vaccines, diluents and all other supplies; stock out date report estimating how long current stocks will last; monthly dispatches report for all items kept in the store; and vaccine by Recipient/Activity report for the reported month to UNEPI. NMS is also required to carry out cycle counts every two weeks for all vaccines and diluents and a full stock take every 6 months of all vaccines, diluents, and immunisation supplies.

Condition

The audit team visited 14 district vaccine stores and 34 health care facilities and noted the following gaps resulting in noncompliance with the NMS vaccine handling requirements:

Stock reconciliation variances for the period July 2020 to June 2021 – The audit team reconciled stock levels (opening stock plus receipts less issuances) and noted variances in 11 of 14 (76%) DVS and 32 of 34 (94%) of HF. See Annex 8e and 8f (Global reconciliation variance summary at DVS and HF level). These variances are mainly because of data entry omission, incorrect entries in the vaccine control books, compensation and other errors that further compounded the variances in stock reconciliation results.

Stock variances from stock counts done by Audit team - 12 of 14 (86%) DVS and 31 of 34 (91%) HF had variance in stock between the book values and stock at hand on the day of the audit team visit. See Annex 8g and 8h (stock count summary for DVS and HF on the day of the visit). Significant variances were observed in Kasangati HC, Mpumude HC, Nabweru Moyo and Midigo HCs while no variances were noted in Mukono, Kojja, Kuluva and Endiinzi HCs. The variances were as a result of poor and inadequate inventory control practices. It was noted that the vaccine control books are not updated regularly with missing entries.

Incomplete vaccine management records - The audit team also noted that the vaccine control books are not updated regularly, delays ranging between 1 to 52 days. In addition, the Vaccine Utilisation Data sheet was not completed for 29 of 34 (85%) of the HFs hence wastage data is not tracked.

Physical counts not regularly done, adjustments to stock levels without investigation of differences - Physical counts were not regularly done i.e., monthly (14% of DVS and 18% of HFs) and when done, there was no documentation of the pertinent details of the physical counts, for example information on the batches counted, expiries, damages and VVM status of the counted vaccines. The exercise was not reviewed by supervisors at district and health facilities. Variances between the vaccine control book and the physical count were not investigated when adjustments were made.

Shortage of vaccine control books – There were shortages of documentation tools during the period such as vaccine control books. As a result, there were periodic data gaps or data captured in alternative documents such as requisition forms. The absence of the official record at the health facility level makes it difficult to capture and report on vaccine utilisation, partly leading to the unexplained variances. This was noted in Mukono DVS, Mpumude, Nakifuma and Buwenge hospitals in the year 2018.

Vaccines received in VVM status 2 – Ten of 14 DVS reported receiving Rota and IPV vaccines at VVM status 2 as detailed in Annex 11. On further review at NMS, it was indicated that this was captured on receipt and reported to UNICEF supply division and the investigations are still ongoing. Preliminary findings point to a manufacturing issue on the labels and the change in the WHO classification.

Inadequate temperature monitoring - We noted cases where temperature logs and fridge tags did not work effectively for a significant number of days in the month e.g., in Omoro DVS, Arua DVS, Bondo HF, Awach HF. Additionally, there was no way to ascertain that fridges were working continuously due to insufficient funding for electricity in facilities with vaccine stores cut off from the main lines, a lack of back-up generators

Recommendation 9

UNEPI and NMS should train and provide job aids to all staff responsible for managing and handling vaccines to comply with the established SOPs, particularly on:

- Recording of batch numbers, expiry dates and VVM status in the vaccine control books/ledgers.
- Reviewing the consumption patterns at the corresponding subsidiary level before re-supplying their direct reports with further vaccines.
- Recording the results of each physical stock counts, investigating the variances, reconciling with the stock records, and documenting the whole process along with justification for adjustments.
- Availing all HFs, the required stock keeping tools/records and job aids to avoid data entry gaps.
- Ensuring adherence to the principle of FEFO through proper recording and filing at the DVS.

Recommendation 10

UNEPI should ensure that supervision visits at all levels are documented and introduce a mechanism for the follow-up- of proposed actions.

or where the changeover to backup is manual. In Arua DVS, the backup generator has not worked since it was installed in 2016. The examples noted here are district stores located in parts of the country that face extreme hot weather conditions which could impact the efficacy of vaccines.

Root cause

The following root causes were identified:

- Inadequate and ineffective supervision during the supervisory visits as such non-compliance issues are not reported and addressed.
- Inadequate practical training for supervisors to ensure effective oversight over stock management processes
- Lack of involvement by senior health facility staff e.g., chief medical officers at subnational levels.
- In some instances, we also noted some human resource constraints due to staff transfers and/or absences.

Management comments

UNEPI/MoH conducts periodic training of DCCTs and EPI focal persons who are expected to provide support supervision and translate operational implementation framework to the health facility teams. Last training was in conducted in January 2022. The trainings are supposed to be held twice a year.

The job aids exist and have been availed to Districts & Health Facilities though follow up on implementation of the SOPs is the challenge.

UNEPI will streamline and strengthen support supervision by ensuring that all visits are documented and effectively followed up. Whenever supervision teams return from the districts, they identify issues that need to be followed up and they organize follow up visits. The funding for such follow up visits is provided for in the HSS budget.

In addition, supervisors will be required to provide documented feedback to the districts before they leave the districts. The review of the status of implementation of the recommendations given to districts will form part of terms of reference for the subsequent supervision visits.

Risk / Impact / Implications

- Stock out and wastage because of poor vaccine handling at facilities
- Inaccurate data collected impacting effective decision making e.g., for stock order replenishment and management resulting in stockout and missed vaccinations
- Inadequate monitoring and supervision and lack of feedback and follow-up results in missed opportunities to address issues in a timely manner and may hinder demonstration of value for money for the Gavi investment in monitoring and supervision activities.

Responsibility

UNEPI Procurement and Supply Chain Specialist

Deadline / Timetable

30 June 2023

4.2.6. Storage capacity was inadequate, old equipment was not decommissioned and CCE equipment maintenance needs improvement

Context and Criteria

Section 30.0 of the NMS operations manual version 2.1 requires NMS to put in place an itemised maintenance plan, based upon a thorough inspection of the cold chain assets and the plan should ensure that: *Major renewal work that can be foreseen, are budgeted for, and updated on regular basis; Arrangements in place to ensure that emergency maintenance takes place in a timely manner so that vaccines and other immunization supplies are protected from damage; Staff should know how to operate the refrigeration, temperature monitoring and alarm equipment, know when routine maintenance is required, and know how to recognize common faults. Voltage regulators are essential to protect the refrigeration equipment (cold / freezer rooms, refrigerators / freezers) from voltage fluctuations; and personnel who are responsible for looking after cold rooms and freezer rooms should receive appropriate hands-on training to ensure that they can carry out all of the tasks*.

Condition

Storage capacity gaps - The audit team visited the National Medical Stores (NMS) in Entebbe and the New Kajjansi site still under construction for the assessments of central level capacity issues, vaccine storage conditions and operations for inventory control practices. NMS currently has 16 Walk in cold rooms (+2 to +8) and two walk in freezers (-15 to -25) estimated at 1,800cbm (1.8 million litres) and 5 Ultra cold chain units (UCC). At the time of the field phase, additional UCC were being installed at NMS.

We noted that there is inadequate cold chain storage capacity at the central level to store routine immunisation vaccines, supplementary immunisation activities vaccines, and Covid-19 vaccines. This critical gap is further escalated by the huge inflows of the new Covid-19 vaccines all of which strain the system further. At the time of the audit new supplementary vaccines arrival for Polio could not be stored at NMS and NMS has rented additional space for 1960 cubic metres (1.9 million litres)

The Kajjansi site was in its final stages of completion of the civil engineering works with the deadline set at end of November 2021, Installation of cold room panels for 4,800 cubic metres (4.8 million Litres) is expected in January 2022 with the tentative ready dates set by end of February 2022. In addition, there were various CCE equipment in the pipeline that in December or Q1 2022 as detailed in Annex 9: CCE incoming shipments from various funding streams that include COVAX Facility, HSS grant, Coverage & Equity, CCEOP, and the government of Japan worth approx. USD 8.3 Million

Three of 14 (21%) DVS (Kampala, Kasese and Mbarara) together with seven of 34 HF (21%) visited reported not having sufficient storage space for all antigens received. The issue is more pronounced with the Covid-19 vaccines that compete with RI for storage space. In Kampala plans were underway to replace the CCE at the DVS with a walk-in cold room (WIC) and transfer the CCE to the divisions to enhance their cold storage capacity and reduce the frequency of weekly vaccine collections currently observed at the DVS due to space limitations.

Storage conditions - CCE had been placed in unsecured areas in two of 14 DVS (Mukono and Bundibugyo). In Mukono DVS the CCE were accessible and not restricted to only key staff, and in Bundibugyo, all locks on the CCE equipment were not functional. Furthermore, in four of 34 HF visited e.g., in Ndejje HC IV, the CCE was installed on a veranda and exposed to the elements and rain.

In addition, for some facilities, while the CCE was operational, they were laid on the ground rather than pallets, power stabilizers were not being used in 57% of the sites visited e.g., Midigo HCIV, Arua, Yumbe, Omoro, Komamboga, Mukono DVS among others and the storage space was not sufficient.

CCE Maintenance - NMS through the Maintenance and Engineering section took over the maintenance of CCE in all Districts in Uganda at the start of 2020/2021. This role initially was under UNEPI with the NMS Maintenance and Engineering section in charge of the central CCE only. UNEPI/NMS have developed a CCE maintenance plan and a CCE rehabilitation plan 2021 – 2025.

We noted that although 6 DVS (Jinja, Kasese, Bundibugyo, Ntungamo, Isingiro and Mbarara) had a CCE preventative maintenance plan, this plan was not followed. No evidence of routine and preventative maintenance in 12 of 14 (85%) DVS and 25 of 34 (74%) HF visited.

Two of 14 DVS and 21 of 34 HF visited did not have access to alternative power back up thus increased CCE vulnerability in case of power outage. This was demonstrated by the extent of fridge tag readings above 8°C. The risk is also compounded by the delays in repairing CCE equipment when faults did occur e.g., Kojja HCIV fridge was returned to the facility six months after collection for repair.

Delays in decommissioning of CCE equipment - The decommissioning activity was one of the key activities moved to NMS, under the newly formed CCE maintenance technical team for oversight and management. A third-party vendor was selected for the collection of all CCE that has been vetted by the technical team and MoH staff for the proper disposal site.

The audit team noted that the decommissioning of obsolete CCE equipment is behind schedule due to the complex steps the programme needs to undertake to ensure the proper disposal and prevention of diversion to the local market with teams required to first visit the sites, review, and take stock of the equipment further derailed by the approval required from each district to let go of the old lot. Consequently, old equipment took up valuable storage space in some districts.

Root cause

Recommendation 11

UNEPI/NMS should:

- Ensure that the Kajjansi site is made operational as per the specified timelines to address the capacity gaps
- Finalise the rollout of the CCE maintenance plan and ensure training of the district cold chain technicians on its implementation
- Continue to advocate and ensure funds for repairs and maintenance are allocated within district budgets
- Ensure that adequate space is made available at DVS and HF level for the installation of CCE equipment

<table>
<tr><td>Delayed implementation and rollout or the newly developed preventive maintenance plan by NMS</td><td colspan="2">Management comments
The large size cold room is in transit to the Country and is expected to be installed and be fully functional by June 2022.

In line with the National Cold Chain Rehabilitation Plan, the country is implementing the CCEOP Phase 3 that brings in additional CCE Equipment to be installed across the Country by Q1 2022. The CCE Equipment is already in country and training and installation is in progress. This should significantly address the cold chain storage capacity gaps at District and Health Facility Levels.

The team is currently rolling out the CCE maintenance plan and making use of the framework to monitor CCE performance using the ODKX Application that is currently being rolled out.

The process for decommissioning of obsolete equipment is in progress. The first phase of the decommissioning currently being implemented by NMS has already started and is expected to be completed by end of April 2022. This should free up space at the DVS. However, the decommissioning of CCE will be ongoing as part of the national cold chain rehabilitation plan for as long as we have CCE in the districts.</td></tr>
<tr><td>Risk / Impact / Implications
• Inability to store enough vaccines to cover the resupply cycle period and leading to stockouts. This includes the likelihood that the country may not have adequate space to store the anticipated surge in Measles Rubella vaccines expected in 2022 to support the Gavi approved MR campaign.
• Wastage and damages due to excessive temperature exposure.</td><td>Responsibility
UNEPI Procurement and Supply Chain Management Specialist</td><td>Deadline / Timetable
30 June 2023</td></tr>
</table>

4.2.7. Waste management SOPs were not in use and training was inadequate

Context and Criteria

Section 21.0 and Section 34.3 of the NMS operations manual version 2.1 gives guidance on the management of obsolete and vaccine wastage and required that officers managing vaccines stock:

- On a monthly basis identify items under the cold chain section that need to be written off in line with established process
- If UNEPI vaccines and diluents must be written off, then Form 29 should be used for capturing and monitoring vaccine wastage and reporting to the programme
- After all write off approvals are given, obsolete items are handed over to QA for isolation in the rejects / quarantine area pending their destruction according to section 22.4 of the stores and operations manual and process guided by the National Drug Authority.

Condition

The audit team reviewed the policies and practices towards wastage management at all levels of the supply chain with the following observations.

The team noted that Waste management and disposal was decentralised to the various supply chain tier levels and take place at national, districts and HF level. Some districts were noted to have engaged the services of 3rd Party players to manage waste on their behalf. No waste management SOPs in 10 of 14 (71%) DVS and 12 of 34 (38%) at HF level, and only 11 of 34 reported receiving training on waste management and disposal.

For Covid -19 wastages, after the realisation of potential of misuse of empty vials (such as exploitation of the vials for counterfeiting), a directive was issued for all empty vials to be collected, accounted for, and returned to a centralised location for proper disposal. This directive was not implemented due to a lack of reverse logistics mechanisms and lack of funding for this process. As a result, the delays witnessed have led to the accumulation of used Covid-19 vials in health facilities with a limited to no control of their storage at this level due to absence of secure quarantine spaces and thus making them further vulnerable to misuse.

Only seven out 14 (50%) DVS had access to an incinerator and HFs were using open burning. Accumulated piles of used vials and wastage found at DVS and HF levels and pits were not covered after burning.

Reverse logistics challenges were noted at 14% of sites visited; long periods taken to collect empty vials from the DVS and or facilities e.g., large stockpile observed at Komamboga HCIV. Empty vials at the HFs were also fewer compared to the dispatched Covid-19 vaccines in the northern region, an indication that guideline for disposal of empties is not adhered too, risking misuse.

Recommendation 12

UNEPI should;

- Undertake the costing of waste management and disposal at all levels of the supply chain
- Advocate with the districts to budget for wastage disposal, reverse logistics and management.
- Finalise the procurement process of the incinerators to supplement the limited existing capacity in country and mapping of the regions for equitable distribution and synergies with other funding streams.

<table>
<tr><td>Root cause
Lack of a costed waste management plan covering all level of the supply chain makes it difficult to budget for and advocate for resources at the various levels.</td><td colspan="2">Management comments
MoH has worked with PATH with support from Gavi to develop a Waste Management Standard Operating Procedures (SOPs) specific to managing immunization waste.

The SOPs are already in use. MoH consulted stakeholders and agreed on the scenarios for managing waste going forward.

MoH will continue to engage districts to provide resources for wastage disposal and reverse logistics.</td></tr>
<tr><td>Risk / Impact / Implications
• The absence of funds for waste management leads to accumulation of waste which takes up valuable space for storage with a risk of improper disposal to create space.
• If used vials are not properly managed and disposed of, they could land in the wrong hands and be exploited for counterfeiting especially for high demand vaccines like Covid-19 vaccines.</td><td>Responsibility
UNEPI Procurement and Supply Chain Management Specialist</td><td>Deadline / Timetable
June 2023</td></tr>
</table>

4.2.8. Covid-19 vaccine management

Context and Criteria	
Covid-19 has negatively impacted the normal supply chain as a result of the lockdowns and travel restrictions. In addition, scarcity of vaccines and short vaccine shelf life brought the need to rapidly rollout a national vaccination campaign which required a robust implementation plan. The corresponding plan requires strong financial backing, infrastructural systems, and a dedicated human resource force. UNEPI developed a Covid-19 vaccine deployment plan, micro plans for the implementation and rollout of vaccines to each district	
Condition	**Recommendation 13**
The audit team examined the national and sub-national preparedness and response to the rollout of Covid-19 vaccinations at all levels noting the challenges and innovations put forward noted the following. The country has made commendable effort in managing the risks as they arise. The issue has been given a medium risk rating because while the country has been proactive in managing risks as they arise, there are significant risks in the management of Covid vaccines and cash provided to manage the distribution that were not fully explored due to the short time and the limited vaccines available, risks may emerge and/or materialise once the volumes and variety of vaccines increase and therefore the auditors did not want to provide a false sense of assurance. ***Stewardship, planning and micro plans*** **-** The UNEPI leads a well-coordinated intra sectoral national Covid-19 task force supplemented by the Alliance Partners to implement the programme at the central level. The team developed a deployment plan and micro plans	UNEPI should: • Aim at integrating Covid-19 services with those of RI/SIA to harness the best practices learnt from Covid-19 programme • Ensure that the issue of reverse logistics is addressed and communicated to the health facilities. • Reconcile all Gavi funded procurements to ensure that funds are fully accounted for.

detailing the critical steps, action ownership and responsibility for implementation. The active involvement of the MoH leadership helped in quick decision making and while the national deployment plan provided to Gavi has not been followed, the changes were made to manage the risks of expiry due to donations of vaccines with short shelf lives and other issues noted below.

Covid-19 Vaccine Storage **-** Despite cold chain space challenges at the national level, the country has successfully received at total of 12,401,750 doses of (AstraZeneca, Sinovac, Moderna, Pfizer, Johnson & Johnson and Sinopharm) as at the end of October 2021. Of these 7,837,113 (63%) doses had been issued out from NMS to the allocated districts.

The security level of NMS was elevated, and Covid-19 vaccines are protected by the special forces command (SFC) who also escorted the vaccines from the airport to NMS premises.

Limited ultra-cold chain storage at NMS **-** There were challenges noted resulting from limited Ultra Cold Chain facilities; NMS and the country has managed this in the short term by collaborating with the Central Public Health Laboratories (CPHL) and the Uganda Virus Research institute (UVRI) for use of all available UCC equipment for the storage of Pfizer and Modena vaccines that had been received in country. There is a risk that as the volume of vaccines that require UCC increases, the country may not have adequate storage capacity. There is a number of cold chain equipment in the pipeline that could address capacity issues in the future. See appendix 9 for details

Distribution at subnational levels **-** Due to the absence of ultra-cold storage at the DVS and health facility levels, vaccines that require UCC were dispatched from the NMS as ready to use and utilised in the nearest districts (Wakiso and Kampala) within 28 days. Temperature tags are included in the cold boxes where possible. This has subsequently been expanded to include the greater Masaka district. Covid vaccines do not have a VVM and there is a risk that should such stock go over 28 days, the vaccines would lose efficacy. There is a need to implement mechanisms to monitor such stocks on a consistent basis. Currently utilisation of Covid-19 vaccines is monitored daily, through call in data and weekly updates shared with the task-team and in case of slow absorption in each district, redistribution is carried out to high consuming districts to avert the expiry of vaccines with a short shelf life. The auditors noted vaccine shortages at some vaccination sites and health facilities while stock was available at NMS for example in Jinja, Mukono and Wakiso.

Unavailability of vaccines for second dose **-** The initial distribution of the Covid 19 vaccines was done on a push system and half of the doses were required to be kept for the second dose. However, to address challenges of vaccine shortages, hesitancy and short expiries, districts were encouraged to use all available vaccines. As a result, a number of people were unable to receive their second shot of the vaccine on time. This was noted in districts of Arua, Gulu and Omoro, Jinja, Mukono and Kampala and in particular for Sinovac vaccine. There is a risk that lack of availability of vaccines may result in more hesitancy by the population and/or challenges with reporting of adverse effects of vaccination.

Programme Data management **-** Vaccination data is entered on the DHIS2 portal that tracks the details of vaccine type, batch no, date of 1st dose and 2nd dose, and on the 14th day after the second dose is given, the system generates a certificate with a QR code. This system was recently installed and there were huge data backlogs of several weeks in data entry into DHIS2.

Management comments

Integration of vaccines into the RI/SIA is a long-term strategic decision that the Ministry leadership is devising mechanisms of implementing. We noted that it requires a multi-faceted approach which may still be unique to the Covid-19 Rollout. The nature of the response to an emergency and having non-EPI/expanded and traditional partners involved, provides a unique challenge on integrating the response with the RI implementation framework. However, the ministry remains committed to align the response in an appropriate way to a response framework deemed feasible with the unique challenges of the pandemic

One of the challenges that will affect the integration. will be the lack of ultra-cold chain equipment in some of the districts to manage certain Covid-19 vaccines.

The National Vaccine Deployment plan has protocols for handling reverse logistics. However, this is not expected to be a standard practice with the streamlining of the forecasting of demand and vaccine allocation practices.

