

# **Joint Appraisal report 2017**

The italic text in this document serves as guidance; it can be deleted when preparing the Joint Appraisal report.

Country	Ethiopia		
Full Joint Appraisal or Joint Appraisal update	Full Joint Appraisal		
Date and location of Joint Appraisal meeting	13-15 November 2017; Addis Ababa, Ethiopia		
Participants / affiliation <sup>1</sup>	This Joint Appraisal report is the work of all relevant stakeholders from WHO, UNICEF, CCRDA, JSI/L10K, CHAI, UNFPA, PATH and from different directorates of the Ministry of Health including EPI from MCHD, Grant Management Unit, Finance & Procurement Directorate, Plan Policy Directorate and Pharmaceutical and Medical equipment Directorate. The report has been enriched with inputs from the ICC and the JA Workshop with participation of in country and global participants including GAVI, BMGF, USAID, WHO, UNICEF and CDC		
Reporting period	July 8, 2016 – July 7, 2017		
Fiscal period <sup>2</sup>	July 8, 2016 – July 7, 2017. The fiscal year is 2009 EFY which covers the period from July 8, 2016 – July 7, 2017. It is one year later to the baseline for program performance evaluation		
Comprehensive Multi Year Plan (cMYP) duration	2016-2020		

#### 1. SUMMARY OF RENEWAL AND EXTENSION REQUESTS

As part of the ongoing grant cycle, Gavi reviews and renews its support to the country annually (referred to as "renewal"). If a country's new and underused vaccine support (NVS) is coming to an end and the country is still eligible for Gavi support, it may submit a request to extend the support (referred to as "extension").

Below tables 1.1 to 1.4 will be pre-populated by the Gavi Secretariat based on the country information submitted through the Country Portal on 15 May and four weeks before the Joint Appraisal meeting. If there are any changes to be made, these changes should be discussed during the Joint Appraisal and flagged in the Joint Appraisal report.

# 1.1. New and Underused Vaccines Support (NVS) renewal request(s)

Type of support (routine or campaign)	Vaccine	End year of support Year of requested support		Target (population to be vaccinated)	Indicative amount to be paid by country	Indicative amount to be paid by Gavi	
Routine	Pentavalent	2020	2018	3,281,395	1,905,000	9,588,000	
Routine	Pneumococcal	2017	2018	3,281,395	920,000	13,365,500	
Routine	Rotavrus	2020	2018	3,281,395	1,306,500	12,265,000	

<sup>&</sup>lt;sup>1</sup> If taking too much space, the list of participants may also be provided as an annex.

<sup>&</sup>lt;sup>2</sup> If the country reporting period deviates from the fiscal period, please provide a short explanation.

### 1.2. New and Underused Vaccines Support (NVS) extension request(s)

If 2017 is the last year of an approved multiyear support for a certain vaccine and the country wishes to extend Gavi support, please do so by requesting an extension of the vaccine support. The extension can be requested maximum for the duration of the Comprehensive Multi-Year Plan (cMYP), which must be submitted to Gavi.

Type of Support	Vaccine	Starting year	Ending year
Routine	Pneumoccocal (PCV10 2 dose vials)	2017	2018*
	Pneumoccocal (4 dose vials, to be confirmed if PCV10 or PCV13)	2019	2020
SIAs	Measles SIAs (Follow up)	2018	2019

<sup>\*</sup>Request to switch the PCV vaccine presentation will be sent to GAVI in 2018 for 2019 implementation.

# 1.3. Health System Strengthening (HSS) renewal request

Gavi commits to Health System Strengthening grants up to a five year period, with the first tranche approved with the approval of the proposal. In subsequent years, the country should submit a renewal request for the approval of the following HSS funding tranche.

Below table summarises key information concerning the amount requested for the next year. Please note that funds previously requested and approved may be pending disbursement and do **not** require further approval.

Total amount of HSS grant	US\$ 80,590,000
Duration of HSS grant (fromto)	2016-2020
Year / period for which the HSS renewal (next tranche) is requested	2018
Amount of HSS renewal request (next tranche)	US\$ 15,350,000

# 1.4. Cold Chain Equipment Optimisation Platform (CCEOP) renewal request

Similar to the Gavi HSS support, the Cold Chain Equipment Optimisation Platform provides phased support for a maximum duration of five years, which is subject to an annual renewal decision.

Below table summarises key information concerning the amount requested for the next year.

