2023

Gavi- Malawi Joint Appraisal Report

DECEMBER 2023

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Background

The Joint Appraisal (JA) is an essential element of Gavi's regular monitoring and performance management (MPM). The JA has evolved to align with Gavi 5.1 strategic shifts.

The JA is an annual, country-led, multi-stakeholder review/discussion that represents an important opportunity for countries to engage Gavi Alliance partners and other key stakeholders on the annual progress of routine immunization programs against national goals and objectives, and to discuss how Gavi support is contributing to this progress. Key stakeholders involved in the country's immunization program should be represented at the Joint Appraisal, including Civil Society Organizations (CSOs).

As an integrated part of Gavi's portfolio management process, the JA discussion reviews Gavi's contribution to immunization programme performance. Malawi's JA discussion took place from the 3rd to the 5th of October 2023 at Sunbird Lilongwe Hotel in the Capital City of Malawi. The period under review was 2021 to mid-2023. The appraisal focused on Routine Immunisation performance including a review of delivery of COVID-19 vaccines and the impact of the COVID-19 pandemic on immunisation. A key feature of the JA was the joint discussion about the promising practices, challenges met, and future needs for improving immunization performance with a focus on reaching zero-dose children and missed communities.

The JA process for Malawi involved preparatory work where data was assembled and analyzed in advance of the discussion to determine the trends and their implications for the EPI program. The JA involved different stakeholders including MOH EPI, PIU, Community Health Department; Gavi, WHO, UNICEF, GPEI, USAID, NORAD, CDC, JSI, Village Reach, and Save the Children.

The approaches that were used for the exercise included PowerPoint presentations from EPI pillar leads, Gavi and EPI partners, and, group discussions. This Joint Appraisal report has been structured as follows;

- Section 1: Country situation: Overview of the performance of Gavi support & discussion on progress and challenges faced
- Section 2: Looking forward: Summary of discussion points and follow-up actions

The information and indicators contained in section 1 are to do with the country's immunization programme performance and Gavi's support mostly based on standard reporting. This is part of Gavi's monitoring and performance management framework, which will inform ongoing portfolio discussions, the JA, as well as discussions at Gavi's High-Level Review Panel (HLRP).

Section 1 focuses on reporting against the Grant-linked Key Performance Indicators developed during Full Portfolio Planning (FPP) / Equity Accelerator Funding (EAF) applications. For these indicators, results were analysed as (1) the absolute change in the indicator as a trend over time and; (2) the percent change in the indicator against the baseline value from the FPP or EAF application. Changes over time were assessed against the end of the grant target set during the application stage.

The below set of crosscutting questions were considered to structure qualitative information:

Cross-cutting Questions

1. What factors have facilitated or impeded progress?
2. What promising practices and/or innovations have emerged?
3. What key contributions have partners made to drive performance?
4. What are the top risks that should be mitigated?

Section 1 forms the analytical foundation to structure the JA discussion with Section 2 summarising the outcome of the JA and follow-up actions.

The outcome of this Joint Appraisal will include a joint assessment of promising practices, perceived challenges, and opportunities for Gavi investments, and should elaborate future actions with clear targets and assigned responsibilities which are owned by the full set of in-country stakeholders.

Introduction to Country Malawi

Malawi is a landlocked country in South-Eastern Africa that was formerly known as Nyasaland. It is bordered by Zambia to the west, Tanzania to the north and northeast, and Mozambique to the east, south, and southwest. Malawi spans over 118,484 km^2 and the 2018-2050 population Projections report has a 2023 estimated population of 19,809,511 where 9,599,265 are males and 10,210,246 are females (as of January 2023). These estimates include 8,134,458 children 0-14 years representing 44 percent of which 4,080,598 are males and 4,053,860 are females **[1]**. This means that almost half of Malawi's population is less than 15 years old. Malawi's capital (and largest city) is Lilongwe. Its second-largest is Blantyre, its third-largest is Mzuzu and its fourth-largest is its former capital, Zomba. It's comprised of 3 administrative regions, namely, the North, the South, and the Central regions. The country is subdivided into five health zones notably, the Northern Zone, Central East, Central West, Southeast, and South-West. These health zones were established to act as administrative points for several districts. The Health Zones are managed by the Zone Manager who oversees health activities and implementation within the districts under his jurisdiction. The country is one of the world's least-developed countries. The economy is heavily based on agriculture, and it has a largely rural and rapidly growing population. The Malawian government depends heavily on outside aid to meet its development needs, although the amount needed (and the aid offered) has decreased since 2000. The Malawian government faces challenges in its efforts to build and expand the economy, to improve education, healthcare, and environmental protection, and become financially independent worsened by widespread unemployment. According to the World Bank figures the Gross Domestic Product (GDP) annual growth rate has dropped from 2.1% in 2021 to 0.9% in 2022 **[2].**

Malawi has a low life expectancy of 58.07 years, of which 56.64 years for men and 59.54 years for women **[3]** years. Under-five mortality of 84 per 1000 live births [4] is still high despite the strides that have seen the drop in child and infant mortalities **[4].** The under-five mortality has remained high due to the persistence of the high mortality rate in the neonates.

Map of Malawi showing Health Zones

Figure 1: Map of Malawi Showing the Five Health Zones

Malawi Immunisation Background

The Expanded Programme on Immunization (EPI) was officially established in Malawi in 1979 about five years later after the WHO establishment of the EPI program in 1974. At the time, Malawi's policy regarding EPI was to immunize all children under 12 months old with the goal of reducing morbidity and mortality due to six preventable diseases namely measles, tuberculosis, whooping cough, diphtheria, poliomyelitis, and tetanus.

Since 2002, the EPI has been introducing new vaccines to protect children and the entire population from different vaccine-preventable diseases such as Pentavalent vaccines, Invasive Pneumococcal Disease PCV13, Rotavirus Diarrhea, Measles-Rubella, Typhoid Conjugate Vaccine, Malaria Vaccine, Human Papilloma Virus HPV, and COVID-19. These new vaccines have contributed to the reduction of diseases in both children and adults in the country.

Routine immunization services in Malawi are mainly delivered through static and outreach clinics. During Supplementary Immunization Activities (SIA), temporary sites and mobile clinics are added on top of the static and Outreach clinics. Wi There are 863 EPI reporting sites in Malawi with approximately and cold chain points totals 1100.The number of outreach clinics ranges from 4400 to around 5500 in a month. The main purpose of establishing outreach clinics and temporary sites is to bring the vaccination services as close as possible to the clients.[5]

The implementation of immunization services is guided by the National Health Policy and the third Health Sector Strategic Plan (HSSP III, 2023- 2030). Through the Essential Health Package (EHP), the HSSP III defines priority health interventions for the entire health sector, including immunization. At a more operational level, the EPI program has been guided by the country's Comprehensive Multi-year Plan cMYP 2017-2022, however, from 2024 Immunization Program implementation will be guided by the National Immunization Strategy (NIS 2023-2030) which is under development.

Since the creation of the epi programme, Malawi has made tremendous progress in ensuring that the majority of children under the age of 5 years are vaccinated with support from donors, the private sector, and civil society **[6].** Unfortunately, the multi-prone challenges faced since 2020 have led to the decline of routine immunization. Section 1 provides a further explanation of how this decline is being addressed. As of today, the Malawi national immunization schedule has incorporated 13 vaccines targeting both infants and adults as indicated on the chart below.

Malawi Immunization Schedule

Age of Administration of Vaccine	Vaccine Type
At birth or first contact	BCG
At birth up to 2 weeks	OPV 0
At 6 weeks	OPV1, DPT-HepB-Hib1, PCV1 and Rota1
At 10 weeks	OPV2, DPT-HepB-Hib2, PCV2 and Rota2
At 14 weeks	OPV 3, DPT-HepB-Hib3, and PCV3, IPV
At 5, 6, 7 months	Malaria vaccines
At 9 months	Measles Rubella 1, Typhoid Conjugate Vaccine
At 15 months	Measles Rubella 2
At 22 months	Malaria Vaccines
At 9 to 14years	HPV vaccine
First contact (15-45 yrs and Pregnant women)	Td 1
At 4 weeks after Td1	Td 2
At 6 months after Td2	Td 3
At 1 yr after Td3	Td 4
At 1 yr after Td 4	Td 5

12 yrs and Above	Covid 19 Vaccine

Table 1: Immunization Schedule for Malawi

(Source: Ministry of Health, Expanded Programme of Immunisation, 2023.)

Section 1: Country situation: overview of performance of support & discussion on progress, challenges faced

A. Immunisation Programme Performance – Zero-dose, Routine immunisation coverage, Vaccine introductions, Campaigns, and Outbreak response

I. PROGRESS ON ZERO DOSE CHILDREN AND UNDER-IMMUNISED CHILDREN VACCINATIONS

Learning Question 1: What progress has been made to reach zero-dose and under-immunised children with vaccinations?

Indicator	2019	2020	2021	2022	% change, 2019-2021	% change, 2020-2021
Number of zero dose children at national level[1]	21,881	37,374	35,777	78,668	+64% (+13,896)	-4.3% (-1,597)
Drop out from DTP1 to DTP3 at national level[1]	2%	1%	2%	3%	+64%	+9%
Drop out from DTP1 to last routine dose of MCV at national level[1]	22%	20%	21%	33%	-4.5%	5%
Percentage of health facilities that reported no stock-outs for the full year for DTP[2]	NA	NA	100%	100%	NA	NA

[1]Source: WHO/UNICEF Estimates of National Immunisation Coverage (WUENIC), July 2022. https://immunizationdata.who.int/listing.html?topic=coverage

[2]Country data as reported to WHO/UNICEF through the electronic Joint Reporting Form (eJRF), July 2022. https://www.who.int/teams/immunization-vaccines-and-biologicals/immunization-analysis-and-insights/global-monitoring/who-unicef-joint-reporting-process /

Country comments :

Like in many other countries, The COVID-19 pandemic affected Routine Immunisation services in 2020 and beyond. Poor utilization and accessibility of health services due to the lockdown, fear of contracting COVID-19, and being vaccinated with COVID-19 vaccine.

Following the 2020 C19 pandemic, Malawi has faced multiple additional challenges that have the impacted routine immunisation programme, for example:

- Cyclone Freddy in March 2023 (a state of disaster was declared in the 14 districts – half of the total 29 districts - that were severely affected by the cyclone.). The UN World Food Programme in Malawi estimated the cyclone to have dumped the equivalent of 6 months of rainfall in 6 days. 5.9 million out of the approximate 20 million population was affected and more than 1,400 people died.
- Tropical storm Ana in January 2022 and Tropical Cyclone Gombe in March 2022 resulted in 64 fatalities and almost 1 million people affected.
- Cholera outbreaks: while annual cholera outbreaks are common in Malawi with peak periods during the rainy season, the one that started on 28 Feb 2022 and peaked in Jan 2023 was particularly heavy, leading to almost 60,000 cases and more than 1,700 fatalities. Initially limited to the flood-affected areas of the southern region, the outbreak spread to the north of the country in August 2022, and by the end of October 2022 all 29 districts were affected. The government declared a national public health emergency on 5 Dec 2022.
- Polio outbreaks: A case of imported Type 1 wild poliovirus (WPV1) was confirmed in Lilongwe district in February 2022, following which an outbreak was declared. This was the first case since 1992 and it was also the first detection of a WPV1 case in Africa since 2016, after the African continent had been declared free of wild poliovirus since 2020. Since the outbreak declaration, the country has identified four more cases of circulating vaccine-derived poliovirus 1 (cVDPV1) in children under 15 and circulating vaccine-derived poliovirus 2 (cVDPV2) in the environmental samples collected in one Lilongwe site. The cases are in Blantyre (1), Mulanje (2) and Phalombe (1).
- Economic crisis & food insecurity: The 2023 IPC analysis for Malawi indicates that 3 million people representing 15% of the total population are experiencing high acute food insecurity IPC Phase 3, Crisis. This has had a prolonged impact on the ongoing fuel crisis and shortage, a direct cause of the acute forex shortage in the country.