Root Cause		
The Covid-19 pandemic is a worldwide humanitarian emergency that has required interventions that countries were not fully prepared for, issues are addressed as they arise.		
Risk / Impact / Implications The special attention and focus given to Covid-19 can overshadow aspects of routine immunisation, as the same human resources are used to manage the two streams that are not integrated. This could result into missed vaccination opportunities of the children.	Responsibility Procurement and Supply Chain Management Specialist.	Deadline / Timetable June 2023

4.3 Immunisation data quality and use

4.3.1 Irregular administrative coverage

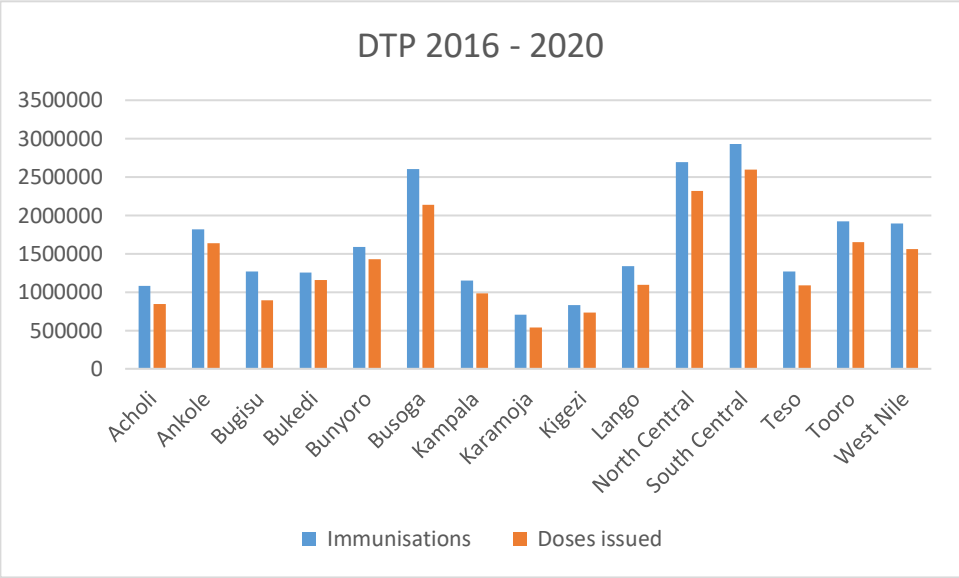
Context

The signed 2013 PFA (under Clause No. 8 (d)) requires that all information that is provided to Gavi including its applications, progress reports, any supporting documentation, and other related operational and financial information or reports, is accurate and correct as of the date of the provision of such information. In addition, the PFA (Annex 1, Article 16) sets out additional provisions on the monitoring and reporting, specifying that "the Government's use of Gavi's vaccine and cash support is subject to strict performance monitoring," such that: "Gavi seeks to use the Government's reports and existing country-level mechanisms to monitor performance."

Condition

Anomalies in reported administrative coverage – There were inconsistencies in the administrative coverage reported by UNEPI in DHIS for the period under review. A comparison between the number of doses issued by National Medical Stores and the administrative coverage reported for 15 regions (135 districts) indicated that the number of children reported as vaccinated for Penta over the years 2016 to 2019 was consistently higher than the quantities of vaccines issued. Through the years 2016 to 2020, the total variation between the number of doses issued and children immunised was quantified at 3.7 million and 1 million for Penta and PCV respectively.

The variances noted are as per illustrations below:



Recommendation 14

We recommend that the MoH and EPI programme:

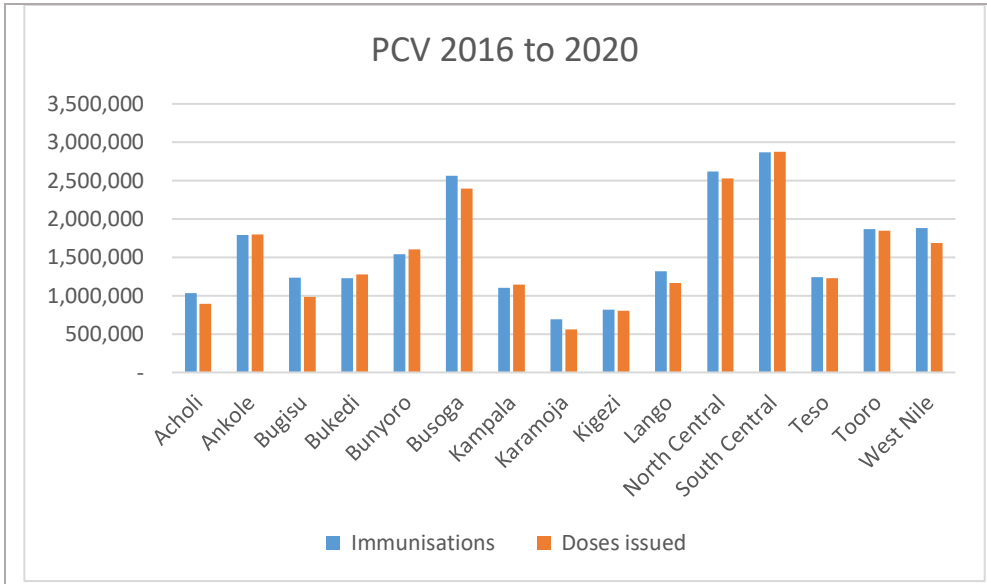
- Routinely triangulate available data, including an assessment of administrative coverage data and vaccine availability/utilisation to check for accuracy of data reported. Such analyses should be completed at national and subnational levels and any data inconsistencies noted should be validated and explained;
- Ensure that all primary data collection tools are completed correctly and correlate or support each other;
- Consistently complete data verification and validation exercises at the health facility and district levels as required by the guidelines;
- Conduct the required surveys and use the results to review the administrative coverage.
- Ensure adequate supervision at subnational level over data collection and management including follow up of recommendations to address data management gaps from routine supervision visits and programme audits.

Management Comments

UNEPI data team and National Medical stores will work to ensure that vaccine issues and vaccination data are routinely triangulated at Health Facility, District, regional and national levels. This will be complemented by implementation of ERP by NMS.

The Ministry of Health with development partners and as part of implementation of the strategic data quality improvement plan (DQIP) had developed Data quality Apps within the DHIS2 that were planned to be rolled out in the in 2020 and 2021. Unfortunately, the COVID-19 pandemic disrupted the plans. With the Epidemic reducing, capacity of Health workers at district and health facility will be built on use of DHIS2 data quality and data analysis Apps.

Additionally, the Ministry of Health has partnered with Shifo Foundation to roll out Smart Paper Technology (SPT). One of the key objectives of SPT is to reduce data quality errors. The roll out of SPT was also hampered by the COVID-19. With the Epidemic reducing, capacity of Health workers at district and health facility will be built on use of SPT technology to implement e-registry that also incorporates stock data.



Inconsistencies between physical doses used and vaccinations reported at the Health Facilities – Significantly higher numbers of vaccinations were reported compared to the physical doses used for at least one of the sampled antigens at each of the facilities visited in the various districts. Significant differences ranging from 15% to 95% were noted at all of the health facilities visited. See Annex 13 for details.

Weaknesses in immunisation data documentation, validation, verification, and collation at the health facility level - Primary immunisation data sources including immunisation tally sheets, monthly reports, and vaccine control books at 34 health facilities were reviewed during the audit. Additionally, data verification and validation tests were performed at 14 districts and the following weaknesses were established.

All the 34 health facilities and 14 districts visited had no evidence of immunisation data verification as stipulated in the HMIS manual and DQIP.

Several of these weaknesses such as inconsistencies in data from linked sources such as vaccine control books, tally sheets and monthly summaries, incomplete registers, lack of data validation and audits are also included in the Data Quality Improvement Plan where they had not been implemented. See further details in issue 4.5.2 below.

The ministry will plan and mobilise resources to carry out data surveys and assessments.

MoH will continue to train data improvement teams to strengthen support supervision at sub national level.

Root Cause	Responsibility	Deadline/ Timetable
• Absence of a systematic data quality review protocol to ensure that immunisation coverage data and SMT data are aligned with each other both at the national medical store and at the national level. • Absence/inadequate data monitoring systems at the national, subnational and health facility level to ensure accuracy and completeness of data recorded and reported.	M&E Specialist and EPI Data Manager	June 2023

Risk / Impact / Implications • Inconsistencies in the reported administrative coverage data amounts to non-compliance with the terms of the signed Partnership Framework Agreement and may undermine the confidence in the reported administrative coverage data. • Inconsistent immunisation and consumption data deters effective strategic decision making thus affecting grant performance and subsequent funding decisions. • Inaccurate reporting on number of children immunised may impact the achievement of Gavi's 5.0 strategic goals.		

4.3.2 Target population data may not be accurate and demographic health survey was delayed

Context

The Gavi HSS and NVS General guidelines (2015-2018), recommend that Gavi supported countries ensure that the country's population projection of live births is consistent with external projections. Furthermore, the guidelines recommend that Gavi supported countries conduct high quality and national representative household survey every five years.

Uganda Bureau of Statistics (UBOS) last carried out a national population census in 2014 and it is expected that the next will be carried out in 2022. The Demographic and Health Survey (DHS) was conducted in 2014.

Condition

Significant differences between the Country's estimated surviving infants and UBOS - The audit team noted that there was an average 38% deviation between the projected births by UBOS (data used for the denominator) and the actual live births reported by the country per year during the period of the audit. (See table below). The live birth data was obtained from DHIS2.

Table 9: Country's Estimated Surviving Infants Population vs UBOS projections (2016 - 2020)

Year	Total Number of Surviving Infants			
	UBOS projected Births	Actual births per country data	Difference	Percentage difference
2016	1,456,900	959,078	497,822	52%
2017	1,485,400	1,040,265	445,135	43%
2018	1,513,400	1,123,279	390,121	35%
2019	1,540,700	1,176,931	363,769	31%
2020	1,567,000	1,205,997	361,003	30%
Cumulative five-year average percentage difference:				**37%**

The last Demographic and Health Survey (DHS) was done in 2014 and since then, there have been no other surveys carried out to independently assess the quality of administrative data (the denominator – target population) to help the country to adjust any irregular coverage results. Furthermore, the team noted that there was no evidence indicating that the administrative coverage and projections were at any point reviewed and adjusted based on the actual live births/surviving infants providing room for the deviation of the projections versus the actual live births.

Recommendation 15

MoH should review the impact of the differences in projected and actual births as it may be indicative of an erroneous denominator against which the immunisation targets are set.

Management Comments

EPI Programme continued to use projected data by UBOS as a national entity that has the legal mandate to produce and publish national population data.

Ministry of Health will work with UBOS to develop guidelines on adjustment of vaccination coverage data in relation to census projections. This will involve strong implementation of the Civil Registration and Vital Statistics plans of Government.

Root Cause

There was no policy or guideline on how best coverage data should be computed, estimated and revised to provide room for adjustment to provide more accurate data.

Risk / Impact / Implications

- Use of inaccurate data may result in inaccurate administrative coverage data which is non-compliant with the terms of the signed Partnership Framework Agreement and may undermine the confidence in the reported administrative coverage data.
- The programme may be unable to design interventions to identify zero dose children due to use of incomplete target data.

Responsibility	Deadline/ Timetable
M&E Specialist and Data Manager	June 2023

4.3.3 Slow implementation of the Data Quality Improvement Plan and insufficient evidence of the use of immunisation data

Context

The General Guidelines for Country Applications for Gavi-eligible countries recommend that Gavi supported countries improve data availability, quality and use as it is essential for planning, programme management and understanding and documenting of results. The guidelines encourage the use of immunization coverage data as an ongoing institutionalized process for better planning, improved programme performance and resource management. Gavi supported countries are encouraged to develop a strategic data improvement plan based on latest assessment and to identify key priority areas to be addressed, clarifying responsibilities, needed and available resources, timelines, and key milestones.

Condition

Slow Implementation of activities in the Data Quality Improvement Plan – the Data Quality Improvement Plan (DQIP) was developed in 2016 following the 2014 Data Quality Assessment (DQA). The updated report on implementation of the DQIP activities indicated that only 3 interventions (9%) had been completed, 11 were partially done and in progress, 10 (31%) were not implemented and 8 (25%) were indicated as implemented but no evidence was available to support this. Similar findings such as around quality of data were noted in our review.

Insufficient evidence of the use of immunisation data for programme decision making and performance improvement – The performance feedback mechanism for immunization data is insufficient and inconsistent to enable data driven decisions and continuous improvement in data quality starting at the lower levels of data collection, collation and reporting. There was no evidence to indicate that for issues noted and identified, timebound actions were developed, review reports developed and/or follow-up done on implementation for issues identified during the DIT review meetings.

Root Cause

Insufficient oversight arrangements surrounding the M&E function both at the MoH level and UNEPI level including the oversight structures - TCC, ICC and the various TWGs).

Recommendation 16

We recommend that the MoH:

- Implement the remaining recommendations of the DQIP;
- Formalises the process of providing performance feedback and follow-up on recommended actions at all levels using standardised templates to ensure consistency.

Management Comments

The ministry will implement the outstanding recommendations of the DQIP.

MoH will develop templates to provide quarterly feedback to the districts on their performance in immunization coverage. The support supervision visits to the districts will also be informed by the issues identified during the previous visits and by the data extracted from DHIS2.

MoH will train and/or orient of Health workers at district and health facility in conducting data driven quarterly reviews using evidence from the periodic reports produced and from follow up actions.

Risk / Impact / Implications

- Key priority areas for data quality may not be addressed on time which could lead to inaccurate, incomplete, inconsistent and unreliable immunisation data.
- Better planning, improved programme performance and resource management may not be attained because of weak use of immunisation data leading to lost opportunities for the country and for targeted beneficiaries.

Responsibility	Deadline/ Timetable
UNEPI Data Manager	June 2023

4.3.4 Delays in SPT roll out and suboptimal utilisation and quality assurance around SPT data

Context

The scope of work for SHIFO includes a section on Health Information systems which states that, "*The MoH and SHIFO will work closely together to ensure that the data generated through the SPT solution is able to be used directly for M&E processes. This will support M&E to focus on improvement actions by using the digital sources, rather than assessing the quality of data by comparing data in physical sources (e.g., registers, tally sheets, monthly reports and DHIS2*)." The section on monitoring & evaluation provides that; *"The KPIs needed to monitor progress will be agreed upon by all partners. Progress reports will be submitted on a quarterly basis, detailing progress under each of the agreed indicators. Any risks and deviations from the plan will be proactively communicated and agreed with Gavi and MoH Uganda."*

Condition

The audit team observed that Smart Paper Technology (SPT) is a good innovation that would help manage the workload at health facilities in a context of limited human resources. There are a number of gaps in the design and current roll out that need to be addressed in a timely manner.

Adoption of the right search criteria – The audit team noted that the queries in the system are currently linked to a long system generated unique identifier number for each child. While this is good from a design perspective, operationally this has not worked well in the context of the country. These numbers are often forgotten by the parents. The phone number was input as an alternative, but this is not unique to each child/family especially as some parents did not have mobile phones. The system is unable to conduct searches by surname of child and/or parent as these are currently captured as images in the system.

Delays in roll out of SPT and inadequate planning in its adoption across the selected districts – As per the initial roll out plan for SPT, the country should have been implementing the second phase (30 districts) by the time of this audit. However, the country is currently rolling out phase one (10 districts). Based on the revised timelines submitted by SHIFO, it is indicated that Phase 1 shall be completed by 31/12/2021 which is highly unlikely as roll out in the first 10 districts is yet to be completed with mainly training of the Training of Trainers and Health facility staff still outstanding.

Out of the four SPT implementing districts visited (with a sample of 10 SPT implementing districts), we visited ten health facilities and noted that 40% (four out of the ten) had the equipment installed but not utilised as the training had not been conducted. Of the six facilities using the equipment, five have not received any supervision and monitoring visits from UNEPI. Three out of six have abandoned use of the manual registers while five out of the six do not have SPT job aids displayed. Consequently, when these facilities run out of the required stationery for SPT, this was not monitored and there was no alternative to record immunisation data. See Annex 19 for further details.

Absence of quality assurance mechanisms over data captured in SPT - Data generated and captured in SPT is extracted and manually input into DHIS2. The two systems are not linked and there is no quality assurance mechanism to ensure that the data input into DHIS2 as extracted from SPT is accurate. It was also noted that for some of the facilities, once the smart papers are filled and sent for scanning, they are not returned to the facility making it difficult for data verification if needed.

Absence of country ownership of SPT Data – There is currently no country ownership of the data entered and stored in SPT as this is housed by the SHIFO servers in Sweden. The country at the facility level and district level can only scan and store data including generation of reports but do not have access to the back end to enable independent review of the data used in generating the reports. MoH at the time of audit intimated that they were in the process of updating their IT infrastructure, however no evidence was provided to support this. Furthermore, by the end of our audit fieldwork, the two staff involved in this process had resigned their positions at UNEPI/Gavi coordination unit.

Non utilisation of SPT Data – SPT as a tool has the capability to generate useful information such as trend analyses around immunization data including but not limited to reports showing children who have missed immunisation sessions (lost to follow up reports), monthly, quarterly, biannual, and annual immunisation statistics by facility, district, region and country as well as lists and trends of facilities that

Recommendation 17

We recommend that the MoH/UNEPI:

- Assigns focal persons to take up a leadership role and keen interest in the roll out, implementation and utility of SPT as well as quality assurance of SHIFO interventions;
- Review the use of unique identifiers and propose a solution to improve the current criteria;
- Carries out a cost benefit analysis on SPT to ascertain the country's capability and whether it is cost effective and sustainable by the country;
- Fast tracks the process of DHIS2 coding and server installation to speed up the data transfer from the SHIFO servers to the MoH servers;
- Ensures that SPT data and reports are used for decision making.

Management Comments

The EPI data manager is responsible for planning, implementation, coordination, quality assurance and roll out of the SPT program.

As required by the agreement between Gavi and Shifo, MoH will ensure that an evaluation of the use of SPT in routine immunization in the 10 pilot districts is done by end of May 2022. Management will ensure that part of the evaluation is cost benefit analysis.

Shifo did testing of the integration and there were some changes requested for by DHI. Shifo is making these changes. Once these changes are done, Shifo shall progress to the full integration where data will be visible in DHIS2.

have or have not reported their data on time. However, we noted that these reports were not run or used for analysis or follow up. Health facilities do not access this information nor is it reviewed at district or national levels.

No costing data available on SPT – As per the SPT rollout plan, 10 districts have been piloted and SHIFO has a plan to roll it out in 20 additional districts. At the moment, no costing or independent appraisal of the costs involved in roll out and implementation and maintenance of SPT has been done to ascertain its cost benefit analysis and whether the country would be able to sustain the investments and manage it effectively after the pilot project is completed.

Delays in evaluation of use of SPT - The completion of Phase 1 required an independent verification of the data entered/captured in SPT which according to the revised timeliness shall be completed by 31 December 2021. However, discussions with the M&E team indicate that this may only be possible by 31 March 2022. Furthermore, the roll out to additional districts and facilities has continued while training and reviews on sustainability have not yet been conducted.

Root Cause

- Limited oversight over the data and M&E function as a whole by the MoH and relevant governance structures i.e., TCC and ICC and the Technical working groups.
- Lack of SPT ownership at the national level creating a leadership gap as no SPT specific focal person has been allocated or selected to be in charge of the project.
- With so many pilot projects going on, the MoH has not paid particular focus on SPT to understand how it can be used across all health-related programmes, its utility and sustainability.
- SHIFO has only one focal person in the country who is in charge of all the operational aspects of SPT and thus this has limited the pace at which this has been rolled out
- Absence of a data review protocol to review and assess data for possible errors.

Risk / Impact / Implications	Responsibility	Deadline/ Timetable
• Value for money for this investment has not been demonstrated yet roll out continues • Data inaccuracy as there is no data verification carried out at the point of entering the SPT data into DHIS2. • Risk of data loss in the event of system related failures or issues with the SHIFO servers.	UNEPI M&E Specialist and Data Manager.	June 2023

4.4 Financial Management

4.4.1 Budget monitoring and reporting systems are inadequate

Context and Criteria

Section 5 of the MoH Gavi financial management guidelines *requires that respective districts report to the MoH, with the MoH ultimately reporting to Gavi on the total utilisation of funds*. The guidelines also *state that the utilisation should be in line with the Gavi supported activities as per the approved work plan/budgets*.

Similarly, Annex 6, Section 39 (e) of the Partnership Framework Agreement on financial management arrangements directs the MoH /UNEPI accounting function to prepare a statement of expenditure for both the quarter and cumulative period, by source of all public funds, comparing actual expenditure against budget, and annotating significant variances with suitable explanations. MoH disburses funds to the districts based on the approved budget allocation. A memo/guideline specifying the activities to be implemented is attached to the disbursement and forwarded by email to the district Chief Administrative Officer (CAO) and District Health Officer (DHO). After the implementation of activities, the districts prepare and submit a financial report to the MoH for consolidation and submission to Gavi.

Condition

The following gaps relating to the budget monitoring and reporting system were identified.

No budget monitoring for sub national level - There was no evidence provided to demonstrate that budget monitoring was performed by the UNEPI/Gavi Project Accountant or mechanisms that confirm that the expenditure reported by the districts was spent as per the approved work plans. In addition, there was no evidence provided to demonstrate that a budget versus actual expenditure analysis was performed at the sub national level. At the Central Level, a budget versus actual analysis was performed for 2020 and 2021. The prior periods budget versus actual analyses were not available for verification and this was attributed to various changes in the finance team.

Gaps in managing advances through IFMS - The IFMS system was designed to capture government expenditure using the cash basis of accounting. A project management module was expected which would address the existing challenges of financial reporting for donor-funded programmes. The IFMIS system was not able to monitor advances to districts and individuals. However, this is now possible from FY 2021/22. In the districts visited by the audit team which had implemented IFMS, none of the district-level accountants could generate a Gavi specific report from the IFMS system. The MoH staff implementing the Gavi programme maintain and reporting on Gavi funds with the support of Microsoft Excel based spread sheets.

There were weaknesses in the monitoring of expenditure by grant. While Gavi transfers money to the country by grant and this was supported by grant specific budgets and activities, the expenditure was not tracked in a similar manner which made it difficult to track what had been spent at grant level.

The FMA developed key milestones to monitor capacity building initiatives which are reported on quarterly. These milestones included: 1) Donor financial reports generated from IFMIS and 2) Advance ageing reports generated from IFMIS. The status of the implementation of these milestones was marked as ongoing throughout the period ended 31 December 2017 and 30 June 2021. In addition, the status of implementation of the external auditor's recommendation raised prior to June 2019 on bank reconciliations indicated that "*Ministry was resolving bank reconciliations in the IFMS system*''. However, as of 30 June 2021, the recommendation has not been implemented. Bank reconciliations continue to be prepared manually.

