1. EXECUTIVE SUMMARY

1.1. Gavi grant portfolio overview

[With reference to the overall portfolio of Gavi grants in the country and the overall scope and funding of the national immunisation programme, briefly describe how Gavi’s vaccine and health systems strengthening support fits within the overall context of the national immunisation programme and contributes to improved outcomes. Refer to the guidance for more details]

The National EPI program of Malawi provides routine immunization against Ten (10) vaccine preventable diseases namely, Tuberculosis, Tetanus, Pneumococcal infection, Hepatitis B, H.influenza type B, Pertussis, Diphtheria, Rotavirus, Polio and Measles.

Malawi implemented active GAVI grant in the reporting period of 2014 which is the New Vaccine grant for DTP-HepB-Hib(Pentavalent) , Rotavirus vaccine(Rotarix), Pneumococcal vaccine (PCV13) and HPV vaccine demonstration. Out of the total budget of US$16,628,367 allocated for immunization program in 2014, about 80% of the budget (US$ 13,096,954) was supported through GAVI grant, 10% from KfW and the remaining was covered by Malawi Government and other partners. The KfW support was only for 2014 to complement the government support towards routine immunization. In 2015 the government of Malawi has paid for traditional vaccines and co-financing through UNICEF. In the 2016 EPI budget, the government has already made commitment for traditional vaccines and co-financing including the procurement of MR which will be introduced in 2016

The total co-financing for Pentavalent, PCV and Rota in 2014 was US$815,000.

Since 2001 GAVI has supported the National EPI of Malawi with New Vaccine Support (NVS), injection materials, immunization service support (ISS), Health System Strengthening (HSS), and Vaccine Introduction Grant (VIG) amounting to $169,853,867.

The grant performance was satisfactory as evidenced by the Malawi 2014 MICS report, the percentage of children aged 12-23 months who had all the recommended vaccinations including rota and PCV by first birthday was 39% while excluding rota and PCV by first birthday was 71%. The reason for low coverage of fully immunized which includes rota and PCV was the two vaccines were newly introduced in the target age cohort.
With the same report coverage by antigen was BCG 96% ; Penta3 90% ; OPV3 88% ; PCV3 87% ; rota2 60% and MCV1 85% by age of 12 months. The discrepancy between Penta3 and rota2 coverage was rota was newly introduced in the survey year and also there is age restriction for rota vaccine administration which is up to 6 months unlike to pentavalent which goes up to 24 months. The dropout rate between Penta1 and penta3 coverage was 7%. The coverage for tetanus second dose among women who have had a live birth within the last 2 years is relatively high in Malawi, at 90 percent.\(^1\)

The Effective Vaccine Management (EVM) Assessment of Malawi report (Dec.2012) shows that the performance at all levels is quite satisfactory for all nine EVM criteria except for vaccine storage temperature at national vaccine store, storage capacity at the regional vaccine stores, storage capacity and distribution management at district vaccine stores and stock management at the service delivery points. The country has planned to conduct the next EVM follow up assessment in 2016 where progress can be measured and new target to achieve will be set.

The improvement plan for EVM was developed and most issues raised during the assessment have been addressed as per attached document.

The current cold chain capacity at national level is adequate for the storage of new vaccines at \(-20\)C\(+8\) such as HPV. The capacity at national level increased from 59,243 litres to 65,759 litres in 2015 to create adequate storage space for IPV which will be introduced in 2016. The country has also increased storage capacity of cold rooms in the southern region with the installation of 2 walk in cold rooms of 40 cubic meters and 2 walk in freezer rooms of 20 cubic meters.

About 400 various types of refrigerators including Solar Direct Drive (SDD) have already been procured by UNICEF through funding from KfW and these will be distributed to health facilities based on the 2014 cold chain assessment. These cold chain equipment are expected to be delivered to the health facilities by October 2015. The distribution of 400 refrigerators will increase the storage capacities for routine and new vaccines including HPV in all health facilities.

However, the introduction of MR and MR SIAs will still require additional cold storage capacity at the national and the regional vaccines stores in Mzuzu

**Achievements**

- Reduced burden of major immunization preventable diseases (Polio, Measles, Neonatal tetanus, Whooping cough, Diphtheria)
- Declining trends in pediatric Hib meningitis and pediatric bacterial pneumococcal disease after successful introduction of DPT-HepB-Hib vaccine
- The HPV demonstration project in Rumphi and Zomba districts attained a coverage of 90% among eligible standard 4 girls.
- Maintained routine immunization coverage above 80% in all antigens. According MICS 2014 report, the immunization coverage was for Penta3 90%; OPV3 88%; PCV3 87%; rota2 60%; measles 85% and fully immunized 71% excluding recently introduced new vaccines, PCV 13 and Rota.

\(^1\) 2014 Malawi MICS report
The country successfully conducted cold chain inventory and is implementing key recommended action points.

