MINISTRY OF HEALTH

MALAWI EPI JOINT APPRAISAL REPORT

2024

(January 2023- July 2024)

2024 Joint Appraisal (JA) Malawi

Reporting period January 2023- July 2024

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 5.0 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 annual progress of routine immunisation programmes against national goals and objectives, and to discuss how Gavi support is contributing to this progress. Key stakeholders involved in the country's immunisation programme should be represented at the Joint Appraisal, including civil society organisations (CSOs).

As an integrated part of Gavi's portfolio management process, the JA discussion should review **Gavi's contribution to immunisation programme performance** in 2023/H1 2024, including current status of your COVID-19 programme and efforts on integration. A key feature of the JA is the joint discussion about the **promising practices, challenges met and future needs** for improving immunisation performance with a focus on reaching zero-dose children and missed communities.

The modality of the Joint Appraisal exercise is tailored to the country context and may be scheduled taking into consideration other planning exercises such as EPI reviews or National Immunisation Strategy Development.[1] The JA process will involve preparatory work to assemble and analyse data in advance of the discussion, exchange on the trends and their implications for the EPI program, and will conclude with the finalisation of a report and relevant deliberation outcomes and follow-up actions. At least one live discussion (in person or virtual) of the multiple stakeholders engaged in the Joint Appraisal should be organised.

The Joint Appraisal template is structured as follows

- **Section 1: Country situation**: overview of performance of Gavi support & discussion on progress and challenges faced during 2023 and first semester of 2024
- **Section 2: Looking forward**: summary of discussion points and follow up actions

The information and indicators contained in section 1 on the country immunisation programme performance and Gavi support are mostly based on standard reporting. They are part of Gavi's monitoring and performance management framework, which will inform ongoing portfolio discussions, the JA, as well as discussions at the Alliance Partnership and Performance Team (APPT) meeting.

Section 1 is also where Gavi expects reporting against the Grant-linked Key Performance Indicators developed during HSS / EAF applications. For these indicators, results are to be 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 HSS or EAF application. Changes over time will be assessed against the end of the grant target set during the application stage. Please ensure that sufficient data is provided to conduct such analyses, including the baseline values, targets, and sufficient annual data to infer trends.

[1] Countries which are finalising in the course of 2023 a Full Portfolio Planning are not expected to conduct a JA.

The below set of cross-cutting questions should be 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 is owned by the full set of in-country stakeholders.

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

Country context

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 km2 and the 2018-2050 population Projections report has a 2024 estimated population of 20,270, 568 where 9,820,249 are males and 10,450,319 are females (as of January 2024). These estimates include 8,241,556 children 0-14 years representing 41 percent of which 4,137,057 are males and 4,104,499 area 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 comprises 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 been increasing from 0.9% in 2022 to 1.5% in 2023 to 2.0% in 2024 [2].

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

Malawi Immunisation Background

The Expanded Programme on Immunization (EPI) was officially established in Malawi in 1979 about five years after the WHO establishment of the EPI program in 1974. At the time, Malawi's policy regarding EPI was to immunise all children under 12 months old to reduce 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 PCV 13, Rotavirus Diarrhoea, Measles-Rubella, Typhoid Conjugate Vaccine, Malaria Vaccine, Human Papillomavirus HPV, and COVID-19. These new vaccines have contributed to the reduction of diseases in both children and adults in the country. Routine immunisation 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.

There are 863 EPI reporting sites in Malawi, with a total cold chain point count of 1100. The number of outreach clinics ranges from 4400 to around 5500 per month. The main purpose of establishing outreach clinics and temporary sites is to bring vaccination services as close as possible to the clients.

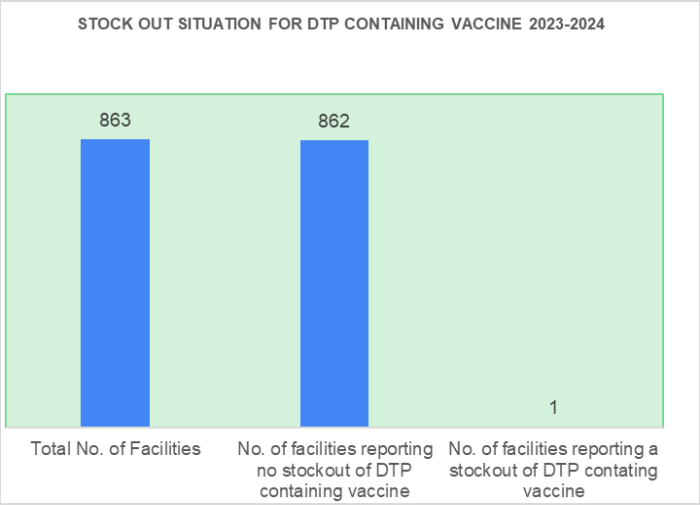
The implementation of immunisation services is guided by the National Health Policy and the third Health Sector Strategic Plan (HSSP III, 2023- 2030). Through the Essential Health Package (EHP), the HSSP III defines priority health interventions for the entire health sector, including immunisation. At a more operational level, the EPI program has been guided by the country's Comprehensive Multi-year Plan cMYP 2017-2022, however, in 2023 a National Immunization Strategy (NIS 2023-2030) was developed to continue providing guidance.

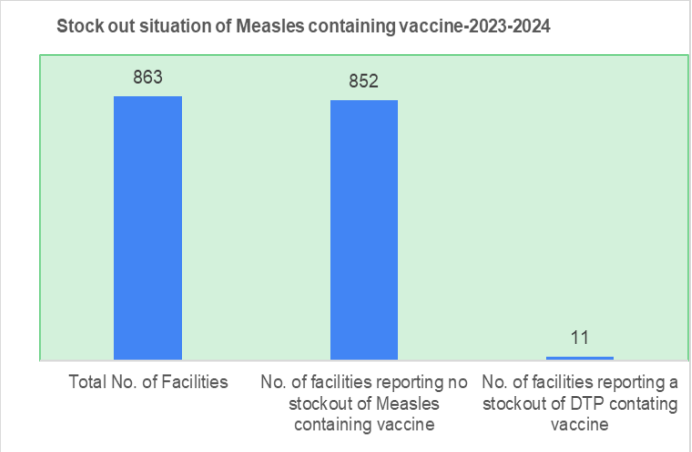
Since the creation of the EPI programme, Malawi has made tremendous progress in ensuring that the majority of children under the age of 5 years are vaccinated with support from donors, the private sector, and civil society. Unfortunately, the multi-prone challenges faced since 2020 have led to the decline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

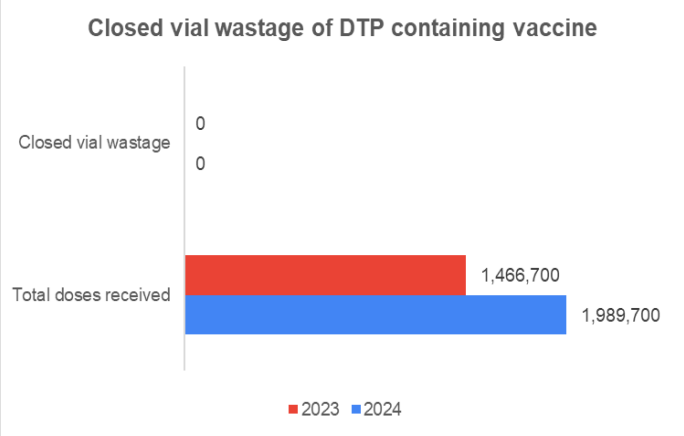
Malawi immunisation schedule:

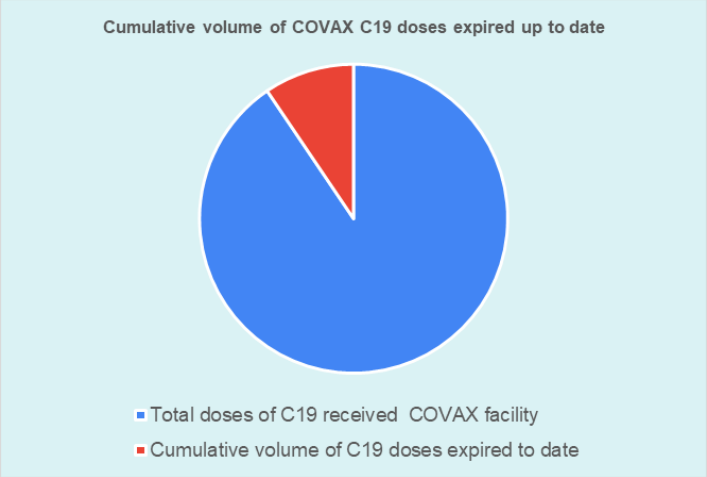
Age of Administration of Vaccine	Vaccine Type
At birth or first contact	BCG
At birth up to 2 weeks	OPV 0
At 6 weeks	OPV1, DPT-HepB-Hib1, PCV1 and Rota1
At 10 weeks	OPV2, DPT-HepB-Hib2, PCV2 and Rota2
At 14 weeks	OPV 3, DPT-HepB-Hib3, and PCV3, IPV
At 5, 6, 7 months	Malaria vaccines
At 9 months	Measles Rubella 1, Typhoid Conjugate Vaccine