Outstanding advances are still monitored and managed using Microsoft Excel spread sheets - These excel spread sheets are prone to errors and manipulations which may go undetected. In addition, the Project Accountant does not perform an aging analysis of the advances to enable timely follow-up and escalation of long outstanding advances.

Recommendation 18

MoH and MoFPED should:

- Expedite the implementation of IFMS to incorporate the Project Management Module so that all advances are recorded and tracked in IFMS.
- Provide additional support to the UNEPI accountant through the accounting department pool at Ministry of Health
- Expenditure tracking should be monitored by grant in order to ensure traceability and easy information retrieval.

<table>
<tr><td>Root cause
• Inadequate capacity building at both the national and the subnational levels in regard to financial management practices in relation to the Gavi Programme funds.
• Inadequate follow-up and oversight to ensure implementation of the relevant financial management practices and accountability mechanisms to hold staff and relevant authorities accountable.
• Delays in configuration of IFMS to meet grant reporting requirements.</td><td colspan="2">Management comments

There have been delays at MOFPED to finalise the configuration of IFMIS. In addition, the frequent change of staff in the finance office has affected the consistent and continuous follow up of MOFPED by UNEPI to finalise the configuration process. The program will continue to follow up with MOFPED to expedite this process.

The program will continue to pursue the office of the permanent secretary to assign an additional accountant to the UNEPI program.

The Quarterly financial reports track expenditure by grant. Therefore, expenditure per grant can easily be traced.</td></tr>
<tr><td>Risk / Impact / Implications
• Key finance functions are not being executed effectively to manage the associated risks.
• Improper accountability for amounts advanced increasing the risk of financial loss and or fraud due to inadequately supported expenditure and questioned costs.
• Failure to identify underspend in the various budget lines to ensure timely funds reprogramming to prevent lost opportunities to the Country.
• Inability to ascertain expenditure incurred per grant.</td><td>Responsibility
Project Accountant

Program Manager</td><td>Deadline / Timetable

June 2023</td></tr>
</table>

4.4.2 Questioned costs and irregularities in accounting for disbursements at district level

Context and Criteria

Paragraph 19 of Annex 2 of the Partnership Framework Agreement (PFA) requires Uganda to manage and use Gavi's funding solely for appropriate programme activities. Furthermore, Paragraph 20.1(c) requires that all expenses relating to the application of such funds, should be properly evidenced with supporting documentation sufficient to permit Gavi to verify the expenses.

Condition

The total expenditure for the period under review was UGX 35,505,942,631 (USD 9,727,656) for which UGX 14,349,280,475 (USD 3,931,310) related to transfers/expenditure incurred at the subnational level. At central level, we sampled and reviewed expenditure amounting to 11,536,077,102 (USD 3,160,569). We also sampled and reviewed transfers to the districts amounting to UGX 1,399,998,363 (USD 383,561) representing 4% of the total expenditure and noted that UGX 222,085,993 (USD 60,845) was questionable due to inadequacy of supporting documents, ineligible or unsupported as shown in the table below:

Table 8: Summary of questioned transactions

District	Total Sampled	Adequately supported	Inadequately supported	Unsupported	Ineligible expenditure	Total with exceptions
Mukono	129,082,191	83,082,209	31,871,991	-	-	31,871,991
Ntungamo	50,166,000	45,166,000	5,000,000	-	-	5,000,000
Bundibugyo	243,766,100	171,107,100	-	7,329,000	54,500,000	61,829,000
Arua	304,712,250	246,990,000	40,702,250	2,800,000		43,502,250
Gulu	79,388,000	70,244,000	8,224,000		-	8,224,000
Moyo	102,193,822	96,404,070	3,269,500	2,520,252	-	5,789,752
Omoro	72,770,000	59,470,000	13,026,000	274,000	-	13,300,000
Yumbe	49,229,000	32,480,000	13,629,000	120,000	3,000,000	16,749,000
Madi-Okollo	111,310,000		33,330,000	2,490,000	-	35,820,000
Kasese	104,069,000	104,069,000	-	-	-	-
Isingiro	106,674,000	106,674,000	-	-	-	-
Mbarara	46,638,000	46,638,000	-	-	-	-
Total UGX	**1,399,998,363**	**1,062,324,379**	**149,052,741**	**15,533,252**	**57,500,000**	**222,085,993**
Total USD	***383,561***	***291,048***	***40,836***	***4,256***	***15,753***	***60,845***

Recommendation 19

MoH should:

- Train the District Accountants in the implementation of programme financial management guidelines as well as Country financial management guidelines.
- Ensures that all expenditures are adequately supported with relevant documents such as fuel receipts, activity reports, attendance sheets, fuel/vehicle logbooks
- Enhance supervision of financial management practices at District level.
- Design a mechanism to ensure that all districts provide/submit receipt acknowledgements for funds received.

Management Comments

MoH will continue to work with the districts to strengthen accountability of Gavi funds through training of health accountants, strengthening support supervision, and review of expenditure documents.

The ministry is still receiving responses from the specific districts. These will be reviewed by MoH and subsequently submit them to the audit team. In addition, to quicken this process, the audit team should include in annex 20 the specific grant/program the expenditure relates to. However, we have noted MR related expenditures whose financial management was handled by WHO.

The PS writes a formal letter communicating funds disbursement to all districts and requests them to confirm receipt of funds. However, the ministry is

The details of the questioned costs per grant are as below:

Grant breakdown	Amount (UGX)	*Amount (USD)*	Fund recipient
HSS	107,111,752	*29,346*	MoH
IPV	14,127,991	*3,871*	MoH
MR campaign	100,846,250	*27,629*	WHO
Total	**222,085,993**	***60,845***	

Inadequate supporting documents: The quality of documentation maintained to support expenditure incurred in implementation of programme activities was found to be inadequate. For example, except for attendance and payment sheets, there was no evidence to confirm that budgeted activities such as training workshops took place such as training reports and images of the activities. Expenditure such as fuel purchases were only supported by filling station receipts rather than activity schedules or logbook entries corresponding to related activities, this made it difficult to confirm utilisation for programme related activities. There were instances of missing supporting documents and payments above the approved budgeted amounts.

Absence of funds receipt acknowledgements: There were no formal mechanisms in place to acknowledge the receipt of funds for implementation of programme activities such as manual or digital receipts and separate payment vouchers for funds withdrawn from the Imprest account contrary to section 10.20.6 of the Treasury Instructions. Further, the required accountability forms (TF 21) which require documentation of details of advances taken and amounts spent subsequently were not maintained contrary to Section 10.20.12 of the Treasury Instructions.

Fuel surcharge – MoH has implemented a system where 30% of funds earmarked for fuel is transferred to MoH pool. 30% of grant funds earmarked for fuel amounting to UGX 14,399,844 ($3,945) for the FY 2020/2021 were transferred to the MoH pool for oil and lubricants to cater for servicing of GAVI vehicles. While various Gavi vehicles were serviced during this period, we noted that the process of accountability for this fuel is not documented and expenditure is not tracked.

There were several cash payments to suppliers at sub national level despite the several non-cash payment options available in the country.

experiencing challenges getting formal acknowledgement receipts from the districts.

Additional Audit Response
We have reviewed the additional documents provided and updated the questioned costs in this section and in and Annex 20.

Root causes

- Inadequate support supervision and training of District Health Accountants in the implementation of programme financial management guidelines.
- Absence of effective follow-up from UNEPI to ensure that the districts submit acknowledgement for funds received and where funds are transferred to another district, this is dully approved prior to the transfer.

Risks/Impact/Implications

- MoH's failure to ensure that Gavi's funding was used for the intended purpose, in accordance with the terms of the Partnership Framework Agreement.
- This resulted into questioned (inadequately supported, unsupported and ineligible) expenditures amounting to UGX 222 million (USD 60,485).

Responsibility	Deadline / Timetable
Project Accountant	June 2023

4.4.3 Low grant absorption

Context and Criteria

The Ministry of Health disburses Gavi's funds in tranches to the districts based on the specific immunisation activities to be implemented. In addition, due to the COVID 19 pandemic, other activities planned at the national and sub- national levels were delayed or did not occur.

Condition

Overall, during the period under review, the utilization rate of Gavi funds was low, being 73%, 97%, 49%, 38% and 42% for the financial years 2016, 2017/2018, 2018/2019, 2019/2020 and 2020/2021 respectively. There has been a decline in funds absorption in the last 3 years as compared to prior years for grant funds available in country. From our review of the approved budgeted activities and approved work plans For FY 2017 to FY 2021, we noted that there were a number of activities amounting to USD 7,054,465 approved grant-wise and not executed by 30th June 2021 as tabulated below;

Table 9: Grant wise summary of unimplemented activities as of 30th June 2021 and subsequent utilization till 30th October 2021

	In June 2021	Expenses till Sept 2021	Remaining balance
Grant	***USD***	***USD***	***USD***
C&E	*2,961,930*	*(8,895)*	*2,953,035*
HSS 2	*3,772,873*	*(281,988)*	*3,490,885*
PBF	*319,662*	-	*319,662*
Total	***7,054,465***	***(290,883)***	***6,763,582***

On a sample basis from the approved work plans, we further noted that procurement activities amounting to USD 878,883 were approved over one year however the procurement processes had not commenced. See details of these in Table 10 under paragraph 4.4.4.

Recommendation 20

MoH/UNEPI should prepare and submit SMART catchup plans with timelines for all delayed activities and ensure that grant utilisation programme is included in the TCC agenda.

Management Comments

MoH will prepare and submit a SMART catch up plan to improve grant absorption.

Root causes

- For NMS specific procurements, there were delays from MoH in provision of specifications as per MOU signed.
- Weak budget monitoring activity to enable timely flagging of unutilised funds to ensure reprogramming
- Weaknesses in budget and expenditure oversight by the governance arms i.e., ICC & TCC.
- Protracted negotiations of funding modalities leading to no disbursement of funds
- Disruptions caused by Covid-19 since March 2020.

Risk/Impact/Implications

Low funds utilisation resulting in missed opportunities by the country as unutilised funds have to be returned to Gavi on closure of Gavi 4.0 grant.

Responsibility

Grants Coordinator

Deadline / Timetable

June 2023

4.4.4 Advance retirement and accountability at national and district levels needs to be improved

Context and Criteria

Section 5 of the Gavi Financial Management Guidelines states that "*funds for a quarter will not be released until accountability is received for subsequent quarter funds*". In addition, Article 5 of the MoU between MoH and each recipient district requires that each district submit accountability one month after implementation of the planned activities. This should include both their accountability of funds received and a technical report on the activities conducted.

Condition

At the time of the audit, we noted significant delays in accounting for advances by the districts, individuals, and institutions. As of 30 June 2021, the total outstanding HSS advances amounted to USD 574,898 of which USD 393,265 related to 2019 and 2020. The status of the outstanding advances is tabulated below:

Table 10: Analysis of outstanding advances

Year	Districts (UGX)	MoH Officials (UGX)	Total (UGX)	*Total USD*
2019	54,986,513	2,531,455	57,517,968	*15,758*
2020	1,367,982,145	9,918,357	1,377,900,502	*377,507*
2021	246,050,000	416,909,006	662,959,006	*181,633*
Total	**1,669,018,658**	**429,358,819**	**2,098,377,476**	***574,898***

Delays in the retirement of advances have been identified in previous reviews including the Gavi 2015 Programme Audit, the 2017 to 2020 Office of the Auditor General (OAG) annual audits for Gavi grants as well as the FMA quarterly reports. UNEPI/MoH subsequently retired the long outstanding advances dating as far back as 2014. However, despite these efforts, the issue persists. The OAG audit for 2019/2020 recommended the development and integration of an advances module in IFMIS which was developed but has not been efficiently put to use to track and monitor the advances.

In addition, while UNEPI indicated that advances are reviewed before retirement, we reviewed a sample of files and noted that UNEPI did not systematically include evidence to show that these advances have been reviewed by the Project Accountant.

The FMA developed Standard Operating Procedures (SOPs) for Financial Management of Gavi grants in 2019 to help address these gaps as well other financial management related gaps that existed. Although these SOPs have been rolled out during stakeholders' meetings, there is no evidence of formal trainings or inductions being provided to the end users (Health accountants and health facility in charges). Therefore, whereas these guidelines have been disseminated, they have not been fully implemented.

Recommendation 21

MoH/UNEPI should:

- Take a more active role in the monitoring of the advances by maintaining an advances aging analysis which shall be used to monitor the period for which the advances have been outstanding and ensuring that these are retired as per the guidelines.
- Ensure that there is systematic review of all accountabilities and evidence of this review maintained as audit trail.
- Have an escalation protocol or mechanism in case of non-compliance with the agreed deadlines.

Root cause

- Inadequate capacity in at the sub national level to ensure compliance with the relevant financial management guidelines.
- Lack of knowledge of the Gavi financial management guidelines developed by the FMA as these have not been distributed to the lower implementation structures such as the health accountants and health facility in-charges.
- Weak accountability mechanisms and follow-up to ensure timely submission of accountabilities and retirement of advances.
- There are no post funds transfer activities implemented to ensure that all funds transferred have been received by the intended beneficiaries.
- Delays in disbursements to some districts ranging from two to four months for activities amounting to USD 84,000 due to delayed allocations within the government IFMIS expenditure system. Funds disbursed but not yet allocated cannot be accessed for programme activities at district level. See Annex 14 for delays noted during the audit.

Management comments

The activated features in the advance module are efficiently being used. The advance module is used to post advances and can generate an advance report. However, the configuration for the ageing analysis report is outstanding. The ministry will follow with MOFPED to ensure that this is completed by 31st August 2022.

MoH continues to strengthen the follow up of accountability of funds advanced to districts and individuals. As a result, the unaccounted-for balances as at 30 June 2021 have reduced to UGX 834,605,859 (234,759) as at 31 December 2021. These accountability documents are available for review.

To further orient districts on the use of financial management guidelines, the ministry will work with the FMA to organise regional training of trainers targeting Health Accountants, CFOs and ADHOs. Funds will be reprogrammed for cascaded trainings of health facility in charges by the CFOs, Health Accountants and ADHOs by 30th June 2022.

MoH has a checklist that it uses for reviewing accountabilities for staff advances. This checklist shall be revised to also cover the accountabilities from districts.

Additional Audit comments

We acknowledge that management has provided an updated advances movement schedule. We reviewed a sample of 20 district files to confirm whether UNEPI had reviewed the accountabilities received. Although MoH indicated that this was done, there was no evidence of review of the files. This process was not documented and errors were noted in the advances movement file. In addition, we noted variances between the amounts retired by MoH/UNEPI and the amounts actually supported by accountabilities. We therefore are not able to rely on the updated figures and still maintain the initial advances figure, pending UNEPI and FMA review.

Risk / Impact / Implications	Responsibility	Deadline / Timetable
• Ineffective management of advances increases the likelihood of ineligible expenditures being incurred and not detected. • Unaccounted for advances above one year are considered as ineligible expenditure requiring a refund to Gavi. This increases the risk of lost opportunity to the Country.	Project Accountant	June 2023

4.5 Procurement and fixed assets management

4.5.1 Fixed assets register was incomplete

Context and Criteria

Section (34) of the Public Finance Management 2015 Act (3) states that *"An Accounting Officer shall be responsible for the management of the assets, and, using the format prescribed by the accountant-General, keep a register of the assets and the inventories*".

According to Page 8, Section 3 – of the Public Finance Management 2015 Act - Interpretation defines capital expenditure as, *"Capital expenditure means any expenditure for the creation or acquisition of a fixed asset, inventory or any other valuable physical stock."*

Best practice requires that a periodic physical verification is carried out to confirm existence and working condition of fixed assets held by an entity.

Condition

UNEPI maintains a consolidated fixed asset register (FAR) for all assets procured using Gavi funds. This register has assets maintained at MoH and all districts. However, during our review we noted the following:

Assets not included in the FAR – The fixed assets register was last updated in June 2020. While more assets were procured by UNICEF in 2021 and handed over to the programme, this was not reflected in the register. Consequently, cold chain equipment worth USD 401,528 was not recorded in the fixed assets register.

Variances between the Fixed Assets Register and the Cold Chain Equipment Management (CCEM) tool – There are variances between the cold chain inventory as managed through the fixed assets register and the CCEM tool. The two lists were not reconciled to identify the source of the differences

NMS assets not included in FAR - Assets procured by UNICEF and distributed to implementing partners i.e., NMS valued at USD 788,216 were not captured in the Fixed Assets Register. This also applies to prior assets managed by NMS procured using Gavi funds.

Assets are not reflected at the cost to put them into use - Freight costs incurred on acquisition of assets up to a value of USD 253,071, were not included as part the costs of the related assets in the Fixed Assets Register.

Inter-district asset transfers with an asset value of USD 6,700 were not reflected in the Fixed Assets Register - Our field visits to 14 districts established that at the time of creation of new districts, cold chain equipment amounting to UGX 24 million (USD6,600) that was moved to new districts had not been updated in the registers and/or approved for transfer.

Some assets verified at the district level were not traceable on the Fixed Assets Register – The auditors noted several assets in vaccine stores that could not be traced to the register. This was noted in districts of Wakiso, Ntungamo, Mbarara and Isingiro as detailed in Annex 16.

Recommendation 22

The Ministry of Health/ UNEPI should:

- Ensure that the consolidated FAR and those at sub national level are updated with all assets purchased using Gavi funds on an annual basis. The updating exercise should be holistically done in reference to the UNICEF assets handover reports, distribution lists and CCEM tool reports.
- Ensure that districts regularly maintain and update their fixed asset registers to ensure that programme assets are tracked, managed, and used for their designated purpose.
- All Gavi assets including those distributed to NMS should be recorded in the consolidated FAR maintained at MoH.
- Ensure that SoPs and guidelines include process for assets transfer. For all assets transferred or moved, proper documentation should be maintained indicating reasons for transfer and destination or current location of the asset.

<table>
<tr><td>Root cause
• Inadequate oversight over fixed assets management.
• No accountability mechanisms to hold persons responsible for roles not performed.
• Failure to update asset registers for new, destroyed, and obsolete items.
• No documentation-maintained pertaining to assets transferred to newly created districts and assets movement from one DVS/HF to another.</td><td colspan="2">
Management comments
We shall comprehensively update the Fixed Asset Register. However, for Cold Chain Equipment as per the global guidance the CCEM tool is a more effective tool for maintaining cold chain equipment asset records. As such we shall segregate all CCE records to be maintained in the CCEM and all other assets in the consolidated asset register.

MoH shall revise the SOPs to include guidance on the management of the transfer of assets. The SOPs shall at the minimum include details of the asset being transferred, the destination and the reasons for the transfer. This revision should be complete by June 30, 2022.</td></tr>
<tr><td>Risk / Impact / Implications

Inadequate controls over the use and custody of the assets may lead to the misuse and loss of programme assets.</td><td>Responsibility

Procurement and Supply Chain Management Specialist</td><td>Deadline / Timetable
30 June 2023</td></tr>
</table>

4.5.2 Procurement activities were delayed and pipeline tracking needs improvement

Context and Criteria

During the period under review, MoH handled procurements of services and other related items under the HSS1 and HSS2 grants. Due to insufficient capacity at MoH and weaknesses in controls over the procurement function, Gavi and UNEPI agreed to use the services of Third-Party Procurement Agents like UNICEF and NMS for high value and specialised procurement activities.

The main liaison between the third-party procurement agents i.e., UNICEF and NMS and UNEPI is the Project Procurement and Supply Chain Specialist. The job description for the Procurement Specialist stipulates the following roles amongst others;
a) In charge of setting-up a procurement management tracking system for the funded procurements;
b) Preparing quarterly and annual procurement reports as inputs into the Project Management reports and;
c) Work with the Third-Party Procurement Agent to develop specifications, cost estimates, and monitor delivery of procured items.

Condition

Delays in implementation of procurement plans- Our review of the procurement process at MoH established that the procurements were generally in line with the procurement plan and grant activities to be funded by the Gavi grant. However, we noted significant delays in the procurement process for some activities at MoH. This had a significant impact on the utilisation rate of the grant relating to funds available in country.

There were delayed procurements amounting to USD 878,883 while some procurement processes had not commenced at the time of the audit as highlighted below;

Table 11: Delayed procurements

Budget item	Implementing agency	Budget USD	Utilization USD	Balance USD	%	Status	Delay
Incinerators	MoH	*772,750*	-	*772,750*	0%	Procurement process hasn't started	Over 1 year
Print and distribute immunisation in practice (IIP) manuals, immunisation charts and Board makers	NMS	*47,710*	*16,193*	*31,517*	34%	Specifications for IIP manuals o/s	Approval June 2020
Buffer stocks for PBM sentinel sites	NMS	*17,861*	*13,245*	*4,616*	74%	Procurement process for balance items not started	Approval June 2020
Procure and install electronic Fixed Asset Management database/system	MoH	*50,000*		*50,000*	0%	Procurement process not started-Under Discussion	Over 1 year
Iinstall electronic Fixed Asset Management database/system	MoH	*20,000*		*20,000*	0%	Procurement process not started-Under Discussion	Over 1 year
Total		***908,321***	***29,438***	***878,883***	**3%**		

Some activities such as the purchase of 8,000 pieces of IIP manuals required reprogramming and budget reallocation with Gavi's approval. No steps had been taken to reprogramme/reallocate the budgeted funds.

Lapses in contracts management – There were significant delays during construction of Medical and staff houses and poor performance of contractors in the execution of their assignments. Delayed payments to contractors caused cash flow constraints which eventually led to delayed completion of the projects.

In addition, the Contractors' All Risk Insurance policies, Advance Payment Securities and Performance Securities all expired before the conclusion of the defects liability period as shown in the table below:

Recommendation 23

MoH/UNEPI should:

- Ensure that contract management plans are put in place to monitor and track delivery of all signed contracts as per the timeliness indicated. These should be communicated to respective stakeholders and closely monitored by the FMA.
- Prepare SMART catchup plans with timelines for completion of the procurement processes set.