Total amount of CCEOP grant	US\$ 27,660,232			
Duration of CCEOP grant (fromto)	April 2018 to Mar 2023			
Year / period for which the CCEOP renewal (next tranche) is requested				
Amount of Gavi CCEOP renewal request	US\$ 20,875,664			
	Country resources	US\$ 6,784,568		
Country joint investment	Partner resources	US\$		
	Gavi HSS resources <sup>3</sup>	US\$		

# 1.5. Indicative interest to introduce new vaccines or request Health System Strengthening support from Gavi in the future<sup>4</sup>

Version: March 2017 2

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<sup>&</sup>lt;sup>3</sup> This amount must be included either in an earlier HSS approval or else in the current HSS renewal request in section 1.4 above.

Indicative interest to introduce new vaccines or	Programme	Expected application year	Expected introduction year		
request HSS support from Gavi	HPV	2017	2018		
	MCV2	2017	2018		
	Measles Campaign	2018	2019		

#### Background

Gavi's support to a country's immunisation programme(s) is subject to an annual performance assessment. The Joint Appraisal is a key element of this performance review. It is an annual, country-led, multi-stakeholder review of the implementation progress and performance of Gavi's support to the country, and its contribution to improved immunisation outcomes.

To inform the Joint Appraisal discussion, the country is expected to post all reporting documents on the Gavi Country portal not later than four weeks ahead of the Joint Appraisal meeting.

This includes reporting against key requirements:

- Update of the grant performance framework (GPF) for indicators which are due
- Periodic financial reports, annual financial statements and audit reports (for all types of direct financial support received, with specific submission deadlines depending on a country's fiscal year)
- End of year stock reporting (which is compulsory to be submitted by 15 May of each year to calculate future vaccine requirements)

Other critical information to be posted on the Country Portal four weeks prior to the Joint Appraisal include:

- Immunisation financing and expenditure information
- Data quality information (including annual desk review and progress report on the implementation of immunisation data quality improvement plans)
- Annual progress update on the Effective Vaccine Management (EVM) improvement plan
- Campaign reports (if applicable)
- HPV specific reporting (if applicable)
- HSS end of grant evaluation (if applicable)
- Post Introduction Evaluation (PIE) reports (if applicable)
- Expanded Programme on Immunization (EPI) reviews (if applicable)
- Gavi and/or polio transition plans or asset mapping information (if applicable)

Other information that will inform the Joint Appraisal discussion include:

- Report by WHO and UNICEF on their technical assistance milestones funded through the Partners' Engagement Framework that should be updated four weeks in advance of the Joint Appraisal
- Analysis on coverage and equity and other relevant programme aspects, as informed by the Joint Appraisal Analysis Guidance (if available)
- Full Country Evaluation report (if applicable)
- Other evaluation of Gavi programmes

Note: Failure to submit the relevant information described above on the country portal four weeks ahead of the Joint Appraisal meeting (except for the vaccine renewal request, which is to be submitted by 15 May) may impact the decision by Gavi to conduct the Joint Appraisal meeting and renew its support.

<sup>&</sup>lt;sup>4</sup> Providing this information does not constitute any obligation for either the country or Gavi, it merely serves for information purposes.

#### 2. CHANGES IN COUNTRY CONTEXT SINCE LAST JOINT APPRAISAL

Comment on changes which occurred since the previous Joint Appraisal, if any, to key contextual factors that directly affect the performance of the immunisation system and Gavi grants (such as natural disaster, political instability, displaced populations, inaccessible regions, etc., or macroeconomic trends or disease outbreaks).

Please indicate if the country has been formally identified by Gavi as fragile and specify if flexibilities in grant management are being requested.<sup>5</sup>

The year 2017 marked a time when historical achievements were registered in the immunization program. Notably, Ethiopia achieved the ARCC approval for polio free status and validated by independent experts to have achieved national Elimination of Maternal and Neonatal Tetanus (MNTE). The country also made significant progress in reducing morbidity and mortality due to Measles. Efforts will continue to maintain the polio free status and sustain MNTE. However, the polio budget ramp down which started to be implemented since mid-June 2016 has affected the technical assistance given to the MoH at different levels with particular negative effect on the zonal and lower level health institutions.