HPV PIE and coverage survey conducted and the findings have been used for decision making process for national HPV stepwise roll out from 2016 to 2020.

The country did not experience stock out of vaccines in 2014 except OPV.

Challenges

- Accessing HSS1 grants (MK423, 000.000.00) for the construction of Mzuzu cold room, procurement of cold chain equipment, procurement of bicycles and payment to the Malawi College of Health Sciences was problematic.
- Although there was high HPV coverage in the demonstration project using a school based approach, the operational costs were found to be high for national rollout.
- Low performance to meet AFP surveillance indicators, particularly non AFP rate was 1.5 (operational is 4/100,000 <15yrs population) and stool adequacy rate was 77% (standard 80% and above)
- Inadequate number of Health Surveillance Assistants (HSAs) in health facilities to meet the expanding immunization services at static and outreach sites as only 9,166 HSAs are active out of expected 15,805
- The Government is facing challenges in meeting the budgetary requirements for vaccines and other EPI operational costs due to competing priorities in the health sector.
- Lack of transport for collection and distribution of supplies by districts to health facilities and shortage of bicycles for HSAs to conduct outreach services.
- Frequent breakdown of refrigerators due to aging of the equipment in some health facilities.
- Data quality issues such as documentation, archiving, analysis
- Inadequate monitoring and evaluation system includes, shortage of monitoring tools, supervision and review meetings
- Delayed implementation of Gavi audit recommendations

Key Recommendations

- To increase the work force for Health Surveillance Assistants (HSAs) who provide immunization services. The required standard ratio is 1 HSA per 1000 population. This can be achieved through Gavi support for Health System Strengthening (HSS) support grant. Currently the ratio of HSA to population is 1:1,500
- To accelerate REC implementation and promote quality micro planning process including community engagement to sustain high routine immunization coverage
- To intensify EPI Disease surveillance (AFP measles, MNT) by addressing identified gaps in the in-depth surveillance review report
- Implement the EVM key recommendations to enhance the ISCM aspects with specific focus on infrastructure system and HR capacity development addressing the motivational aspects.

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2 MOH-IHRIS
- Scale up EPI communication interventions to create community demand for immunization services
- Scale up the HPV introduction in phased approach by starting in five districts in 2016
- Review EPI M&E framework and strengthen supervision, review meetings, documentation, archiving, data management and sharing
- Conduct Periodic Intensified Routine Immunization in low performing health facilities
- Improve Immunization service delivery through provision of adequate transport such as utility vehicles, trucks, boats, motor cycles, bicycles
- Government to mobilize more resources for immunization services from the local collaborative partners

### 1.2. Summary of grant performance, challenges and key recommendations

<table>
<thead>
<tr>
<th>Grant performance (programmatic and financial management of NVS and HSS grants)</th>
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<tbody>
<tr>
<td><strong>Achievements</strong></td>
</tr>
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</tr>
<tr>
<td>• HPV PIE and coverage survey conducted and the findings have been used for decision making process for national HPV stepwise roll out in 2016 in a phased manner. HPV PIE and coverage survey documents are attached.</td>
</tr>
<tr>
<td>• The country did not experience stock out of vaccines in 2014 except OPV</td>
</tr>
<tr>
<td><strong>Challenges</strong></td>
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<tr>
<td>• GAVI funds kept in local currency, once it is devalues, a loss is encountered and affects implementation of activities.</td>
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<tr>
<td>• Disbursement of funds for the remaining activities have been a challenge due to the ineffectiveness of the IFMIS.</td>
</tr>
<tr>
<td>• Prolonged procurement process for the construction of the Mzuzu cold room for Northern Region and procurement of refrigerators including bicycles</td>
</tr>
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• Inadequate number of Health Surveillance Assistants (HSAs) in health facilities to meet the expanding immunization services at static and outreach sites, as MOH-IHRIS report 2015, only 9,166 HSAs are active out of expected 15,805.
• The Government is facing challenges in meeting the budgetary requirements for vaccines and other EPI operational costs due to competing priorities in the health sector.
• Lack of transport for collection and distribution of vaccines, injection materials and other immunization supplies by districts to health facilities and shortage of bicycles for HSAs to conduct outreach services.
• Frequent breakdown of refrigerators due to aging of the equipment in some health facilities and inadequate maintenance capacity of cold chain at all level.
• Data quality issues such as inadequate documentation, archiving, analysis.
• Ineffective monitoring and evaluation system includes, shortage of monitoring tools, inadequate supervision and review meetings.
• Low community participation and service demand in some geographical areas and in community groups.
• Delayed implementation of Gavi audit recommendations.