At 15 months	Measles Rubella 2
At 22 months	Malaria Vaccines
At 9 to 14 years	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

2. Learning Question: **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 • Number of CCE received/installed/ leased through third party providers. • Equipment maintenance and/or onsite readiness. • Cumulative volume of C19 doses expired to date (and volume specific to COVAX supported doses, if the data is available)	**Graphs:** 


Stock out situation of Measles containing vaccine-2023-2024
863
852
11
Total No. of Facilities
No. of facilities reporting no stockout of Measles containing vaccine
No. of facilities reporting a stockout of DTP contating vaccine


Closed vial wastage of DTP containing vaccine
Closed vial wastage
0
0
Total doses received
1,466,700
1,989,700
2023
2024


Cumulative volume of COVAX C19 doses expired up to date
Total doses of C19 received COVAX facility
Cumulative volume of C19 doses expired to date

Country comments :

The country has 863 reporting facilities within the supply and cold chain system. Facility stock levels are monitored through manual and two electronic platforms namely Open Logistics Information System(OpenLMIS) and electronic Health Information Network (eHIN). OpenLMIS is operational at district level while eHIN is operational at both district and facility levels to enable facilities record transactions as they happen thereby helping us to access real time data on stock levels at service delivery points. Decisions are made based on stock-status data from facility and district reports to avoid overstocks and stock-outs. The recent transition of eHIN system from current system to an Open Source app has affected the operation of the system at the end users and this has resulted in a decreased utilisation of the system by users.

With support from GAVI and other partners i.e UNICEF, most districts conduct their scheduled monthly distributions on time, a factor that has contributed to low stock out rates in the facilities and an increase in the uptake of vaccines in outreach sessions. However, challenges still exist for distribution from health facilities to hard-to-reach areas in some facilities. The recently implemented Drive project in 13 districts of the country has tremendously improved vaccine availability in the facilities and hard to reach areas. The drive project which is being piloted through UNICEF involves a community volunteer that is given a basic motor bike and is responsible for transportation of Vaccines and Supplies and times a Health worker to an outreach clinic in collaboration with Health workers at a Health Centre.

Of the 863 facilities, one (1) facility reported a stock-out of DTP containing vaccines in the period 2023-24 representing 0.1% of the facilities in the country. For measles-containing vaccines, 11 facilities reported a stock out in the same period, representing1.3% of the facilities in the country and 98.7% stock availability in the facilities. The increase in consumption of the vaccines during the PIRIs and the inconsistencies in distribution schedules from district vaccines stores to health facilities to replenish the stocks on time led to stock outs in some facilities.

Wastage rates (both open and closed vial) are monitored through health facility monthly reports shared on monthly basis in which case feedback and support is given to facilities registering significant open/closed wastage rates. In the past 18 months, no facility reported a closed vial wastage of DTP containing vaccines.

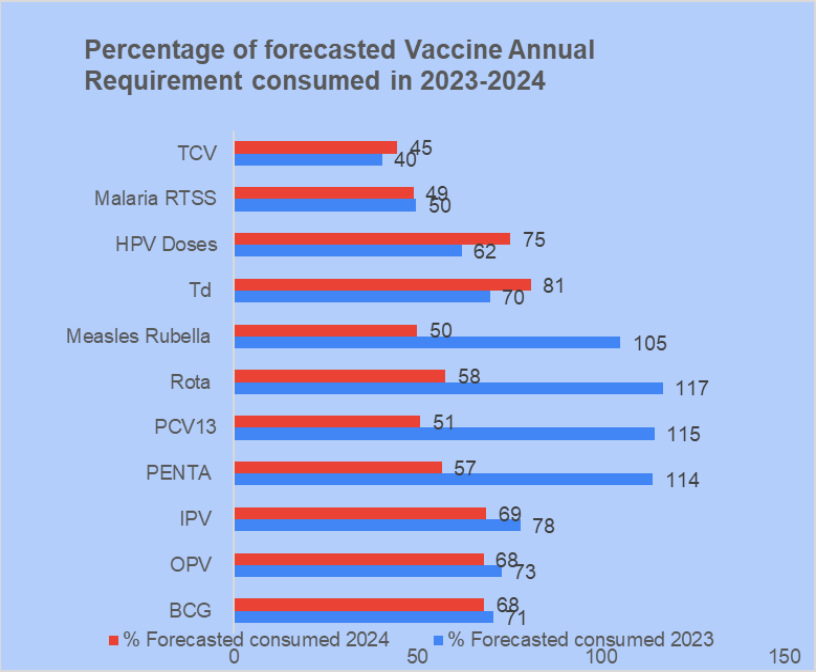
The cumulative volume of C19 vaccine expired to date is 864,795 doses of a total 8,249,430 doses that were received through the Covax facility. This represents a 10.4% expiry for all C19 vaccines received in Malawi

3. Learning Question: 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., stockouts, increased coverage, wastage)?

Indicator(s):

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

Graphs:



Country comments:

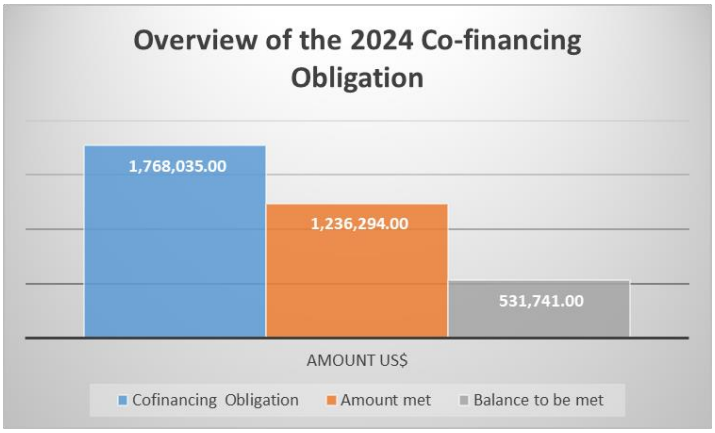
The Expanded program on Immunization conducts annual forecasts of vaccine requirements for the coming year at the end of third quarter in the prior year. In the year 2023, the percentage of annual forecasted vaccine needs that were actually consumed were above 70% for 73% of the vaccines and exceeded 100% for four vaccines namely (MR,Rota, PCV and Penta). The increase in demand and consumption for these vaccines could be due to the good number of Supplementary Immunization activities (SIAs) that were conducted in this year i.e. the integrated TCV-MR-bOPV-Vitamin A campaign.

In the year 2024, the percentage of forecasted vaccine needs that were consumed for more than 81% of the vaccines were below 70%. Only two vaccines (Td and HPV) registered a consumption rate of 75% and above. However, coverage data from WEUNIC shows significant improvement in coverage of key antigens from 2023 through 2024 indicating that the demand for vaccines is there; at the same time, vaccines stock movement has not shown any significant variations. This drop in the percentage of forecasted vaccine needs that were actually consumed is likely an issue of missing data entries on consumed doses in DHIS-2 which was used as a data source. Efforts are being taken to improve the quality of data in DHIS-2 through supportive supervision and mentorship to reinforce DHIS2 skills and enhance accurate reporting.

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

Indicator(s):

- Country co-financing obligation



Country comments:

Malawi has consistently worked towards meeting its co-financing obligations and has never defaulted. For 2024, the total co-financing requirement is **$1,768,035**, of which **$1,236,294** has already been paid, leaving a balance of **$531,741** to be processed before **31st December 2024**.

Despite efforts, the 2024 co-financing obligation remains partially unmet at the time of the Joint Appraisal. To ensure timely completion of the payments, Gavi has engaged the Minister of Health and the Secretary for Health in Malawi, both in writing and through direct meetings, emphasizing the importance of fulfilling these obligations on time.

Malawi's current economic challenges have made it difficult to meet co-financing requirements entirely through government resources. The country has relied significantly on support from stakeholders such as the Health Sector Joint Fund (HSJF) to bridge the gap.