During the same time, despite these significant challenges, the Malawi EPI programme achieved:

- Application finalization and launch of the integrated TCV/bOPV/MR/Vit A campaign in May-Jun 2023: admin. coverage of 77% for TCV (target 9 months -14 years), 86.6% for bOPV (target 0-59 mo) and 83.2% MR (target 9-59 mo).
- CCEOP grant Years 4-5 implementation to a total of CCE replaced 173 (21%), CCE expansion 314 (38%) and CCE extension 341 (41%)
- Cholera campaigns: Two oral cholera vaccination campaigns, from May to Jun 2022 and Nov 2022 to Jan 2023, have allowed for the administration of nearly 5 million doses to above 1 year in 21 districts. An “End Cholera” campaign was launched in Feb 2023, to increase access to appropriate cholera prevention and treatment health care services; increase access to safe water, sanitation, and improved food hygiene; and strengthen risk communication, community involvement, and social mobilization in cholera prevention and treatment. Efforts will continue to focus on prevention and mitigation as the rainy season is about to start,

- Polio campaigns: In response to the 2022 case detection, MOH initiated 6 polio vaccination campaigns (4-day house-house):
- HSS reallocation/acceleration plan: together with Gavi and partners EPI finalized the HSS reallocation to better align with Gavi 5.0 and key EPI priorities. The revised HSS budget will focus investments on 1. restoring routine coverage (MRS) and reaching zero dose (ZD), 2. data quality (DQ) 3. revitalizing the HPV vaccination programme (HPV) 4. strengthening vaccine management and supply chain (EVM).

Routine immunization coverage unfortunately declined last year as compared to previous /C19 years (WUENIC data) and additional efforts are underway to restore it:

Vaccine/Year	2019	2020	2021	2022
DTP1	97	85	85	89
DTP3	95	94	93	86
MCV1	92	90	90	82
MCV2	75	75	74	60
Rota	92	91	92	85
PCV3	95	93	93	87

Table 2:Routine Immunization Coverages from 2019- 2022

Despite the decline in routine immunization coverages and the corresponding increase in zero dose and under-immunized children, the country continues to address the coverage challenges by conducting Periodic Intensified Routine Immunisation (PIRI) activities in low-performing districts to boost immunization coverage. Additional targeted efforts include:

With support from WHO, capacity building in the provision of Catch-up Immunisation and Missed Opportunities for Vaccination (MOV) have been provided for Health workers in Lilongwe, Ntcheu, and Blantyre, and 1,472 EPI and non-EPI staff were trained. 5,000 copies of Job aids on immunization schedules and 5,000 immunization wheels providing critical information schedules and eligible ages were printed for health workers to support the identification of under-immunized and zero-dosed children.

Using Integrated Campaigns, Malawi has leveraged funding support for new vaccine introduction to provide catch-up immunization against Polio, and measles-rubella and also provided Vitamin A supplementation. In addition, Civil Society Organisations in some districts have adopted mother care groups as pro-vaccination mentors in communities to promote vaccine uptake.

EPI revised the My Village My Home (MVMH) tool to include Malaria and HPV vaccines and integrated it with Vit A and Deworming with support from partners. MVMH is a tool for tracking the immunization status of Children at the Village level through village heads and Volunteers.

Capacity building for health workers was conducted in 10 districts as the route to track ZD children using the MVMH tool at the community level.

In collaboration with partners, EPI conducted door-to-door mobilization for vaccination using HSAs in Dowa district to identify the missing and zero-dose children. Several rounds of community dialogue/meetings were organized with the community and faith leaders, and health centre staff for reaching out to zero-dose and missed children. With support from partners, Community Rapid Assessment was done (CRA) using Behavioural and Social Drivers (BeSD) for Vaccination. This was a crucial effort to increase vaccine uptake. Two rounds of CRA were executed to understand the routine immunization uptake together with the COVID-19 vaccine. The assessment helped to understand the drivers of vaccination including socioeconomic and geographical barriers, transportation and distance to clinics, vaccination hours, and vaccinator attitudes and behaviours. Faith-based leaders influenced the family's decision to vaccinate the children and adolescents.

II. MANAGEMENT OF VACCINE STOCKS

Learning Question 2: How well are vaccine stocks being managed?

Indicator(s):

- Number of Health facilities that reported no stock-outs of DTP containing vaccine
- Number of health facilities that reported no stock-outs of Measles-containing vaccine
- Closed vial wastage of DTP-containing vaccine

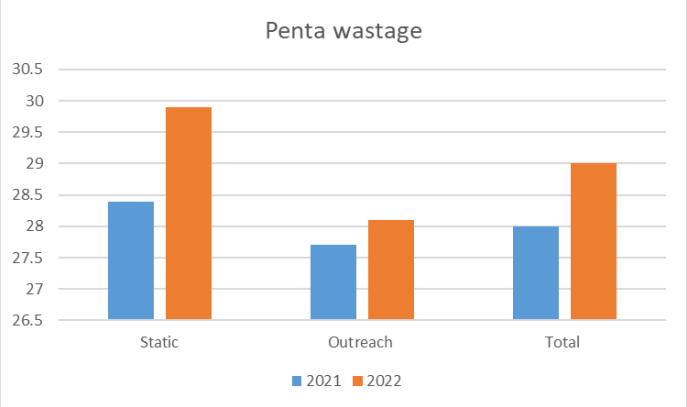


Figure 2: Graph showing Open Vial wastage for Penta comparing static and Outreach Clinics between 2021 and 2022

Source: DHIS2

Country comments :

Malawi has a total of 29 districts and 863 health facilities that are expected to report every month. Stock out rates for all antigens and stock availability in these health facilities are monitored on a monthly basis through the Open Logistic Management Information System (oLMIS) and electronic Health Information Network (eHIN). The data in the systems is presented as stock availability; thus, the system displays the network (eHEN) stock status of all antigens in the facilities.

Stock availability is calculated as a percentage and represents the number of facilities that reported no stock out of pentavalent or measles-containing vaccines. In the years 2021 and 2022, no facility reported a stockout of DTP and measles-containing vaccines.

In terms of closed vial wastage for pentavalent, total wastage between 2021 and 2022 is consistently within the WHO-recommended closed vial wastage rates of below 1% at the national level. In 2021 and 2022, the total closed vial wastage was 0.0072 and 0.036 respectively (eHIN data).

III. VACCINE FORECASTING, CONSUMPTION, STOCK OUT AND WASTAGE

Learning Question 3: Are vaccines being consumed at rates that are in-line with approved forecasts? What are the key drivers of consumption compared to expectation (e.g., stock outs, increased coverage, and wastage)?

Indicator(s):

- Percentage of forecasted Annual Vaccine Requirement (AVR) consumed in prior period (by antigen)

Graphs:

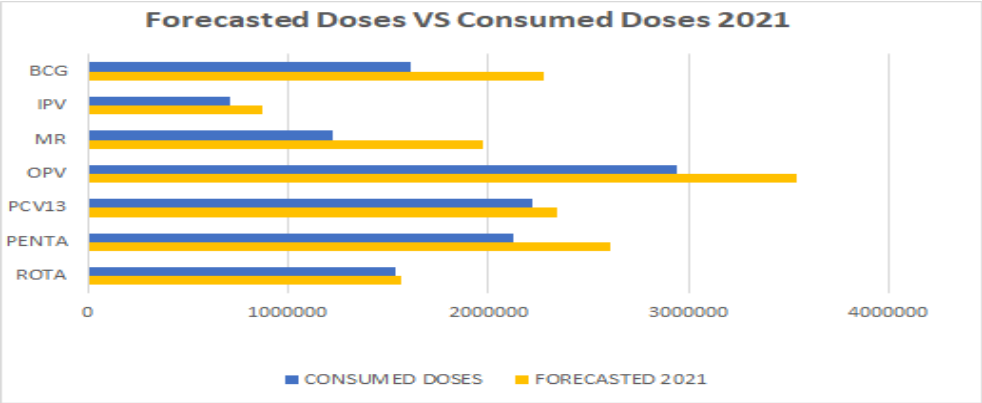


Figure 3: Graph showing forecasted doses of vaccine versus consumed doses in 2021

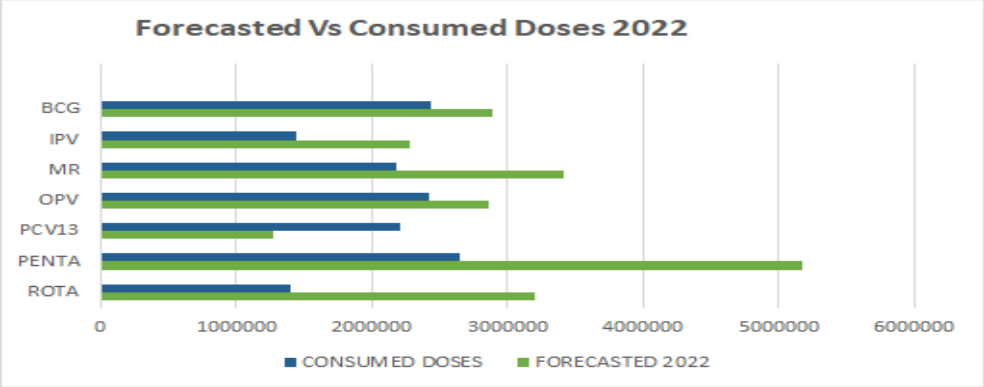


Figure 4: Graph showing Forecasted Doses of Vaccine versus Consumed doses in 2022

The average percentage of forecasted doses vs consumed doses for pentavalent in 2021 and 2022 was 62%.

Forecasted doses are way higher than the consumed doses as some of the forecasted doses may have been in the pipeline and received later in the other year leading to the observed difference. At the same time, not all forecasted doses were received as planned.

Country comments:

The annual requirement is calculated based on the target population, which is obtained from the Malawi Government National Statistics Office (NSO) projections. The target population figures inserted in the WHO forecasting tool are used to calculate the total number of doses for each antigen, quantities of injection materials, and shipment schedules. Immunization coverage decreased in 2021 due to COVID-19 and vaccine hesitancy, which reduced consumption.

An evidence-based approach through research or quality data has to be taken to establish whether wastage or stock-outs affect consumption too.