Key recommended actions to achieve sustained coverage and equity (list the most important 3-5 actions)

• Provision of Technical assistance for management of Gavi grants at national level.
• To increase the work force for Health Surveillance Assistants (HSAs) to meet the required standard ratio of 1:1000 population every year through Health System Strengthening Support. Currently the ratio of HSA to population is 1:1,500.
• To accelerate REC implementation and promote quality micro planning process including community engagement to sustain high routine immunization coverage.
• To intensify EPI Disease surveillance (AFP measles, MNT) by addressing identified gaps in the in-depth surveillance review report.
• Implement the EVM key recommendations to enhance the ISCM aspects with specific focus on infrastructure system and HR capacity development addressing the motivational aspects.
• Scale up EPI communication interventions to create community demand for immunization services.
• Scale up the HPV introduction in phased approach by starting in five districts in 2016.
• Review EPI M&E framework and strengthen supervision, review meetings, documentation, archiving, data management and sharing.
• Conduct Periodic Intensified Routine Immunization in low performing health facilities.
• Improve Immunization service delivery through provision of adequate transport such as utility vehicles, trucks, boats, motor cycles, bicycles.
• Government to mobilize more resources from the collaborative partners.

1.3. Requests to Gavi’s High Level Review Panel

Grant Renewals

New and underused vaccine support
• The country requests for renewal of DTP-HepB-Hib vaccine support which is expiring in 2015.
We further request new vaccine support for HPV national roll out.

Health systems strengthening support
• The country proposed that HSS2 funds (US$16.1M) meant for procurements be done through WHO and UNICEF. However, Gavi recommended that Malawi should opt for
developing a new HSS proposal over 5 years period. Malawi is in agreement with this recommendation. There will be need for TA for this exercise.

1.4. Brief description of joint appraisal process

[More details can be provided in an Annex]

The Joint appraisal process of Malawi took place with all joint appraisal team members in the country. In this process face-to-face dialogue and meetings were conducted in the country between the EPI partners. At regional/global level dialogue took place with partners through emails and teleconference for better clarification and exchange of information. WHO, UNICEF, Gavi and other EPI partners were consulted and their inputs and comments were incorporated.

Based on these relevant documents were reviewed and data analyzed: the comprehensive multiyear plan (2016-2020), the 2014 annual progress report, financial reports, MICS 2014, JRF 2014, EVM report (2012), post-introduction evaluations of HPV and coverage survey. Activities were also reviewed on annual work plan basis. Implementation of the work plan and evaluation of activities funded by GAVI for EPI were also appraised. Technical team also shared draft JA report with relevant experts for comments. The team has also conducted several discussions with members during the planning and preparation of the Joint Appraisal document so as to secure final approval. The joint appraisal process and findings were endorsed by the ICC members.

The JA process steps involved:
- Gavi shared all the JA supporting documents and guidelines in April 2015
- Agreement on date and composition of mission team; In May 2015
- Follow-up communication to the MOH and partners through email on the objectives and dates of the joint appraisal (JA) workshop; In June
- Desk review of relevant documents and data analysis in September 2015
- EPI partners discussion on grant performance September 2015
- Consolidate joint appraisal findings in September 2015
- Preliminary joint appraisal report developed by the EPI partners; in September 2015
- Refining of the joint appraisal draft report with MOH and partners’ input; in September 2015
- Presentation of the JA draft report to the EPI sub Unit TWG (ICC) in September 2015
- Finalization of the JA report for Malawi in September 2015
- Endorsement of the final JA report by the ICC on 11 September 2015

2. COUNTRY CONTEXT

(MAXIMUM 1-2 PAGES)

2.1. Comment on the key contextual factors that directly affect the performance of Gavi grants.

[See guidance document for more details]

Positive factors
Leadership & Governance: There is a well-established structure with clear leadership, linkages and roles in relation to Expanded Program on Immunization right from the national level through region, zone and district to the service delivery points. EPI policy guidelines, manuals, standard operating procedures and related documents were in place to influence the planning and implementation of immunization program. The challenge observed during supervision was less availability of the guidelines, SOPs, training manuals other monitoring tools at the service delivery points.

Health Service Delivery: There is a robust, functional and effective health service delivery system has been established as evidenced by sustained high immunization coverage rates for the past ten years. The findings from the 2012 KAP survey on immunization revealed that the majority of participants were satisfied on the services provided. Nevertheless, there are some bottlenecks that affected quantity as well as quality of immunization services, such as some of the health facilities provide immunization service on scheduled days, irregular outreach immunization service because of inadequate transport and shortage of vaccinators.

Health Workforce: The government has instituted Health Surveillance Assistants (HSAs) to provide immunization service both at fixed and outreach immunization sites. Nevertheless, the observed high attrition of HSAs for various reasons, transfers and overload with other responsibilities resulting in inadequate staffing at the service delivery points, which is more apparent at the outreach sites. It is important to address staff motivation and retention scheme to maintain high immunization coverage. There were also challenges in coordination and tracking of capacity building for EPI trained health workers due to insufficient database.