Table 12: Lapsed contractors all risk/performance security on construction contracts

Contractor	Risk mitigation	Start date	End date	Final inspection
Contractor A	Contractors all risk	1-Oct-16	31-Mar-17	Apr-19
Contractor B	Performance security	13-Oct-16	13-Jul-17	Apr-19
Contractor B	Advance performance security	13-Oct-16	13-Jul-17	Apr-19

Absence of status reports on on-going/delayed procurements – There were no evidence of regular monitoring of procurement activities by the Procurement Unit. We did not see any evidence of tracking of the status of the procurement plan, and neither were these reports provided by the Procurement Specialist to indicate regular monitoring of activities.

Root cause

- Absence of contract management plans to monitor and track delivery of contracts as per the timeliness indicated.
- Full Specifications for some activities not provided by respective departments at MoH at conceptualising of the project activities.
- Weaknesses in project supervision and monitoring.
- Weak accountability mechanisms to ensure staff and TPPAs are held accountable for roles not implemented.

Management comments

MoH noted the contract management challenges and a review and realignment of the implementation framework was done which led to successful completion and closure of the project. All staff houses and Vaccine store were completed and being used to support immunisation activities.

Some of the delays are due to factors beyond the ministry's control. However, MoH is working to streamline and expedite the implementation of these procurements. Where necessary, the Program shall request Gavi to reprogramme funds to the unfunded or underfunded priorities.

Risk / Impact / Implications

- Low absorption of the grant funds and consequently lost opportunity for the country.
- Increased exposure to financial loss in the event of noncompliance with contractual obligations.

Responsibility

Procurement and Supply chain management specialist

Deadline / Timetable

June 2023

4.6 Programme sustainability

4.6.1 Programme sustainability concerns

Context

According to Gavi's long term strategy, "*Empowering countries to take ownership of their vaccination programmes is a core component of the Gavi business model. Based on their Gross National Income (GNI) per capita, countries are expected to allocate an increasing amount of their resources to vaccination. The long-term goal is for countries to achieve financial sustainability.*"

"When a country reaches the eligibility threshold, Gavi's financial support is gradually phased out over five years. By the end of this period, countries are required to fully self-finance their vaccine programmes. As of early 2020, a total of 16 countries across South-East Asia, Africa, Eastern Europe and Latin America have transitioned out of our support., countries transition from being aid reliant to being sustainable after a certain period and achievement of a number of indicators."

Condition

Over reliance on Gavi funded project staff – UNEPI and MoH have no sustainability plan in regard to their staff costs and largely continued to rely on Gavi primarily funding significant human resources, totalling approximately UGX 1.6 billion (approximately USD 448,000) per year. Moreover, to date, no sustainability plan has been developed, in order to prepare the programme for reduced HR administrative support from donors. Important to note is that Gavi funds 100% of the cost of 17 full time project staff as well as paying top -up allowances for another three civil servants from the UNEPI team.

Salary increments for Gavi supported positions were not supported by performance reviews – The audit team noted that the salary for one individual within the Gavi Coordination Unit was doubled, while other staff received moderate cost of living adjustments. The Gavi audit team could not find evidence on file to support the change in roles and responsibilities that would support a doubled salary that will now cost an additional USD 24,000 to the Gavi grant.

Root cause

- Inadequate funding for critical positions necessitating use of donor funds for HR and administrative support. This is a recurring problem in a number of Gavi supported countries as such positions are necessary to meet immunisation objectives.

Recommendation 24

It is recommended that the MoH:

- Develops a contingency plan articulating how it would continue to operate immunisation activities, in the event that donor funding of its central level overheads and staff costs was reduced.
- Ensures that salary increments are supported by in-depth performance reviews and that the implications of the additional cost to the HR support evaluated before submission to Gavi for approval.

Management Comments

Over reliance on Gavi funded project

MoH is making progress towards reducing the number of Gavi funded staff. For example, two cold chain officers previously funded by Gavi were transitioned to NMS. GoU has deployed additional staff in the program which include, a Principal Medical Officer, 1 Senior Medical Officer and 2 Nursing officers. In addition, 2 drivers were given a 1-year non-renewable contract ending June 2022.

Salary increment

MoH has always engaged Gavi and will continue to engage Gavi before any salary changes are made. The ministry submits a request for no objection to Gavi with a justification for the proposed increments. Justifications are either after a performance review or due to cost-of-living adjustments.

Additional audit comments

While Gavi approval was sought, there were no performance reviews on file to support the requests made. These performance reviews were not provided to auditors during our audit fieldwork.

Risk / Impact / Implications	Responsibility	Deadline/ Timetable
• There is a likelihood that unsupported salary increments may create inequity within the Gavi coordination unit team structure. • The new HR costs may not meet the new HSS support guidelines that provide for minimising HR costs within Gavi supported programme activities. • The payments may not be sustainable within the government's civil service structure creating a likelihood that these positions, that are critical to the management of the immunisation programme, may not be available if not supported by donors.	Program Manager UNEPI	June 2023

5. Annexes

Annex 1 – Acronyms

A&I	Audit and Investigations
CCE	Cold Chain Equipment
DIT	Data Improvement Teams
DQA	Data Quality Assessment
DQIP	Data Quality Improvement Plan
DVS	District Vaccine Store
EPI	Expanded Programme for Immunisation
FAR	Fixed Assets Register
FMA	Financial Monitoring Agent
FY	Financial Year
GMR	Grant Management Requirements
GoU	Government of Uganda
HC	Health Centre
HF	Health Facility
HPAC	Health Policy Advisory Committee
HSAC	Health Sector Audit Committee
HSS	Health Systems Strengthening
IA	Internal Audit
IAS	International Auditing and Assurance Standards Board
ICC	Immunisation Country Coordination Mechanism
IIP	Immunisation In Practice
ISS	Integrated Supportive Supervision
NMS	National Medical Stores
MoF	Ministry of Finance
MoH	Ministry of Health
PBF	Performance Based Funding
SPT	Smart Paper Technology
ToRs	Terms of Reference
TPPA	Third Party Procurement Agent
TWG	Technical Working Group
OAG	Office of the Auditor General
SMT	Stock Management Tool
SOP	Standard Operating Procedures
UGX	Ugandan Shillings
UNEPI	Uganda National Expanded Programme on Immunisation
UNICEF	United Nations Children's Fund
USD	United States Dollars
VAR	Vaccine Arrival Forms
VIG	Vaccine Introduction Grant
WHO	World Health Organization

Annex 2 – Methodology

Gavi's Audit and Investigations (A&I) audits are conducted in accordance with the Institute of Internal Auditors' ("the Institute") mandatory guidance which includes the definition of Internal Auditing, the Code of Ethics, and the International Standards for the Professional Practice of Internal Auditing (Standards). This mandatory guidance constitutes principles of the fundamental requirements for the professional practice of internal auditing and for evaluating the effectiveness of the audit activity's performance. The Institute of Internal Auditors' Practice Advisories, Practice Guides, and Position Papers are also be adhered to as applicable to guide operations. In addition, A&I staff will adhere to A&I's standard operating procedures manual.

The principles and details of the A&I's audit approach are described in its Board-approved Terms of Reference and Audit Manual and specific terms of reference for each engagement. These documents help our auditors to provide high quality professional work, and to operate efficiently and effectively. They help safeguard the independence of the A&I's auditors and the integrity of their work. The A&I's Audit Manual contains detailed instructions for carrying out its audits, in line with the appropriate standards and expected quality.

In general, the scope of A&I's work extends not only to the Secretariat but also to the programmes and activities carried out by Gavi's grant recipients and partners. More specifically, its scope encompasses the examination and evaluation of the adequacy and effectiveness of Gavi's governance, risk management processes, system of internal control, and the quality of performance in carrying out assigned responsibilities to achieve stated goals and objectives.

Annex 3 – Definitions: opinion and audit issue rating

A. Overall Audit Opinion

The audit team ascribes an audit rating for each area/section reviewed, and the summation of these audit ratings underpins the overall audit opinion. The audit ratings and overall opinion are ranked according to the following scale:

Effective	**No issues or few minor issues noted**. Internal controls, governance and risk management processes are adequately designed, consistently well implemented, and effective to provide reasonable assurance that the objectives will be met.
Partially Effective	**Moderate issues noted.** Internal controls, governance and risk management practices are adequately designed, generally well implemented, but one or a limited number of issues were identified that may present a moderate risk to the achievement of the objectives.
Needs significant improvement	**One or few significant issues noted.** Internal controls, governance and risk management practices have some weaknesses in design or operating effectiveness such that, until they are addressed, there is not yet reasonable assurance that the objectives are likely to be met.
Ineffective	**Multiple significant and/or (a) material issue(s) noted.** Internal controls, governance and risk management processes are not adequately designed and/or are not generally effective. The nature of these issues is such that the achievement of objectives is seriously compromised**.**

B. Issue Rating

For ease of follow up and to enable management to focus effectively in addressing the issues in our report, we have classified the issues arising from our review in order of significance: High, Medium and Low. In ranking the issues between 'High', 'Medium' and 'Low', we have considered the relative importance of each matter, taken in the context of both quantitative and qualitative factors, such as the relative magnitude and the nature and effect on the subject matter. This is in accordance with the Committee of Sponsoring Organisations of the Treadway Committee (COSO) guidance and the Institute of Internal Auditors standards.

Rating	Implication
High	At least one instance of the criteria described below is applicable to the finding raised: • Controls mitigating high inherent risks or strategic business risks are either inadequate or ineffective. • The issues identified may result in a risk materialising that could either have: a major impact on delivery of organisational objectives; major reputation damage; or major financial consequences. • The risk has either materialised or the probability of it occurring is very likely and the mitigations put in place do not mitigate the risk. • Management attention is required as a matter of priority. • Fraud and unethical behaviour including management override of key controls.
Medium	At least one instance of the criteria described below is applicable to the finding raised: • Controls mitigating medium inherent risks are either inadequate or ineffective. • The issues identified may result in a risk materialising that could either have: a moderate impact on delivery of organisational objectives; moderate reputation damage; or moderate financial consequences • The probability of the risk occurring is possible and the mitigations put in place moderately reduce the risk. • Management action is required within a reasonable time period.
Low	At least one instance of the criteria described below is applicable to the finding raised: • Controls mitigating low inherent risks are either inadequate or ineffective. • The Issues identified could have a minor negative impact on the risk and control environment. • The probability of the risk occurring is unlikely to happen. • Corrective action is required as appropriate.

Annex 4: Sample Regions/Districts/Health Facilities

No.	Regions/Districts/Health Facilities	
1	Central Region	Health Facilities
	Kampala District Vaccine Store	Kawaala HC IV
		Kisenyi Health Centre IV
		Komamboga Health Centre IV
	Wakiso District Vaccine Store	Kasangati HCIV
		Nabweru HCIV
		Kakiri HCIV
	Mukono District Vaccine Store	Mukono General Hospital
		Kojja Health Facility
		Nakifuma Health Facility
	Jinja District Vaccine Store	Buwenge General Hospital
		Mpumude HCIV
		Walukuba HCIV
2	Western Region	
	Ntungamo District Vaccine Store	Rwenkiniro
		Ruhaama HC
		Kitwe HC III
	Kasese District Vaccine Store	Kichwamba HC III
		Bwera Hospital
		Kagando Hospital
	Bundibugyo District Vaccine Store	Nyahuka HC III
	Mbarara District Vaccine Store	Rubaaya HC III
		Bwizibwera HC IV
	Isingiro District Vaccine Store	Nyamuyanja
		Endizi HC

3	Northern Region	
	Arua District Vaccine Store	Opia HCIV
		Kuluva Hospital
		Bondo HCIII
		Patico HC III
	Yumbe District Vaccine Store	Yumbe Hospital
		Kwera HC III
		Midigo HCIV
	Omoro District Vaccine Store	Kwera HCIII
	Moyo District Vaccine Store	Moyo Hospital
	Gulu District Vaccine Store	Layibi Techo HCIV
		Lapainat HCIII
		Awach HCIII

Annex 5 - Delay in implementation of the ICC resolutions

Date of initial meeting discussion at ICC	Resolutions made by ICC Meeting	Number of times issue discussed in various meetings	Action			Number of days between 1st resolution made and implementation/ to-date for un-executed resolutions	Remarks/ Some of the root causes for the delay
			Done	Ongoing	Not done		
16-Nov-18	Reprogramme waste disposal funds towards procurement of environmentally compliant incinerators	3			√	1,085	a) Guidance on the type of incinerators was not given. Partner UNICEF not in position to do so due to lack of specialist in such procurements, b) The required number was 8 but the funds allocated were not enough to buy one. c) There is a likely decision to reprogramme the funds to other activities.
16-Nov-18	Provide in the HSSII reprogrammed budget to enable NMS to dispose obsolete cold chain equipment	4		√		578	a) First instalment was on 16 June 2020 of UGX 2.5B and second disbursement UGX 600M in Sept 2020. 1st retrieval of the equipment commenced in October 2020. b) Delay due to PPDA guidelines of procurement of the contractor to demobilize. c) Some materials in which CCE is made is hazardous and the vaccine store which cannot be disposed of without consultation of NEMA.
28-Jan-19	Contractors should fix all defects in two weeks after which after which the consultants are to submit the final reports by 28 Feb 2019 as part of the close out	2	√			62	Joint inspections of March 2019 and the final inspections of April 2019 established. Project completion report was prepared dated May 2019
28-Jan-19	Refund of ineligible expenses amounting to USD197,452 was executed with a shortage of USD 13,690	1	√			29	Executed
28-Jan-19	At total of UGX 129,214,915 has been unaccounted for since 31 Dec 2017. MoH to follow up with the errant officers to recover the money	1	√			122	The refund was affected 20 May 2019 which is 122 days after the decision was made. The remedy by MoH refunding the money from its accounts is not the solution in financial management but a weakness in the oversight arrangements of the Ministry.
16-May-19	Blacklist Muga Services Limited, retain their final pay and engage another contractor to fix the snags	2			√	914	Muga was paid the retention fee of UGX 23,633,546 for contract No. DF43/JUN18/1436 (Lot 4 - Bulisa, Nakaseke, and Zombo) on 22 June 2018 which is 318 days before the directive was issued. The ICC directive to blacklist Muga Services Ltd was not effected. MoH has gone ahead to contract Muga for other services after the blacklisting directive.
06-May-19	UNEPI PM to follow up with MoFPED and MoLG to support the closure for funds for district accountabilities.	2	√				Implemented up to district level

Date of initial meeting discussion at ICC	Resolutions made by ICC Meeting	Number of times issue discussed in various meetings	Action			Number of days between 1st resolution made and implementation/ to-date for un-executed resolutions	Remarks/ Some of the root causes for the delay
			Done	Ongoing	Not done		
06-May-19	UNEPI tasked to develop an effective mechanism to track and account for the stocks optimally	1			√	920	The LMIS (Oracle ERP) which tracks the medicines in the warehouse and consumption at the health centre was supposed to be installed but they found difficulties in the roll out. They reverted to the Maxi ERP system with visibility at only NMS.
06-May-19	Get a consultant to develop Uganda's Vaccine Usage patterns	1			√	920	
06-May-19	Integrate the HMIS data in decision making and forecasts to enhance vaccines accountability	1			√	920	
26-Jul-19	The UNEPI Programme Manager to follow up with WHO and PATH on the consultancy of developing the implementation framework/ guidelines for Immunisation Act.	1		√			
26-Jul-19	UNEPI to present quarterly work plan Performance reports in the subsequent ICC meetings	1			√	833	EPI TWG tracks annual work plans on quarterly basis but evidence they are presented at the ICC meetings
26-Jul-19	Only 87 districts out of the 135 are on IFMIS. MOLG and MOFPED to set up all the remaining districts on IFMS	2	√				Done
26-Jul-19	Identify players like religious leaders and kingdoms who can reach the congregations swiftly Resolution The programme was tasked to reach out to all the unreached Ugandans	2		√		668	On going
29-Oct-20	A few grant management requirements had not been addressed Resolution Address the GMRs related to ICC, TCC, IFMIS LMIS and Cold Chain Maintenance	2			√	372	
23-Jun-21	MoH intended to strengthen the capacity of the Regional Referral Hospitals so that they directly supervise the implementation of EPI in the districts Resolutions Keep TCC updated on the progress	1			√	135	
	Total resolutions implemented		**5**	**3**	**8**	**581**	
			31%	19%	50%		

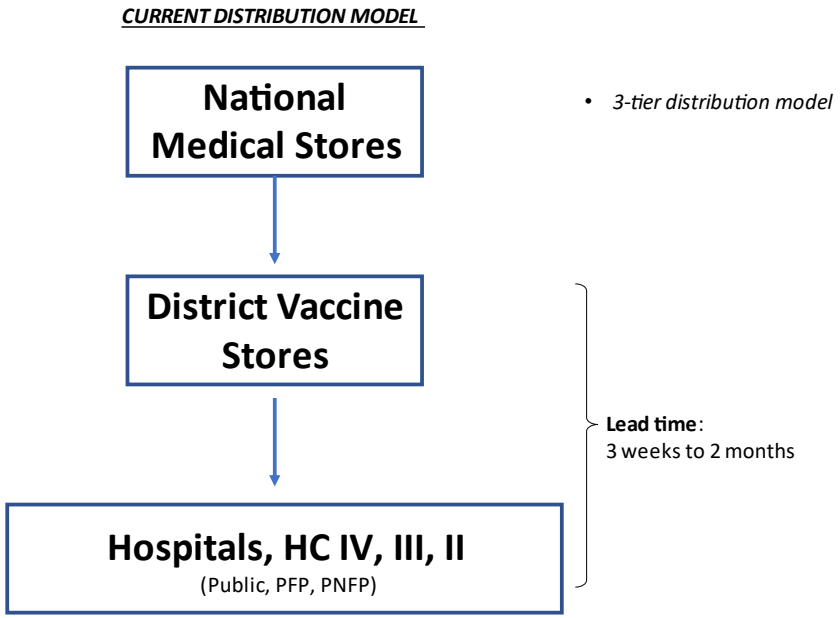
Annex 6 – Similar resolutions passed by ICC and TCC

ICC PROCEEDINGS		TCC PROCEEDINGS	
ICC resolutions	**Meeting date**	**TCC resolutions**	**Meeting Date**
UNEPI directed to reprogramme waste disposal funds towards procurement of environmentally compliant incinerators	16-Nov-18	Reprogrammed HSSII grants **Resolution** Use funds allocated to waste management to procure incinerators	12-Feb-19
Provide USD300,000 in the HSSII re-programmed budget to enable NMS to dispose obsolete cold chain equipment	16-Nov-18	Reprogrammed HSSII grants **Resolution** Provide USD300k towards NMS to dispose of obsolete cold chain equipment	12-Feb-19
Refund of ineligible expenses amounting to USD197,452 was executed with a shortage of USD13,690 **Resolutions** a) Expedite refund as it is a determinant to future funding b) The programme should escalate names of staff and districts and amounts of non-compliant staff to PS for administrative action	28-Jan-19	Refund of ineligible expenses amounting to USD197,452 was executed with a shortage of USD13,690 **Resolutions** a) Expedite refund as it is a determinant to future funding b) The programme should escalate names of staff and districts and amounts of non-compliant staff to PS for administrative action	12-Feb-19
HSSI Close out **Resolutions** a) Contractors should fix all defects in two weeks after which after which the consultants are to submit the final reports by 28 Feb 2019 as part of the close out b) There will be no extension of the defects' liability period	28-Jan-19	The HSSII close out **Resolution** Members noted defects liability period ends in March 2019 and the final inspection for civil works to be done before retention is paid out	12-Feb-19
MR Campaign - Identify players like religious leaders who can reach the congregations swiftly **Resolution** The programme was tasked to reach out to all the unreached Ugandans	26-Jul-19	MR Campaign - Endorsement of HSSII concepts for implementation of USD 2,090,604 - working with religious leaders and the 5 kingdoms before funds can be sent for implementation **Resolution** Sign MoU with religious leaders and the five kingdoms before funds are sent for implementation	18-Jul-19
Engage the MoFPED to secure GoU funding commitment for the introduction of Yellow Fever Vaccination	15-May-20	Government of Uganda was committed to fund the Co-financing for Yellow fever introduction **Resolution** Ensure that the costs are included in the FY 2020/2021	13-May-20
Chair informed the meeting about the need to assess and prepare the mitigation measures against effects of current events like floods and COVID -19 on programme performance **Resolution** Prepare mitigation measures against the effects of current events to ensure districts are well prepared to implement the activities despite the challenges	15-May-20	It was important that we start to plan for the effects of COVID -19 pandemic on the implementation of activities **Resolution** Ensure that we incorporate mitigation measures to counter the effects of COVID-19 on the implementation of activities	13-May-20

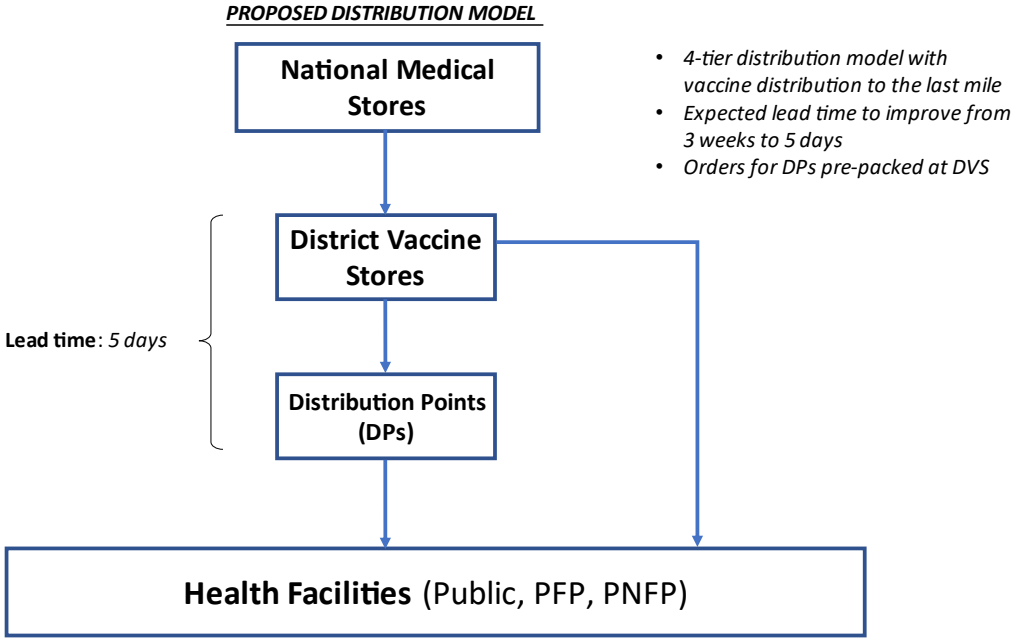
Note:
Incidences where the issues are discussed first at ICC and later at TCC and yet it TCC reports are supposed to be presented at the ICC (highlighted in red)