However, the year was not without challenges. The impacts on health and nutrition status of the El Nino driven drought that started in 2015 is continuing in many parts of the country. Erratic, delayed rain falls throughout 2016 and including suboptimal spring rains in 2017 have resulted in critical water shortage in parts of the country impacting the agriculture production, animal health and ultimately human health and nutrition, as food insecurity remains high.

The 2017 drought has further exacerbated the recovery process and added additional Woredas and communities in the southern belt and Somali region which are currently critically affected by extended drought. This is going to further exacerbate the already existing health problems and the acute malnutrition.

The outbreak of AWD that started in 2015 spread during the dry season in 2016 and reached a peak in April 2017 notably in Somali Region with further spread to other regions. The response required massive intervention of MOH (at all levels) jointly with all partners. The analysis of the previous year's epidemiological data on the pattern of AWD outbreak in Ethiopia indicates that the main triggering factor for this ongoing outbreak has been the severity and length of the drought (and the lack of clean water and poor sanitation/hygiene practices).

The findings and recommendations of 2017 Belg assessment (jointly executed by UN agencies, NGO partners, and line Ministries led by NDRMC) showed changes on health and nutrition status in areas affected by the ongoing Horn of Africa drought.

The drought emergency is compounded with influx of refugees mainly from South Sudan, Somalia and Eritrea. As of date, Ethiopia is hosting already around 800,000 refugees that include children, one of the top 10 countries globally hosting refugees. IDPs as a result of the drought and intercommunal conflicts are also reported. FMOH, RHBs and partners are supporting continued immunization services among these vulnerable populations through entry points screening and polio/measles vaccinations, mobile outreach in camps and IDP sites; however, challenges remain as the influx continues and population movements are unpredictable thereby increasing inequities in routine immunization. UNICEF is procuring vaccine to the refugee population based on MOU signed between the FMOH and UNICEF. In response to increasing number of refugee population, additional funding is required from GAVI for vaccine procurement to sustain and strengthen the support.

SDG PF funders as a major contributor of the FMOH has managed to make the drought and its repercussions on Nutrition and disease outbreaks are a key priority of the Development Assistance Group and continues to lead on coordination in supporting the GoE and UN to improve efficiency of the response. In 2009 EFY, USD \$ 23,842,735 was reprogrammed from SDG-PF to support the emergency response and preparedness activities. In order to build resilient health system, a proposal developed with a total budget of \$54,562,073.6 of which FMOH is requesting DPs to assist.

Version: March 2017 4

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#### 3. PERFORMANCE OF THE IMMUNISATION SYSTEM IN THE REPORTING PERIOD

This section should provide a succinct analysis of the performance of the immunisation system, including a thorough analysis of immunisation coverage and equity, as well as a review of key drivers of poor coverage. It should focus on the evolution/trends observed over the past two to three years and particularly changes since the last Joint Appraisal took place.

Information in this section will substantially draw from the recommended analysis on coverage and equity and other relevant programme aspects which can be found in the Joint Appraisal Analysis Guidance (http://www.gavi.org/library/gavi-documents/guidelines-and-forms/joint-appraisal-analysis-guidance/).

#### 3.1. Coverage and equity of immunisation

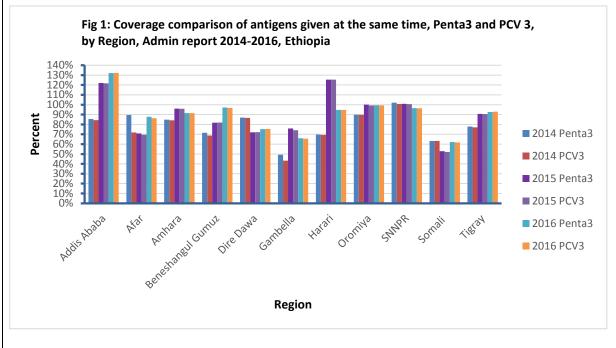
Please provide an analysis of the situation related to coverage and equity of immunisation in the country.

Provide a summary of the difference in **coverage across various geographical areas, populations and communities** and the evolution over the past years. Relevant information includes: overview of districts/communities which have the lowest coverage rates and/ or the highest number of undervaccinated children, number of vaccine preventable diseases (VPD) cases observed in various regions/ districts etc.