The other challenge with forecasting doses is inaccuracies in catchment population estimates. Previous experience has shown significant under/ overestimation of district population estimates provided by the National Statistical Office compared to other data sources including administrative data. Through the Gavi HSS grant support, The Kamuzu University of Health Sciences has conducted a denominator study, whose results will be released in 2024, to help understand the population estimates challenges.

IV. COUNTRY CO-FINANCING COMPLIANCE

Learning Question 4: Is the country complying with co-financing requirements in a timely manner?

Indicator(s):

- Country co-financing obligation met in a timely manner

Graphs:

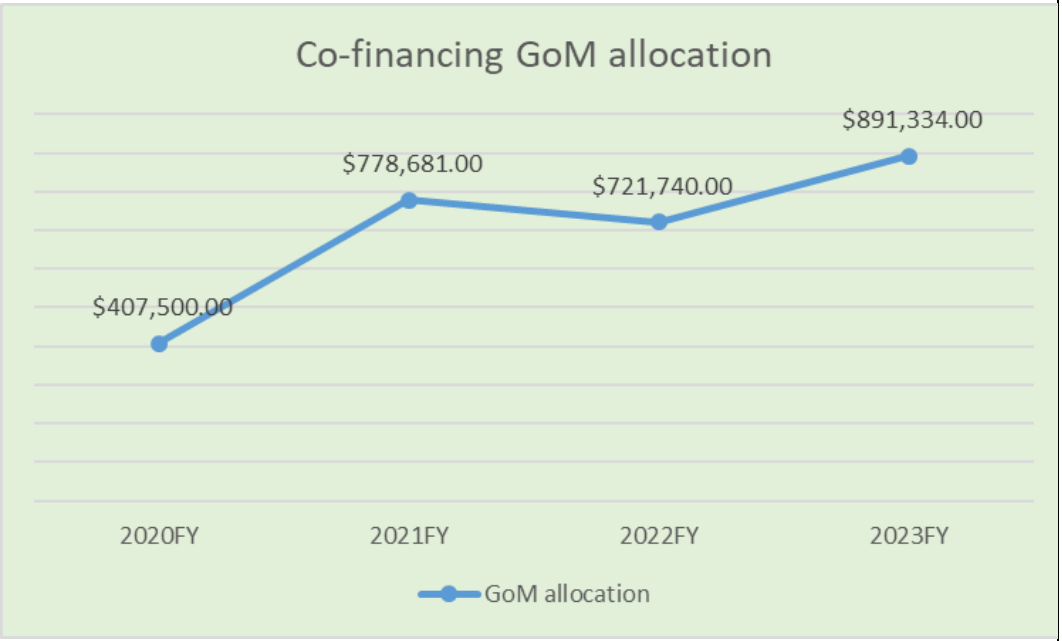


Figure 5: Trend of co-financing by Malawi Government since 2020

Country comments:

Malawi has never defaulted in its co-financing requirements. The GoM the government of Malawi, commits to the Co-financing obligation on time every year.

V. NEW VACCINE INTRODUCTION AND THE COVERAGE

Learning Question 5: If applicable, have new vaccines been introduced as planned and if not, why? Is coverage of recently introduced vaccines being scaled-up as expected?

NB: Report on Post 2019 JA

Indicator(s):

- Number of routine introductions completed over number of targets set for the calendar year
- Coverage of recently introduced vaccines

Graphs:

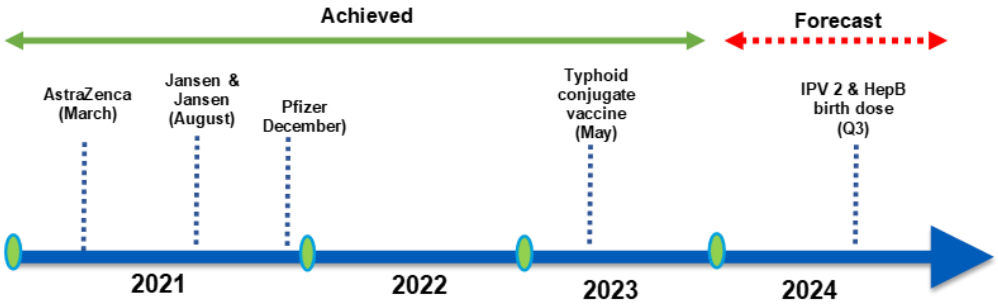


Figure 6: Vaccine Introduction roadmap Since 2022

Year	Vaccine	Planned	Implemented	Coverage
2021	COVID-19 Vaccine	Mar	Mar	As of August 2023: **At least 1 dose:** 27% of total population **Completed dose series:** 23% of total population
2023	Typhoid conjugate vaccine campaign	May	May	Administrative coverage -77% Post campaign coverage survey - 79.6% against targeted 95%
2023	Typhoid conjugate vaccine introduction	June (was originally planned	June	Coverage data available in 2024

NB:In addition, forecasted routine introduction & campaign dates were validated during the JA discussion			for 2022 yet delayed due to integrati on with the MR catch-up		

Table 3: Performance and schedule of Vaccine Introductions since 2021

Country comments:

Vaccine Introductions

a. Covid-19 Vaccine

The country introduced COVID-19 vaccine on 11 March 2021 at a ceremony launched by his excellency the president Dr Lazarus Chakwera at a function which took place in Zomba district. At first we targeted frontline health workers, social workers, people with comorbidities and the elderly aged 60 years and above. The introduction of the vaccine followed the timely development of the COVID-19 National Vaccine Deployment Plan (NVDP).

Due to the low uptake of the COVID-19 vaccine. EPI and partners had come with various innovative vaccine delivery strategies to reach more people and also to prevent vaccine expiries. COVID - 19 express strategy, includes mobile vaccination, community sensitisation through dramas and radio and fixed addition sites like markets, Vaccinate My Village, Finish a vial (FAV) (incentivizing the vaccinators upon completion of each vial of vaccine) which helped significantly in planning, implementation and data management of COVID-19 vaccinations. The use of vaccine delivery strategies such as COVID-19 Vaccine Express strategy which facilitated vaccinations in hard-to-reach areas. These strategies registered some success such as making vaccines available at doorstep, reduce out of pocket costs for marginalised communities to prevent unnecessary travel for pregnant women and high-risk populations, reduce vaccine hesitancy when the vaccine is taken at the doorstep and provide on spot answers to myths and misconceptions.

Despite these interventions COVID - 19 vaccination coverage remained suboptimal at 18% against a set target of 50% for entire population due to:

1. Challenges in reaching expected targets for COVID-19 due to myths, misconceptions and misinformation
2. Fears of safety of new vaccines
3. Multiple emergencies with vaccination campaigns leading to vaccination fatigue
4. Inadequate healthcare workers to support with vaccination
5. Inconsistent and inadequate data capturing and reporting by facilities and districts

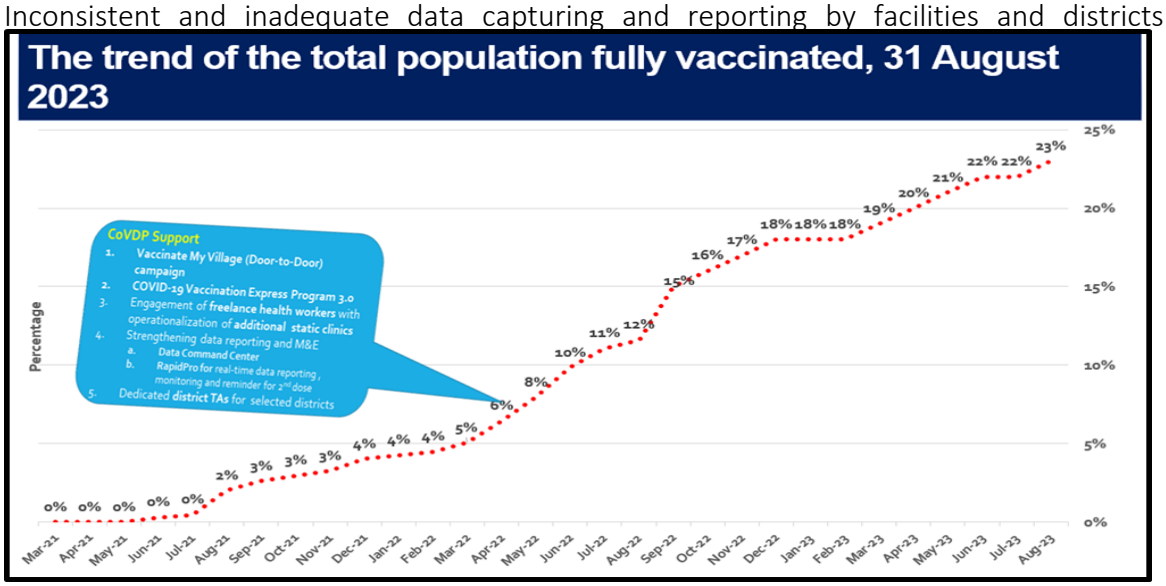


Figure 7:Trend of C19 vaccination till August 2023

Figure 8: Covid-19 Vaccination at a mobile site (Left), Door-to- door Vaccination within a village in Malawi (Middle) and Mobilisation of clients for Covid-19 using branded vehicles with support from Gavi Covid-19 Delivery Support (CDS)

b) Typhoid Conjugate Vaccine (TCV)

Malawi is one of the countries with a high typhoid burden with an estimated 444 cases per 100,000 population each year [7]. In that regard, Malawi conducted TCV campaign that was integrated with Measles Rubella Catch up, Polio and Vitamin A campaign from the 15th to the 21st May 2023. The

campaign targeted 9,000,000 children of age range 0-15 years in all 29 districts of the country. Immediately after the campaign the country routinized the vaccine.

The Post Coverage Survey for the campaign showed a coverage of 79% representing 7,030,644 children vaccinated which was below the recommended set coverage target of 95%. The contributing factors to the lower coverage include;

1. Vaccination fatigue among recipients against a background of 3 national-wide polio campaigns, multiple Covid-19 express strategy campaigns and Cholera vaccine campaigns prior to the campaign
2. Over-integration of interventions whereby apart from TCV and Measle Rubella, Oral Polio Vaccine (bOPV and Vitamin A supplementation were added without addition health workforce)
3. Delays in disbursement of some resources to the districts such as fuel for timely implementation of other preparatory activities.

The TCV vaccine continued being administered routinely from June, 2023. Despite the various challenges observed with both introductions, strong Government commitment, multi-partner support and strong collaboration were amongst best practices in the introductions of these new vaccines.

VI. RECENT GAVI-SUPPORTED VACCINATION CAMPAIGNS; EFFECTIVENESS AND IMPACT

Learning Question 6: If relevant, how effective have recent Gavi-supported vaccination campaigns been?[1] Please highlight lessons learned which are applicable for routine immunization and upcoming campaigns (e.g., timeliness of outbreak response, quality, campaign reach and link back to strengthening routine immunization).