Annex 7: Uganda Vaccine flow structure redesign from current (3-tier) to proposed 4-tier system

A. Supply Chain Model- Current



B. Proposed New model



Annex 8: VSCM issues

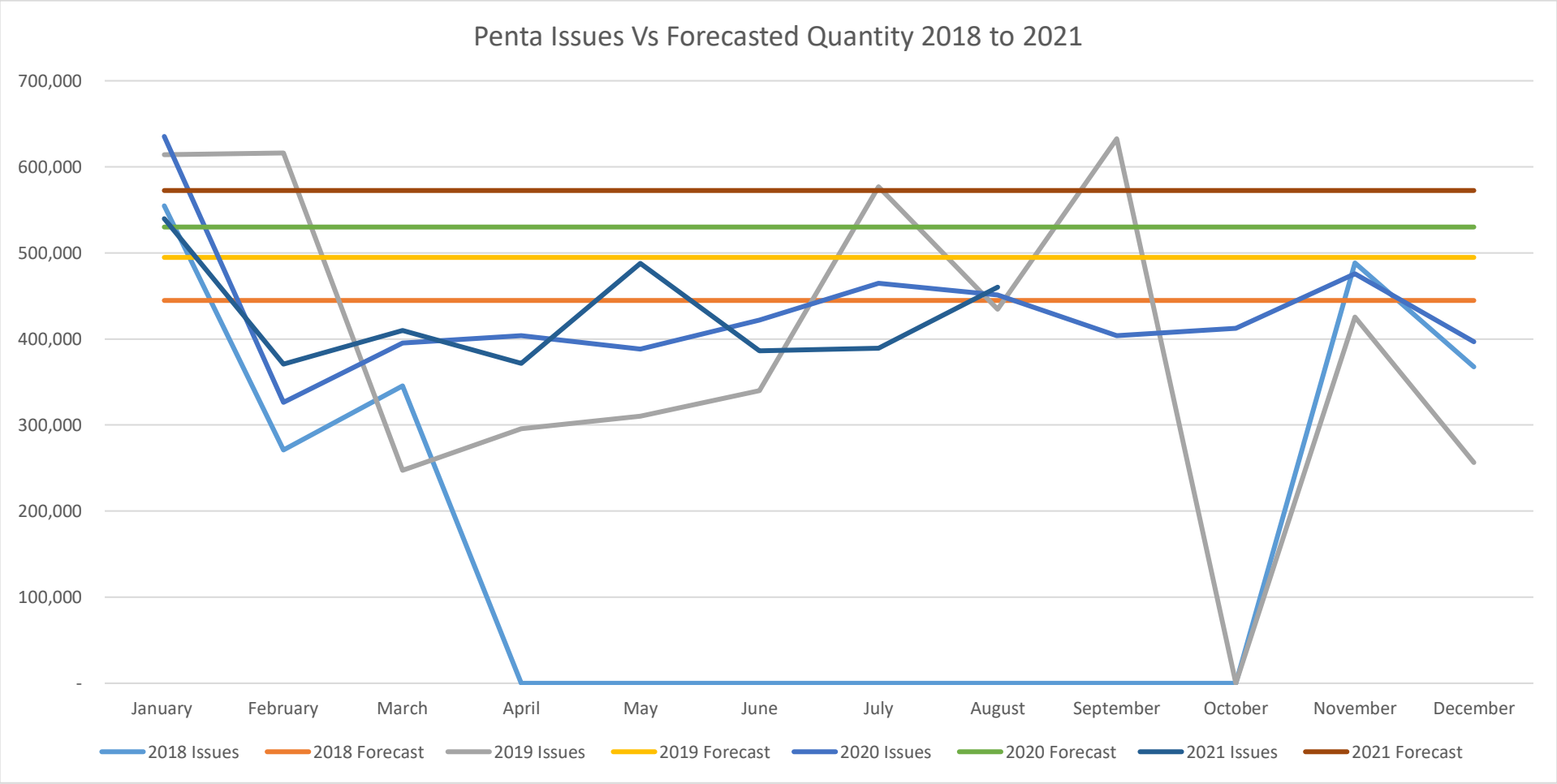
Annex 8a: Stock status overview on the day of the audit

NMS vaccine stock levels as at 28.10.2021 and follow up on expected deliveries as at 12.11.2021

Antigen / syringe / Safety box	Months of stock based on Forecasted consumption	Months of stock based on Actual issuances for last 6 months	Confirmed Expected quantity (dose/pcs)	Expected delivery date	Remarks	Additional follow-up on expected Deliveries as at 12-Nov-2021
Penta	1.1	1.5	1,741,500	09-Dec-21	Understocked on day of Audit	No new pipeline information
Measles & Rubella	3.4	3.2	654,500	18-Nov-21		Awaiting delivery
PCV	1.8	2.5			Understocked on day of Audit	No new pipeline information
HPV	9.3	5.7				
IPV		-	851,150	01-Nov-21	Stocked out on the day of Audit	851,150 doses delivered as stated
ROTA	1.3	1.6			Understocked on day of Audit	No new pipeline information
Syringes 0.05ml		-	2,000,000	in country/ customs	Stocked out on the day of Audit	Due to space challenges call off are made
Syringes 2ml	2.0	2.4				
Syringes 0.5ml	5.4	20.2				
Syringes 5ml	2.7	5.3				

Annex 8b: Penta issues vs forecasted quantities

Chart 1: Comparison of forecasted vs issues data for Penta.



Source data for the graph:

Issues and Forecasted data for PENTA 2018 to 2021

	2018		2019		2020		2021	
Month	Issues	Forecast	Issues	Forecast	Issues	Forecast	Issues	Forecast
January	554,700	444,750	613,920	494,766	635,310	530,092	539,760	572,499
February	271,300	444,750	616,320	494,766	326,400	530,092	370,800	572,499
March	345,700	444,750	247,440	494,766	395,280	530,092	409,680	572,499
April	-	444,750	295,680	494,766	404,000	530,092	371,880	572,499
May	-	444,750	310,080	494,766	388,490	530,092	487,680	572,499
June	-	444,750	339,780	494,766	421,920	530,092	386,160	572,499
July	-	444,750	576,960	494,766	464,540	530,092	389,280	572,499
August	-	444,750	434,640	494,766	450,960	530,092	460,080	572,499
September	-	444,750	632,640	494,766	403,920	530,092		572,499
October	-	444,750	-	494,766	412,440	530,092		572,499
November	488,400	444,750	425,550	494,766	475,680	530,092		572,499
December	367,440	444,750	256,360	494,766	396,720	530,092		572,499
Totals	**2,027,540**	**5,337,000**	**4,749,370**	**5,937,192**	**5,175,660**	**6,361,104**	**3,415,320**	**6,869,992**

Annex 8c: Stockout at DVS level June 2020 to July 2021 (number of days)

Test Antigen:	Penta		PCV		Rota		COVID AZ	
DVS Name	Low	High	Low	High	Low	High	Low	High
Kampala-DVS						5	2	25
Wakiso -DVS	5	23						
Mukono -DVS								59
Jinja - DVS			3	20	4	21	13	27
Gulu - DVS						33	7	38
Omoro -DVS								
Moyo - DVS								
Yumbe - DVS					23	38	7	42
Arua - DVS						18		
Kasese - DVS	3	12	10	14		26		
Bundibugyo - DVS		10	8	26		5	20	36
Ntungamo DVS			2	10	10	23	11	44
Isingiro - DVS	4	61		9		20	6	26
Mbarara - DVS				4			8	25

Annex 8d: Summary of Health stockout days for reviewed HF – June 2020 to July 2021

Test Antigen:	Penta		PCV		Rota		COVID AZ	
Health Facility	Low	High	Low	High	Low	High	Low	High
Mukono General Hosp	N/A	7	N/A	7	N/A	N/A	N/A	N/A
Kojja HCIV	1	2	1	N/A	N/A	4	1	33
Nakifuma HCIV	1	7	1	7	N/A	N/A	N/A	N/A
Kasangati HC	1	6	7	21	3	48	N/A	N/A
Kakiri HC	N/A	4	N/A	N/A	1	5	N/A	N/A
Nabweru HC	N/A	N/A	N/A	N/A	5	23	N/A	N/A
Kisenyi HC	N/A	6	1	6	N/A	5	6	8
Komamboga HC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Kawala HC	1	31	17	31	N/A	30	3	32
Mpumude HC	N/A	12	3	3	N/A	5	N/A	N/A
Walukuba HC	2	20	N/A	37	4	15	N/A	N/A
Buwenge Hosp	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Layibi Techo HC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	15
Awach HC III	N/A	N/A	N/A	N/A	N/A	N/A	N/A	32
Patico HC III	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lapainat HC III	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Moyo Hosp	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Yumbe Hosp	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Midigo HC IV	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Kerwa HC III	N/A	N/A	N/A	N/A	10	18	N/A	N/A
Opia HC III	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Kuluva Hosp	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bondo HC III	N/A	6	1	N/A	N/A	38	N/A	N/A
Bwera Hosp	N/A	8	N/A	N/A	5	8	N/A	N/A
Kagando Hosp	42	53	7	42	N/A	42	N/A	N/A
Kichwamba HC III	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nyahuka HC III	N/A	N/A	2	21	N/A	N/A	N/A	N/A
Rweikiniro HC	N/A	N/A	N/A	N/A	N/A	4	14	26
Kitwe HC	N/A	N/A	N/A	4	5	18	15	47
Ruhama HC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nyamuyanja HC	3	4	2	13	3	13	10	86
Endiinzi HC	3	11	N/A	N/A	4	11	13	86
Bwizibwera HC IV	N/A	N/A	N/A	N/A	N/A	N/A	7	36
Rubaya HC III	N/A	51	N/A	N/A	N/A	18	N/A	N/A

Annex 8e: DVS stock count variance on the day of the visit

Antigen:	Penta			PCV			ROTA			COVID AZ		
DVS Name	Stock Record	Physical Count	Variance	Stock Record	Physical Count	Variance	Stock Record	Physical Count	Variance	Stock Record	Physical Count	Variance
Kampala-DVS	2,050	2,050	-	14,000	14,000	-	450	450	-	1,110,650	1,110,650	-
Wakiso -DVS	25,560	28,070	2,510	46,000	45,000	(1,000)	2,400	16,900	14,500	60	-	(60)
Mukono -DVS	4,830	4,830	-	6,116	6,116	-	680	680	-	654		(654)
Jinja - DVS	2,020	2,940	920	5,832	2,796	(3,036)				3,300	-	(3,300)
Gulu - DVS	3,820	1,480	(2,340)	3,040	2,960	(80)	-	-	-	-	2,430	2,430
Omoro -DVS	170	120	(50)	200	884	684	150	300	150	2,740	3,100	360
Moyo - DVS	830	830	-	2,400	2,400	-	804	600	(204)	-	-	-
Yumbe - DVS	1,690	3,320	1,630	5,800	6,278	478	2,700	3,456	756	890	890	-
Arua - DVS	8,610	8,480	(130)	12,320	12,420	100	-	-	-	29,101	28,820	(281)
Kasese - DVS	2,640	960	1,680	2,700	2,800	(100)	-	1,650	(1,650)	2,900	2,900	-
Bundibujo - DVS	-	1,350	(1,350)	660	4,020	(3,360)	-	450	(450)	-	-	-
Ntungamo DVs	5,800	7,760	(1,960)	6,400	6,800	(400)	-	3,250	(3,250)	-	-	-
Isingiro - DVS	13,112	3,500	9,612	19,852	19,752	100	458	207	251	8,760	8,760	-
Mbarara - DVS	3,160	1,220	1,940	76	2,284	(2,208)	1,138	-	1,138	26,060	17,430	8,630

Annex 8f: Global Reconciliation of variances at HF observed between July 2020 to June 2021

HF Name	Penta	PCV	Rota	COVID AZ
Mukono General Hosp	-	-	-	-
Kojja HCIV	242	721	- 66	- 25
Nakifuma HCIV	-	- 290	- 135	- 251
Kasangati HC	6,507	2,340	3,845	-
Kakiri HC	443	500	50	-
Nabweru HC	869	-	883	-
Kisenyi HC	- 5,136	- 6,818	- 3,158	-
Komamboga HC	- 739	- 3,669	1,005	- 34,630
Kawala HC	5,573	2,544	1,006	2,764
Mpumude HC	1,276	1,603	- 484	1,554
Walukuba HC	2,542	1,809	896	-
Buwenge Hosp	1,185	2,438	353	-
Layibi Techo HC	34	5	-	- 12
Awach HC III	1	32	- 31	14
Patico HC III	22		49	- 150
Lapainat HC III	-	- 452	54	-
Moyo Hosp	- 532	72	- 47	- 392
Yumbe Hosp	120	- 69	23	- 218
Midigo HC IV	261	295	257	- 353
Kerwa HC III	493	2,233	- 56	- 300
Opia HC III	160	89	723	- 160
Kuluva Hosp	149	199	- 113	- 44
Bondo HC III	441	749	64	226
Bwera Hosp			6,291	
Kagando Hosp	- 2,570	- 388	- 1,723	226
Kichwamba HC III	-	-	-	-
Nyahuka HC III	20	- 10	- 190	-
Rweikiniro HC	-	-	-	-
Kitwe HC	8	- 110	- 56	250
Ruhama HC	390	71	27	-
Nyamuyanja HC	- 224	2	4	-
Endiinzi HC	- 2,454	74	- 1,711	-
Bwizibwera HC IV	658	499	428	-
Rubaya HC III	- 59	70	- 22	19

Annex 8g: Summary of stock count on day of visit at DVS level

	Antigen:	Penta			PCV			ROTA			COVID AZ		
#	DVS Name	Stock Record	Physical Count	Variance	Stock Record	Physical Count	Variance	Stock Record	Physical Count	Variance	Stock Record	Physical Count	Variance
1	Kampala-DVS	2,050	2,050	-	14,000	14,000	-	450	450	-	1,110,650	1,110,650	-
2	Wakiso -DVS	25,560	28,070	2,510	46,000	45,000	(1,000)	2,400	16,900	14,500	60	-	(60)
3	Mukono -DVS	4,830	4,830	-	6,116	6,116	-	680	680	-	654		(654)
4	Jinja - DVS	2,020	2,940	920	5,832	2,796	(3,036)				3,300	-	(3,300)
5	Gulu - DVS	3,820	1,480	(2,340)	3,040	2,960	(80)	-	-	-	-	2,430	2,430
6	Omoro -DVS	170	120	(50)	200	884	684	150	300	150	2,740	3,100	360
7	Moyo - DVS	830	830	-	2,400	2,400	-	804	600	(204)	-	-	-
8	Yumbe - DVS	1,690	3,320	1,630	5,800	6,278	478	2,700	3,456	756	890	890	-
9	Arua - DVS	8,610	8,480	(130)	12,320	12,420	100	-	-	-	29,101	28,820	(281)
10	Kasese - DVS	2,640	960	1,680	2,700	2,800	(100)	-	1,650	(1,650)	2,900	2,900	-
11	Bundibujo - DVS	-	1,350	(1,350)	660	4,020	(3,360)	-	450	(450)	-	-	-
12	Ntungamo DVs	5,800	7,760	(1,960)	6,400	6,800	(400)	-	3,250	(3,250)	-	-	-
13	Isingiro - DVS	13,112	3,500	9,612	19,852	19,752	100	458	207	251	8,760	8,760	-
14	Mbarara - DVS	3,160	1,220	1,940	76	2,284	(2,208)	1,138	-	1,138	26,060	17,430	8,630

Annex 8h: Stock Count Variance Summary Table – Health Facilities

HF Name	Penta	PCV	Rota	COVID AZ
Mukono General Hosp	N/A	N/A	N/A	N/A
Kojja HCIV	N/A	N/A	N/A	N/A
Nakifuma HCIV	58	211	55	-1
Kasangati HC	190	-741	1,087	3,186
Kakiri HC	-284	6	45	-840
Nabweru HC	-1,784	522	N/A	-2,154
Kisenyi HC	N/A	-28	-6	-792
Komamboga HC	-22	N/A	-92	-32
Kawala HC	-15	46	28	N/A
Mpumude HC	-220	-344	-187	N/A
Walukuba HC	126	126	48	N/A
Buwenge Hosp	200	80	-32	N/A
Layibi Techo HC	N/A	-4	4	-8
Awach HC III	40	8	32	-24
Patico HC III	N/A	N/A	N/A	N/A
Lapainat HC III	20	-4	24	-28
Moyo Hosp	-10	-268	258	-526
Yumbe Hosp	N/A	N/A	N/A	N/A
Midigo HC IV	447	-401	848	-1,249
Kerwa HC III	-21	69	-90	159
Opia HC III	0	-3	3	-6
Kuluva Hosp	0	0	0	0
Bondo HC III	0	-8	8	-16
Bwera Hosp	813	-194	-112	0
Kagando Hosp	-130	-292	0	-100
Kichwamba HC III	N/A	N/A	N/A	N/A
Nyahuka HC III	85	-66	-160	-10
Rweikiniro HC	-2	-7	N/A	70
Kitwe HC	N/A	N/A	-3	0
Ruhama HC	120	112	-27	0
Nyamuyanja HC	0	0	1	0
Endiinzi HC	0	0	0	0
Bwizibwera HC IV	-4	3	1	-400
Rubaya HC III	100	-2	-1	N/A

Annex 9: CCE Equipment in the pipeline handled by UNICEF Supply Division

Source of funding	Type of equipment	Source of equipment	Is installation through service bundle?	Estimated implementation start
COVAX facility (GAVI)	• 114 x SDD refrigerators • 5 x Haier WIC room mono block 10m3 • 196 x UIFF Vaccine carriers	Haier PQS sources	Yes. • Beyond Logistics Ltd & • Kazi Foods – WIC	December 2021
HSS (GAVI)	• 251 x SDD refrigerators • 11 x on-grid refrigerators • 7 x Large WICR • 2 x WIF & 1 x Drive In envelope	Haier PQS sources	Yes. • Beyond Logistics Ltd	December 2021
Coverage and equity (GAVI)	• 246 x SDD refrigerators • 64 x on-grid refrigerators	Haier	Yes. • Beyond Logistics Ltd	December 2021
CCEOP (GAVI)	• 700 x SDD refrigerators • 49 x on-grid refrigerators	Haier	Yes. • Beyond Logistics Ltd	December 2021
Government of Japan	• 115 x SDD refrigerators • 61 x UIFF Cold Box • 2000 x UIFF Vaccine Carrier	B Medical PQS sources	No. • NMS	Q1 2022

Annex 10: Vaccine Supply Chain Pictorial Evidence

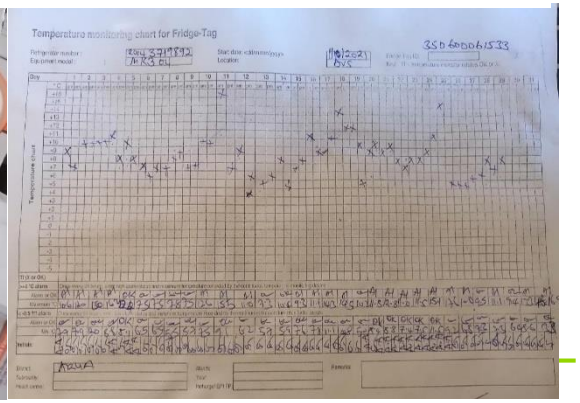
Layipi Techo Open burning

Yumbe wastage disposal site

CCE out of Gas in Kasese (Kichwamba HC)

Kichwamba HC Vaccines in Lab Fridge

Temperature excursion due to absence of power backups



Food stuff in CCE equipment at Mukono DVS

Poor vaccine storage Isingiro, damaged labels

Annex 11: – DVS Review Summary

Thematic Area		Vaccine Receipt and Recording					Distribution of Vaccines to HFs		Stock Reconciliation		Expiries	
#	Name of DVS	1. Does District track and record temperature on receipt of vaccines from the Port of Entry?	2. Does the District check the VVM status of vaccines on receipt and document the process?	3. Does the District receive pre-shipment alerts prior to delivery?	4.Has there been an incident when no adequate space is available to store the consignment?	5. Has District ever received damaged or vaccines with changed VVM status from the national store?	3. Is there infrastructure for cold-chain transportation?	6. Does the DVS keep buffer stock?	2. Were there any variances noted?	4. Does the store perform any variance investigations	1. Have you ever experienced any expiry of vaccines and related commodities during the period 1 July 2016 to 30 June 2021)	2. Are expiries physically removed from viable stock?
1	Kampala-DVS	No	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	N/A
2	Wakiso -DVS	No	Yes	Yes	No	Yes	Yes	No	Yes	No	No	N/A
3	Mukono DVS	No	Yes	Yes	No	No	Yes	No	No	Yes	No	N/A
4	Jinja - DVS	Yes	Yes	Yes	No	No	Yes	No	Yes	No	No	N/A
5	Gulu - DVS	No	Yes	Yes	No	Yes	Yes	No	Yes	No	No	Yes
6	Omoro -DVS	No	Yes	Yes	No	Yes	Yes	Yes	Yes	No	No	Yes
7	Moyo - DVS	No	Yes	Yes	No	Yes	Yes	Yes	Yes	No	No	Yes
8	Yumbe - DVS	No	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes
9	Arua - DVS	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes
10	Kasese - DVS	No	Yes	Yes	Yes	No	Yes	Yes	N/A	No	No	N/A
11	Bundibujo - DVS	No	Yes	Yes	No	Yes	Yes	Yes	Yes	No	No	N/A
12	Ntungamo DVS	No	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes
13	Isingiro - DVS	No	Yes	Yes	No	No	Yes	Yes	Yes	No	Yes	Yes
14	Mbarara - DVS	No	Yes	Yes	Yes	Yes	Yes	Yes	N/A	No	Yes	Yes
Totals												
Count of (Y)		**1**	**14**	**14**	**4**	**10**	**14**	**9**	**11**	**1**	**4**	**8**
Count of (N)		**13**	**0**	**0**	**10**	**4**	**0**	**5**	**1**	**13**	**10**	**0**
Count of (N/A)		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**6**
% if Yes		**7%**	**100%**	**100%**	**29%**	**71%**	**100%**	**64%**	**79%**	**7%**	**29%**	**57%**