Countries are strongly encouraged to include heat maps or similar to show immunisation coverage trends over time. Examples of such analysis are available in the Joint Appraisal Analysis Guidance (available via <a href="http://www.gavi.org/library/gavi-documents/guidelines-and-forms/joint-appraisal-analysis-guidance/">http://www.gavi.org/library/gavi-documents/guidelines-and-forms/joint-appraisal-analysis-guidance/</a>)

Ethiopia has continued efforts to strengthen immunization coverage in the year 2016 aiming to achieve 93% Pentavalent3/PCV3 coverage and to reduce dropout rates to below 5%. Actions were undertaken to improve immunization coverage by providing technical, financial and cold chain support to low performing areas. Huge coverage discrepancies have been observed between Regions/Zones/districts and among the various vaccine antigens by all estimation methods. Administrative report for 2017 is not yet complete; hence the 2016 EPI coverage is used in this report as the latest available information.

Based on the administrative data report of 2014-2016, out of the 11 regions 7 of them achieved Penta3 coverage >=90% coverage while Dire Dawa, Gambella, Afar and Somali Regions achieved less than 90% coverage With regard to antigens given at the same vaccination schedule such as Penta3 and PCV3, there was not much difference in coverage (Fig 1).



The administrative and other estimate reports in the past ten years showed progressive increase on immunization coverage.

Administrative coverage has to be triangulated with other data sources to have better program estimates. Based on the WHO-UNICEF estimate for 2016, the immunization coverage was relatively lower than the administrative coverage and remained stagnant; pent3 coverage remained at 77% in 2015 and 2016.

Further, according to the EDHS 2016 finding, vaccination coverage was found to be very low for all antigens and much lower than the other coverage estimates, 53% for penta3, and 54% for MCV1. However, the EDHS surveys showed increasing trend in EPI coverage over the past years, for example, penta3 coverage of 29% in EDHS 2005 to 53% in EDHS 2016.

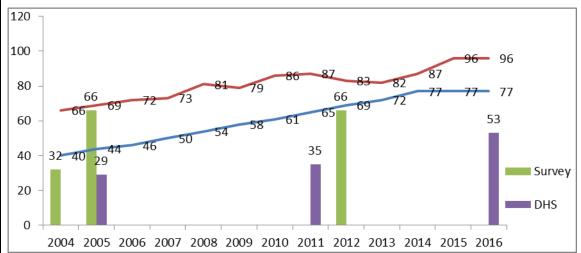
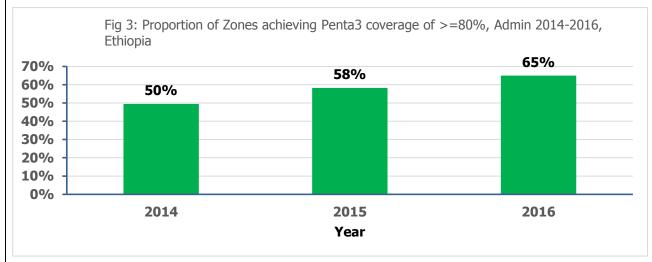
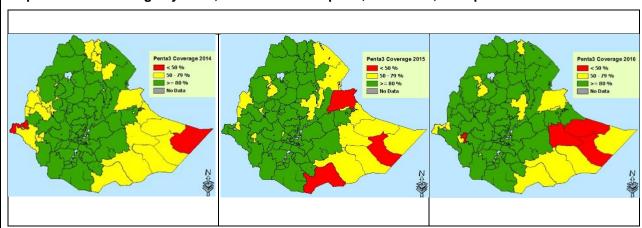


Fig. 2. Trend in immunization coverage for penta3 using different data sources

Accordingly, the proportion of Zones achieved Penta3 coverage of > 80% progressively increased in the last three years, from 50% in 2014 to 69% in 2016 (Fig 3, Map 1).



The administrative coverage by the zone in the following map shows improvement in the penta 3 coverage reached in the last 3 consecutive years.



Map 1: Penta3 coverage by Zone, administrative reports, 2014-2016, Ethiopia

Similarly, proportion of Woredas with penta3 coverage of 80% and above increased from 63-% in 2014 to 76 in 2016

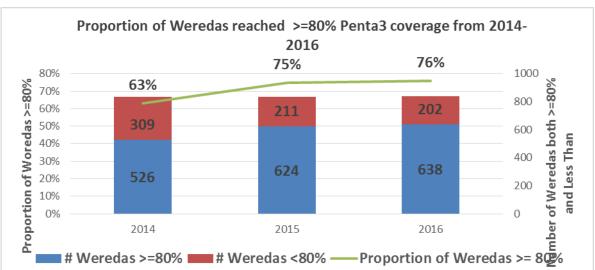
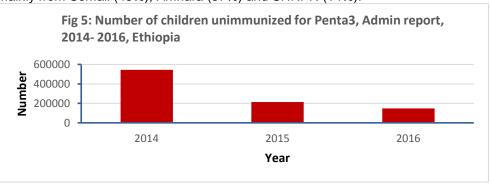