Indicator(s):

- Number of vaccination campaigns conducted (stratified by type of campaigns, including preventive, reactive, catch-up, follow-up, sub-national and national)
- Coverage of recent Gavi-

Gavi Supported Campaigns Post 2021 Multi-stakeholder Dialogue

	Campaign Antigen	Type of Campaign	Age Group	Target	Achieved
2021	IPV Catch-up	Catch-up, nationwide	2 years 8 Months	80%	65% coverage
2021	COVID-19	Reactive, nationwide	Priority Group 12 years & above	70%	At least 1 dose: 27% of total population Completed dose series: 23% of total population

[1] Please reflect on those campaigns conducted since the last Joint Appraisal/Multi-Stakeholder Dialogue exercise.

supported campaigns, compared to target

- Number of reported outbreaks of vaccine-preventable diseases (for which GAVI supports with reactive campaigns)

2023	TCV	Catch up, nationwide	9 months – 14 years	95%	Administrative coverage -77% Post-campaign coverage survey -79.6%

Table 4: Gavi supported Introductions or Catch up campaigns since 2021

***** NB: Besides the Gavi-supported campaigns, Malawi conducted 4 rounds of bOPV and multiple COVID-19 vaccination campaigns supported by WHO with funding from Global Polio Eradication Initiative (GPIE)

Lessons learnt

- The introduction of the Emergency Operation Centre (EOC) approach both at National and subnational level is essential for campaign planning, coordination, monitoring and implementation.
- Stakeholder mapping and engagement is key in resource mobilisation and technical assistance for effective implementation for campaigns at all levels.
- Development of bottom/up micro-plans should be done before development of actual operational budget to ensure that there is alignment of resources
- Integration of health interventions remains a best practice for reaching populations with more services in an efficient way while leveraging coverage of one intervention to boost uptake of others.
- Strengthening data management ensures accurate reflection of activities and timely response to challenges.
- Delayed payments for campaign activities and personal remuneration lead to health worker demotivation
- Proactive community stakeholder engagements ensure enhanced community ownership and acceptance of interventions
- Delayed resolution of misinformation and disinformation leads to wide- spread misinformation which compounds vaccine hesitancy for covid-19
- Participatory approaches are relevant and efficient in fostering community compliance
- Engagement with the faith groups to galvanise the momentum for vaccination among certain faith groups
- Too many campaigns also creating fatigue among the communities.
- Frequent collection of social and behavioural data is important to understand the drivers of vaccine acceptance and hesitancy. The data supported in adapting the demand for vaccination during the campaign and routine delivery.

Effectiveness of Campaigns

- OCV and Covid-19 vaccinations contributed to the reduction of cases of disease following reactive campaigns

- Cold chain capacity was strengthened at all levels
- Built capacity of health workers at all levels including surveillance and vaccine safety
- Strengthened community linkages with each round of campaigns in line with RED strategy.
- Enhanced mapping of Zero- dosed children and missed communities as part of campaigns
- Strengthened collaboration with other non health stakeholders e.g. teachers

Best Practices

- Government commitment at all levels was pivotal to the success of the campaign, especially the tenacity of the health workers on the field to ensure children were vaccinated
- Collaboration with Multi-sectorial Ministries, Departments, Agencies such as the Ministry of Education, facilitated the use of the school- based vaccination approaches with good uptake due to the use of teachers as mobilisers
- Engagement of the District Executive Committees, local leaders and traditional leaders was also helpful to mobilise and reach out of school children including adolescents.
- Use of Data Visibility Tools and Dashboards for Tracking Preparedness helps to track National and Subnational progress and provide real time information of challenges that require accelerated efforts to remain on track.
- Use of Local Leaders and Traditional leaders ensured community ownership and participation in campaign activities.
- Use of Teachers as mobilisers to engage, mobilise and support vaccination
- The program also leveraged support of Partners who provided technical and financial support for the campaigns which enabled implementation of innovative strategies to reach targeted populations.

VII. PROGRESS OF COVID-19 VACCINE INTRODUCTION

Learning Question 7: If relevant, how effective have recent Gavi-supported vaccination campaigns been?[2] Please highlight lessons learned which are applicable for routine immunization and upcoming campaigns (e.g., timeliness of outbreak response, quality, campaign reach and link back to strengthening routine immunization).

Indicator(s):	Graphs:
• Reflect on current coverage levels of the adult population and key at risk population. • Describe how the country plan to use opportunities for integrated	Complete primary series coverage (% population) [March 2021 – August 2023]

[2] Please reflect on those campaigns conducted since the last Joint Appraisal/Multi-Stakeholder Dialogue exercise.

delivery of COVID-19 vaccine with routine immunisation & other primary health care services

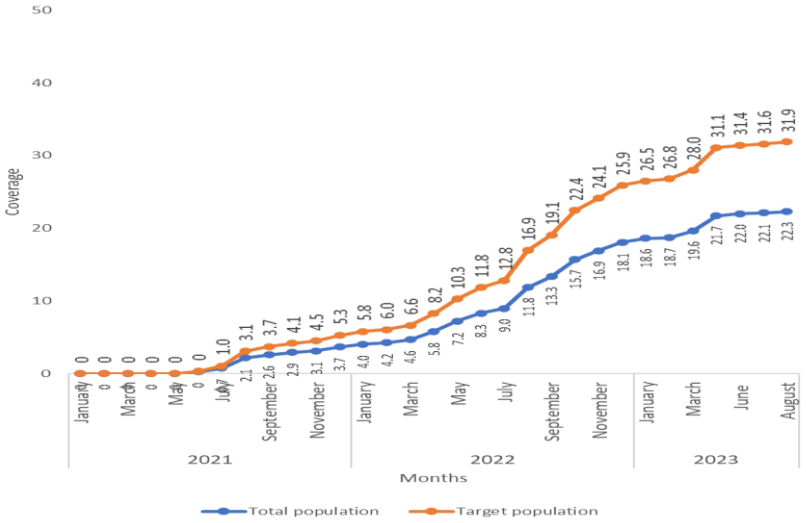


Figure 9: Graph showing Covid-19 Vaccination in Malawi trend till August 2023

Coverage for COVID-19 vaccination is being monitored using both total population and target population. The total population for the country is 19.3 million and target population is 13.5 million.

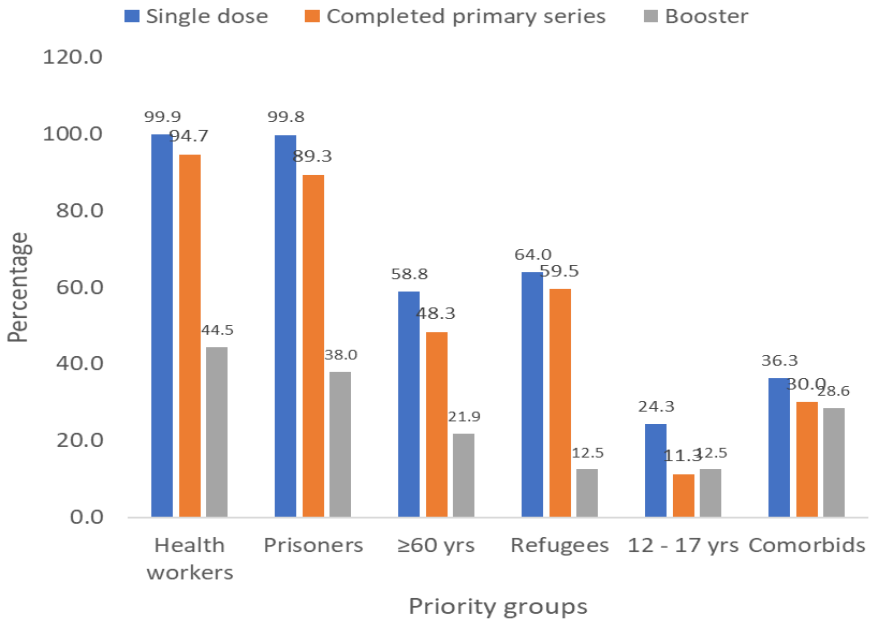


Figure 10: Graph showing Covid-19 Vaccine Coverage against Priority Groups

Geospatial Mapping of Primary Series Coverage by Districts as at 31.08.2023

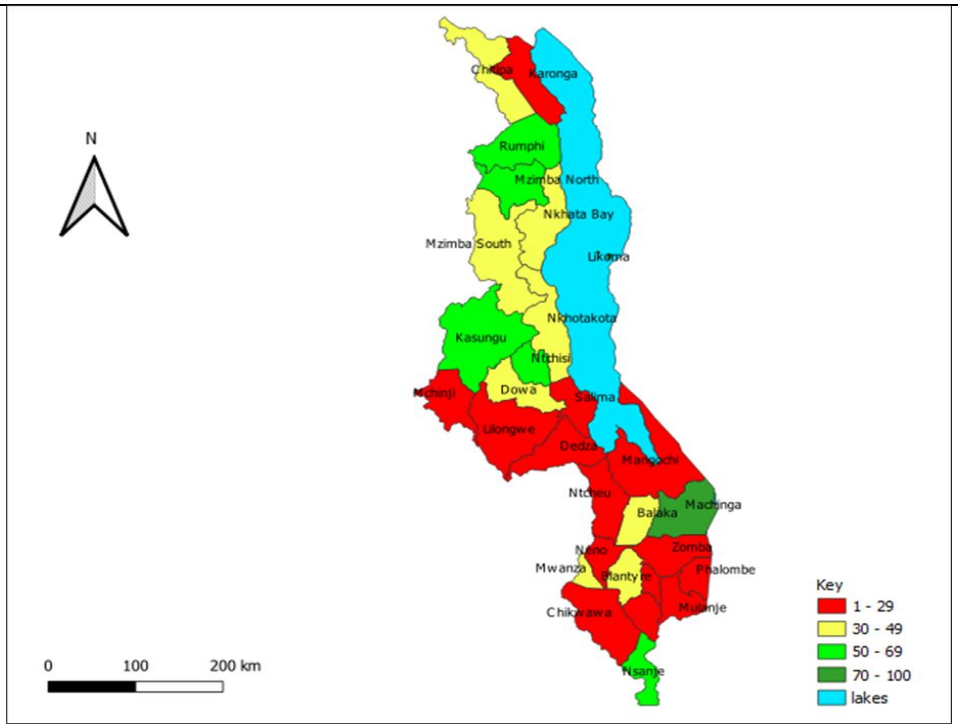


Figure 11: Map-Ministry of Health COVID-19 Vaccination Update Report, 31st Aug 2023

As of 31st August 2023, 23% of the general population and 32% of the target population had completed the primary series of vaccinations.

Vaccine uptake amongst key priority groups however has remained relatively low. Only 18% of females in the general population have completed the primary series of a COVID-19 vaccine. Similarly, primary series coverages amongst persons living with comorbidities (30%), elderly (48%), and adolescents (11.3%) have remained low with ten priority districts currently accounting for more than 60% of the unvaccinated population in Malawi.COVID-19 Vaccine uptake is inequitably skewed with the majority of districts in the south and central region recording lower coverages.