During the Joint Appraisal, the following proposals were made to support Malawi in meeting its co-financing obligations and ensuring sustainability:

1. **Development of a Multi-year Co-financing Sustainability Plan:** Gavi, in collaboration with the Ministry of Health, the Ministry of Finance, and HSJF partners, will develop a multi-year co-financing sustainability plan. This plan aims to increase government ownership and ensure long-term stability in meeting vaccine financing requirements. The plan shall ensure future Vaccine Introductions are thoroughly considered for their co-financing implications.
2. **Clear Demarcation of Co-financing and Traditional Vaccine Payments:** The sustainability plan will include a clear distinction between co-financing obligations and traditional vaccine payments to avoid confusion and improve accountability.
3. **Alignment of the Co-financing Payment Calendar with the Government's Fiscal Year:** Gavi will work on revising the co-financing payment calendar to align with Malawi's fiscal calendar, ensuring better integration into government financial planning and execution.

These measures aim to enhance Malawi's capacity to meet its co-financing obligations, strengthen government ownership, and improve financial sustainability for immunization programs

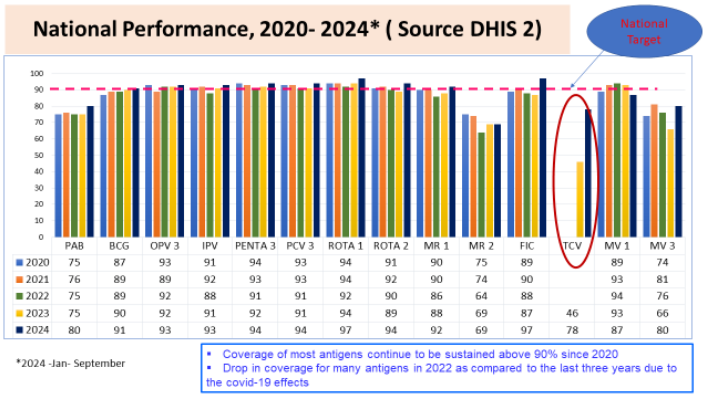
5. Learning Question: If applicable, have new vaccines been introduced as planned and if not, why? Is coverage of recently introduced vaccines being scaled-up as expected?

Indicator(s):

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

In addition, forecasted routine introduction & campaign dates should be validated during the JA discussion

Graphs:



Typhoid Conjugate Vaccine (TCV) is the vaccine that was introduced in May 2023. No other new vaccines have been introduced since the 2023 JA in October 2023. The coverage of TCV since introduction is at 78%.

The country is planning for the IPV2 introduction in Q4 of 2024 and HPV MAC in Q3 of 2025. For the IPV 2, Training of Trainers was conducted in November 2024 and at the time of report writing training sessions for Health workers was in session ready for the introduction. For the HPV Multi Age Cohort (MAC), a comprehensive schedule of activities with clear timelines will be developed in the first month of 2025. The HPV MAC will cover girls 9-18 years with a single dose followed by switch to HPV single dose for 9 years age girls in routine services.

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

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-supported campaigns, compared to target (coverage rate disaggregated by sex if collected)
- Number of reported outbreaks of vaccine-preventable diseases (for which GAVI supports with reactive campaigns)

Gavi supported vaccine introductions and catch-up campaigns since 2021

Year	Campaign Antigen	Type of Campaign	Planned vs implementation timelines	Age Group	Target	Achieved
2021	IPV Catch-up	Catch-up, nationwide	2021 vs 2021	2 years 8 Months	80%	65% coverage
2021	COVID-19	Reactive, nationwide	2021 vs. 2021	Priority Group 12 years & above	70%	**As of August 2023:** [K1] **At least 1 dose:** 27% of total population **Completed dose series**: 23% of total population
2023	TCV	New introduction (& Integrated Catch up), nationwide	April 2021 vs. May 2023 Delayed due to polio outbreak	9 months – 14 years	95%	**Administrative coverage** -77% **Post-campaign coverage survey** -79.6%
2024	Inactivated polio vaccine (IPV2)	New introduction	November 2024 vs. November 2024	9 months	80	Introduction still in session at time of writing JA report

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

Country comments:

Gavi supported vaccination campaigns have been significant in containing and preventing vaccine preventable diseases in the country. Since last year in May, 2023 when Malawi conducted the integrated MR-TCV-bOPV and Vitamin A campaign, the country has not conducted any vaccination campaign supported by GAVI. However, country- wide integrated micro-planning and two rounds of Periodic Intensification of Routine Immunisation (PIRI) were conducted in September and October 2024 to catch up on the unimmunised and underimmunized children. The PIRI activity is being conducted following a drop in immunisation coverages due to the effects of Covid-19 pandemic and natural disasters that affected routine immunisation between 2021 and 2023. The two rounds of PIRI have enhanced immunisation coverages. As of September 2024, the country has noted an increase in Penta1, MCV1 coverage from 93% to 94% and 88% to 92% from 2023 to 2024 respectively. Similarly the percentage of zero dose children has also dropped from 4% in 2023 to 2.7%. The third round of PIRI, which will be targeted, is expected to be conducted in January of 2025 which is anticipated to bring further improvements.

Malawi experienced 11 measles outbreaks between January and December 2024, reporting a total of 501 cases across 10 districts: Lilongwe, Neno, Mchinji, Mangochi, Ntcheu, Rumphi, Blantyre, Nkhotakota, Balaka, and Machinga.

In response, the country conducted four Supplementary Immunization Activities (SIAs) in Lilongwe, Mchinji, Ntcheu, and Rumphi.

- In Lilongwe, the SIA targeted children aged 9 months to 15 years, with a target population of 145,992. A total of 149,054 children were vaccinated, achieving 102% coverage.
- In Mchinji, with the same target age group, 105,024 children were vaccinated out of the targeted 119,483, resulting in 88% coverage.

The other two districts that carried out the SIAs observed similar performance in SIA coverages of above 80% against their targets. These campaigns were crucial in controlling the outbreaks and increasing immunization coverage in the affected districts.

Strengths of the campaigns and PIRIs

- Unimmunised and under-immunised children were mapped for PIRIs
- Facility based micro-planning was inducted in all districts
- Integrated micro-planning and mapping for PIRIs ensured all vaccine antigens were targeted
- As part of PIRI preparations, digitalisation of integrated micro-planning tools was done
- Availability of all antigens

Lessons Learnt during campaigns and PIRIs

- For new vaccine introductions, early decision on number and the antigens to integrate in a national multi-antigen campaign is required for adequate and timely planning as well as smooth implementation. For example, late decisions lead to late production and distribution of training, IEC and data collection materials.
- For a new vaccine introduction, it might be advisable not to be integrated with other antigens in a vaccination campaign to ensure better introduction and reporting of related AEFIs.
- In a multi-antigen integrated campaign, minimising the number of injectable vaccine antigens to only one in future, could reduce caregiver refusals during campaigns.
- Community sensitisation is very critical for any activity involving community participation
- Time allocation for training (e.g integrated microplanning, multi-antigen or new vaccine introduction campaigns) should be based on the available content to be provided.

- For multi-antigen campaigns, prior planning and budgeting for waste where facilities have no or limited infrastructure for waste disposal to avoid keeping wastes for months before collection for disposal.
- Prior use Digitisation of data by HSAs requires adequate gadgets

Challenges

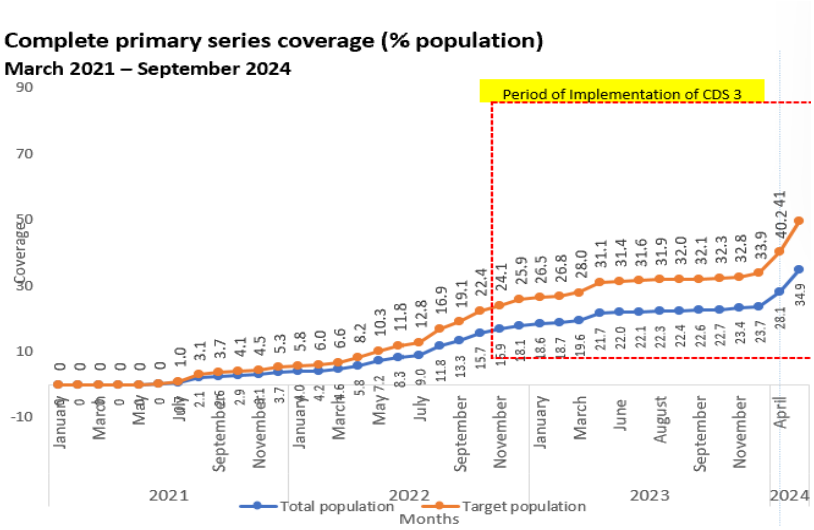
- Over-integrated or multi-antigen campaigns give difficulties with tailoring of messages to communities as well as information overload.
- Competing priorities affected the timeliness of implementing campaigns and PIRIs.
- Delayed frontline workers (FLWs) allowance payments for training and actual campaign days as well as complicated payment mode for campaign fuel including partners' internal funds approval systems affected implementation. For example, it takes up to 4 months after completion of a campaign, for some FLWs to get paid.