Access to Essential Medicines: There is a well-established, effective immunization supply chain management. The country has not encountered vaccine stock out for the reporting period of 2014 except for OPV which lasts for 2 months. The Ministry of Health through the EPI programme mobilizes resources to support the efficient delivery of immunization services, including the resources needed to strengthen and expand the entire cold chain.

Health Information Systems: The framework and structure for an effective Health Information System was in place, including the requisite draft EPI Policy manual and related standards. All districts and most health facilities have target for under one children to be vaccinated annually and able to document the immunization records. However, overall documentation and archiving needs improvement: For instance, recording of vaccine and supplies in the stock book is not consistently done despite having the stock books in all districts, some districts outreach registers are kept by HSAs in the field, the health facility reports are not being verified by the supervisors.

Health promotion and community engagement
Health Education Unit with MOH is overall responsible to developing communication social mobilization strategies to create demand for services and to improve uptake of existing services. At the sub national level health promotion officers plan and implement communication and social mobilization activities whereas at community level Health Surveillance Assistants conduct health promotion messages. There has been no social research conducted on immunization/MNCH recently, but the country is intending to conduct a KAP survey to collect data on community knowledge and practice regarding immunization. The National EPI communication and social mobilizing strategy has recently been revised. Communication and social mobilization plans have been developed for measles and IPV based on rapid assessment conducted to understand community perception towards immunization. A mix of communication channels are used for informing families and communities about immunizations and to motivate them to go for services. At community level religious and community leaders are mobilized to influence families to take their children for immunization.
**Health Systems Financing:** Government made significant strides in health sector financing and contributed approximately 13% of the national budget to the sector in 2014. And the EPI budget has raised up to MK960,980,560 in 2014/15 financial year. The government has been regularly making the co-financing payment for Gavi supported new vaccines. Gavi supported about 80% of the overall fund which were used for new vaccines during the reporting period of 2014.

All Gavi resources to the government through MoH are managed through the Integrated Financial Management Information System (IFMIS) under ‘below the line’ account (off budget) and accounted for in the Accountant General’s final accounts. However, the IFMIS have been found to be ineffective as there were some flaws in the system. HSS1 was managed through this system.

The following constraints have been encountered:
- Disbursement of funds has been a challenge since the IFIMIS was no longer reliable.
- Prolonged procurement process
- Financial reports could not be generated through IFIMIS
- Devaluation of local currency
- Not having a desk finance officer for Gavi fund
- Keeping funds in local currency instead of foreign currency (USD)
- Keeping Gavi fund in a pool account

Action taken to address issues encountered and improve management
- Opening of a foreign denominated account has been done following the audit recommendations
- A separate account for GAVI funds has been also opened following the audit recommendation
- Transfer of the remaining MK423,000,000.00 to the new account is in progress
- Proposal to send part of HSS2 meant for procurement of cold chain equipment to UNICEF
- Proposal to send part of HSS2 funds meant for procurement of motor vehicles to WHO.
- Using the foreign denominated account, involving a fiduciary agent and a procurement agent
- Contracting a coordinator for the HSS2 funds using the project management portion
- Putting an oversight committee in place

### 3. GRANT PERFORMANCE, CHALLENGES AND RENEWAL REQUESTS

*MAXIMUM 3-5 PAGES*

#### 3.1. New and underused vaccine support

**3.1.1. Grant performance and challenges**

[Comment on all bolded areas listed in the table in this section of the guidance document]

Currently, Malawi is implementing five vaccines through GAVI support for New Vaccine support grant, namely Pentavalent, PCV, Rota, IPV and measles second dose
Between 2002 and 2012 Malawi has introduced three new vaccines in the routine EPI schedule namely, Pentavalent, PCV13 and rotarix.

The lesson learnt identified below will be considered for new vaccine introduction in 2016:

- In order to ensure smooth implementation all pre-introduction activities – cold chain strengthening, training, updating and printing of tools – should be planned and conducted well in advance of the introduction
- It is critical to stock adequate supplies of vaccine to meet demand, especially during initial phase of introduction
- Formation of National Task Force 6 months before introduction of new vaccine ensures smooth implementation of the planned activities
- Multi-sectoral collaboration was key to successful introduction of new vaccines.
- Late disbursement of funds of funds affected the implementation of the planned activities.

**Pentavalent (DPT-HepB+Hib)**
Malawi introduced DPT-HepB+Hib in January 2002 with GAVI grants for the period of 2012 to 2015. Meanwhile in the 2014 APR the country requested for an extension of support. The country successfully introduced and sustained high Penta coverage above 80%. According MICS 2014, the coverage of the third dose of Penta3 was 90 percent. The dropout rate between Penta 1 and penta 3 was 7%.