Demand for C19 vaccination has significantly declined since the WHO declaration of Covid-19 as no longer a public health threat as such MOH Malawi is prioritizing reaching out to the most at risk mainly:

Strengths

- Resilient Health system with the ability to respond simultaneously to multiple health emergencies i.e., Polio outbreak, Cholera Outbreak and COVID-19 pandemic.
- Availability of a functional Presidential Taskforce for COVID-19 led by the Minister of Health to provide oversight of all response activities
- Good partner coordination by MOH effectively mobilized resources to reduce duplication of efforts and ensure harmonisation of activity implementation.
- Use of multiple deployment strategies such as Fixed sites, Outreach teams and House to House approaches.
- Strong commitment from staff to conduct the COVID-19 vaccination activities despite competing priorities.

- Integration of COVID-19 vaccination activities into routine activities such as Routine immunisation outreaches and Community activities such as Fertilizer distribution exercise and large gathering events.
- Functional Supply Chain system for the last mile distribution of routine vaccines integrated with COVID-19 vaccine.
- Implementation of integrated Risk communication and Community Engagement Strategies that deliver COVID-19 vaccination education as a comprehensive package of information helping to address fears and misconceptions holistically.
- Established systems for the active involvement of community structures such as local leaders, opinion leaders and community gatekeepers in co- creation, planning and implementation of vaccination interventions.
- Ongoing Rapid Gender, Equity and Human Rights Barrier Assessment for COVID-19 vaccination in 10 Priority Districts.

Key Challenges

- Multiple Health emergencies overstretching existing health system capacity.
- Absence of a National Policy guiding COVID-19 integration into RI and PHC.
- Delayed reporting of routine COVID-19 vaccination data.
- High Vaccine Hesitancy in most communities especially amongst the 12-17 years priority group.
- Prolonged time between activity implementation and reimbursement of allowances affecting staff morale
- Limited capacity of the committee members on planning, implementation and monitoring the RCCE/demand generation interventions based on social and behavioural data

Lessons Learnt

- Timely community participatory processes in co-creating interventions, implementing and monitoring through community feedback mechanisms is essential for ownership and acceptance of activities.
- Effective mapping of eligible individuals, based on the set priority groups, is critical to ensure the most vulnerable and at-risk persons are reached with the vaccines.
- Effective Collaboration and coordination across cross-cutting Ministries, Departments, and agencies are key for successful vaccine delivery. The establishment of a multi-agency Vaccination Taskforce is now being leveraged to advance the COVID-19 vaccination integration agenda.
- Strategies that bridged access gaps, bringing vaccines to the doorsteps of the population facilitated uptake in especially hard- to reach communities and amongst vaccine hesitant populations and these should be prioritized as COVID-19 is integrated into PHC and RI.
- Engagement of local leaders in community sensitization for vaccines is effective in most villages.

- Engagement of association leaders for the elite societies was effective in mobilising the communities for vaccination
- Availability of health workers that are vaccine refusers is a worrying behaviour that can even affect the community`s acceptance of the vaccine.

Outlook for COVID-19 Integration.

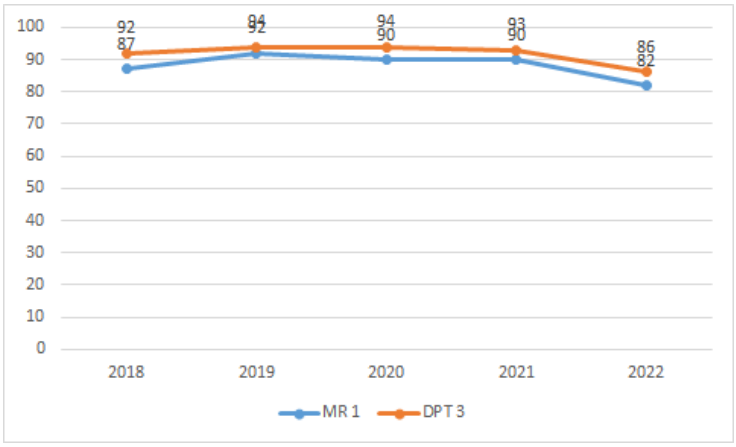
The MOH through the EPI has commenced processes to develop a National Integrated COVID-19 Vaccine Deployment Plan to guide effective implementation of COVID-19 vaccine delivery. Within the context of the plan, COVID-19 vaccine deployment will be transitioned into existing Primary Health Care and Routine Immunisation systems and joint programming will be used to improve equitable access for all, increase coverage, and leverage available resources to strengthen the health system.

Whilst significant progress has been made in the transitioning of COVID-19 vaccination from a vertical programme to an integrated health activity there are still some essential gaps that need to be addressed. High COVID-19 vaccine hesitancy continues to affect vaccine uptake, and this has the potential to influence healthcare activities which COVID-19 vaccination is integrated with. Ensuring sustainable financing modalities for integrated COVID-19 vaccine delivery is also a challenge given the many health priorities and health financing challenges the health system is dealing with. Development of an integrated guideline and Capacity building for health workers delivering the PHC interventions remains to be conducted.

VIII. PROGRESS OF IMMUNIZATION SET TARGETS

Learning Question 8: Trajectory and progress against targets set

- How does the progress over the past year compare with your Theory of Change or programme objectives?
- If there are other factors (e.g., government transitions, natural disasters, other disease outbreaks, etc.) which have led to disruptions in your immunisation programme over the last year, please also reflect on those.

Indicator(s):	Graphs:
• Number of children who received DTP3 and the number of children who received MCV1 in the past year compared to the number who received those vaccines in 2019. • Qualitative information	 **Figure 12: Immunisation Coverage trend from 2018** The number of children vaccinated for DPT3 and MCV1 has decreased steadily since 2018. DPT3 coverage dropped from **94%** to **86%** between 2019 and 2022 which represents a 4% decrease in coverage. MCV1 coverage moved from **92%** to **82%** between 2019 and 2022 which represents a **10%** decrease in coverage.
For other information on COVID-19 vaccination, **refer to details under question 1**	

B. Programme Management

Financial implementation of Gavi cash grants

Cash Support Summary

Grant	Recipient	Period		Status as of 28 September 2023					Cash Bal	Compliance**	
			Grant Value	Approved	Disbursement	Commitments	Expenditure	Utilisation%		Fin. Rep	Audit
HSS	MOH &UNI	2018 - 23	41,160,000	41,160,000	23,819,902	1,436,338	21,079,249	95	1,304,316	Yes	Up to date
HPV	MOH	2018 - 20	674,415	674,415	674,416	9,017	618,422	93	49,976	Yes	Yes
IPV	MOH	2018 - 21	1,491,292	1,491,292	1,491,291	44,450	824,407	58	622,435	Yes	Yes
CDS	MOH & UNICEF	2021 - 25	9,187,588	9,187,588	7,940,741	436,208	3,914,716	55	4,836,619	Yes	Yes
TCV Campaign	MOH & UNICEF	2022 - 23	6,175,929	6,175,929	6,175,929	2,139,144	2,842,585	81	1,194,200	Yes	N/A
MMR	MOH & UNICEF	2022- 23	2,077,089	2,077,089	2,077,089	964,152	767,982	83	344,956	Yes	N/A
TCV Routine	MOH	2022- 23	665,915	665,915	665,915	308,357	224,021	80	1,33,537	Yes	N/A
Total			61,432,229	61,432,229	42,845,284	5,337,666	30,271,426	83	8,483,040		

Table 5: Overview of Gavi Cash support to Malawi and perfomance

*All amounts are in USD
**Comment below in case of non-compliance

The funds for TCV/MMR campaign were received in November of 2022, the preparatory activities for the campaign and the actual days occurred between January and June 2023, as a result the audit will be conducted after the current Government financial year end following the Gavi Audit requirements as per the Gavi Audit guidelines.

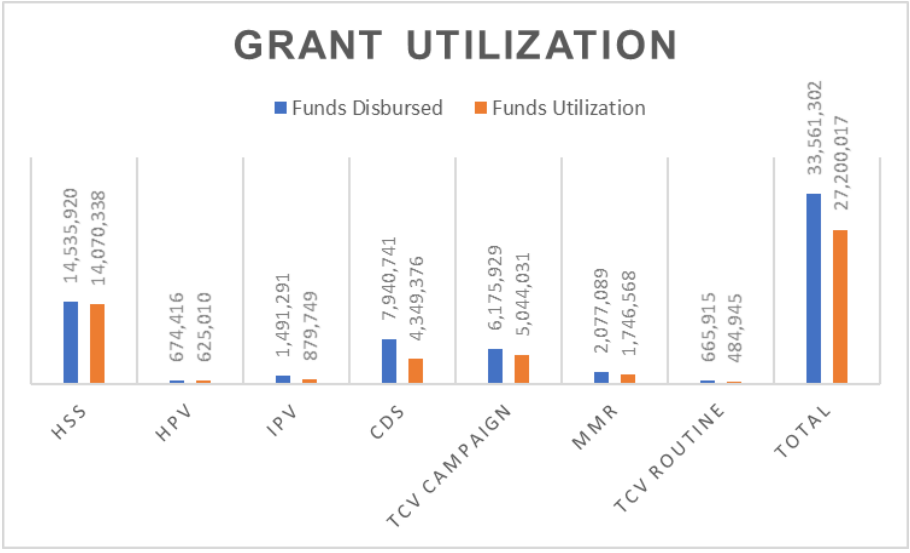
Both the HPV and IPV post-campaign remaining funds amounting to USD 660,948 have been incorporated into the recently approved HSS reallocation.

Over 70%(USD2,527,299) of funds for the CDS grant are for COVAX Delivery support III (CDS3) being implemented through UNICEF and WHO.

The USD1,462,420 remaining for the TCV/MMR campaign is expected to be utilized by June 2024 as EPI is finalizing on requests for post-campaign activities under the reutilization.

IX. COUNTRY ABSORPTION OF GAVI FUNDING AND THE DRIVERS

Learning Question 9: How well is the country able to absorb Gavi funding and what are the drivers?