	Thematic Area	Stockout (Select antigens)						Stock Counts		Trainings	
#	Name of DVS	Has the store ever experienced any stock outs of any vaccines from 1 July 2016 to date?	PENTA	PCV	IPV	ROTA	Other	1. Does the facility undertake stock counts/reconciliation for vaccines in its stores?	4. Are there any variances between the physical stock and the stock records?	1. Has the stores team received any training in vaccines / stock management)	2. Has the stores team received any support supervision from the UNEPI in the last 12 months?
1	Kampala-DVS	Yes	No	No	No	Yes	Yes	Yes	No	Yes	Yes
2	Wakiso -DVS	Yes	No	No	No	No	Yes	Yes	Yes	Yes	Yes
3	Mukono DVS	Yes	No	No	No	No	Yes	Yes	No	Yes	Yes
4	Jinja - DVS	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5	Gulu - DVS	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
6	Omoro -DVS	Yes	No	No	No	No	Yes	Yes	Yes	Yes	Yes
7	Moyo - DVS	No	No	No	No	No	No	Yes	Yes	Yes	Yes
8	Yumbe - DVS	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
9	Arua - DVS	Yes	No	No	No	Yes	No	Yes	Yes	Yes	Yes
10	Kasese - DVS	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
11	Bundibujo - DVS	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
12	Ntungamo DVS	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
13	Isingiro - DVS	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
14	Mbarara - DVS	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Totals											
Count of (Y)		**12**	**4**	**1**	**1**	**10**	**12**	**14**	**12**	**14**	**14**
Count of (N)		**2**	**10**	**8**	**13**	**4**	**2**	**0**	**2**	**0**	**0**
Count of (N/A)		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
% if Yes		**86%**	**29%**	**7%**	**7%**	**71%**	**86%**	**100%**	**86%**	**100%**	**100%**

Thematic Area		Storage Conditions															
#	Name of DVS	Are the vaccines entries done by batch no's to allow for batch tracking?	Is there sufficient cold chain space for the Vaccines?	Are there established min-max stock levels for the vaccines?	Is there a clear sign that shows that the vaccine store is a restricted area?	Are vaccines stored in clean and well-kept areas?	Are there thermometers and temperature loggers in the cold rooms?	Are the thermometers functional?	Are there written records of temperature monitoring?	If written records of temperature monitoring exist,	Are there remote temperature control systems with Alerts	Is there power back up (e.g., generators, Invertors; others) to sustain the operation of these temperature control systems?	Are all vaccines stored on shelves or pallets (No vaccines stored directly on the floor)?	Is the distance between stored vaccines to walls at least 30 cm? and between secondary packages for air circulation?	Are the labels of vaccines visible with Batch No on locations?	Does the vaccine store contain a separate and well identified space for damaged and expired vaccines?	Are there guidelines or job aids (should be on the wall) to ensure good storage conditions?
1	Kampala-DVS	Yes	No	No	Yes	Yes	N/A	N/A	Yes	No	No	Yes	Yes	No	Yes	No	Yes
2	Wakiso - DVS	Yes	Yes	No	Yes	Yes	N/A	N/A	Yes	No	No	Yes	Yes	Yes	Yes	No	Yes
3	Mukono DVS	Yes	Yes	No	No	No	N/A	N/A	Yes	Yes	No	Yes	No	No	Yes	No	Yes
4	Jinja - DVS	Yes	Yes	No	No	Yes	N/A	N/A	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes
5	Gulu - DVS	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
6	Omoro - DVS	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
7	Moyo - DVS	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes
8	Yumbe - DVS	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	No	Yes
9	Arua - DVS	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes
10	Kasese - DVS	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No	No	N/A	N/A	Yes	No	Yes
11	Bundibujo - DVS	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	No	Yes	N/A	N/A	Yes	No	Yes
12	Ntungamo DVS	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	N/A	N/A	Yes	No	Yes
13	Isingiro - DVS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	N/A	N/A	Yes	No	Yes
14	Mbarara - DVS	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	N/A	N/A	Yes	No	Yes
Totals																	
Count of (Y)		14	11	5	5	12	10	10	14	7	4	12	8	3	14	5	14
Count of (N)		0	3	9	9	2	0	0	0	7	10	2	1	6	0	9	0
Count of (N/A)		0	0	0	0	0	4	4	0	0	0	0	5	5	0	0	0
% if Yes		**100%**	**79%**	**36%**	**36%**	**86%**	**71%**	**71%**	**100%**	**50%**	**29%**	**86%**	**57%**	**21%**	**100%**	**36%**	**100%**

	Thematic Area	CCE Equipment's					Wastage Management				COVAX			
#	Name of DVS	1. Is the equipment installed in a safe and secure place?	2.Was the CCE at the store functional on the day of the visit?	3. Does the DVS have a Preventative Maintenance Plan? *Check availability of the plan*	4. Are Equipment maintenance activities conducted as per plan and documented?	5a. Has the equipment ever broken down since the day of installation?	6. Are there equipment maintenance logs? When was the last time the equipment was serviced?	1.Is there a Waste Management SOP at the Health Facility*? Ask for a copy of the SOP*	2.Does the Health Facility have access to an incinerator?	3. Has the facility team received any training in vaccine waste management?	1.Did the DVS received COVAX vaccines? If so, indicate which ones.	2.Did the district experience any stock out of COVAX vaccines?	3. Has the facility team received any training in Covid vaccine management?	3. Is the facility Covid vaccination data up to date? DHIS2 or another tool being used?
1	Kampala-DVS	Yes	Yes	No	N/A	No	No	No	No	Yes	Yes	Yes	Yes	Yes
2	Wakiso -DVS	Yes	No	No	N/A	No	No	No	No	Yes	Yes	Yes	Yes	Yes
3	Mukono DVS	No	Yes	No	N/A	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes
4	Jinja - DVS	Yes	Yes	Yes	No	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes
5	Gulu - DVS	Yes	Yes	No	N/A	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No
6	Omoro -DVS	Yes	Yes	No	N/A	No	No	Yes	Yes	No	Yes	Yes	Yes	No
7	Moyo - DVS	Yes	Yes	No	N/A	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No
8	Yumbe - DVS	Yes	Yes	Yes	N/A	No	No	No	No	Yes	Yes	Yes	Yes	No
9	Arua - DVS	Yes	Yes	Yes	N/A	No	No	No	Yes	Yes	Yes	Yes	Yes	No
10	Kasese - DVS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
11	Bundibujo - DVS	No	Yes	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes
12	Ntungamo DVS	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No
13	Isingiro - DVS	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	N/A
14	Mbarara - DVS	Yes	No	Yes	No	No	Yes	No	No	No	Yes	Yes	Yes	No
Total count of (Y)		12	12	8	2	7	5	4	7	10	14	14	14	6
Total count of (N)		2	2	6	4	7	9	10	7	4	0	0	0	7
Total count of (N/A)		0	0	0	8	0	0	0	0	0	0	0	0	1
% if Yes		**86%**	**86%**	**57%**	**14%**	**50%**	**36%**	**29%**	**50%**	**71%**	**100%**	**100%**	**100%**	**43%**

Annex 12: – Health Facility Review Summary

Thematic Area	Vaccine Receipt and Recording			Stock Reconciliation		Expiries			Stockout (Select antigens)				Stock Counts	
Name of HF	1. Does the Health Facility track and record temperature on receipt of vaccines from DVS?	2. Does the Health Facility check the VVM status of vaccines on receipt and document the process?	3. Have you ever received damaged or vaccines with changed VVM status from DVS?	2. Were there any variances noted?	4. Does the store perform any variance investigations? If yes, document the process	1. Have you ever experienced any expiry of vaccines and related commodities during the period 1 July 2016 to 30 June 2021)	2. Are expiries physically removed from viable stock?	3. How are expired vaccines disposed of?	Has the store ever experienced any stock outs of any vaccines from 1 July 2016 to date?	PENTA	PCV	ROTA	1. Does the facility undertake stock counts/reconciliation for vaccines in its stores?	4. Are there any variances between the physical stock and the stock records?
Mukono General Hosp	NO	YES	YES	N/A	N/A	NO	N/A	N/A	YES	N/A	N/A	YES	YES	N/A
Kojja HCIV	YES	YES	NO	YES	NO	NO	N/A	N/A	YES	YES	YES	YES	YES	YES
Nakifuma HCIV	NO	YES	NO	YES	NO	NO	N/A	N/A	YES	NO	YES	NO	YES	YES
Kasangati HC	NO	NO	NO	YES	NO	NO	N/A	N/A	YES	YES	YES	YES	YES	YES
Kakiri HC	NO	NO	NO	YES	NO	NO	N/A	N/A	YES	YES	NO	YES	YES	YES
Nabweru HC	YES	YES	N/A	YES	NO	NO	N/A	N/A	YES	NO	NO	YES	YES	YES
Kisenyi HC	YES	YES	NO	YES	NO	NO	N/A	N/A	YES	YES	YES	YES	YES	YES
Komamboga HC	NO	YES	YES	YES	NO	NO	N/A	N/A	NO	NO	NO	NO	YES	YES
Kawala HC	NO	YES	NO	YES	YES	YES	N/A	N/A	YES	YES	YES	YES	YES	YES
Mpumude HC	NO	YES	NO	YES	NO	NO	N/A	N/A	YES	YES	YES	YES	YES	YES
Walukuba HC	NO	YES	YES	YES	NO	NO	N/A	N/A	YES	YES	YES	YES	YES	YES
Buwenge Hosp	NO	NO	NO	YES	NO	NO	N/A	N/A	YES	NO	YES	NO	YES	YES
Layibi Techo HC	NO	YES	NO	YES	NO	NO	YES	N/A	YES	NO	NO	NO	YES	YES
Awach HC III	NO	YES	NO	YES	NO	NO	YES	N/A	YES	NO	NO	NO	YES	YES
Patico HC III	NO	YES	NO	YES	NO	NO	YES	YES	YES	NO	NO	NO	YES	YES
Lapainat HC III	NO	YES	NO	YES	NO	YES	NO	NO	NO	NO	NO	NO	YES	YES
Moyo Hosp	NO	YES	NO	YES	NO	NO	YES	N/A	NO	NO	NO	NO	YES	YES
Yumbe Hosp	NO	YES	NO	YES	NO	NO	YES	N/A	YES	NO	NO	NO	YES	YES
Midigo HC IV	NO	YES	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES
Kerwa HC III	NO	YES	NO	YES	NO	NO	YES	N/A	YES	NO	NO	YES	YES	YES
Opia HC III	NO	YES	NO	YES	NO	NO	YES	N/A	YES	NO	NO	NO	YES	YES
Kuluva Hosp	NO	YES	NO	YES	NO	NO	YES	N/A	YES	NO	NO	YES	YES	YES
Bondo HC III	NO	YES	NO	YES	NO	NO	YES	N/A	YES	YES	YES	YES	YES	YES
Bwera Hosp	No	Yes	no	yes	no	no	n/a	n/a	yes	yes	YES	yes	yes	Yes
Kagando Hosp	yes	Yes	no	yes	no	yes	no	DVS	yes	yes	YES	yes	yes	Yes
Kichwamba HC III	yes	Yes	no	N/A	no	no	n/a	n/a	n/a	yes	YES	yes	yes	n/a
Nyahuka HC III	yes	Yes	no	yes	no	yes	yes	DVS	yes	yes	YES	yes	yes	Yes
Rweikiniro HC	yes	Yes	no	yes	no	no	n/a	n/a	yes	yes	YES	yes	yes	Yes
Kitwe HC	yes	Yes	no	yes	no	no	n/a	n/a	yes	yes	YES	yes	yes	Yes
Ruhama HC	No	Yes	no	yes	no	no	n/a	n/a	yes	yes	YES	yes	yes	Yes
Nyamuyanja HC	No	Yes	no	yes	no	no	n/a	n/a	yes	yes	YES	yes	yes	Yes
Endiinzi HC	yes	Yes	no	yes	no	yes	yes	DVS	yes	yes	YES	yes	yes	Yes
Bwizibwera HC IV	yes	Yes	no	yes	no	yes	yes	DVS	yes	yes	YES	yes	yes	Yes
Rubaya HC III	yes	Yes	yes	yes	no	yes	yes	DVS	yes	yes	YES	yes	yes	Yes
Count of Y	11	31	4	32	1	7	13	1	29	19	20	23	34	31
Count of N	23	3	29	0	32	27	3	2	4	14	13	11	0	0
Count of N?A	0	0	1	2	1	0	18	26	1	1	1	0	0	2
Percentage of Yes	**32%**	**91%**	**12%**	**94%**	**3%**	**21%**	**38%**	**3%**	**85%**	**56%**	**59%**	**68%**	**100%**	**91%**

Thematic Area	Storage Conditions															
Name of HF	Are the vaccines entries done by batch nos to allow for batch tracing?	Are all the columns of the register filled correctly as required?	Is there sufficient CCE space PHC needs?	Are there established min-max stock position for the vaccines?	Is there evidence that the CCE is located in a restricted area?	Is the CCE normally locked?	Are vaccines stored in clean and well-kept areas?	Are there thermometers and temperature loggers in the CCE? Describe whether they are digital	Are there written records of temperature monitoring?	If written records of temperature monitoring exist, check to see	Has a temperature data logger or monitor being installed in the Health Facility Store	Is there power back up? (e.g. generators, Invertors; others) to sustain the operation of these temperature control systems	Are the labels of vaccines visible with batch No on locations?	Does the facility maintain a separate and well identified space for quarantined vaccines?	Does the vaccine contain a separate and well identified space for damaged and expired vaccines	Are guidelines or job aids (should be on the wall) to ensure good storage conditions available?
Mukono General Hosp	YES	NO	NO	NO	YES	YES	NO - In a corridor	YES	YES	YES	NO	YES	NO	NO	NO	YES
Kojja HCIV	YES	NO	YES	YES	YES	YES	YES	YES	YES	NO	YES	NO	YES	YES	YES	YES
Nakifuma HCIV	YES	YES	YES	NO	NO	NO	YES	YES	YES	YES	YES	NO	YES	YES	YES	YES
Kasangati HC	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO	YES	NO	YES	NO
Kakiri HC	YES	NO	YES	NO	YES	YES	YES	YES	YES	NO	YES	NO	YES	YES	YES	YES
Nabweru HC	YES	NO	YES	YES	NO	NO	YES	YES	YES	YES	YES	NO	YES	YES	NO	NO
Kisenyi HC	YES	NO	NO	NO	NO	NO	YES	YES	YES	NO	YES	YES	YES	YES	YES	NO
Komamboga HC	YES	NO	NO	NO	YES	YES	YES	YES	YES	NO	YES	NO	YES	YES	YES	NO
Kawala HC	YES	YES	NO	NO	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO
Mpumude HC	YES	NO	YES	NO	YES	YES	YES	YES	YES	YES	YES	NO	YES	YES	YES	YES
Walukuba HC	YES	NO	NO	NO	NO	YES	NO	YES	YES	NO	YES	NO	YES	YES	YES	NO
Buwenge Hosp	NO	NO	NO	NO	YES	YES	YES	YES	YES	NO	YES	YES	YES	YES	YES	YES
Layibi Techo HC	YES	YES	YES	NO	YES	YES	YES	YES	YES	NO	YES	NO	YES	YES	YES	YES
Awach HC III	YES	YES	YES	NO	YES	NO	YES	YES	YES	YES	YES	NO	YES	YES	YES	YES
Patico HC III	YES	YES	YES	NO	YES	NO	YES	YES	YES	NO	YES	NO	YES	YES	YES	YES
Lapainat HC III	YES	YES	YES	NO	YES	YES	YES	YES	YES	NO	YES	YES	YES	YES	YES	YES
Moyo Hosp	YES	YES	YES	NO	YES	YES	YES	YES	YES	NO	YES	YES	YES	YES	YES	YES
Yumbe Hosp	YES	YES	YES	NO	YES	YES	YES	YES	YES	NO	YES	NO	YES	YES	YES	YES
Midigo HC IV	YES	YES	YES	NO	YES	YES	YES	YES	YES	NO	YES	YES	YES	YES	YES	YES
Kerwa HC III	YES	NO	YES	NO	YES	YES	YES	YES	YES	NO	YES	NO	NO	YES	YES	YES
Opia HC III	YES	YES	YES	NO	YES	YES	YES	YES	YES	NO	YES	NO	YES	YES	YES	YES
Kuluva Hosp	YES	YES	YES	NO	YES	NO	YES	YES	YES	NO	YES	NO	YES	YES	YES	YES
Bondo HC III	YES	YES	NO	NO	YES	YES	YES	YES	YES	YES	YES	NO	YES	YES	YES	YES
Bwera Hosp	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	no	yes	no	no	yes
Kagando Hosp	yes	yes	yes	yes	no	no	yes	yes	yes	yes	no	no	yes	no	no	yes
Kichwamba HC III	yes	yes	yes	yes	no	no	yes	yes	yes	yes	no	no	yes	no	no	no
Nyahuka HC III	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	yes	yes	no	no	no
Rweikiniro HC	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	no	yes	yes	yes	yes	yes
Kitwe HC	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	no	yes	yes	no	no	yes
Ruhama HC	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	no	yes	no	no	yes
Nyamuyanja HC	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	no	yes	yes	no	no	yes
Endiinzi HC	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	no	yes	yes	no	no	yes
Bwizibwera HC IV	yes	yes	yes	yes	no	yes	yes	yes	yes	no	no	yes	yes	no	no	yes
Rubaya HC III	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	no	yes	no	no	no
Count of Y	33	23	27	13	27	26	32	34	33	14	22	13	32	22	21	25
Count of N	1	10	7	20	7	8	1	0	0	20	12	21	2	12	12	9
Count of N?A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Percentage of Yes	**97%**	**68%**	**79%**	**38%**	**79%**	**76%**	**94%**	**100%**	**97%**	**41%**	**65%**	**38%**	**94%**	**65%**	**62%**	**74%**

Thematic Area	Trainings		CCE Equipment						Wastage Management			COVAX			
Name of HF	1. Has the stores team received any training in vaccines / stock management)	2. Has the stores team received any support supervision from the UNEP in the last 12 months)	1. Is the equipment installed in a safe and secure place?	2.Was the CCE at the store functional on the day of the visit?	3. Does the DVS have a Preventative Maintenance Plan? *Check availability of the plan*	4. Equipment maintenance activities conducted as per plan and documented?	5a. Has the equipment ever broken down since the day of installation?	6. Are there equipment maintenance logs? When was the last time the equipment was serviced?	1.Is there a Waste Management SOP at the Health Facility? Ask for a copy of the SOP	2.Does the Health Facility have access to an incinerator?	3. Has the facility team received any training in vaccine waste management ?	1.Did the DVS received COVAX vaccines? If so, indicate which ones.	2.Did the district experience any stock out of COVAX vaccines?	3. Has the facility team received any training in Covid vaccines management	3. Is the facility Covid vaccination data up to date? DHIS or other tool being used?
Mukono General Hosp	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO	YES	YES	YES	YES	YES
Kojja HCIV	YES	YES	YES	YES	NO	NO	YES	NO	YES	YES	YES	YES	YES	YES	YES
Nakifuma HCIV	YES	YES	YES	YES	NO	NO	NO	N/A	NO	NO	YES	YES	YES	YES	NO
Kasangati HC	YES	YES	YES	YES	YES	YES	NO	NO	NO	NO	NO	YES	YES	YES	YES
Kakiri HC	YES	YES	YES	YES	NO	NO	NO	NO	YES	NO	YES	YES	YES	YES	NO
Nabweru HC	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO	NO	YES	YES	YES	NO
Kisenyi HC	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO	NO	YES	YES	YES	YES
Komamboga HC	YES	YES	YES	YES	NO	NO	NO	NO	NO	NO	NO	YES	YES	YES	YES
Kawala HC	YES	YES	YES	YES	YES	NO	YES	YES	YES	NO	YES	YES	YES	YES	YES
Mpumude HC	YES	YES	YES	YES	YES	YES	NO	NO	NO	YES	YES	YES	YES	YES	NO
Walukuba HC	YES	YES	NO	YES	NO	NO	NO	NO	NO	NO	YES	YES	YES	YES	NO
Buwenge Hosp	NO	YES	YES	YES	NO	NO	NO	NO	NO	NO	YES	YES	NO	YES	NO
Layibi Techo HC	NO	YES	YES	YES	NO	N/A	NO	NO	YES	NO	NO	YES	YES	NO	NO
Awach HC III	NO	YES	YES	YES	NO	N/A	NO	NO	YES	YES	NO	YES	YES	NO	YES
Patico HC III	NO	YES	YES	YES	NO	N/A	NO	NO	YES	YES	NO	YES	YES	NO	YES
Lapainat HC III	NO	NO	YES	YES	NO	N/A	NO	NO	YES	YES	NO	YES	NO	NO	YES
Moyo Hosp	NO	YES	YES	YES	NO	N/A	NO	NO	YES	YES	NO	YES	NO	NO	YES
Yumbe Hosp	NO	YES	YES	YES	NO	N/A	NO	NO	YES	NO	NO	YES	YES	NO	NO
Midigo HC IV	NO	NO	YES	YES	NO	N/A	NO	NO	YES	YES	NO	YES	NO	NO	YES
Kerwa HC III	NO	YES	YES	YES	NO	N/A	NO	NO	YES	YES	NO	YES	NO	NO	YES
Opia HC III	NO	YES	YES	YES	NO	N/A	NO	NO	YES	YES	NO	YES	NO	NO	YES
Kuluva Hosp	NO	YES	YES	YES	NO	N/A	NO	NO	YES	YES	NO	YES	YES	NO	YES
Bondo HC III	NO	YES	YES	YES	NO	N/A	NO	NO	YES	YES	NO	YES	YES	NO	YES
Bwera Hosp	no	yes	yes	yes	yes	no	yes	NO	no	yes	no	yes	yes	yes	no
Kagando Hosp	no	yes	no	yes	yes	no	yes	no	yes	yes	yes	yes	yes	yes	no
Kichwamba HC III	no	yes	no	no	no	no	yes	no	no	no	no	yes	yes	yes	no
Nyahuka HC III	no	yes	yes	yes	no	n/a	no	no	no	yes	no	yes	yes	yes	no
Rweikiniro HC	no	yes	yes	yes	yes	no	no	no	yes	no	no	yes	yes	yes	no
Kitwe HC	no	yes	yes	yes	yes	no	no	yes	yes	no	yes	yes	yes	yes	no
Ruhama HC	no	yes	yes	yes	no	no	no	no	yes	no	no	yes	yes	yes	no
Nyamuyanja HC	no	yes	yes	yes	no	n/a	no	no	yes	no	yes	yes	yes	yes	no
Endiinzi HC	no	yes	yes	yes	no	n/a	no	no	no	no	no	yes	yes	yes	no
Bwizibwera HC IV	no	yes	no	yes	no	no	no	no	yes	yes	no	yes	yes	yes	no
Rubaya HC III	no	yes	yes	yes	no	no	no	no	yes	yes	no	yes	yes	yes	no
Count of Y	11	32	30	32	7	2	5	2	21	16	11	34	28	23	15
Count of N	23	2	4	1	25	18	29	31	12	12	23	0	6	11	19
Count of N?A	0	0	0	0	0	14	0	1	0	0	0	0	0	0	0
Percentage of Yes	**32%**	**94%**	**88%**	**94%**	**21%**	**6%**	**15%**	**6%**	**62%**	**47%**	**32%**	**100%**	**82%**	**68%**	**44%**