Administrative data revealed that wastage rate was 5%.

As indicated on figure 1 the routine immunization coverage increased progressively since Gavi grants commenced in 2002

**Figure 1: Trend of routine immunization coverage-2002-2014**

The decline associated due to shortage of kerosene and gas in the country, devaluation in 2012 affect the services to run properly, stock out of OPV for 2 months in 2014, shortage and frequent breakdown of bicycles used for outreach immunization services by HSAs, cancellation of outreach immunization services. Based on from measles cases based surveillance in 2014, there were 3 confirmed cases and 433 confirmed cases.

Figure 2 shows that trend of reduction of pediatric Hib meningitis following introduction of Haemophilus Type B vaccine into the routine immunization as pentavalent vaccine

**Figure 2: Trend of pediatric meningitis at queen Elizabeth Hospital 1977-2011**
Figure 3 below shows that the gap between the administrative and survey coverage of Penta3 has been narrowed from 2002 to 2014 that might be through Gavi grants the quality of administrative data improved and representing the national coverage rate.

The total program budget for pentavalent vaccine was US$ 87,153,245. In 2015 Penta co-financing requirement: US$ 464,000 for 234,500 doses

**PCV13**

Pneumococcal Conjugate vaccine (PCV13) was introduced in November 2011 with support from the Gavi. GAVI has continued to provide support, alongside the Government of Malawi that has been co-financing the procurement of PCV13 from 2011 to 2016. The country is planning to switch from single dose to four doses in 2016.

The total program budget USD 57,379,230 (8,506,000 in 2015). The country currently is administering PCV13, 1 dose vial

*According MICS 2014, the coverage of the PCV1 was 95%, PCV3 was 87%.*

**Rotavirus vaccine**
Rotavirus vaccine was introduced in October 2012 with GAVI support until 2016, for 5 years period. According MICS 2014 report, the coverage of rota1 was 64% and rota 2 was 60%. The same report also found that the coverage for Penta3 was 91%. The reason for discrepancy between the two antigens to have low rota coverage compared to penta was the age restriction to rota administration in which rota should be given before 6 months of age while Penta up to 24 months of age.

The figure below revealed that since the introduction of the rotavirus vaccine in 2012, hospitalizations and emergency visits for rotavirus have dropped dramatically.

**Figure 4: Hospitalization, incidence of Rotavirus caused diarrhea and Rota vaccine coverage**

Source: National EPI program, MOH

The total programme budget for Rota vaccine was US$ 15,077,133. In 2015 co-financing requirement: US$ 205,000 for 78,000 doses

**HPV demonstration project**

In 2014 with support from GAVI, Malawi conducted HPV demonstration project in Zomba and Rumphi districts targeting grade 4 school going girls and 10 years out of school going girls. The target for Zomba was only for urban schools. The two years demonstration project was successful in that over 85% coverage was achieved.

A multi-sectoral Task Force was in place to oversee the planning and implementation of the HPV demonstrations project. Apart from the Ministry of Health, Ministry of Education was also involved in the HPV demonstration project activities at national and district levels. The total program budget was US$ 568,500.
The HPV PIE, coverage survey and cost evaluation were conducted during the demonstration project. The cost evaluation revealed that the operation cost for the demonstration project using school based strategy was expensive.

Malawi is planning to rollout HPV vaccination starting with five districts after successful completion of the demonstration project in two districts targeting grade four girls and ten years out of school girls. A multi-sectoral Task Force will be in place to oversee the planning and implementation of the HPV vaccination rollout. Apart from the Ministry of Health, Ministry of Education is also involved in the HPV national stepwise rollout and the application has been submitted in September 2015 to Gavi for consideration by the November 2015 IRC.

The HPV demonstration project used school based approach which was expensive as health workers and teachers were provided with allowances. The national rollout will use routine immunization service delivery points where normally allowance are not paid when conducting immunization clinics.

Based on PIE for HPV the acceptance for the vaccine by the community in the two project districts was satisfactory. All the monitoring tools for national roll out of HPV will be revised when the proposal has been approved by Gavi.

The storage capacity for HPV national rollout is adequate. However in the next five years there will be need to replace aging cold chain equipment. Kerosene and gas refrigerators will be replaced with Solar Direct Drive (SDD). None PQS equipment will also be replaced. Details are in the 2014 cold chain inventory assessment report

### Measles Second Dose (MSD)

Malawi applied to GAVI for support to introduce the Measles Second Dose (MSD) which was launched in July 2015 by Honorable Minister of Health. The function was attended by WHO and UNICEF representative, Civil Society Organizations on vaccines and immunization and other dignitaries. It was a joint launch with the World health commemoration. The VIG (US$558,500) for MSD was channeled through WHO. Gavi will provide measles vaccine for five years and there is no co-financing.

Lessons learnt from PCV, rota and HPV introduction were used during the introduction of MSD.