7. Learning Question: What is the current status of your COVID-19 vaccination?

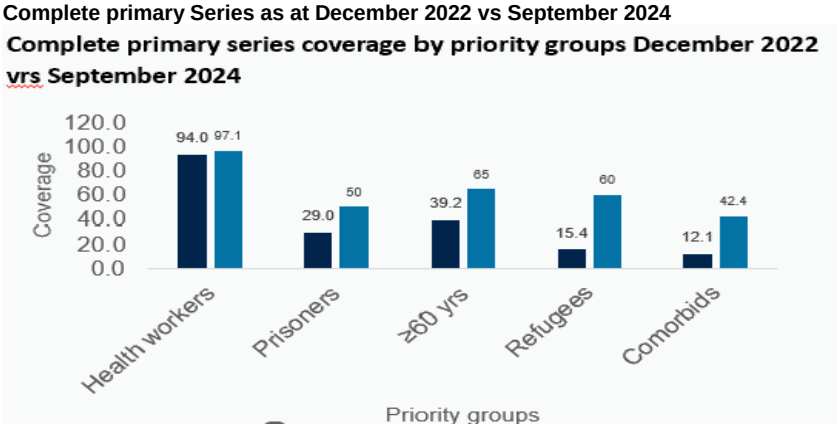
Indicator(s):

- Report and reflect on progress in uptake, with particular emphasis on older adults, health workers and other high-priority population group (as defined by WHO SAGE guidance). Analyse both primary series uptake and boosting.
- Describe if and how the country is integrating delivery of COVID-19 vaccine with routine immunisation & other primary health care services, including reflecting on how Gavi CDS has been used to support these integration efforts (if applicable).
- How have CDS funds been used to strengthen broader RI efforts beyond COVID-19?

Graphs:



Complete primary Series as at December 2022 vs September 2024



Country comments (please consider the set of cross-cutting questions to structure comments)

With funding support from the GAVI CDS 3 grant, Malawi has transitioned from the vertical programming for COVID-19 deployment into an integrated approach into routine immunisation and Primary Health Care.

To ensure a robust policy environment to govern integrated approaches to COVID-19 vaccine deployment, support was provided for the development of the Malawi COVID-19 Integrated Vaccine Deployment Plan 2023- 2026 which provides the rationale, approach, M&E framework and a costed plan for COVID-19 vaccine delivery. This document has since been reviewed by the EPI Technical Working group and Health Services Technical Working Group. The plan is currently awaiting approval by MOH before being disseminated.

In 2024, COVID-19 vaccine delivery was focused on delivery through routine immunisation services as well as through integrated platforms of care in line with the objectives of the third edition of the Health Sector Strategic Plan(HSSP III). Leveraging on routine immunisation services, COVID-19 is provided at routine immunisation sites including outreach points. COVID-19 vaccination has also been progressively provided in other care areas Non-Communicable Disease Clinics, HIV/ TB clinics and antenatal clinics targeting pregnant women. Integrated approaches were also leveraged to strengthen emergency preparedness and response activities in Cholera response.

An integrated COVID-19 and cholera preventive campaign was conducted in which integrated services were delivered at the community level. The package of services included the provision of COVID-19 vaccination, delivery of preventive messaging on COVID-19 and Cholera, distribution of chlorine tablets and household water testing. The integrated campaign leveraged on interpersonal communication at the household level to drive behaviour change communication which significantly helped improve appropriate WASH practices and uptake of COVID-19 vaccines which were all critical in curbing the two outbreaks.

Using CDS 3 resources, vaccinators were recruited in most districts to increase the numbers in order to cater for the increasing vaccination work. A total of 380 vaccinators were recruited in all the districts.

To ensure effective targeting of high-risk groups, orientation and mentorship of frontline workers has been ongoing in the health facilities to strengthen knowledge on the use of integrated approaches for vaccine delivery. So far over 2927 health workers have been oriented across the country and this is ongoing.

There has been progressive improvement in COVID-19 Coverage in 2024. Primary series coverage improved from 24% and 34% in the general and target population as of December 2023 to 34% and 48% respectively as of September 2024.

Equitable uptake of COVID-19 amongst priority groups also increases significantly. Primary Series Coverage amongst older persons increased significantly from 39% in December 2022 to 65% as at September 2024 and similarly primary series coverage amongst persons living with comorbidities increased from 12.1% as at December 2022 to 42.4% as at September 2024.

In January 2024, the country had 2,271,200 million doses of COVID-19 vaccines at risk of expiry at different intervals from January - September 2024. Using diverse approaches, targeted campaigns were conducted in January, April and September to accelerate vaccine delivery to high-risk groups living in underserved and hard to reach communities. This reduced the amount of COVID - 19 vaccines that expired by almost 50% as 1,079,515 doses were utilised during that period. These activities were preceded by mapping of zero- dosed populations as part of preparations of Periodic Intensification of Routine Immunisation.

Strengths

- Resilient Health system with the ability to respond simultaneously to multiple health emergencies i.e., Polio outbreak, Cholera Outbreak, Cyclones and COVID-19 pandemic.

- Availability of a functional Presidential Task Force for COVID-19 led by the Minister of Health to provide oversight of all response activities
- Good partner coordination by MOH effectively mobilised 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 and integrated vaccine delivery across the various platforms of care.
- Strong commitment from staff to conduct the COVID-19 vaccination activities despite competing priorities.
- 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.
- Recruitment of more vaccinators in most districts helped in provision of the vaccine to more people.
- Use of different strategies in vaccine delivery e,g FAV, encouraged vaccinators to vaccinate more people.

Key Challenges

- Low risk perception further worsened by declaration of the end of COVID-19 as a global emergency leading to declined demand for vaccines.
- COVID-19 related vaccine hesitancy in most districts driven by myths and misconceptions.

Lessons Learnt

- Leveraging integrated approaches to implementation is essential for Health systems strengthening and efficient use of limited resources
- 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 prioritised 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.

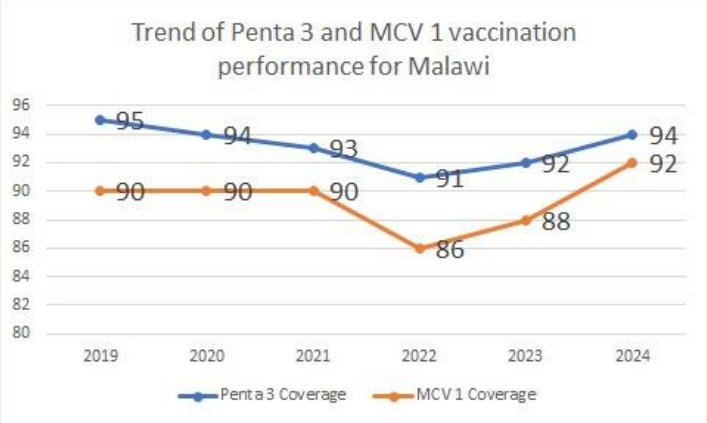
8. Learning Question: Trajectory and progress against targets set

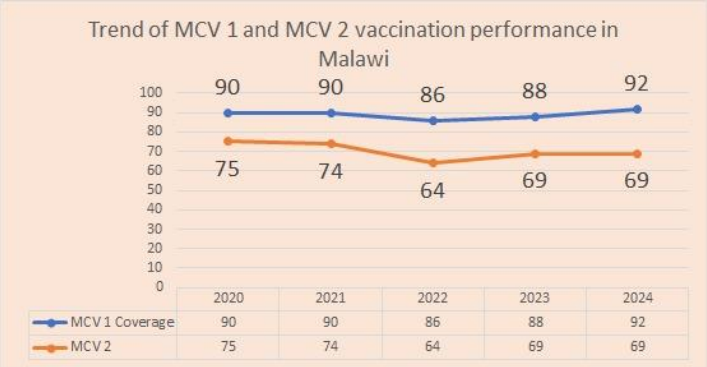
- **How does the progress over the past year compare with your Theory of Change or programme objectives?**

- How has **COVID-19** and **COVID-19 vaccination** impacted your routine immunisation programme, what has been done to maintain and restore immunisation and what has been the impact of it (please include reference to trends in DTP3 and MCV1 coverage)?
- 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):

- Number of children who received DTP3 and number of children who received MCV1 in the past year compared to the number who received those vaccines in 2019.
- Qualitative information





WUENIC coverage progression

Vaccine	2019	2020	2021	2022	2023
DTP1	97	95	95	89	95
DTP3	95	94	93	86	91
Rota2	92	91	92	85	91
PCV3	95	93	93	87	91
HPV1	85	81	13	13	68
IPV1	88	91	92	84	91
MCV1	92	90	90	82	87
MCV2	75	75	74	60	65

Country comments (please consider the set of cross-cutting questions to structure comments):

The country is progressively recovering from the impact of the COVID-19 pandemic as well as the effect of the multiple health emergencies on immunisation systems. The recent 2023 WUENIC data shows significant recovery across most antigens with Penta 3 and MCV 1 recovering from its significant dip in 2022 of 91% and 86% respectively to 92% and 88%.