Annex 13: Health Facility Immunisation Data Reconciliation

Antigen:	Penta							PCV						
HF Name	Tally sheets (a)	Monthly report (b)	Total No. of doses dispensed (c)	Variance 1 (b-a)	Variance 2 (c-a)	% variance 1	% variance 2	Tally sheets (a)	Monthly report (b)	Total No. of doses dispensed (c)	Variance 1 (b-a)	Variance 2 (c-a)	% variance 1	% variance 2
Mukono General Hosp	-	8,923	-	8,923	-	100%	100%	-	8,923	-	8,923	-	100%	100%
Kojja HCIV	-	895	2,601	895	2,601	100%	100%	-	901	3,105	901	3,105	100%	100%
Nakifuma HCIV	-	2,315	-	2,315	-	100%	100%	-	2,124	2,753	2,124	2,753	100%	100%
Kasangati HC	-	5,418	10,873	5,418	10,873	100%	100%	-	5,359	10,106	5,359	10,106	100%	100%
Kakiri HC	1,214	668	2,629	(546)	1,415	-82%	54%	1,190	703	2,320	(487)	1,130	-69%	49%
Nabweru HC	2,782	2,726	3,011	(56)	229	-2%	8%	2,752	2,720	3,230	(32)	478	-1%	15%
Kisenyi HC	-	3,733	5,850	3,733	5,850	100%	100%	-	3,733	4,484	3,733	4,484	100%	100%
Komamboga HC	2,089	4,111	14,635	2,022	12,546	49%	86%	2,522	4,093	11,874	1,571	9,352	38%	79%
Kawala HC	5,854	6,159	15,228	305	9,374	5%	62%	5,876	6,148	13,190	272	7,314	4%	55%
Mpumude HC	1,376	1,507	1,751	131	375	9%	21%	1,378	1,507	1,205	129	(173)	9%	-14%
Walukuba HC	765	1,335	1,658	570	893	43%	54%	767	1,237	1,302	470	535	38%	41%
Buwenge Hosp	651	824	1,974	173	1,323	21%	67%	671	824	1,791	153	1,120	19%	63%
Layibi Techo HC	272	76	274	(196)	2	-257.89%	0.73%	272	75	271	-197	-1	-262.67%	-0.37%
Awach HC III	1413	1509	1488	96	75	6.36%	5.04%	1415	1509	1475	94	60	6.23%	4.07%
Patico HC III	406	406	376	-	(30)	0.00%	-7.98%	406	406	-	0	-406	0.00%	100.00%
Lapainat HC III	550	534	678	(16)	128	-3.00%	18.88%	548	534	668	-14	120	-2.62%	17.96%
Moyo Hosp	506	506	488	-	(18)	0.00%	-3.69%	502	502	479	0	-23	0.00%	-4.80%
Yumbe Hosp	2493	3282	2868	789	375	24.04%	13.08%	2493	3479	2702	986	209	28.34%	7.74%

Antigen:	Penta							PCV						
Midigo HC IV	1391	1478	1110	87	(281)	5.89%	-25.32%	463	1478	1225	1015	762	68.67%	62.20%
Kerwa HC III	675	2203	1865	1,528	1,190	69.36%	63.81%	675	2203	1941	1528	1266	69.36%	65.22%
Opia HC III	708	669	622	(39)	(86)	-5.83%	-13.83%	707	660	619	-47	-88	-7.12%	-14.22%
Kuluva Hosp	1676	1670	1664	(6)	(12)	-0.36%	-0.72%	1676	1670	1664	-6	-12	-0.36%	-0.72%
Bondo HC III	1111	1,193	1,150	82	39	6.87%	3.39%	1097	1159	1162	62	65	5.35%	5.59%
Bwera Hosp	2,930	2,926	2,917	(4)	(13)	-0.14%	-0.45%	3136	3124	2938	-12	-198	-0.38%	-6.74%
Kagando Hosp	1,491	2,040	1,266	549	(225)	26.91%	-17.77%	1,645	1,940	690	295	-955	15.21%	-138.41%
Kichwamba HC III	703	821	0	118	(703)	14.37%	100.00%	709	824	0	115	-709	13.96%	100.00%
Nyahuka HC III	1,384	1,379	1,331	(5)	(53)	-0.36%	-3.98%	1,411	1,417	1,345	6	-66	0.42%	-4.91%
Rweikiniro HC	1,150	1,067	1,189	(83)	39	-7.78%	3.28%	1,162	1,067	1,167	-95	5	-8.90%	0.43%
Kitwe HC	2,030	2,230	2,256	200	226	8.97%	10.02%	2,030	2,230	2,248	200	218	8.97%	9.70%
Ruhama HC	721	811	708	90	(13)	11.10%	-1.84%	721	812	794	91	73	11.21%	9.19%
Nyamuyanja HC	625	509	666	(116)	41	-22.79%	6.16%	623	509	681	-114	58	-22.40%	8.52%
Endiinzi HC	932	1,017	805	85	(127)	8.36%	-15.78%	917	1,040	848	123	-69	11.83%	-8.14%
Bwizibwera HC IV	706	980	1,017	274	311	27.96%	30.58%	706	980	1,016	274	310	27.96%	30.51%
Rubaya HC III	430	547	566	117	136	21.39%	24.03%	424	547	602	123	178	22.49%	29.57%

Annex 14: – Delayed disbursements to districts

Year	Description of activity	Date disbursed	Date received	Amount UGX 2021	Amount *USD* 2021
2019	Implementation of ICHD	26-Apr-19	21-Jun-19	7,100,000	*1,997*
2019	Implement outreaches, deliver vaccines	22-Nov-19	30-Apr-20	45,470,043	*12,790*
2020	To support 140 Local Governments	27-Nov-19	31-Mar-21	246,050,000	*69,212*
TOTAL				**298,620,043**	***84,000***

Annex 15 : Inter district asset transfers not recorded/reconciled

No.	Equipment	Serial Number per Aster Register	Location per Master Register	Actual Location	Cost of the fixed asset in UGX	Equivalent cost in *USD*	Grant No.
1	FRIDGE	20161179722	Gulu DVS	OMORO DVS	2,012,096	*559*	HSSI
2	FRIDGE	20150562357	Gulu DVS	OMORO DVS	2,903,360	*806*	HSSI
3	FRIDGE	20150973520	Gulu DVS	OMORO DVS	2,903,360	*806*	HSSI
4	FRIDGE	20151281500	Kyalumba HC III	KASESE DVS	10,364,320	*2,879*	HSSI
5	FRIDGE	201511281476	Bwera Hospital	KASESE DVS	2,903,360	*806*	HSSI
6	FRIDGE	2015050562266	Rwashamire HC IV	Ruhama HC III	2,903,360	*806*	HSSI
	TOTAL				**23,989,856**	***6,664***	

Annex 16 : Physical assets not traceable to the MoH Global Fixed Assets Register

District	No.	Equipment	Serial Number of Equipment at the DVS/HF
Ntungamo	1	ICELINED FRIDGE	SN:20042804228
	2	ICELINED FRIDGE	SN:20025000364
	3	DEEPFREEZER	SN:20031705253
	4	DEEPFREEZER	SN:2010481245
	5	DEEPFREEZER	SN:20104841274
	6	DEEPFREEZER	SN:72021691
	7	DEEPFREEZER	SN 64114260
Mbarara	1	fridge	SN:20144740541
	2	fridge	SN20150562303
	3	fridge	SN 20042804248
	4	DEEPFREEZER	SN 20181607856
	5	DEEPFREEZER	SN 20031705233
Isingiro	1	Fridge	SN:20104533601
	2	Fridge	SN:20151281439
Wakiso	Kasangati HC IV		
	1	Freezer	72021677
	2	Mobile Phone	FITUG-GAVI-PH038
	3	Ice Liner	20042804278
	Nabweru HCIII		
	1	MK 304 Fridge	205629

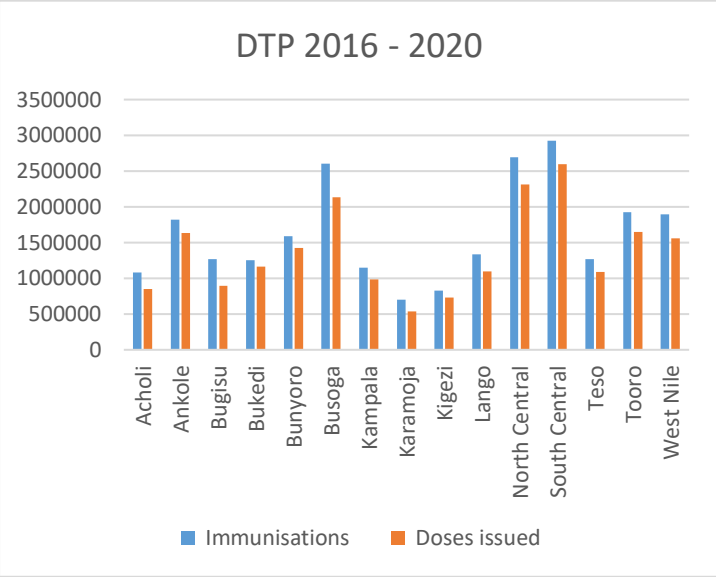
Annex 17 – DQIP Status

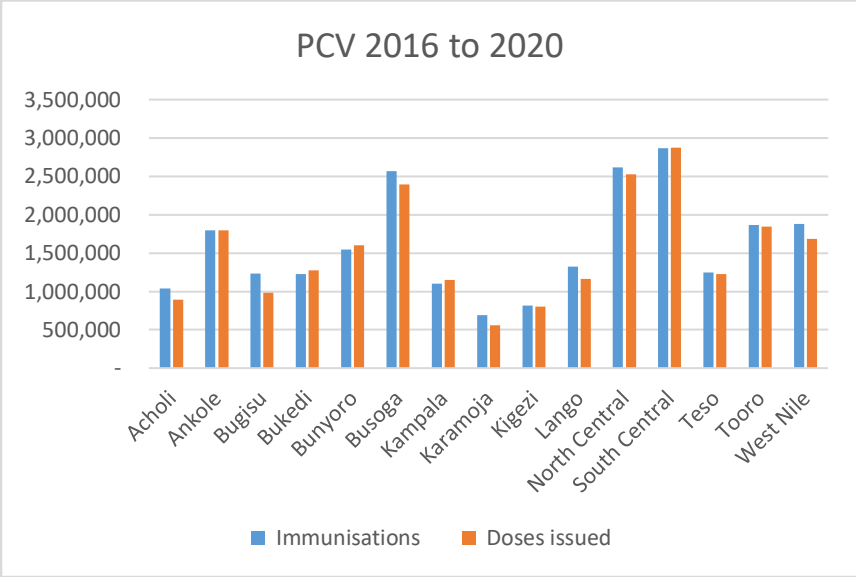
Strategies	Interventions	Key Activities	DUE (planned for 2019/2020/2021)	STATUS (Completed/Ongoing/Not Started)	COMMENT
STRATEGIC OBJECTIVE 1: INCREASE QUALITY AND USE OF DATA IN DECISION MAKING	Enhance the integration of data quality review and cleaning activities for EPI and other HMIS indicators	Sensitize EPI persons and stakeholders at national, regional, district and facility on importance of having quality EPI data.	Y	Partially	Conducted through the Community Health Department and DIT training done for the different regions.
		Make the discussion of EPI data mandatory in all data cleaning workshops at district, regional and national levels.	Y	Not done	Data Cleaning should be done as part of partner support who usually focus on other disease programmes- Not yet done
	Ensure harmonization of EPI tools within DHIS2	Develop and disseminate action plan and timeline for roll out of new tools and elimination of old tools	Y	Done	The Revised tools were all removed and new tools distributed through the Division of Health Information (DHI).
		Ensure centrally controlled development, editing, printing of HMIS tools.	Y	Done	This is controlled centrally through DHI. Approvals are done at Central level before Mass printing.
	Develop and disseminate manual, guidelines and tools for data quality for EPI	Technical assistance for development of a data element description manual and SOP	Y	No evidence	The Manuals and SOPs are still in draft form.
		Dissemination of the manual and SOP on quality control checks	Y	Not done	Manuals not yet printed
		Develop unique codes that allow grouping of districts and HFs into categories of challenge areas to enhance M&E in those districts	Y	No evidence	The Programme mapped the programme staff to focus on specific Regions. The focus is on supporting districts improve on their EPI outcomes
	Ensure functional data improvement teams (DIT)	Establish national data quality improvement champions	Y	Partially	This is done through continued capacity building of DIT at Regional level.
		Roll out data improvement teams at regional and district levels	Y	Partially	DIT have maintained their presence and support to the regions. Whereas per DIT these have been rolled out, no output has been provided because of this activity
		Implement data quality improvement at health facility level	Y	No evidence	Quarterly funds sent to the districts to support Data quality Improvement
	1e. Strengthen reporting of EPI data by the private sector	Dialogue with private sector health facilities on EPI reporting and register them on DHIS2	Y	No evidence	Through the DHI and the district health office, the private sector health provides are provided with access to report through DHI2

Strategies	Interventions	Key Activities	DUE (planned for 2019/2020/2021)	STATUS (Completed/Ongoing/Not Started)	COMMENT
		Train their staff on HMIS tools and DHIS2 platform, and institute incentives for reporting	Y	No evidence	Training conducted integrate with the private health facilities whenever the resources are adequate
		Provide regular support supervision and mentorship on reporting in DHIS2	Y	Partially	Done as part of the integrated support supervision conducted in collaboration between UNEPI and DHI. Whereas support supervision was undertaken, there is no evidence of mentorship regarding the data component
STRATEGIC OBJECTIVE 2: TO INCREASE QUALITY AND USE OF DATA IN DECISION MAKING	Enhance capacity for quality data analysis and use at all levels	Conduct training on data analysis and use for central level and district level staff	Y	Partially	Integrated with DIT and other EPI training as part of the modules.
		Develop EPI dashboard in DHIS2	Y	Partially	Dashboards are deployed in the DHIS2 system but not full cascaded to the lower levels for use. Orientations have been done for some districts as part of a module in a comprehensive EPI training
	Ensure participation of partners and stakeholders in EPI meetings	Develop and disseminate a meeting planner	Y	Done	Planner developed
		Provide facilitation required for the meeting	Y	Partially	Supported mainly by partners WHO and CHAI, & PATH
	Determine catchment area and target populations for all HFs to obtain reliable estimates of denominators for calculating coverage and performance levels	Conduct pilot study in a sample of HFs to determine catchment area and target populations.	Y	Not Done	
		Evaluate the results of the pilot studies	Y	Not Done	
	Establish an E-registry	Finalize the establishment of the E-registry	Y	Partially	Through the SPT system some few districts have started to use the e-Registry
STRATEGIC OBJECTIVE 3: TO	Expand the server capacity for rapid DHIS2 processes	Install a big data server with accessories for MoH/DHI	Y	Not Done	Some support has come to DHI/ICT through external funds

Strategies	Interventions	Key Activities	DUE (planned for 2019/2020/2021)	STATUS (Completed/Ongoing/Not Started)	COMMENT
STRENGTHEN THE NATIONAL HMIS TO SUPPORT DATA QUALITY IMPROVEMENT	Regularly update the national Health Facility Master List (HFML) to ensure completeness	Review and update existing Health Facility Master List	Y	Partially	Ongoing work done and DHI is finalizing the Master facility list and develop and Health facility eRegistry
		Develop unique codes for health facilities; codes that have district and sub-county sub-codes.	Y	Partially	This is part of the ongoing work for developing a Health facility eRegistry
		Print and disseminate update master list	Y	Not Done	This will be done after finalization
		Online Health Facility Master List	Y	Not Done	Ongoing work done and DHI is finalizing the Master facility list and develop and online Health facility eRegistry
	Ensure regular supply of up-to-date and harmonised HMIS tools	Estimate the average number of HMIS tools used quarterly, semi-annually and or annually	Y	No evidence	Joint LIOs and M&E review meeting still ongoing monthly and includes the RIOs on quarterly basis (For implementing States)
		Create an accountability system for HMIS tools	Y	No evidence	
	Improve tracking of child vaccination	MoH to dialogue with NIRA to create an equivalent of National ID Number (NIN) for children right at birth and have that number used for the child immunization	Y	Not Done	
	Advocate for enough qualified data personnel at all levels	MoH to dialogue with MoFEP and MoPS and review staffing norms and recommend enough data personnel.	Y	Not Done	
	Diversify internet providers to ensure wider coverage especially for upcountry remote areas	Engage multiple internet providers for DHIS2 platforms especially upcountry remote areas	Y	Not Done	
STRATEGIC OBJECTIVE 4: TO IMPROVE FINANCIAL SUSTAINABILITY FOR THE EPI DATA AGENDA	Advocate for increased commitment and effective financing for data improvement agenda	Engage and lobbying development partners to support the implementation of DQIP	Y	Partially	Some partners like AFENET, CHAI, WHO and UNICEF support some components of the DQIP especially through TA to support districts. This has also been reflected through the ODK forms for integrated support supervision that are being developed and rolled out for tracking and capturing COVID 19 vaccination data.
		Mobilize local/domestic funding for EPI activities in general and DQIP in particular	Y	No evidence	Through the above partners

Annex 18 : Admin immunization Coverage data vs Vaccine Doses Issued to the Regions (Cumulative 2016-2020)





Annex 19: Review of SPT Implementing Districts/Facilities

District	Mukono			Jinja			Mbarara		Isingiro	
Health Facility	Nakifuma HC	Koja	Mukono General Hosp.	Buwenge General Hosp.	Mpumude HCIV	Walukuba HCIV	Rubaaya HC III	Bwizibwera HCIV	Nyamuyanja HC IV	Endiizi HCIII
Check whether SPT is being used in conjunction with the manual forms	No	No	Yes	Yes	N/A	N/A	No	Yes	N/A	N/A
Check whether job aids on how to use SPT are available in the HFs.	No	No	Yes	No	N/A	N/A	No	No	N/A	N/A
Training on SPT has been carried out. Indicate dates.	Yes	Yes	Yes	Yes	N/A	N/A	Yes	Yes	N/A	N/A
Check a sample to check whether unique identifiers are used for patient	Yes	Yes	Yes	Yes	N/A	N/A	Yes	Done	N/A	N/A
Confirm the data review process after scanning prior to upload?	Yes	Yes	Yes	Yes	N/A	N/A	Yes	Yes	N/A	N/A
Confirm if they have adequate stock of the smart papers and whether they have experienced any stock outs. If so, for how long?	No	No	No	No	N/A	N/A	Yes	Yes	N/A	N/A
Confirm how SHIFFO coordinates with CHWs/VHTs for follow up of patients	No	Yes	No	No	N/A	N/A	Yes	Yes	N/A	N/A
District level:					N/A	N/A			N/A	N/A
At district level, confirm how the data scanned is input into DHIS2	No	No	No	No	N/A	N/A	No	No	N/A	N/A
Confirm if there have been any supervision visits by UNEPI team specifically looking at SPT	No	No	Yes	No	N/A	N/A	No	No	N/A	N/A

Annex 20: Questioned costs from Districts (UGX)

	Voucher No.	Payment	Grant	Exceptions noted	Unsupported	Inadequately supported	Ineligible	District Comments	Audit Response
MUKONO DISTRICT									
31/10/2017	PV-S02486	4,800,000	HSS	There was no activity report or acknowledgement of receipt of funds by the beneficiaries		4,800,000			Management did not provide the additional documents
5/5/2016	PV-S00825	14,127,991	IPV	There were no activity logs to confirm that the vehicle/ fuel was used for programme activities. Only a receipt was attached.		14,127,991			Management did not provide the additional documents
2/10/2021	-	12,944,000	HSS	There was no activity report or acknowledgement of receipt of funds by the beneficiaries		12,944,000			Management did not provide the additional documents
Total		**45,999,983**			-	**31,871,991**	-		
NTUNGAMO DISTRICT									
13/11/2020	32682070	5,000,000	HSS	**Radio spot:** There was no LPO, no activity report, no job card and hence no evidence of details of the spot adverts for the campaign. In addition, funds were advanced to an individual instead of directly paying to radio station as required by government practices, rendering the payment an irregular cash payment with insufficient accountabilities		5,000,000			Management did not provide the additional documents
Total		**5,000,000**				**5,000,000**			

BUNDIBUGYO DISTRICT									
22/10/2019	25885488	7,329,000	HSS	**Supply of fuel;** The fuel was purchased as a block figure but no breakdown of activities to which the fuel relates. There was no fuel consumption schedule and details of how the fuel was consumed	7,329,000			Breakdown for activities broken down and fuel consumption sheet printed and attached to the accountabilities.	Not seen. UGX 7,329,000 is inadequately supported.
22/10/2019		54,500,000	HSS	GAVI funds to be refunded due to not being utilised for the intended purpose			54,500,000		Management did not provide the additional documents
Total		**72,659,000**			**7,329,000**		**54,500,000**		
ARUA DISTRICT									
18/10/19	GAVI/10/19/19	16,440,000	MR CAMPAIGN	No accountability on file availed for audit.		16,440,000		The accountabilities were in a separate file. They are available for review.	No meeting minutes attached. Payment sheets reviewed totalling UGX 17,880,000.
18/10/19	GAVI/10/19/17	650,650	MR CAMPAIGN	No fuel consumption schedule and vehicle log sheets on file availed for audit.		650,650		The fuel consumption schedule and receipt is attached.	No vehicle log sheets availed for review. Receipt and consumption report from filling station reviewed.
18/10/19	GAVI/10/19/16	1,789,200	MR CAMPAIGN	No fuel consumption schedule and vehicle log sheets on file availed for audit.		1,789,200		The fuel consumption schedule and receipt is attached.	No vehicle log sheets availed for review. Receipt and consumption report from filling station reviewed.