### Measles Rubella (MR) Introduction

Malawi is planning to introduce MR into routine immunization schedule after the catch up campaign which will target children aged 9 months to 14 years. The proposal will be submitted to Gavi in September 2015 for supporting the catch up campaign. Malawi government will pay for measles first dose and rubella component, while Gavi will pay for measles second dose component for five years. The Government of Malawi has already committed for introduction of MSD

### IPV

Malawi applied to GAVI for support to introduce IPV into routine immunization services together with measles second dose. Due to shortage of IPV vaccine globally the introduction has been delayed and shifted to January 2016

The vaccine introduction grant (VIG) of US$ 542,500 was disbursed through UNICEF. There is no Co-financing required for this activity.
I

PV was supposed to be launched with MSD but because of global shortage of IPV it was rescheduled to January 2016. This has an implication in funding because there will be need for refresher courses for health workers and funds is not available.

The first delivery of 10-dose IPV presentation is expected in Dec. 2015. Total programme budget is USD 1,904,000 over 2015-2017.

**Switch tOPV to bOPV**

Malawi is planning to switch from tOPV to bOPV into routine immunization services April 2016 as recommended by WHO.

**The issue of unused finds on ISS, HSS and VIG will be discussed during country visit in early November.**

**Country experience on New vaccine introduction**

Following each new vaccine introduction the country conducted PIE for PCV(August 2012), rota(July 2013) and HPV demonstration(March 2014) to assess the strengths and challenges described below:

**Achievements**

- Introduction plans were developed for Penta, PCV, rota and HPV demonstration at national level to guide implementation of activities and trainings.
- Conducted adolescent health integration assessment but
- National TOTs trainings were well conducted and cascaded to sub-national levels, and training materials were distributed timely
- The national EPI database and district reporting tools were updated to include PCV 13 prior to introduction
- All health facilities use safe injection equipment, AD syringes and safety boxes, for immunisation
- There is a budget line for vaccine procurement and government fully finances traditional vaccines and procures these vaccines through UNICEF Supply Division. In 2014 KfW complemented the government budget for procurement of some quantities traditional vaccines.

**Challenges**

- In addition HSAs were not well informed to identify and report the AEFI. Most facilities did not have emergency kit for management of AEFI
- Inadequate maintenance capacity of cold chain at all level
- Supervision was inadequate and no written supervisory reports are available in most districts and health facilities
- There were no national waste management guidelines that direct how to dispose expired stock and track for closed vaccine wastage monitoring purposes

3.1.2. NVS renewal request / Future plans and priorities
[Comment on all bolded areas listed in the table in this section of the guidance document]

New and underused vaccine support

Vaccines renewal in 2016:

* Measles second dose, 10 dose(s) per vial, LYOPHILISED, 2 dose schedule
* Pneumococcal (PCV13), 1 dose(s) per vial, LIQUID, 3 dose schedule
* Rotavirus, 2-dose schedule

Extension from 2016 until 2020

3.2. Health systems strengthening (HSS) support

3.2.1. Grant performance and challenges

[Comment on all bolded areas listed in the table in this section of the guidance document]

HSS1
The grant is not yet concluded
- There are 4 outstanding activities
  - Construction of the Mzuzu cold room in the Northern Zone
  - Procurement of vaccine refrigerators
  - Procurement of bicycles
  - Payment to Malawi College of Health Sciences for health workers who were trained under HSS grants and the payment has not been paid up to now.

Challenges
- Activity 1.1 Train health surveillance assistants, has been implemented but the institution has not been paid due to challenges in accessing HSS1 funds.
- Activity 3.3 Purchase of push bikes, has not been implemented due to challenges in accessing HSS1 funds. Progress is put at 10% because tendering process was done.
- Activity 3.9 Procurement of cold chain equipment, has not been implemented fully due to challenges in accessing HSS1 funds. Progress is put at 20% because it is at contractual level.
- Activity 4.6 Construction of cold room in Mzuzu for Northern Zone, has been stalled due to challenges in accessing HSS1 funds. Progress is put at 20% because a contract is place and the contractor at one time was on site and started some work. Now the work has been stalled.
- Provision of solar systems to facilities, to create conducive work environment for staff by making power supply available in the facilities is directly linked to strengthening the EPI program.
- Delay in accessing remaining Gavi fund (MK423, 000.000.00) with treasurer. However the MOH officials are pursuing the matter with treasurer.