As at September 2024, significant recovery is seen with Penta 3 and MCV 1 coverage at 94% and 92% respectively.

This significant improvement is resulting from deliberate efforts to provide catch- up vaccination to all zero-dose and under-immunised populations whilst still sustaining routine immunisation. With support from GAVI, investments have been made in Mapping zero- dose and under-immunised populations across the all 29 districts and two (2) rounds of Periodic Intensification of Routine Immunisation has been conducted to reach these underserved communities and populations.Special strategies like urban vaccination in major cities and tracking of children through community based MotherCare groups has also helped in reaching more children.

Awards to best performing districts helped in promoting morale among health workers. With HSS funding, 5 districts received an award as best performing districts per zone based on best coverage.

Zero-dose

Indicator	Source	2019	2020	2021	2022	2023
Number of **zero-dose** children at national level (DTP1)	WHO/UNICEF	18,227	30,878	31,262	69,899	32,260
	Admin data	21,881	37,374	35,777	80,080	37,568
Dropout from DTP1 to DTP3 at national level	WHO/UNICEF	2%	1%	2%	3%	4%
	Admin data	2%	1%	2%	3%	4%
Dropout from DTP1 to last routine dose of MCV at national level	WHO/UNICEF	23%	21%	22%	33%	32%
	Admin data	23%	21%	22%	33%	

B. Programme Management

Financial implementation of Gavi cash grants

Cash[3] Support Summary*

Grant	Recipient	Period	Status as of **September 2024**						Cash Bal	Compliance**	
			Grant Value	Approved	Disbursed.	Commitment	Expenditure	Utilisation (in %)		Fin. Rep	Audit
HSS	MOH & UNICEF	2018 – 25	41,160,000	41,160,000	31,042,290	3,302.076	27,740,214	100	0	Yes	Yes
HPV	MOH	2018 – 20	674,415	674,415	674,416		628,351	93	18,085	Yes	Yes
IPV	MOH	2018 -21	1,491,292	1,491,292	1,491,291		869,045	57	265,684	Yes	Yes
CDS	MOH & UNICEF	2021 – 25	9,187,588	9,187,588	8,645,588	465,823	6,884,648	85	1,295,117	Yes	Yes
TCV Campaign	MOH & UNICEF	2022 – 25	6,175,929	6,175,929	6,084,850	1,057,909	3,423,664	74	1,603,276	Yes	Yes
MMR	MOH & UNICEF	2022 – 25	2,077,089	2,077,089	2,049,928	428,484	1,254,845	82	366,599	Yes	Yes
TCV Routine	MOH	2022 – 25	665,915	665,915	665,915	186,889	367,959	83	111,067	Yes	Yes
PBF	MOH	2024	5,300,000	5,300,000	5,300,000				5,300,000		
Total			66,732,228	66,732,228	46,704,785	5,441,181	38,344,816	94			

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

[3] All HSIS grants (HSS, VIGs, OPS, Switch), EAF and CDS cash support as applicable.

9. Learning Question: How well is the country able to absorb Gavi funding and what are the drivers? (This should cover all funding including funds channelled 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
- Amount of cash balance in-country

Country comments:

Based on the funds received the country has been able to absorb funds to an overall 94% of funds received in country as of 30th September 2024. Remaining funds under TCV Campaign, MR and TCV Routinisation await finalisation of liquidations so that balances can be rolled into the HSS grant. Both the HPV and IPV post-campaign funds amounting to USD 660,948 that remained post implementation were already incorporated into the HSS grant.

The Majority of cash balances $5.3 Million is under PBF which is now underway mainly through UNICEF and goes towards procurement of motorbikes and solarization of some health facilities. The Cash balances under CDS funding has mostly just been utilised towards PIRIs and C-19 campaigns and figures to be revised once reconciliation process is completed.

Based on the funds received, the country has successfully absorbed the disbursed resources as detailed in the table above. The key drivers of fund absorption have been:

1. **Effective Collaboration:** Strong partnerships between the EPI, PIU, district teams, and other implementing entities ensured the timely submission of proposals.
2. **Reallocation Processes:** The well-supported reallocation processes of the HSS grant by the Gavi Country Team facilitated changes in implementation strategies and helped overcome barriers to implementation.
3. **Structured Planning:** The timely development of bi-annual work plans for the HSS grant enabled smoother and more efficient implementation.
4. **Dedicated Support:** Embedding Gavi-specific Program Officers at the national EPI level, with a focus on facilitating and supporting the implementation of grant-planned activities, proved critical to the success of the program.

Despite the above achievements, some challenges to full absorption of the HSS grants remain, including:

1. **New Vaccine Introductions and Catch-Up Campaigns:** These activities require substantial preparation time, diverting attention from other critical activities under the HSS grant.
2. **Public Health Emergencies:** Multiple emergencies necessitate EPI's focus on immediate responses, which can delay the implementation of HSS-related activities

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

- What is the progress of Grant Management Requirements implementation?
- How has the country addressed recommendations arising from past audit recommendations (annual external audits + Gavi Programme Audit)?
- 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)?
- Specifically, what actions have been taken to enable a larger % of Gavi funds to be channelled back through government systems?

Country comments:

The country has taken some steps towards addressing outstanding GMRs, AMAs and Recommendations from Reviews such as the Monitoring review of 2023. Some key updates to these recommendations and requirements are as follows;

1. **Structure and Staffing**
    a. **Staff capacity Challenges:** The EPI has now filled 7 permanent positions at National level under Government allocation. Gavi also approved additional support staff the PIU namely Gavi dedicated procurement officer, Additional Accountant, administrative Assistant and Driver all of which are in place. The capacity of an M&E Specialist to sit within EPI is yet to be filled.
    b. **Key Performance Indicators for PIU**: Gavi is finalising on KPI for the PIU which once finalised will be used to guide grant performance.
2. **Financial Management**
    a. **Digitisation of Financial Processes**: PIU agreed with Gavi and Global Fund to implement an ERP System. The procurement process for this was initiated but yet to be completed
    b. **Staff advances**: Outstanding cash advances have been a recurring challenge that the PIU has faced over time. The ERP is anticipated to address some of the challenges however the PIU continues to look for alternative ways to minimize staff advances
3. **Program Management**
    a. **Policy and Immunisation Strategy**: The country now has a finalised National Immunisation Strategy (NIS) which will be used as the guiding document for the Gavi Full Portfolio Planning (FPP) in 2025
    b. **Community Health Services; Untrained HSA**: Through Gavi Support a total of 274 HSAs have been trained in pre-service training since January 2023. In addition Gavi has supported the development of HSA training Curriculum which has now been adopted by some training institutions to provide more structured 1 year training for HSAs.
4. **Procurement**
    a. **Procurement Key Performance Indicators (KPIs)**: The PIU awaits finalisation of development of KPIs which shall be shared by Gavi to guide performance in procurement.
    b. **Procurement Plans**:The 2024 Procurement Plan was finalised on time. In addition the ERP is expected to have a module that will further improve procurement operations.
5. **Fixed Asset Management**
    a. Inadequate physical verification of assets and incomplete asset register: In 2024, the PIU has conducted physical assets verification exercises across the country. Part of the exercise was to verify Cold Chain Equipment (CCE) that were distributed to Health Facilities through UNICEF. The exercise is a big step towards ensuring a complete asset register.
6. **Grant Management Requirements**

a. Some GMRs are ongoing and still being tracked. These include MOH audit committed whose functions were replaced by the PIC Finance/Audit subcommittee, Repair and maintenance plans in Health Facilities and Assets management and VAT refunds. Other GMR were completed and closed.

During the JA mission, Gavi agreed with PIU for the Provision of a Financial Management Technical Assistance (TA) within PIU to strengthen financial management. This TA will be key in ensuring that recommendations and AMAs are addressed.

The country continues to utilise services of a Fiscal Agent as part of assurance mechanism and risk mitigation.

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

Country comments:

1. 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.

2. 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.

3. 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.

4. 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. This is one of the main challenges that is affecting delivery of infrastructure such as the vaccine stores construction.

5. 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.

12. Learning Question: Is the country effectively addressing gender related barriers (e.g. faced by caregivers or adolescents in accessing immunisation services and barriers faced by health workers in delivering immunisation services)?