Fig 4: Proportion of Woredas achieved >= 80% penta3 from 2014-2016

The total number of unimmunized children for pentavalent 3 reduced from 543,843 in 2014 to 147,322 in 2016. Based on the EDHS 2016 result majority of the unvaccinated children are located in four regions namely: Oromia, Amhara, SNNPR and Somali regions. This result was substantiated by admin report mainly from Somali (43%), Amhara (37%) and SNNPR (14%).



Additional analysis of the number of unimmunized children using Penta 3 coverage for the year 2016 shows that majority of the unimmunized children was contributed by Oromia followed by SNNPR and the least number are found Dire Dawa (see figure below).

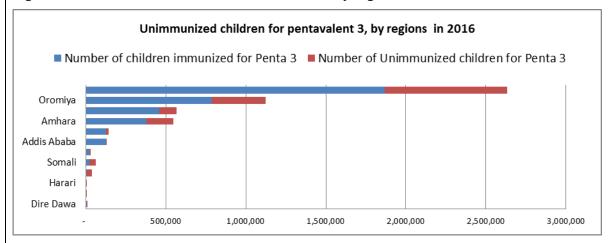
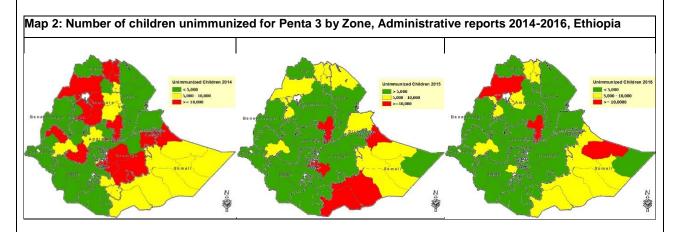


Fig 6: number of unimmunized children for Penta3 by regions in 2016

Further analysis of trend in the number of unimmunized children using Penta 3 coverage over three recent years (2014 – 2016) by zone has shown progressive improvement as shown in the map below.



In conclusion, EPI coverage showed an increasing trend in the past years in all estimate methods, including in the EDHS surveys. Similarly, number of unimmunized children also progressively decreased in the preceding years. The coverage between antigens administered at the same vaccination schedules more or less the same such as penta3 and PCV3.

However, there is huge discrepancy in coverage, and number of unimmunized children based on the various estimate methods among different regions. The discrepancies may be because of denominator issues, problems related to data quality, and due to variation in estimation methods. The consistently low coverage and high number of unimmunized children in more standardized surveys indicate that EPI coverage is still sub optimal in Ethiopia.. Tailored actions are required in areas/regions with consistently low coverage, such as, Afar, Somali, Gambella and other foci areas in other regions. Increasing rapidly the coverage in underserved areas of the country both in large populations and in remote hard to reach locations through special efforts using the RED/REC approach and conducting diverse vaccination delivery strategies such as PIRI, Sustained outreach services (SOS) and other approaches should be prioritized in 2018. Moreover, concerted effort is needed to improve stock management and ensure adequate and timely

availability of vaccines; strengthening defaulter tracking mechanisms including through the use of the community network and systematic implementation of all the 5 pillars of the RED approach to close the gap in access and utilization of immunization services. Strengthening capacity building of health workers and EPI managers and institutional capacity to enable them to provide immunization service.

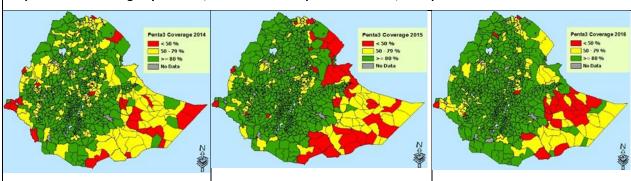
#### 3.2. Key drivers of low coverage/ equity

Please highlight key drivers of the low levels of coverage and equity highlighted in the section above. For those districts/communities identified as lower performing, explain the **key barriers** to improving coverage.