(This covers all funding including funds channeled through partners.)	
➢ Comment on the financial implementation progress of grants including but not limited to the utilisation rates. What are the key issues?	
Indicator(s): • Percentage of grant funds utilised	 **Figure 13: Graph showing grant Utilisation Graph for funds received in country**

- Amount of cash balance in-country

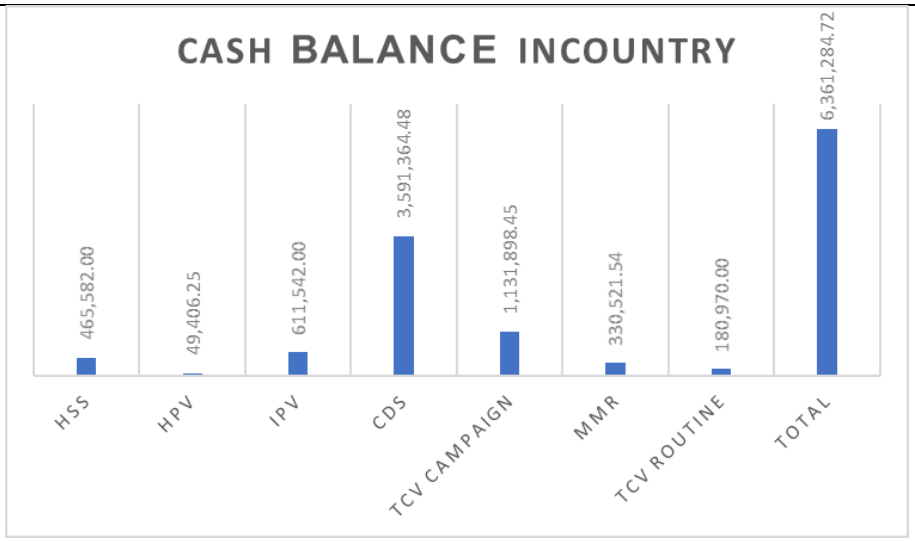


Figure 14: Graph showing in-country cash balance

Based on the funds received the country has been able to absorb funds as per table 5 above. The overall absorption for funds from all Gavi grants (for funds disbursed to the country) is 81%. Both HPV and IPV introduction grants whose absorptions were at 93% and 59% respectively, have been closed and the remainder of funds rolled into the HSS grant. The key drivers for absorption have been the following;

1. Good collaboration between the Ministry (Expanded Program on Immunization, EPI), PIU and the district teams as well as partners ensuring timely submission of proposals.
2. Timely development of bi-annual work plans for the HSS grant are prepared six months before the Secretary for Health approves implementation. This allows smoother implementation.
3. For the Vaccine introductions or Catch-up campaigns, having advance bulk proposal development sessions where all district EPI coordinators are assisted in the development of proposals to ensure timely submission of documents in readiness for the campaign
4. Having Gavi-specific Program Officers embedded at the EPI national level, dedicated at facilitating and supporting grant-planned activity implementation has proven to be key to grant implementation.

Despite the levels of absorption above, some barriers to full absorption, especially for the HSS grants include;

1. Multiple vaccine introductions/Catch-up campaigns within the five years (2018 – 2023) of the HSS grant implementation. The VIG/Catch-up campaigns are time-bound, very intensive, and on average, each took about six months of intense preparation. This in turn diverted the implementation focus on the HSS grant by EPI and stakeholders.

2. The COVID-19 pandemic affected the implementation of HSS grant activities as activities were structured in a way that was very difficult to implement amidst the COVID-19 pandemic. The CDS (Covid-19 Service Delivery) early access window was introduced to assist with C-19 vaccine deployment efforts. With the deployment of COVID-19 vaccine, there was slow down in efforts around zero dose and under-immunized children

X. PROGRESS OF RESOLVING ISSUES ARISING FROM ASSURANCE ACTIVITIES

Learning Question 10: How well is the country resolving issues arising from assurance activities? What issues are left to solve and what is the path forward?

Progress of the Grant Management Requirements (GMR)			
Item #	GMR Area	Status	Comment
2. l)	Asset Management	Ongoing	A FAR is maintained by PIU with some gaps in cold-chain equipment (CCE) that were procured through UNICEF. PIU will use the planned asset verification to for 2023 to further update the FAR to include the CCEs Asset verification was done in 2021. During the HSS grant reprogramming, funds were allocated for another exercise that is scheduled for March 2024
2. m)	Follow up on reporting on EVM improvement plan	Ongoing	A recent EVMA assessment was done in 2022 and the Programme is in the process of implementing the recommendations of the new EVMA
2. n)	Repair and maintenance plans and logs Repair dates.	Pending	Currently there are no comprehensive maintenance plans for various levels. However, the MOH with support from Partners have done a National Cold Chain Equipment (CCE) Assessment which has given some guide on various areas including the development of a comprehensive preventive maintenance plan
2. q)	Insurance	Ongoing	Currently, the assets covered by insurance are motor vehicles and motorcycles. Due to resource challenges, other items do not get insured by the Government

2. r)	Internal audit plans and reports	Ongoing	The Internal audit is concluding on the annual Risk assessment 2023.
2. s)	External audit arrangements	Ongoing	The external audits have been done every year with HSS grant support and shared with Gavi. In 2023 the external audit has been done by the National Audit Office
2. t)	MOH Audit Committee	Closed	The audit committees under Government ministries were decommissioned. However, a Finance and Audit sub-committee was introduced under the Project Implementation Committee (PIC) to provide the required MoH audit committee would have provided

Table 6: Update for selected ongoing and outstanding GMRS

- How has the country addressed recommendations arising from past audit recommendations (annual external audits + Gavi Programme Audit)?

The country has engaged all relevant departments that are involved in the implementation of the grants with EPI taking the lead and PIU coordinating.

All past audit recommendations have been detailed in a tracking table, which indicates the issue as noted by the audit, the responsible personnel to address the issues, as well as the date by which the issue should have been resolved. The tracker is monitored through PIU which liaises with the relevant departments and personnel to ensure that the issues raised are being addressed as per the management comments in the report.

The level of implementation and completion of the recommendation varies with the nature of the recommendation, what is required for effective execution, and which stakeholders are involved to ensure the successful implementation of the recommendation. For instance, some recommendations aimed at addressing recurring advances, data management improvement issues, and vaccine management improvement issues are being still being addressed.

- Comment on the improvements that have been made to financial management and risk assurance activities with support of assurance providers (e.g., Fiscal Agents, Monitoring Agents, Financial Management Technical Assistance)

Significant improvements in financial management and risk management at the Ministry of Health - MoH have been achieved through efforts undertaken by various assurance providers which including Fiscal Agent. These activities have contributed to an increased recognition within MoH of the crucial importance of maintaining sound financial practices. Below are some key activities undertaken by FA that have resulted in the improvement of financial and risk management at the MoH.

1. Continuous monitoring of GAVI-approved activities.
   FA has been involved in the continuous monitoring and approval of activity requests submitted by the GAVI grantees
2. Accuracy of financial reports and budgets.
   Fiscal Agent is engaged in the comprehensive review of financial reports and budgets that the MoH-PIU submits to GAVI. This involves the examination of quarterly financial reports and budgets by FA before they are officially presented to GAVI.
3. Compliance
   FA has been involved in ensuring that the MoH complies with various national laws and GAVI rules and national regulations and laws when administering GAVI grants and these include; Procurements Acts and labour laws for GAVI-funded grant staff.
4. Risk management
   FA in collaboration with MoH Internal audit involved in developing a risk assessment of the MoH-PIU which is responsible for managing GAVI grants. This is important as it enables various assurance providers ie Fiscal agents and Internal auditors to focus on areas that are considered high risk hence deploying adequate resources to mitigate the identified risk.
5. Spot checks
   FA has been conducting surprise spot checks on GAVI-funded activities i.e Typhoid and measles campaigns to uncover fraudulent activities which might go unnoticed and also acts as deterrence against fraudulent activities.

FA, PIU and GAVI continue to work closely together to ensure there are no information gaps between the three stakeholders.

XI. FINANCIAL MANAGEMENT-RELATED BOTTLENECKS FOR IMPLEMENTATION

Learning Question 11: Please comment on any other financial management-related bottlenecks for implementation and compliance.

Country comments:

- The main bottleneck that has been experienced for the campaigns is the disbursing of funds to beneficiaries at the sub-national level. Usually, the bulk of activities for example actual days take place in all the districts within the same days. With the current system and internal controls in place within the PIU for cash management, there is a need for participants' (HSA's, volunteers, teachers, and all other health workers) registers to be verified against the pay-out sheets that are uploaded into the cash management service provider for payment. This is a heavy workload on EPI district coordinators, and as a result, a lot of time is taken for the documents to be verified and accepted for payment.
- Human *resources* to support *the* management of extra *Gavi* funds that come under *MOH-PIU* has been a challenge. Only 2 fully *dedicated* staff were supporting both the HSS grant and VIG implementation. T*his challenge has now been addressed* with the *introduction of temporary HR support in* the campaign.
- The other bottleneck experienced is protracted procurement processes to get necessary approvals from the Public Procurement and Disposal of Assets *Authority (*PPDA) on high-value procurements such as infrastructure and goods.
- The country has also been experiencing high inflation for the past few years. The price fluctuation brought contact management *challenges,* as suppliers would refuse to provide service demanding price adjustments.
- The country has for some time, especially since 2022, been experiencing serious shortages in forex. This affected the management of contracts for items that are sourced offshore by vendors.

XII. COUNTRY GENDER-RELATED BARRIERS

Learning Question 12: Is the country effectively addressing gender-related barriers?

(e.g. faced by caregivers or adolescents in accessing immunization services and barriers faced by health workers in delivering immunization services)?	
Indicator(s): Has the country implemented initiatives that remove or reduce gender related barriers?	Graphs:

Qualitative information

Data by gender-related access barriers to immunization

Indicator	Key sources	Key data and reflections
Level: Individual & Interpersonal (immediate social networks, such as family, peers, colleagues)		
Decision Making & Mobility	- DHS 2015-16 - World Bank - UN Women	• Women and girls aged 15+ spend 8.7% of their time on unpaid care and domestic work, compared to 1.3% spent by men. • In 2017, 29.8% of women and 37.9% of men in Malawi had an account • 46.9% of women participated in making major decisions in the household in 2016 • Women involved in decisions about their health care increased from 55% in 2010 to 68% in 2015-16.
Health	- DHS 2015-16 - African Development Bank	• 439 women die per 100,000 live births due to pregnancy-related causes in Malawi (2017) • In 2016, 73.9% of women of reproductive age (15-49 years) had their need for family planning satisfied with modern methods • 22% of females aged 15-24 who are currently married had unmet need for family planning in 2017 • The unmet needs for family planning among the married are 19%, and among the unmarried it is at 40%. • Malawi has one of the highest adolescent pregnancy rates worldwide; at 141 births/1000 girls, which is 3-fold higher than the global average. • AND HIV prevalence among adult women (aged 15- 64) to be 13%, compared with 8% among adult men. In 2018, 4% of young women (age 15–24) were living with HIV, compared to 2% of young men.
Gender-based violence	- DHS 2015-16 - UN Women	• In 2018, 17% of women aged 15-49 years reported that they had been subject to physical and/or sexual violence by a current or former intimate partner in the previous 12 months • 34% of women aged 15-49 experienced physical violence by age 15 while 20% experienced sexual violence. (2015-16)
Education	- DHS 2015-16 - African Development Bank	• 7% of girls and 11% of boys complete lower secondary school in Malawi as of 2017 data • Literacy rates are higher for men than women, at 71.6% and 65.9% respectively.
Level: Community		
Social Norms	- DHS 2015-16 - World Bank - UN Women - Equaldex - African Development Bank	• 42.1% of women aged 20–24 years old who were married or in a union before age 18. • 9% of women 20–24 years old were first married or in union before age 15 in 2017 • Adult literacy in Malawi is lower among women (55%) than among men (70%) in 2015
Level: Institutions (employment & labour force, health & education systems)		
Workplace: employment	- DHS 2015-16 - African Development Bank	• The labor force participation rate among females is 73% and among males is 82% for 2019 • Vulnerable employment among women is 65% and among men is 54% in Malawi for 2019 • Unemployment rate is higher among females (26% than among males (14%). • Women are far more likely to not be paid for their work compared to men. Specifically, 59% of women reported that they are not paid for their labor compared to 26% of men (2017)
Level: Public policy (laws & policies, government, and politics)		
Laws & policies	- UN Women - UN Women - World Bank: Women, Business & the Law - African Development Bank	• The Ministry of Gender, Child Development and Community Development has developed the second edition of the NGP (2015-2020) in 2015. • In Malawi, 83.3% of legal frameworks that promote, enforce and monitor gender equality under the SDG indicator, with a focus on violence against women, are in place. • When it comes to constraints on freedom of movement, laws affecting women's work after having children, constraints on women's starting and running a business, and laws affecting the size of a woman's pension, Malawi could consider reforms to improve legal equality for women.
Government & politics	- UN Women - African Development Bank	• There is a Gender Advisory Committee (GAC) responsible for advising the cabinet committee on gender issues. The coordinating ministry for gender issues is the Ministry of Gender, Child Development and Community Development (MoGCDCD). At technical level, there are specific Technical Working Groups (TWGs) on i) Gender, Culture, HIV and AIDS and Human Rights Technical Working Group; ii) Gender Based Violence Technical Working Group and the Technical Working Group on Political Empowerment of Women (GoM, 2015) • As of February 2021, only 22.9% of seats in parliament were held by women.