Indicator(s):	**Graphs:**

• Did (when) the country conduct a gender analysis that identified barriers faced by health workers, caregivers and adolescents (yes/no) • Has the country implemented initiatives that remove or reduce gender related barriers?	

Country comments

To effectively mainstream gender equity and human rights in immunisation, the Expanded Programme on Immunisation, in partnership with the Ministry of Gender, Community Development, and Social Welfare, conducted a rapid analysis and barrier assessment in 2024. This evaluation aimed to understand the varying impacts of gender-related factors on immunisation access and outcomes.

As part of support to improve gender mainstreaming, UNICEF Malawi Country office recently conducted a Gender Bottleneck Analysis. The recent analysis also reveals critical disparities in health service access, particularly highlighting the need for a robust monitoring framework and targeted interventions for vulnerable populations, including children with disabilities. It emphasizes the importance of fostering inclusivity through community engagement, such as promoting songs that encourage participation across socioeconomic divides. At the health facility level, restructuring complaint systems is essential to ensure caregiver feedback is addressed effectively. Cultural stigma and time poverty significantly hinder male involvement in child health services, while young mothers prioritize antenatal care due to fear of scolding, perpetuating a cycle of underutilization of vital health services. Addressing these barriers is vital for improving health outcomes and ensuring equitable access to care.

Methods

The assessment comprised a desk review of relevant gender equity and rights (GER) data, field data collection, and validation sessions with key stakeholders. A total of 886 individuals were engaged across 10 districts.

Participants examined biological, structural, social, and cultural norms affecting GER, alongside discussions in focus groups on barriers to immunisation, particularly about COVID-19. They also proposed interventions tailored to address district-specific challenges.

Key stakeholders in these engagements included community-based organisations (CBOs), civil society organisations (CSOs), government officials, community leaders, and academic institutions. Among the participants were representatives of persons with disabilities, gender focal persons, police, judiciary, local leaders, women's groups, health workers, men's groups, and support groups for individuals with comorbidities.

Focus group discussions were organised within the engagement sessions, allowing participants to contribute to data collection on GER analysis and barriers to immunisation related to GER.

The methodological approach of the gender bottleneck analysis study involved a mixed-methods design, combining quantitative surveys and qualitative interviews. Data collection tools included structured questionnaires, Key Informant Interviews (KII) and Focus Group Discussions guides. Quantitative data was analysed using STATA and qualitative data was analysed using gender-sensitive analytical frameworks such as Social Relations Framework and Gender Equality and Social Inclusion (GESI). This comprehensive approach ensured a robust understanding of the gender-specific bottlenecks in nutrition and health programs including immunisations.

Key findings

In Malawi, gender equality is enshrined in the Constitution, which prohibits discrimination based on various factors, including sex, ethnicity, and disability. Important resilience initiatives, such as the National Resilience Strategy, highlight the need for gender equality and social inclusion, recognising the importance of addressing the vulnerabilities and strengths of marginalised groups in programme design and implementation. However, despite numerous supportive policies and plans, Malawi faces significant challenges in effectively implementing these measures.

High illiteracy rates, particularly among women, along with limited decision-making power, adolescent marriages, and early pregnancies, significantly hinder both men's and women's access to healthcare services, including COVID-19 vaccinations. Research indicates that while women are often more willing to be vaccinated, many require male permission to receive vaccines for themselves or their children. Additionally, economic constraints impede access to healthcare, as transportation costs remain a significant barrier, even though immunisation services are free.

Harmful socio-cultural practices and discriminatory social norms continue to disadvantage women and marginalised groups, acting as major obstacles to achieving gender equality and accessing health services, including vaccinations. Women's poverty is closely related to their participation in low-income activities and limited access to resources such as land and capital. The 2017 Malawi Demographic and Health Survey (MDHS) revealed stark discrepancies in payment practices: 61% of employed men were paid in cash, compared to only 30% of women, with 59% of women receiving no payment for their work, versus 26% of men. Consequently, women often engage in more unpaid care work than men, limiting their decision-making power and control over household resources. Factors affecting the well-being and rights of children and adolescents include a lack of education, child labour, initiation rituals, child marriage, and adolescent pregnancy.

Conversely, men are also less likely to seek healthcare, including COVID-19 vaccinations, with many expressing a belief in their resilience against the virus, which diminishes their perceived need for vaccination.

While immunisation services extend to hard-to-reach communities, such as internally displaced persons' camps and refugee settings, challenges like inadequate transportation and frequent stock outs—especially in remote areas—impact service quality. Moreover, there is a lack of data on inequality monitoring at subnational levels, making it challenging to identify factors driving immunisation-related inequalities. The assessment also revealed a shortage of tailored Information, Education, and Communication (IEC) materials for specific populations, such as individuals with visual or hearing impairments, limiting their ability to make informed decisions regarding immunisation, including COVID-19 vaccinations.

Additionally, a just concluded Gender Bottleneck Analysis by UNICEF Malawi reveals critical disparities in health service access, particularly highlighting the need for a robust monitoring framework and targeted interventions for vulnerable populations, including children with disabilities. It emphasizes the importance of fostering inclusivity through community engagement. At the health facility level, restructuring complaint systems is essential to ensure caregiver feedback is addressed effectively. Cultural stigma significantly hinders male involvement in child health services, where women ridicule men who assist with child health, and community norms dictate that men should not take on childcare roles discouraging male involvement at the community level. Addressing these barriers is vital for improving health outcomes and ensuring equitable access to care.

Opportunities

The Government of Malawi, through the Ministry of Gender, Community Development and Social Welfare and other agencies, departments and Ministry has demonstrated through the strong legislative and policy environment, its commitment to address Gender, Equity and Human Rights. The institutional capacity to enforce these acts, strategies, policies and agreements should be strengthened to support a holistic approach to address GER barriers in Health including immunisation in line with the National Immunisation Strategy 2023-2030.

Malawi has a strong social and cultural system with each community having influential persons who are widely accepted by the community and can be leveraged to drive change once empowered with key knowledge to address GER gaps. Existing community structures such as mother-support groups have been leveraged to strengthen immunisation. However other Gender Related structures such as Full councils, Community Victims Support Units, traditional authority, and male groups can be further leveraged to improve immunisation-related health literacy and address any gender-related violence arising from immunisation-related activities to ensure equitable access for all.

There is also a vibrant network of community-based organisations (CBOs), Civil Society Organisations, and Non- Governmental Organisations working actively to improve economic, social, cultural, and biological drivers of gender-related inequalities. These have established social systems and some level of community acceptance and can be collaborated with to improve GER gaps in Immunization.

To address the highlighted challenges and barriers, some key priority areas were identified to address the Gender Equity and Human Rights related to immunisation. These are outlined as follows.

Emerging Priorities

Strengthen	Immunisation-related health literacy and awareness with a focus on the most at-risk including women, adolescents in early marriages and adolescent mothers, men, and other vulnerable populations with prevalent biological, Social, and cultural norms that influence immunisation -related health-seeking behaviours.
Bridge	Knowledge amongst health workers in Gender Equity and Human Rights mainstreaming as well as immunisation related gaps in technical officers to ensure enhanced collaboration and partnerships in mainstreaming GER in immunisation.
Enhance	Political and Social support for Immunisation through advocacy with National and subnational agencies including Traditional Authorities, Full councils, Women's groups, Men's groups. Community dialogues to address stigma around male caregivers and encourage discussions about gender roles in parenting. These dialogues

	can be facilitated by trusted community leaders to create a safe environment for open conversations. The use of media to address the importance of immunisation, debunk myths about gender-related challenges, and improve inclusivity in health care service delivery
Strengthen	Institutional and administrative processes to support GER mainstreaming in Immunization leveraging upon institutional structures such as Gender Technical Working Groups, District Executive Committee meetings to review and address holistically progress in mainstreaming GER in immunisation. Provide targeted support to female-headed households, such as mentorship initiatives.
Facilitate	The implementation of the National male involvement strategy to enhance male involvement in immunisation. This can include the launch of targeted campaigns to encourage male involvement in child health services. Use positive role models and success stories to challenge cultural stigma and promote shared responsibilities
Implement	Develop and implement hgh-impact strategies to bridge access gaps to reach populations being left behind including hard-to-reach underserved communities, IDP camps, Refugee camps, and person Living with Disabilities ensuring accessibility and tailored outreach strategies to meet their specific needs. Develop a robust complaint and redress system in health facilities that ensures caregiver feedback is collected, reviewed, and acted upon. This can include anonymous suggestion boxes and regular community feedback forums. Establish peer-led support groups that provide a safe space for young mothers to share experiences and receive guidance on child health. This can help alleviate fears associated with accessing services and foster a supportive community. Organise community dialogues to address the stigma around male caregivers, community norms that dictate that men should not take on childcare roles, and encourage discussions about gender roles in parenting. These dialogues can be facilitated by trusted community leaders to create a safe environment for open conversations.