3.2.2. Strategic focus of HSS grant

[Comment on the extent to which the HSS grant contributes to improve and sustain coverage and equity in access to immunisation. See guidance document for more details]

HSS grants strategic goal is to contribute to reduce maternal and child mortality by addressing health system bottlenecks related to immunization. The objectives aim to strengthen the
performance of the health system by addressing key health and immunization system bottlenecks. The strategic focus of HSS2 grant is to increase the coverage and equity through improving community participation, improve Strengthen transportation system in immunization service delivery particularly for outreach services, advocacy for immunization service delivery enablers including electrification, roads, cultures and belief), increasing demand for immunization service, strengthening effective vaccine management capacity, and strengthening management and leadership capacity. Immunization program in Malawi is supported within EHP package and is funded by Malawi Government and other collaborating partners. Gavi is providing complementarity support to address system bottlenecks and challenges that are not covered by other donors as stated in the cMYP. Immunization is part of the EHP and mostly delivered by Health Surveillance Assistants (HSAs). To standardize services, and move them closer to the client, the EHP is undergoing an expansion of the community level of health delivery with a target of one HSA per 1,000 of the population. Currently the ratio of HSAs to 1000 in the population is 1:1,200

3.2.3. Request for a new tranche, no-cost extension, re-allocation or reprogramming of HSS funding / Future HSS application plans

[Indicate request for a new tranche of HSS funds (and the associated amount) or no-cost extension, or any planned changes in terms of re-allocation or reprogramming. Also describe future HSS application plans]

The country is preparing to apply new HSSII in early 2016

3.3. Graduation plan implementation (if relevant)

[Comment on all bolded areas listed in the table in this section of the guidance document]

Not applicable

3.4. Financial management of all cash grants

[Comment on all bolded areas listed in the table in this section of the guidance document]

Recommendation under implementation of the CPA have been addressed although transferring the remaining funds of MK423, 000.000.00 into the newly opened foreign currency denomination account. Then the country will be in a position to complete the outstanding HSS activities.

The following will be discussed during the visit:
1. Grant/Fund bank balances held in Malawi.
2. Use or reprogramming of Grants/Fund bank balances
3. Alternative Funding mechanism.
4. Completion of outstanding HSS activities

3.5. Recommended actions
<table>
<thead>
<tr>
<th>Actions</th>
<th>Responsibility</th>
<th>Timeline</th>
<th>Potential financial resources needed and source(s) of funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Vaccines</td>
<td></td>
<td></td>
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<tr>
<td>- Introduction Inactivated Polio Vaccine (IPV)</td>
<td>MOH</td>
<td>2016</td>
<td>GAVI</td>
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<tr>
<td>- Switch from tOPV to using bOPV</td>
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<tr>
<td>- Conduct MR SIAs</td>
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<tr>
<td>- Conduct PIE for HPV, IPV and MR</td>
<td></td>
<td></td>
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<tr>
<td>Routine Immunization</td>
<td></td>
<td></td>
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<tr>
<td>- Conduct Periodic Intensification of Routine Immunization in low performing health facilities</td>
<td>MOH</td>
<td>2016</td>
<td>UNICEF/Gavi</td>
</tr>
<tr>
<td>- Conduct regular supervision to lower levels to improve knowledge and skills for health workers</td>
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<tr>
<td>Data Quality</td>
<td></td>
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<tr>
<td>- Improve documentation, archiving data management and sharing</td>
<td>MOH</td>
<td>2016</td>
<td>WHO</td>
</tr>
<tr>
<td>- Review EPI monitoring tools and distribute the new tools</td>
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<td></td>
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<tr>
<td>- Improve vaccine preventable disease and AEFI surveillance indicators</td>
<td></td>
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<tr>
<td>Cold Chain</td>
<td></td>
<td></td>
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<tr>
<td>- Support the establishment of effective CC maintenance management</td>
<td>MOH/UNICEF</td>
<td>2016</td>
<td>UNICEF/Gavi</td>
</tr>
<tr>
<td>- Installation of temperature monitoring devices at national vaccine store</td>
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<tr>
<td>- Increase Cold chain space and efficiency at all levels</td>
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<tr>
<td>- Support the HR capacity building efforts in ISCM</td>
<td></td>
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<tr>
<td>EPI communication</td>
<td></td>
<td></td>
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<tr>
<td>- Training of health workers interpersonal communication</td>
<td>MOH/CSO</td>
<td>2016</td>
<td>UNICEF</td>
</tr>
<tr>
<td>- CSO mobilization to implement communication and social mobilization interventions</td>
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<tr>
<td>- Support community participation in development and implementation of micro planning</td>
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<tr>
<td>- Advocacy for more funding for immunization from local partners</td>
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</tbody>
</table>
4. TECHNICAL ASSISTANCE

(MAXIMUM 1 PAGE)

4.1 Current areas of activities and agency responsibilities

[Comment on technical assistance received and the responsibilities of the different agencies which provided the support. See guidance document for more details]

- Immunization financing assessment - WHO
- Cold chain inventory – WHO and PATH
- HPV PIE, coverage survey and cost effectiveness analysis - WHO and PATH
- HPV integration interventions - UNICEF