Figure 15: Table showing gender related socioeconomic indicators

Country comments:

The Expanded Programme of Immunisation is working to address Gender, Equity and Human Rights related Barriers to Immunisation in conjunction with multiple stakeholders including the Ministry of Gender

- A Gender, Equity and Human Rights Analysis in the Context of the COVID-19 pandemic was conducted, and this was used to guide response activities including immunization.
- A gender profile for Malawi has been developed in conjunction with MOH and MOG to understand the biological, structural, social, economic etc norms, policies, and systems that influence immunization service uptake.
- Multi-stakeholder engagements with District Executive Committees and District Gender Technical Working Groups within 10 high-priority districts have been done to identify barriers to immunization and to develop context-specific interventions to address identified barriers.
- A Gender, Equity, and Human Rights Barrier Assessment related to Immunisation using COVID-19 as a proxy is also currently being conducted. Data collection is ongoing.

Key identified Gaps.

Demand Side Factors

- Low health literacy and education for women
- Women have limited autonomy in decision-making including health-seeking behaviour
- Females have limited access and control over resources and mobility
- High prevalence of gender-based violence and harmful practices including early marriages, adolescent pregnancies,
- Gender-based myths and misconceptions influencing vaccine hesitancy

Supply Factors

- GER blind attitudes of health workers and service provision without needs met
- Poor acceptability and accessibility of some health services including immunization
- Inadequate capacity within HF for GER-focused microplanning
- Limited involvement of some priority groups in the co-creating interventions to address GER-related gaps

Key Gender Equity and Human Rights-related Interventions

Leadership, planning, and governance

1. Inclusion of Gender, Equity, and Human Rights considerations in the current EPI strategic Documents being developed/ Reviewed (National Immunisation Strategy, EPI Policy, and Integrated National COVID-19 Vaccination Deployment Plan).
2. Progressive multi-stakeholder engagement of Subnational Leadership on addressing GER-related Immunisation.

Service Delivery

1. Implementation of multiple health delivery approaches to bridge access, acceptability, and gaps include community-based outreaches and house-to-house strategies for the most vulnerable including women, older persons, hard-to-reach communities, missed communities, internally displaced persons, and persons living with disabilities.
2. Training of Health workers in GER-focused microplanning.

Demand Generation and Community Engagement

1. Use of gender transformative communication messages appealing to both male and female caregivers, older persons, adolescents, etc to promote equal responsibility to vaccination.
2. Collaboration with CSO's, CBO's and NGO's to design and implement GER transformative interventions to improve equitable access to immunisations for all. MOH/UNICEF collaboration with Malawi Network of Older persons to vaccinate elderly persons.
3. MOH/WHO orientation of National and subnational Gender Networks, Technical Working Groups etc on Immunisation related advocacy.

XIII. HEALTH INFORMATION SYSTEMS, DATA STRENGTHENING, MONITORING AND LEARNING

13. Learning Question: How well is the country implementing its health information systems and data strengthening, monitoring and learning activities?

Malawi has been implementing the use of the Digital Health Information Management System since 2021. As of December 2022, capacity building in the use of the DHIS 2 system for reporting routine EPI data was completed and EPI data successfully migrated into the DHIS 2 system. Whilst some capacity building gaps still exist within service delivery points, continuous provision of supportive supervision and on- site coaching is progressively being used to address these gaps.

Use of Real time Data Management systems to improve availability of fit for purpose data for decision making.

Through multiple partner support, in- country capacity in the use of real time data management tools have been deployed to monitor the various outbreak response measures including monitoring pre-campaign preparedness, intra- campaign supervision, in process monitoring and end process monitoring. These were deployed in the multiple COVID-19 Vaccination campaigns, OCV campaigns, Polio Reactive campaigns etc.

The M&E pillar under the national polio outbreak response developed data collection tools such as tally sheets, summary sheets, ODK forms, google sheets for administrative and preparedness data, development of Power BI dashboard for data visualization for pre-campaign, intra-campaign, and post-campaign.

Use of Data for Decision-Making

EPI data is continuously analysed and disseminated across all levels to inform programmatic planning. At National Level, analysed routine data is shared through review meetings, routine engagements with district teams and through the weekly IDSR bulletin to provide district feedback on their performance with key recommendations on addressing gaps. Similar structures are also employed at the sub-national level.

Data Quality Assessments.

Data quality assessment was conducted was conducted in Balaka, Ntchisi, Nsanje and Mangochi

Data collected from the field visit was analyzed for 7 quality components of an effective immunization monitoring system as indicated in in the summary table below:

Domain	Description
Reporting	How well the system transfers information to the next higher level
Archiving	How well the system transfers information to the next higher level
Demographic Information	How well the system collects and utilizes information about the target population for planning
Core Outputs	How well the system uses data gathered to make decisions about implementation
Utilizing data for action	How well the system uses data gathered to make decisions about implementation
Vaccine utilization	How well the system monitors vaccine wastage and its utilization

Figure 16: Description of elements of the DQA

The standard performance recommended for each component was 80% and any score < 80% was considered as a weakness. The radar graphs below (figure 17 and 18) show the rating of different components of the monitoring system that were assessed at both the district and health facility levels. Figure 1 below shows that at district level the strongest component was core output at 84%, while denominator (demographic information) was the weakest at 46%. For health facility level, Figure 2, the strongest is Evidence for data use component, 86% and the least is reporting component at 55%

District Aggregated Radar

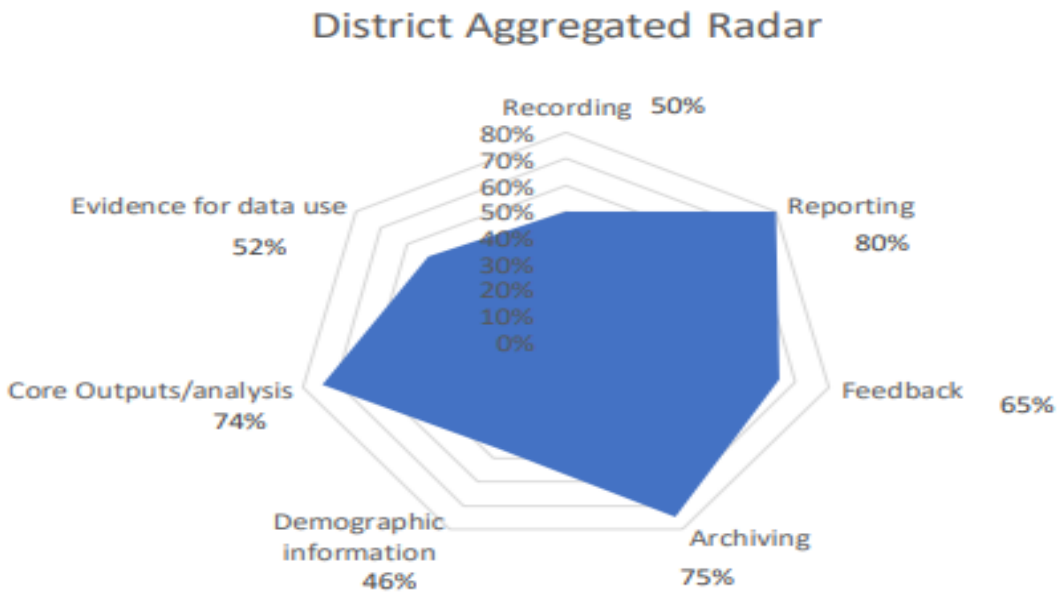


Figure 17: District Aggregate Radar graph of DQA Monitoring system components

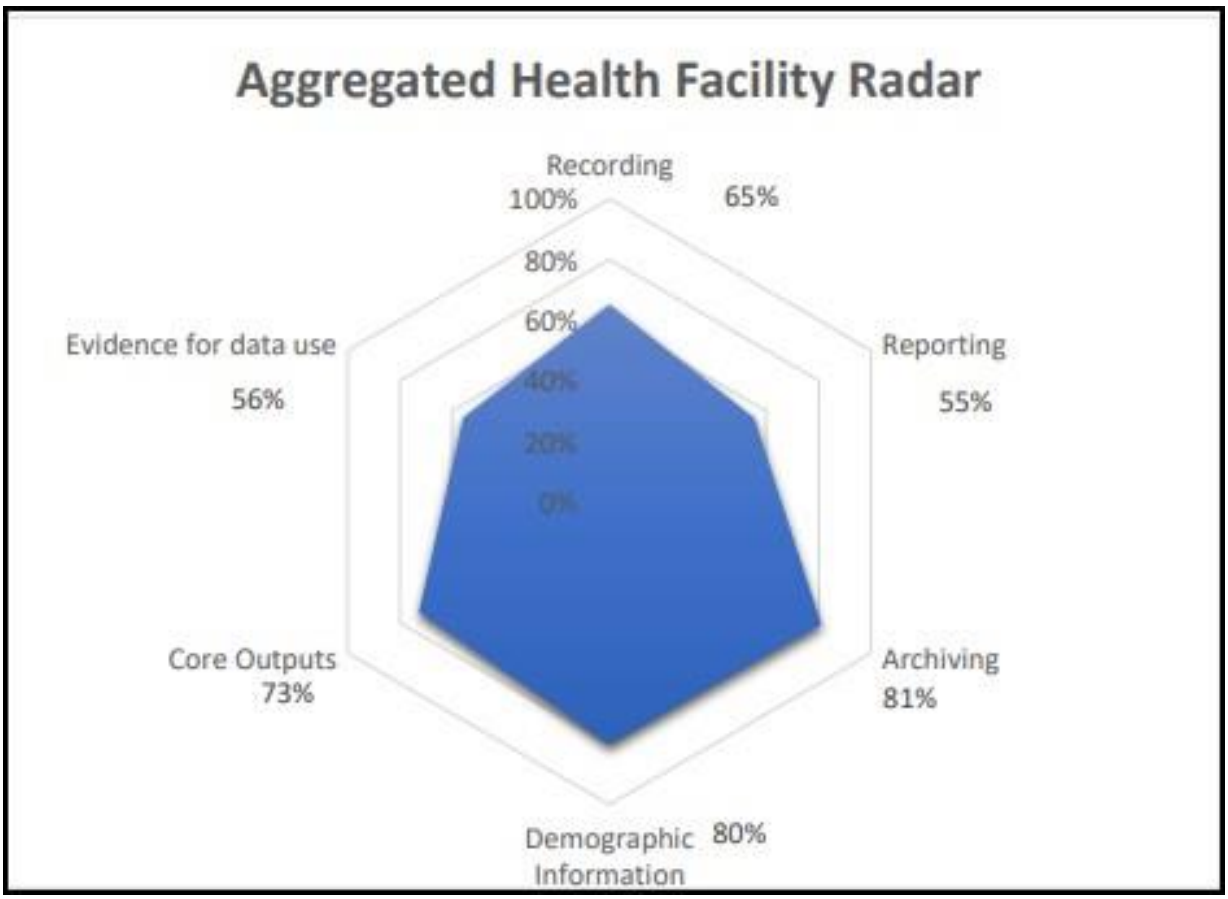


Figure 18: Health Facility Radar graph of DQA monitoring system

C. Implementation of Technical Country Assistance (PEF-TCA)

XIV. IMPLEMENTATION OF PEF TCA AND COVAX TA

Learning Question 14: Is the country implementing PEF TCA and COVAX TA as expected? Please explain how the TCA has helped to support the achievement of the country objectives.