Monitor	Vaccine implementation progress and equitable access through selected priority indicators that include national and subnational data disaggregated by sex and age.

Constitution of the Republic of Malawi, https://www.malawi.gov.mw/index.php/resources/documents/constitution-of-the-republic-of-malawi?download=44:constitution-of-malawi Malawi Demographic and Health Survey 2015-2016, https://dhsprogram.com/publications/publication-FR319-DHS-Final-Reports.cfm Malawi Demographic and Health Survey, NSO, (DHS 2015-2016)

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

- What is the progress of planning and implementing health information systems and data strengthening, monitoring and learning activities? Do these collectively constitute at least 10% of your HSIS/EAF grant budget?
- How will the country address remaining data-related gaps or barriers to immunisation programme performance?
- Comment on key results or findings for identified learning priorities based on country's application. Specifically, what actions have been taken to improve immunisation programme performance based on these data? e.g. better understand specific barriers to immunisation, successfully guide implementation, inform course correction for grant activities

Country comments:

- **Progress of planning and implementing health information systems and data strengthening, monitoring and learning activities**

1. Capacity Building in DHIS2 and EPI Data Reporting

By December 2022, Malawi successfully completed a comprehensive, nationwide capacity-building program focused on using DHIS2 for EPI data reporting. The integration of EPI data into the DHIS2 system represents a transformative milestone, facilitating centralized, real-time management of immunization data. Despite the widespread training, some capacity gaps remain, particularly at service delivery points where health workers continue to need additional support in data management. To bridge these gaps, the Ministry of Health has implemented ongoing supportive supervision and on-site coaching to reinforce DHIS2 skills and enhance reporting accuracy progressively.

Surveillance-Specific Training: WHO-led training on the ODK Companion App was conducted across all districts, equipping district teams with the skills to report surveillance data promptly. This training significantly improves data quality and ensures timely reporting, critical for disease outbreak responses.

2. Digitization of Primary Data Collection Tools

While the DHIS2 platform provides a digital backbone for data management for aggregate data however case based data i.e. primary data collection tools such as immunization registers, tally sheets, and reporting forms are still in manual formats. This reliance on paper tools remains a bottleneck, slowing data flow and hindering real-time monitoring and analysis.Funding Challenges still a bottleneck digitizing patient level primary data collection tools. A digitized ecosystem would streamline reporting, reduce manual entry errors, and improve data integrity at all levels.

However there have been efforts to develop digital monitoring tools for campaigns with support from partners, Malawi has effectively deployed real-time digital tools - Google sheets, to monitor various vaccination campaigns, including COVID-19, oral cholera vaccine (OCV), and polio campaigns. These tools facilitate comprehensive oversight of pre-campaign preparedness, in-campaign supervision, and post-campaign evaluations.

3. Data Quality Improvement and Utilization

I. **Data Quality Assessments (DQAs):** DQAs conducted in districts such as Balaka, Ntchisi, Nsanje, and Mangochi identified key strengths and weaknesses across seven critical components of immunization monitoring. While the core output component showed strength (scoring 84%), demographic data quality remained a challenge (scoring 46%), indicating the need for targeted interventions to address gaps in demographic data accuracy.

II. **Informed Decision-Making**: EPI data is routinely analyzed and used at national and sub-national levels for program planning and evaluation. National-level analysed data is shared through review meetings, regular district team engagement, and the weekly IDSR bulletin, which offers performance feedback and specific recommendations for improvement. This structured dissemination ensures data-driven decision-making across all levels.

4. Monitoring & Evaluation (M&E) and Information Products

DHIS 2 remains the national priority tools for strengthening EPI data management in the country for use in Routine immunization; Surveillance and SIAs,

Data Collection and Visualization Tools: The M&E component of Malawi's national polio outbreak response has developed various data collection tools, such as tally sheets, summary sheets, ODK forms, and Google Sheets, for capturing administrative and preparedness data. Additionally, Power BI dashboards provide real-time visualization of data from pre-campaign, intra-campaign, and post-campaign activities, greatly enhancing M&E efficiency and clarity.

Supportive Supervision: Regular supportive supervision across districts and health facilities bolsters data quality and M&E efforts, fostering continuous feedback loops and targeted capacity-building where performance challenges arise.

5. Funding and Budget Allocation

Budget Allocation and Constraints: While a significant portion of the HSIS/EAF budget is dedicated to supporting health information systems and monitoring activities, the existing funding levels are insufficient to fully digitize the remaining manual data collection tools. This reliance on external support for campaign-specific digital tools highlights the need for sustainable investment to meet the minimum 10% allocation target fully.

- **How the country plans to address remaining data-related gaps or barriers to immunisation programme performance?**

  - **Ongoing Training:** Malawi will continue to invest in building health workers' data management skills9 at service delivery points. This includes regular training on DHIS2, data collection methods, and data analysis to ensure accurate and timely reporting. Additionally, we also focus on building digital literacy among health workers to ensure they are comfortable with electronic systems, especially as more tools transition from paper to digital.
  - **Supportive Supervision and On-Site Coaching**: Supervisors will conduct more frequent supportive supervision visits and on-site coaching sessions, targeting facilities and districts that have shown persistent data quality issues. This approach reinforces data management skills and promotes accountability at local levels.
  - **Electronic Immunization Registers and Reporting Forms**: Digitizing immunization registers, tally sheets, reporting forms, mapping and microplaning tools will be prioritized to eliminate manual data entry and reduce errors. This shift will improve data accuracy, support real-time monitoring, and streamline data flow from facility to district to national levels.
  - **Expand the use of Mobile Data Collection Tools**: Where feasible, Malawi will expand the use of mobile data collection tools, such as computers, tablets or mobile phones, solar power banks to enable direct digital entry of immunization data. This reduces time spent on data transcription and allows immediate access to accurate data at all levels.
  - **Regular Data Quality Audits**: Malawi will institutionalize data quality audits in more districts, beyond the initial assessments to improve EPI data quality across the country additionally implementing routine data validation checks, such as cross-referencing DHIS2 data with facility-level records, will be crucial for improving data reliability. This will also be done using standardized operating procedures for data validation and correction developed by CMED.
  - **Integrated Digital Platforms at all levels**: Malawi plans to expand the use of real-time digital tools, such as the WHO-supported ODK app and Power BI dashboards, for routine immunization data. By integrating these tools into regular monitoring, not just campaigns, Malawi can enable more timely and comprehensive program assessments. Additionally expanding dashboard capabilities to support real-time visualization of immunization coverage and service delivery metrics at national, district, and facility levels to allow program managers to identify coverage gaps quickly and take corrective actions as needed.
  - **Data Review Meetings**: Regular data review meetings at National, zone and district levels will continue to support data use in planning. The activities will major on routine data analysis, paired with feedback loops to district teams, will help refine immunization strategies based on recent performance. For example, data insights can inform outreach plans, helping target areas with the lowest coverage. Additionally, the use of real-time data will support adaptive immunization strategies. If, for instance, certain areas show lower-than-expected coverage due to logistical challenges, resources can be reallocated accordingly to address these barriers.
  - Printing of data tools: Both facility and take home record tools will be printed continuously to include new vaccines and avoid stock outs.
  - **Partner Collaboration for Technical Assistance**: Leveraging partnerships with WHO, Gavi, and UNICEF JSI and KUHES, Malawi will seek ongoing technical assistance to address data-related gaps. This includes support for training programs, technology upgrades, and data quality audits. While external support has been essential, Malawi

aims to mobilize more domestic and partner funding to sustain digital transformation initiatives, including fully transitioning to digital data tools.

- **key results or findings for identified learning priorities based on the country's application**

  Malawi has implemented several key actions to improve its immunization program performance based on identified learning priorities and data analysis:

  - Improved data collection and use has helped in understanding barriers to immunization, such as access issues in remote areas and socio-cultural factors affecting vaccine uptake.
  - The integration of DHIS2 for centralized data management has improved routine immunization reporting plus real-time monitoring tools, like the ODK app and Power BI dashboards, enhance campaign preparedness and facilitate immediate adjustments during vaccination campaigns.
  - Data analysis has improved resource allocation redirected to low-performing districts identified.
  - Data has been used to identify and incentivize better performing districts and tailor training initiatives to address specific gaps in data management and digital literacy among health workers.