18/10/19	GAVI/10/19/15	10,079,300	MR CAMPAIGN	No fuel consumption schedule and vehicle log sheets on file availed for audit. UGX 5,880,000 budgeted for this item contrary to UG 10,079,300 paid.		10,079,300		The fuel consumption schedule and receipt is attached and available to be presented to the verification team. The fuel was consumed as budgeted.	No vehicle log sheets availed for review. Receipt and consumption report from filling station reviewed.
18/10/19	GAVI/10/19/14	2,795,100	MR CAMPAIGN	No fuel consumption schedule and vehicle log sheets on file availed for audit. UGX 126,000 budgeted for this item contrary to UGX 2,795,100 paid.		2,795,100		The fuel consumption schedule and receipt is attached are now available to be presented to the verification team.	No vehicle log sheets availed for review. Receipt and consumption report from filling station reviewed
16/10/19	GAVI/10/19/04	2,800,000	MR CAMPAIGN	No accountability on file availed for audit.	2,800,000.00			The documents are available and can be presented to the verification team.	Management did not provide the additional documents.
11/10/2019	GAVI/10/19/03	4,102,000	MR CAMPAIGN	No accountability on file availed for audit.		4,102,000		The documents are available and can be presented to the verification team.	No meeting minutes. Related to training of DHT and subcounty trainers for a total of 42 participants. Payment sheets, attendance sheets and receipts seen for hall hire and stationary reviewed.
11/10/2019	GAVI/10/19/01	4,846,000	MR CAMPAIGN	No accountability on file availed for audit.		4,846,000		The documents are available and can be presented to the verification team.	Management did not provide the additional documents
Total		**215,382,250**			**2,800,000-**	**40,702,250**	**-**		
GULU DISTRICT									
2/10/2019	Not indicated	3,024,000	MR CAMPAIGN	Vehicle log sheets (to confirm utilisation of fuel for the intended activities)		3,024,000			Management did not provide the additional documents

				not attached to the vouchers.					
20/09/10	HEL/04/11/19	5,200,000	MR CAMPAIGN	Vehicle log sheets (to confirm utilisation of fuel for the intended activities) not attached to the vouchers.		5,200,000			Management did not provide the additional documents
Total		**41,224,000**			**-**	**8,224,000**			
MOYO DISTRICT									
21/02/20	28047473	5,000,000	HSS	Vehicle logs for fuel worth UGX 1,717,500 not maintained. LPO not raised, no invoice. Delay in payment of allowances. Funds for ICHD outreach sessions transferred out of Single Treasury Account to individual in Feb 2020, activity carried out in March, April and May 2020 but payments made to beneficiaries in June 2020.		1,717,500			Management did not provide the additional documents
25/02/20	28106801	5,000,000	HSS	Vehicle logs for fuel consumption not maintained. District level support supervision was carried out on 6/12/2019 as per Attendance sheets though report prepared states that activity was carried out from 12th to 14th November 2019.		340,000			Management did not provide the additional documents
21/01/20	28047470	5,000,000	HSS	No LPO, invoice, receipt, fuel consumption schedule, vehicle logs	1,970,000				Management did not provide the additional documents

21/02/20	28047467	550,252	HSS	No LPO, invoice, receipt, fuel consumption schedule, vehicle logs	550,252				Management did not provide the additional documents
24/02/21	34691979	2,872,000	HSS	Vehicle logs for fuel consumption not maintained. LPO not raised, no invoice. Direct procurement (Fuel was budgeted for at a rate of 4,000 per litre. However, Petrol was purchased at 4,400 and Diesel at 4,100)		1,212,000			Management did not provide the additional documents
Total		**18,422,252**			**2,520,252**	**3,269,500**			
OMORO DISTRICT									
9/12/2019	02/12/1019	450,000	MR CAMPAIGN	Vehicle log sheet not attached. Fuel worth UGX 176,000 only had receipt attached.	274,000	176,000		It was an oversight not to attach vehicle log sheet and fuel receipt worth 274,000. However, both vehicle log sheet and receipt worth 274,000 are available for inspection.	Unable to verify validity for the following reasons: 1) It's not possible to match them to the receipts that we reviewed as the receipts have not been attached and; 2) The signature for the district transport officer is missing
24/02/21	44230	420,000	MR CAMPAIGN	Vehicle log sheets not attached. Fuel consumed receipt attached.		420,000		It was an oversight not to attach vehicle log sheet. However, vehicle log sheet is available for inspection.	Unable to verify their validity for the following reasons:1) It's not possible to match them to the receipts that we reviewed as the receipts have not been attached and; 2) The signature for

									the district transport officer is missing
24/02/21	44233	310,000	MR CAMPAIGN	Vehicle log sheets not attached. Fuel consumed receipt attached.		310,000		it was an oversight not to attach vehicle log sheet. However, vehicle log sheet is available for inspection.	unable to verify their validity for the following reasons: 1) It's not possible to match them to the receipts that we reviewed as the receipts have not been attached; and 2) The signature for the district transport officer is missing
23/03/21	Not Indicated	430,000	MR CAMPAIGN	Vehicle log sheets not attached. Fuel consumed receipt attached.		430,000		it was an oversight not to attach vehicle log sheet. However, vehicle log sheet is available for inspection.	unable to verify their validity for the following reasons: 1) It's not possible to match them to the receipts that we reviewed as the receipts have not been attached; and 2) The signature for the district transport officer is missing
30/10/19	43756	2,520,000	MR CAMPAIGN	Receipt attached; consumption schedule attached. Vehicle log sheets not maintained and attached		2,520,000		it was an oversight not to attach vehicle log sheet. However, vehicle log sheet is available for inspection.	unable to verify their validity for the following reasons: 1) It's not possible to match them to the receipts that we reviewed as the receipts have not been attached; and

									2) The signature for the district transport officer is missing 3) No vehicle log sheets attached to supporting documents.
30/10/19	17/20/2019	2,520,000	MR CAMPAIGN	Receipt attached; consumption schedule attached. Vehicle log sheets not maintained and attached		2,520,000		it was an oversight not to attach vehicle log sheet. However, vehicle log sheet is available for inspection.	unable to verify their validity for the following reasons: 1) It's not possible to match them to the receipts that we reviewed as the receipts have not been attached; and 2) The signature for the district transport officer is missing 3) No vehicle log sheets attached to supporting documents.
30/10/19	43754	3,150,000	MR CAMPAIGN	Receipt attached; consumption schedule attached. Vehicle log sheets not maintained and attached		3,150,000		it was an oversight not to attach vehicle log sheet. However, vehicle log sheet is available for inspection.	unable to verify their validity for the following reasons: 1) It's not possible to match them to the receipts that we reviewed as the receipts have not been attached; 2) The signature for the district transport officer is missing 3) No vehicle log sheets attached to supporting documents

14/01/20	43834	3,500,000	MR CAMPAIGN	Receipt attached; consumption schedule attached. Vehicle log sheets not maintained and attached		3,500,000		it was an oversight not to attach vehicle log sheet. However, vehicle log sheet is available for inspection.	unable to verify their validity for the following reasons: 1) It's not possible to match them to the receipts that we reviewed as the receipts have not been attached; and 2) The signature for the district transport officer is missing 3) No vehicle log sheets attached to supporting documents.
Total		**13,300,000**			**274,000**	**13,026,000**			
YUMBE DISTRICT									
20/04/21	HEAAPRIL-21-GAVI-05	609,000	HSS	Vehicle logs not attached to the fuel consumption schedule. Funds utilised after activity. Payment voucher raised in IFMS in April 2021, but the Supplier received funds on 3/8/2021.		609,000			Management did not provide the additional documents

22/01/21	HEAAPRIL21-GAVI-03	2,000,000	HSS	Item budgeted for was SDA for stakeholders. However, amount was used to pay for meals and refreshments that were not budgeted for. Further, the meals and refreshments plus hall hire did not an have LPO. 6% WHT was not deducted off the supply.			2,000,000		Management did not provide the additional documents
22/01/21	HEAFEB-GAVI-02	3,000,000	HSS	96 persons of the 100 planned were paid leaving 120,000 unaccounted for. SDA paid to attendees at a rate of UGX 30,000 contrary to Section 4.0 of the HSSII Financial guidelines	120,000		1,000,000		Management did not provide the additional documents
22/01/21	HEAAPRIL21-GAVI-03	500,000	HSS	Receipt attached; however, items were not charged to the stores for issuance		500,000			Management did not provide the additional documents
22/01/21	HEAAPRIL21-GAVI-03	250,000	HSS	6% WHT was not deducted off the supply (it was part of supply of meals)		250,000			Management did not provide the additional documents
22/01/21	HEAAPRIL21-GAVI-03	150,000	HSS	No rate of airtime paid per day utilised per day. Payment made as a lumpsum.		150,000			Management did not provide the additional documents

16/10/20	HEAOCT20-GAVI-01	8,080,000	HSS	In Yumbe Hospital, attendance sheets were signed for one day. In Yumbe Hospital, Aliapi HCII, Ambelechu HCII, Apo HCIII, Abiriamajo HCII and Barakala HC, Allowances were paid for up to four days for some staff yet budget was for a 2-day activity		8,080,000			Management did not provide the additional documents
16/10/20	HEAOCT20-GAVI-01	4,040,000	HSS	In Yumbe Hospital, attendance sheets were signed for one day. In Yumbe Hospital, Aliapi HCII, Ambelechu HCII, Apo HCIII, Abiriamajo HCII and Barakala HC, Allowances were paid for up to four days for some staff yet budget was for a 2-day activity		4,040,000			Management did not provide the additional documents
Total		**18,629,000**			**120,000**	**13,629,000**	**3,000,000**		
MADI-OKOLLO DISTRICT									
		3,280,000	MR CAMPAIGN	Payment voucher not on file reviewed. UGX 2,009,000 not budgeted for.		2,009,000		The voucher No GAVI/10/19/08 was one request for payment of Allowances and Transport refund for health workers totalling to 138,900,000.0 UGX. This payment voucher is available on the file with all the relevant	No payment voucher seen.

								accountabilities for review.	
		2,492,000	MR CAMPAIGN	Payment voucher not on file reviewed. UGX 1,763,000 not budgeted for.		1,763,000		The voucher No GAVI/10/19/08 was one request for payment of Allowances and Transport refund for health workers totalling to 138,900,000.0 UGX. This payment voucher is available on the file with all the relevant accountabilities for review	No payment voucher seen. Payment sheets reviewed agree to total amount disbursed.
		5,040,000	MR CAMPAIGN	Payment voucher not on file reviewed. UGX 940,000 not budgeted for.		940,000		The voucher No GAVI/10/19/08 was one request for payment of Allowances and Transport refund for health workers totalling to 138,900,000.0 UGX. This payment voucher is available on the file with all the relevant accountabilities for review	No payment voucher seen. Payment sheets reviewed agree to total amount disbursed.
		21,080,000	MR CAMPAIGN	Payment voucher not on file reviewed.		21,080,000			No payment voucher seen. Payment sheets reviewed agree to total amount disbursed.

		22,900,000	MR CAMPAIGN	Payment voucher not on file reviewed. UGX 2,120,000 not budgeted for.	2,480,000	540,000		The voucher No GAVI/10/19/08 was one request for payment of Allowances and Transport refund for health workers totalling to 138,900,000.0 UGX. This payment voucher is available on the file with all the relevant accountabilities for review	No payment voucher seen. Instances noted where participants signed for single day and collected allowances for 2-3 days. Additional allowances days not signed for are considered as unsupported.

		55,964,000	MR CAMPAIGN	Payment voucher not on file reviewed. UGX 6,454,000 not budgeted for.		6,454,000		The voucher No GAVI/10/19/08 was one request for payment of Allowances and Transport refund for health workers totalling to 138,900,000.0 UGX. This payment voucher is available on the file with all the relevant accountabilities for review.	No payment voucher seen. Payment sheets reviewed agree to total amount disbursed.
		554,000	MR CAMPAIGN	Item not planned for. Payment voucher not on file reviewed	10,000	544,000		The available funds budgeted for the activity were limited and therefore could not address the desired number of activities. Hence the limited.	No payment voucher. UGX 10,000 unsupported.
					2,490,000	**33,330,000**			
GRAND TOTAL		**312,088,493**			**15,533,252**	**149,052,741**	**57,500,000**		

Annex 21: Good practices Noted - Pictorial Evidence

Organised DVS – Jinja

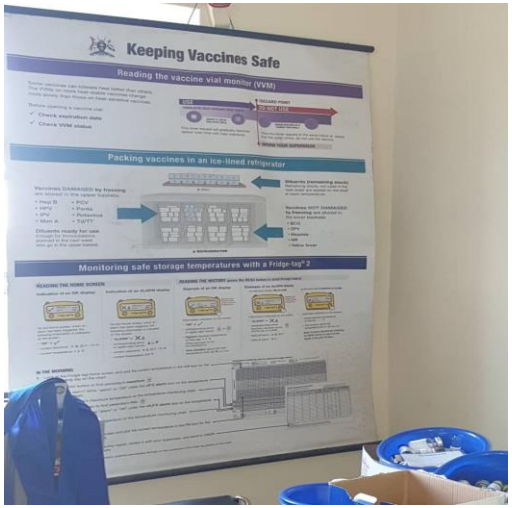
Power stabilisers- Noted at all HFs visited

Pallets for cold boxes - Kawaala HCIV

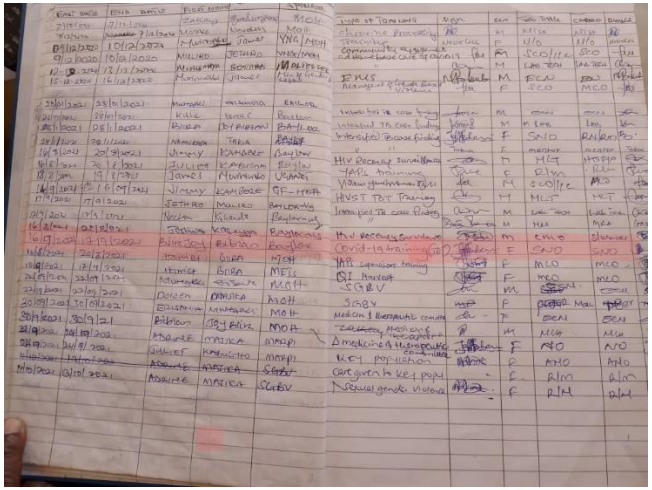
Organised COVID vaccination outreaches – Kampala

Isolated COVID 19 Vaccine vials – Komamboga HC

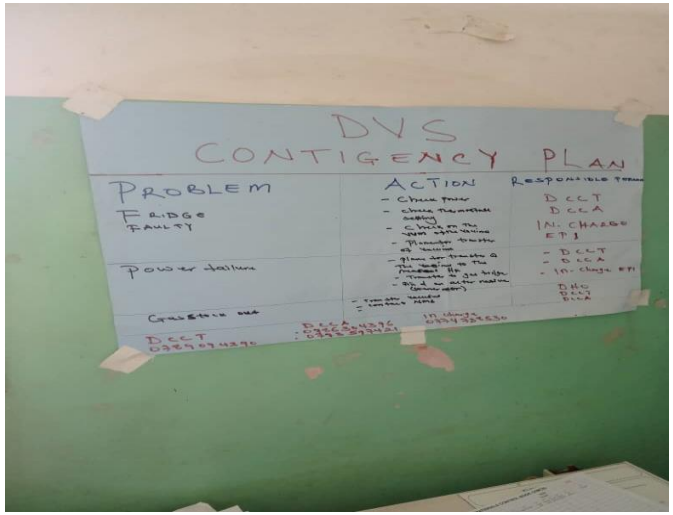
SOPS for Vaccines management – Mukono & Koja



Training logbook – Kasese DVS

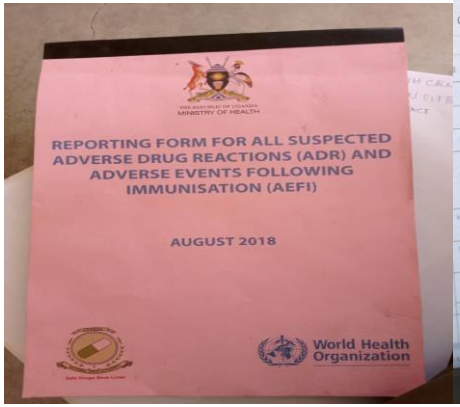


CCE – DVS contingency plan Bundibugyo

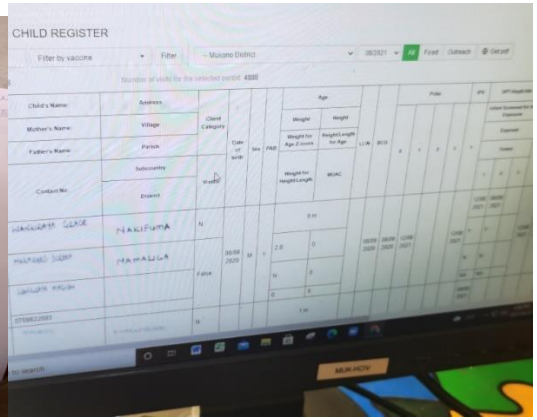


Digital fridge tags noted across all regions visited

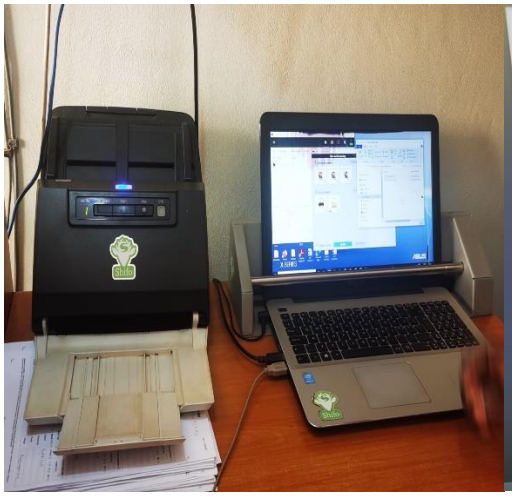
Immunisation adverse reactions register – Kasese



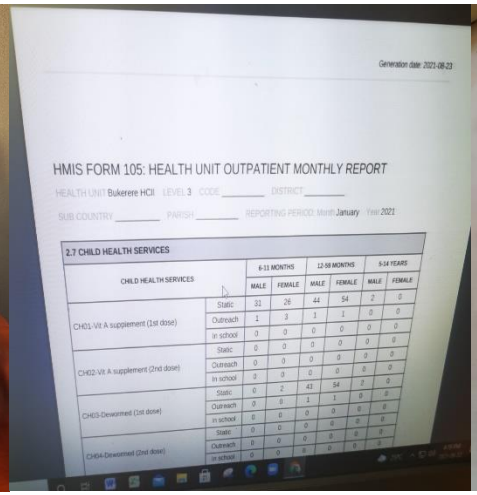
Sample SPT child register – Mukono General Hosp.



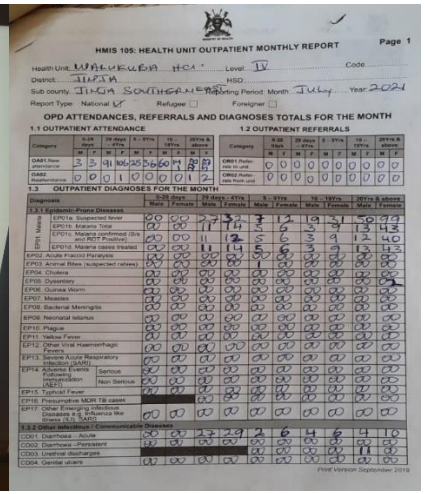
SHIFO Scanning Centres operational – Mukono Gen



SPT Generated monthly report – Mukono Gen



Walukuba HCIV Monthly report



Vaccines and injections materials control book – Mukono DVS