Indicator(s):	Graphs:
● Country analysis on partner performance as per workplans	

Country comments:

For the period 2021-24, the GAVI the Vaccine Alliance approved USD 3,275,327 of the PEF/TCA and COVAX Technical assistance. PEF/TCA and COVAX TA is delivered through support provided by core Vaccine Alliance partners, WHO and UNICEF and extended partners, JSI, KUHES, PATH and Village Reach in their respective areas of expertise. This support consists of capacity building activities, program reviews/evaluation, development of strategies, materials and tools and on-going skills transfer aimed at addressing bottlenecks identified in the previous Joint Appraisal with the overall goal to improving coverage and equity in reaching the under-immunised and zero dose children.

PEF/TCA and COVAX grant supported implementation of coverage, equity and bottleneck analysis, development of crisis communication plan for COVID-19 vaccination, demand generation for COVID-19 vaccination, capacity development on preventive maintenance of cold chain equipment, and inspection of cold chain system enhancements. TA support is delivered through internal and external staff working directly with the Ministry of Health as well as consultants engaged from time to time.

On the basis of the reporting against PEF functions and milestones, summarise the progress of partners in delivering technical assistance

UNICEF has been coordinating with MOH PIU, EPI and CHSS units of MOH in planning, implementation and monitoring of GAVI HSIS-III grant, COVID-19 Delivery Support (CDS) and providing technical support to EPI-MOH in national and district level strategic planning and monitoring for equitable and effective coverage of immunization. Further support has been provided to improve vaccine quantification, forecasting, procurement and distribution and strengthen cold chain system management including development of guidelines/tools, performance monitoring support to address the need. UNICEF has also engaged the Malawi Institute of Journalism to develop innovative and creative communication materials to mobilize communities for 2YL vaccination and COVID-19 vaccination and broadcast communication messages on this vaccination using multiple communication channels.

UNICEF successfully achieved all Milestones under PEF/TCA and COVAX TA for 2021-2022 with a fund utilization rate of 100%. For PEF/TCA 2023, all milestones for June 2023 reporting have been completed. These are:

i. **Monitoring plan for CCEOP implementation developed:** The monitoring plan for CCEOP implementation has been developed. UNICEF has supported the Ministry of Health in developing the CCEOP operation plan for years 4 and 5. A cost estimate and purchase order have been produced and shared with the Ministry of Health. The country has already started receiving equipment for CCEOP ODP 4.

ii. **One NLWG meetings and 1 PMT meetings held:** One NLWG meeting and PMT meeting were held. The country has continued to have monthly meetings of the Immunization Logistics Technical Working Group, which has played a vital role in the deployment of Covid-19 vaccines and supported the preparations of the TCV/MR/OPV integrated campaign. The working group is currently focusing on commodities that are below order levels to ensure that resources are urgently mobilized for procurement.

iii. **Evidence-based National EPI Advocacy, Communication and Social Mobilisation (ACSM) strategic plan developed:** The plan has been instrumental in reaching over 9 million individuals nationwide with vital immunization messages, thereby enhancing their knowledge and understanding. As a result, the plan has played a significant role in achieving over 95% polio vaccine coverage in the first four rounds of the polio SIA campaign, while also contributing to a 32% coverage of COVID-19 vaccination among high-risk groups.

iv. **MOH Annual Implementation Plan (AIP) for EPI program 2023-24 finalized delayed:** With the support of UNICEF, the Ministry of Health (MOH) has the Annual Implementation Plan (AIP) for the EPI program 2023-24. The development of the AIP was delayed due to multiple emergencies and competing priorities.

Over the reporting period, JSI has had COVAX TA, PEF TCA, CDS early access TA, and CDS3 TA. During these projects, the following TA has been provided:

- NDVP for COVID-19 vaccine developed and used as guidance for COVID-19 vaccine introduction and rollout with priority target populations identified and quantified.
- COVID vaccination micro plans available in select districts
- Provided TA on building capacity for health workers through the development of training materials adapted from global and regional level guidance and subsequent training of district level TOTs, supervision of district training in selected districts. This included AEFI training led by AFENET.
- Technical review of draft ACSM strategy and generic risk and crisis communication plans (developed by UNICEF and WHO) provided and co-facilitation of national workshop to develop key messages and communication materials
- Support to coordination, micro-planning, and review meetings conducted at the national level
- Support monitoring activities through revision of data collection tools to include COVID–19 and other new vaccines, data management, and supportive supervision.
- MVMH tool guideline and tool revised to make it integrated (HPV, MVMH, Vitamin A supplementation, and Deworming) and disseminated to 10 districts.
- DHMTs and vaccinators in 10 districts oriented in the revised integrated MVMH tool.

- Orientation of teachers and Health workers on HPV routinization and integration with Pfizer COVID-19 vaccines in Lilongwe district.

Below are the challenges faced during this implementation period:

- Inadequate funding for TCA to implement comprehensive strategies.
- Delayed funding for TCA. Making it difficult to implement some prevailing interventions.
- Short implementation period to make an impact.
- Lack of resources for the implementation of innovative strategies in districts, like the MVMH

During the JA discussion, EPI and partners discussed further TA needs to support the program in 2024/2025, which include:

Ongoing technical Assistance Needs:

a. Cross-border surveillance and preparedness (request TA regional partners)
b. Vaccine introduction
c. Strengthen Coordination, include ICC and sub TWGs & work-plans (under HPV TA)
d. SBC & ZD implémentation
e. EPI advocacy
f. Rumour tracking
h. Capacity building IPC
i. Strengthening integrated surveillance
j. Supply chain; maintenance, asset disposal; quantification of CCE needs; expand RTDs; create a center of excellence

NB: Not all TA needs can be funded under the Gavi PEF Framework, so further discussions will be need to prioritise critical TA support

Section 2: Looking forward: Summary of key discussion points and follow up actions

Briefly summarise the key discussion points, including identified needs and follow up actions resulting from the Joint Appraisal review and dialogue.
This may include

- Identified (future) needs and priorities
- Follow-up actions to accelerate planned activities
- Expected adjustments to activities and as applicable the Gavi workplan, targets and budget, such as budget reallocations, modifications in TCA planning, revision of dates for anticipated new vaccine applications or introductions, etc. [3]
- Roll-out or expansion of promising practices and innovations
- Other aspects and follow up actions

Priorities Malawi			
	2024	**2025**	**comment**
Q1	HPV switch 2:1 dose	NIS completed	To reimburse funds via switch application
	nOPV round 1		Potentially combined w MR
	PIRI /catch-up efforts (RI & HPV)		Supported by HSS and CDS2 funds. No additional vaccine needs. Fyi PIRIs/catchup already start in Q4 2023
	Plan for 2024/25 TA		To complete RFP ZD (2021-22 TA)
Q2	HPV MAC & Switch application	conduct MAC (Q2/Q3 TBC)	Dedicated HPV TA available as of Feb (Dr Dafrossa)
	nOPV round 2		Potentially combined w MR
	Apply for IPV2/Hexa (TBC)	Intro IPV2/Hexa	to assess against capacity constraints. IPV2 easier to roll-out compared to Hexa.
	PIRI / Catch-up efforts (RI & HPV)		Supported by HSS and CDS2 funds.
Q3	PIRI/Catch-up efforts (RI & HPV)		Supported by HSS and CDS2 funds RI & HPV
	apply for Heb B birth dose (TBC)	Q1 introduce HebB birth dose (TBC)	Mwi will likely apply for HEB-B due to multi-prone pressure, yet to assess capacity and co-fi impact

[3] This refers to all types of Gavi support

	start HSS4 application (TBC: move to 2026?)	start HSS4 application (TBC: move to 2026?)	HSS3 ends July 2025. Or request 3r year NCE for HSS4 to start under Gavi 6.0 (2026)
Q4	PIRI/Catch-up efforts (RI & HPV)		Supported by HSS and CDS2 funds RI & HPV
	Oct/Nov Gavi light touch JA		
	Q3/Q4 Malaria expansion application	Q3/Q4 malaria expansion intro.	To extend TA contract Donnie
Ongoing/ cross-cutting priorities			
	Strengthen financial and programmatic management PIU & EPI		Following recommendations MR report and targeted TA support (Dr Darfossa & Roque TBC)
	strengthen emergency preparedness & response		Ongoing risks cholera and weather related. CDS3 allocated to ongoing OCV/C19 prevention
	NIS development (2025-2030)		Will require additional analysis, eg rapid convenience assessment and updated ZD analysis TA by Donnie
	HSS & PBF acceleration		Need to sustain absorption rates. Reallocation of remaining HSS 6.6M PBF budget received, yet missing clarification raised by FA, incl missing asset register.

Table 7: Looking forward; Priorities for Malawi

References

1. National Statistical Office Malawi, “2018-2050 Population Projections”, 2020
2. World bank 2022: https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?locations=MW
3. National Statistical Office Malawi, “life expectancy projection”, 2023
4. The Malawi Maternal, Neonatal and Child Health Fact sheet, USAID 2017available at https://2017-2020.usaid.gov/malawi/fact-sheets/malawi-maternal-neonatal-and-child-health-fact-sheet#:~:text=Neonatal%20mortality%2C%20often%20caused%20by,84%20per%201000%20live%20births
5. National Statistical Office Malawi, “Multiple Indicator Cluster Survey”, 2023
6. Malawi Medical Journal; “Determinants Of Vaccination Coverage In Malawi: Evidence From The Demographic And Health Surveys”, 19(2):79 - 82 June 2007
7. UNICEF, “Preserving Immunization Services During the COVID-19 Pandemic”, 2022
8. World Health Organization “Recommendation to use of first typhoid conjugate vaccine”, 2018