4.2 Future needs

[Comment on all bolded areas listed in the table in this section of the guidance document]

See TA table below

5. ENDORSEMENT BY ICC, HSCC OR EQUIVALENT & ADDITIONAL COMMENTS

(MAX. 1 PAGE)

Brief description of how the joint appraisal was endorsed by the relevant national coordination mechanism:

Issues raised during debrief of joint appraisal findings to national coordination mechanism:

Any additional comments from
- Ministry of Health:
- Partners:
- Gavi Senior Country Manager:

<table>
<thead>
<tr>
<th>TA need</th>
<th>Actions</th>
<th>Intended outcome</th>
<th>Modalities</th>
<th>Possible provider</th>
<th>Included in cMYP/HSS2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long term TA EPI advisor/ Surveillance and Data</td>
<td>• To coordinate and monitor new vaccine introduction of Measles-Rubella, HPV and IPV; • Coordinate MR SIAs;</td>
<td>• New vaccines introduced successfully • MR SIAs implemented and achieved</td>
<td>1 year (P3 level)</td>
<td>WHO</td>
<td>Yes</td>
</tr>
<tr>
<td>Management</td>
<td><strong>Long Term TA EPI advisor</strong></td>
<td><strong>Short Term TA</strong></td>
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</tbody>
</table>
| • Immunization data quality self-assessment and development of an immunization data quality;  
• Support capacity enhancement and provide support from within MOHs to strengthen leadership and oversight of the program;  
• Support external review and EPI coverage verification survey;  
• Support Joint Appraisal report writing | • ISCM standards maintained  
• EPI and HSS planned activities integrated at program and service delivery level  
• Cold chain inventory assessment done and recommendation monitored  
• Implementation of REC approach coordinated at all levels  
• Implementation of EPI communication strategy coordinated and monitored  
• Quarterly and annual report on equity service delivery of immunization submitted  
• Gavi supported activities monitored and quarterly report submitted  
• Training of health worker on IPV conducted and report submitted  
• HSS2 grant proposal developed | UNICEF  
1 year (P3 level)  
Yes |
| • Immunization data quality improved | • EVM assessment conducted and training materials and SOPs developed  
• Cold chain inventory conducted  
• Capacity building on cold chain management supported | UNICEF  
1 month  
Yes |
| • Support the implementation of the ISCM Improvement through EVM assessment findings, training materials and SOPs development.  
• Integration and harmonization approach between EPI and HSS;  
• Cold chain preparedness and readiness assessment  
• Support to improve and sustain high immunization coverage through REC approach and scale up of the essential healthcare package.  
• Support accelerating immunization coverage through effective demand generation and communication interventions  
• Improve equity of service delivery to hard to reach population and unimmunized children through targeted interventions and involvement of communities and CSOs  
• Monitor implementation of Gavi supported activities  
• IPV switch: inventory assessment and disposal training;  
• Support formulation of HSS2 grant proposal; | • Support EVM follow-up assessment: Training, assessment and improvement plan development.  
**Supporting the HR capacity building** in the area of Planning and monitoring and maintenance management.  
**Support Establishment of robust CC Inventory and maintenance** Management system which include updateable CCE replacement and expansion plan: | UNICEF  
1 month  
1 month  
1 month  
Yes |
| • Support to build capacities among EPI partners in evidence-based C4D planning, resource | • EPI partners supported on C4D planning and resource | UNICEF  
1 month  
Yes |
mobilization for plan implementation, systematic data collection and knowledge management, monitoring and evaluation, and reporting. mobilization and report submitted

| Short Term TA | • Support provided to conduct HPV, IPV and MR Post Introduction Evaluation (PIE) • Provision of Technical assistance for management of Gavi grants at national level | • PIE of HPV, MR and IPV introduction conducted and report submitted | 3 months | WHO | Yes |

6. ANNEXES

Please include the following Annexes when submitting the report, and any others as necessary:

- **Annex A. Key data** (this will be provided by the Gavi Secretariat)

- **Annex B. Status of implementation of the key actions from the last joint appraisal and any additional High Level Review Panel (HLRP) recommendations**

<table>
<thead>
<tr>
<th>Key actions from the last appraisal or additional HLRP recommendations</th>
<th>Current status of implementation</th>
</tr>
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<tbody>
<tr>
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- **Annex C. Description of joint appraisal process** (e.g. team composition, how information was gathered, how discussions were held)

- **Annex D. HSS grant overview**

<table>
<thead>
<tr>
<th>General information on the HSS grant</th>
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<tbody>
<tr>
<td>1.1 HSS grant approval date</td>
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<td>1.2</td>
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<td>1.3</td>
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<td>1.4</td>
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<td>1.5</td>
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<td>(US$ in million)</td>
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<td>1.11</td>
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<td>1.12</td>
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- Annex E. Best practices (OPTIONAL)