- Health Work Force: availability and distribution of health work force.
- Supply chain: key insights from latest EVMs and implementation of the EVM improvement plan.
- **Demand generation / demand for vaccination**: key insights related to demand for immunisation services, immunisation schedules, etc.
- Gender-related barriers<sup>6</sup>: any specific issues related to access by women to the health system.
- Leadership, management and coordination: leveraging the outcomes of the Programme Capacity Assessment and/or other assessment, please describe the key bottlenecks associated with management of the immunisation programme; this includes the performance of the national/regional EPI teams (e.g. challenges related to structure, staffing and capabilities), management and supervision of immunisation services, or broader sectoral governance issues.
- **Public financial management:** the extent to which funds requested are made available in a timely fashion at all levels, highlighting particular bottlenecks in the disbursement process.
- Other critical aspects: any other aspect identified, for example based on the cMYP, EPI review, PIE, EVM or other country plans, or key findings from available independent evaluations reports<sup>7</sup>.

The administrative report shows that the geographical inequity improved in the last three years, except in Somali and Gambella Regions. Different sources including EDHS also showed that the four developing regions (Afar, Somali, Beneshangul Gumuz and Gambella) have persistently low coverage. These regions have predominantly pastoral communities.

Map 3: Penta3 coverage by Woreda, administrative reports 2014-2016, Ethiopia



In EFY 2009 it was planned that 85% of Woredas to achieve pent3 coverage of 80% and above. However, the annual performance report indicated about 77% (663 of Woredas) achieved penta3 coverage of 80% and above which is about 8% points fall of the target for the year. Of those Woredas who did not meet the target, about 98 (11%) performed below 60% (Map4), most of those Woredas performed below 60% are remote and lowlands with dispersed settlement which compromise access and utilization of immunization services. Few highland and urban Woredas also did not achieve at least 80% target which

Version: March 2017 9

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<sup>&</sup>lt;sup>6</sup> Gender-related barriers are obstacles (for access and use of health services) that are related to social and cultural norms about men's and women's roles. Women tend to be the primary caretakers of children, but sometimes lack the decision-making power and resources to access or use available health services.

<sup>&</sup>lt;sup>7</sup> If applicable, such as Full Country Evaluations (relevant for Bangladesh, Mozambique, Uganda and Zambia) and Technical Assistance evaluations (conducted for Gavi Partners' Engagement Framework tier 1 and tier 2 priority countries).

require further investigation. Different strategies including PIRI, extended outreach and mobile strategy will be used to increase the coverage and equity in low performing Woredas. Proper identification of bottlenecks and its causalities will be implemented in densely populated and low coverage areas to design appropriate strategy.

Map 4: Performance of Penta3 by Woredas

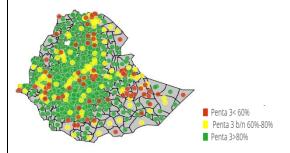
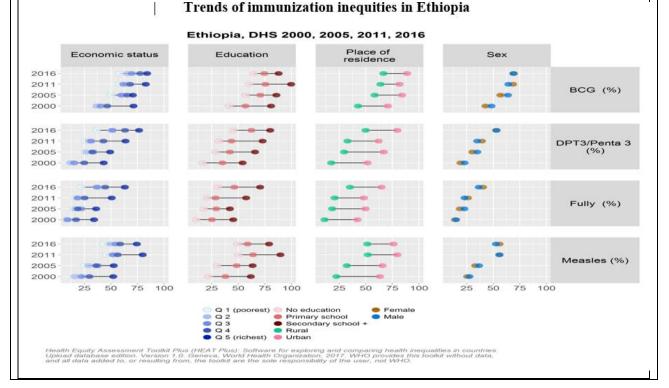


Figure 7 below indicated the coverage of key antigens by equity markers from the consecutive four EDHS. Coverage was analyzed using the WHO Health Equity Assessment toolkit plus (HEAT+, 2015). Accordingly, the past four Demographic and Health Surveys in Ethiopia showed immunization inequities by wealth quantile, mothers' education and residence while the gap by sex showed no significant difference. The 2016 EDHS showed wide gap by key equity stratifies. For example children vaccinated three doses of DTP containing vaccines among the households with highest quantile were 40% points higher than children from the lowest wealth quantile households. Similarly, children whose mothers are educated at least secondary were 30% points more likely to vaccinate compared with children from mothers who have no education. Children living in urban areas were also 30% points more vaccinated compared to their counterparts in rural areas. While only slight difference 3.8 % more girls have received all basic vaccines compared to boys in the same study. The analysis indicated that inequities in wealth and education are not narrowing during the last decade while slight narrowing indicated in residence. Inequity among regions on immunization coverage exists with highest coverage in Addis Ababa (96%) and lowest in Afar 20% for Penta 3.