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

14. Learning Question: 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):

- Country analysis on partner performance as per workplans

Graphs:

Partner	Type of support	Budget US$ (up to)	Impl. period	Status
WHO	HPV TA	$608,370	2023-2025	Latest reporting to be done in Nov-25.
UNICEF	HPV TA	$288,684	2023-2025	Minor delays reported in implementation pace.
WHO	PEF TCA	$1,624,569	2022-2025	Of the 2024-25 budget of US$ 993,429, Gavi disbursed the 2024 budget of US$ 205K.

	UNICEF	**PEF TCA**	**$1,602,060**	**2022-2025**	**Of the 2024-25 budget of US$ 844,273, Gavi disbursed the 2024 budget of US$ 403K.**
	Kuhes	**PEF TCA**	**$610,602**	**2023-2025**	**Initial contract: US$150,602. Costed extension ongoing for the recently approved US$460,000.**
	PATH	**PEF TCA**	**$269,000**	**2024-2025**	**RFP concluded Contract to end 30-Jun-25.**
	TBD (RFP)	**PEF TCA**	**$237,000**	**2025**	**RFP to be launched in Nov-24.**
	JSI	**CDS3 TA**	**$200,000**	**2023-2024**	**Contract ended 30-Jun-24 but reporting not yet finalized.**
	Village Reach	**CDS3 TA**	**$199,852**	**2023-2025**	**Contract to end 28-Feb-25.**

Summary of TA support

1. UNICEF

- Provided TA in **Supply Chain, Routine Immunization Strengthening, and Demand Creation**.
- Key achievements include:
  - Integrated service delivery to reach zero-dose and under-immunized children.
  - Social and behavior change interventions to drive demand for immunization.
  - Strengthened stock management and Logistics Management Information Systems (LMIS).
  - Improved cold chain management to ensure vaccine availability at service delivery points.

2. WHO

- Provided technical assistance in several key areas, including:
  - Finalization and dissemination of the National COVID-19 Vaccine Deployment Plan.
  - Mapping and dosing of zero-dose and under-immunized populations (over 50,629 zero-dose and 267,316 under-immunized individuals identified and reached).
  - Support for integrated COVID-19 vaccine delivery targeting high-risk populations.
  - Conducted a Gender, Equity, and Human Rights analysis to assess immunization barriers.
  - Provided mentorship and supportive supervision for frontline immunization workers.
  - Facilitated EPI review meetings to document progress, challenges, and recommendations.

3. Kamuzu University of Health Sciences (KUHeS)

- Led the revision of the Malawi EPI Field Manual for health workers through:
    - Stakeholder consultations and workshops.
    - Validation by national technical working groups (TWGs).
    - Final approval by MOH senior management for national use.

4. JSI

- Supported COVID-19 vaccine integration into Routine Immunization (RI) and PHC.
- Key activities included:
    - Adaptation of microplanning tools in line with SAGE recommendations.
    - Capacity building for health workers and teachers.
    - Development of national immunization strategies.
    - Mentorship and supervisory visits at district and facility levels.
    - Strengthening data management systems for performance monitoring.

5. VillageReach

- Applied Human-Centered Design (HCD) to identify and address immunization barriers.
- Key contributions:
    - Conducted **barrier assessments** for COVID-19 vaccine integration and cholera prevention in Mangochi.
    - Developed behavior change communication strategies via radio.
    - Supported mapping of under-immunized populations and outreach services.
    - Trained DHMTs in Phalombe and Thyolo to use HCD for program improvement.

6. PATH

- Focused on service delivery and demand creation for the Typhoid Conjugate Vaccine (TCV).
- Key interventions:
    - Post-introduction supervision to ensure TCV integration into routine immunization.
    - Community radio campaigns to raise awareness and increase uptake.
    - Conducted a health worker assessment to refine immunization strategies.

7. Amref Health Africa

- Supported **integrated immunization** strategies, health worker training, digital health, and quality improvement.
- Key contributions:
    - Integrated immunization services within PHC, ANC, and PNC programs.
    - Developed pre-service and in-service training programs for HSAs and health workers.
    - Strengthened digital health systems, including I-CHIS.
    - Piloted the Periodic Intensification of Routine Immunization (PIRI) to inform national implementation.
    - Enhanced Risk Communication and Community Engagement (RCCE) strategies to counter misinformation and increase vaccine acceptance.

Each partner played a crucial role in strengthening Malawi's immunization program through technical assistance, system improvements, and community engagement initiatives, contributing to increased vaccine coverage and improved health outcomes.

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.

The three day Joint appraisal meeting resulted in identification of key priorities for Q4 of 2024 until the year 2026. These key priorities were stratified based on thematic area or immunisation pillar as presented in the table below;

Immunisation Pillar	Key Priorities	Period
New Vaccine Introduction	IPV 2 Introduction	Q4 2024
	OCV Reactive Campaign	Q4 2024
	Complete MR risk assessment	Q1 2025
	MR SIA & Switch Application	Q1 2025
	Preventive OCV Application	Q1 2025
	Assessment need for Hep B	Q1 2025
	Malaria vaccine expansion.	Q2 2025
	HPV MAC switch implementation	Q3 2025
	Conduct the MR SIA (with MR-5 vial switch)	Q2 2026
Routine Immunization	Round 3: Catch Up PIRI	Q4 2024
	Health Facility Micro plans Validation	Q1 2025
	Supervision following IPV2 introduction	Q1 2025
	Refresher Training of HWs on EPI Manual	Q1 2025
	EPI Cluster Survey implementation	Q2 2025
	Integrated targeted PIRIs in priority districts	Q2 2025
	National launch of strategic EPI documents (including NIS)	Q2 2025
	Scale up of 2YL	Q3 2025
	Post-introduction Evaluation of IPV2	Q2 2025
	Health Facility Micro plans Validation	Q1 2026
	Integrated targeted PIRIs in priority districts	Q2 2026

	- Updating EPI indicators.- Installing EPI server.- Scaling up open LMIS.- Conducting regular data performance reviews.	Q1 2024 – Q3 2025
Data Management	Denominator harmonization	Q4 2024
	Data Performance Review	Q4 2024
	Articulate DQ vision for electronic immunization register (EPI & KUHeS)	Q1 2025
	Completion of Denominator Study	Q1 2025
	Data Performance Review	Q1 2025
	Procurement of updated CHPs	Q1 2025
	Data Quality Assessment	Q2 2025
	Restructure EPI indicators and configure DHIS2. (Meta-data analysis)	Q2 2025
	Install EPI Server	Q4 2025
Cold Chain and Supply	Additional Space for Dry Store	Q2 2024
	Deployment of Zonal CCTAs	Q2 2024
	Complete comprehensive cold chain assessment	Q1 2025
	Forecasting Supply Chain Assessment	Q1 2025
	Finalization of Solarization of PHC facilities	Q2 2025
	Electronic Warehouse Management System	Q2 2025
	Scale up QR Code system to cold boxes and vaccine carriers	Q2 2025
	Equip Cold rooms with Fire safety equipment, and user orientations	Q2 2025
	Finalization of Solarization NVS, RVSs	Q3 2025
	Scaling up of Open LMIS	Q3 2025
	Scale up of Drive Project for HTRAs	Q3 2025
Surveillance	Active Case Search	Q4 2024
	Measles Risk Assessment	Q1 2025
	Procurement of reagents for measles ELISA test lab	Q1 2025
	Active Case Search	Q1 2025

	Procurement of surveillance refrigeration storage equipment at national level plus KCH and Fridge for Measles Sample	Q2 2025
	Trainings on VPD surveillance	Q2 2025
Vaccine Safety	Orient & mentor HWs on AEFI surveillance	Q4 2024
	Roll out of Vigimobile	Q4 2024
	Casualty Assessment for SAEs	Q1 2025
	Printing of AEFI manuals, reporting & investigation forms.	Q1 2025
Governance and Programme Management	Gavi Mission (NIS review, HSS application) Submit the $6.6 budget to Gavi	Q1 2025
	Develop joint co-financing sustainability plan	Q1 2025
	Gavi to complete contract PFM TA	Q1 2025
	Revise vaccine allocation formula and co-financing cycle (to align against Mw fiscal yr	Q1 2025
	EPI sub-TWG meeting	Q1 2025
	MAITAG meeting and EPI Sub-TWG meeting	Q2 2025
	Gavi to disburse remaining 6.6m tranche	Q2 2025
	Gavi to communicate HSS4/FPP ceilings and start the application process	Q3 2025
	Completion of HSS4/FPP Gavi application	Q4 2025
RCCE (Risk Communication and Community Engagement)	Finalization of RCCE Plan	Q2 2025

Some of the identified priorities are ongoing priorities that the country shall continue to implement in like with NIS and other key guiding documents

References

1. National Statistical Office Malawi, “2018-2050 Population Projections”, 2020
2. World bank 2023: https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?locations=MW
3. National Statistical Office Malawi, “life expectancy projection”, 2023