Figure 7: Trend in immunization inequities in Ethiopia, EDHA 2000-2016



To address inequalities among the lowest wealth quantile and non-educated groups of population, the linkage of temporary beneficiaries of Productive Safety net program (PSNP) with key maternal and child health and nutrition will be enhanced as per the PSNP-IV implementation manual in program woredas. As one of the objectives of Community Based Health Insurance (CBHI) is to increase health service utilization, the opportunity to increase enrolment, re-enrolment to CBHI and fee waiver for indigents will be used to increase uptake of immunization among fee waived households to use immunization service apart from curative services. In EFY 2009, out of the total of 377 districts enrolled in the CBHI, 248 districts (65.8%) have started to provide the service. Other strategies will be employed as through stratification and progress of immunization will be monitored through community convenience surveys of among high risk communities.

The major barriers related to low immunization coverage in poor performing areas in Ethiopia are:

- 1. **Health Work Force**: although Ethiopia has deployed at least two health extension workers per health post, the recent reviews reveal that there is 7 to 10 percent attrition rate per annum. The attrition rate is higher for urban health extension workers. Besides, lack of motivation among the HEWs, distance of residence from the health post, interruption of vaccination sessions due to different reasons, slow implementation of career development, high work load, as well as lack of good governance affected the quality and implementation of vaccination. Cognizant of these facts, FMOH has developed a revitalized/optimized health extension program strategy which is yet to be endorsed and approved.
- 2. Supply chain: The 2013 EVMA assessment identified storage, temperature, stock management and distribution system as the major challenges.. Major challenges in the supply chain and the cold chain system have been identified in recent years, both through the supportive supervision, the last Joint Appraisal and through routine monitoring of immunization activities. These weaknesses included poor capacity on the supply chain management including handling of storage facilities and inappropriate use of equipment, shortage of continuous temperature monitoring devices, poor visibility of stock at lower level, significant portion of non-functioning cold chain equipment, and lack of optimal cold chain equipment. Nationally, 71% of the refrigerators are absorption type which are not user friendly and in efficient. Moreover, only 25% of the health posts are equipped with any type of CCE. Hence, cold chain expansion and rehabilitation is the top priority over the next five years period.

According to the revised EVM IP, the major findings includes:

- UNICEF Vaccine Arrival Report format will be strictly used by PFSA for every vaccine shipment. However, there is a delay in submitting the VAR
- The practice of reviewing temperature records on a monthly basis is Partially achieved and keeping complete set of temperature records for at least 3 years period is Achieved
- Expansion of positive and negative vaccine storage capacity at the PFSA Hubs and the zones level is achieved
- Cold chain equipment maintenance campaigns conducted in all regions by prioritizing those with high number non-functional refrigerators
- Assignment of one cold chain maintenance technicians from biomedical technicians/electricians at regional and Woreda level is partially Achieved
- All PFSA Hubs and Zonal cold rooms are equipped with vaccine stores with computers, printers and install and implement a stock management tool (HCMIS).
- The minimum and maximum vaccine stock levels is defined at level in the system

The use of standardized vaccine requisition (VRF) form is fully implemented at Woreda, zones and PFSA hubs levels. In order to address the urgent challenges linked to cold chain, 6,000 SDD refrigerator (optimal CCE) are procured using SDG-PF and Ethiopia apply for additional Gavi support through the CCEOP platform. Over the past couple of years, cold chain capacity of the cold room

almost double reaching 934,200 lit. Though the capacity building activities s going on at all level in the supply chain system and the overall progress made in the supply chain and cold chain management will be identified in the planned CCI and EVMA in 2018. The planned EVMA is intended to basically assess the impact of all intervention made by Government and Donors including the capacity building activities. Moreover, regular supportive supervision activities will be used to assess the progress made in the cold chain and vaccine management practices.

Based on the 2013 CCI data, cold chain expansion and rehabilitation analysis was made taking in to consideration the different type of refrigerators deployed to health facilities following 2013 CCI and other pipeline procurement including those optimal equipment to be procured using a secured budget from SDG-PF and CCEOP.

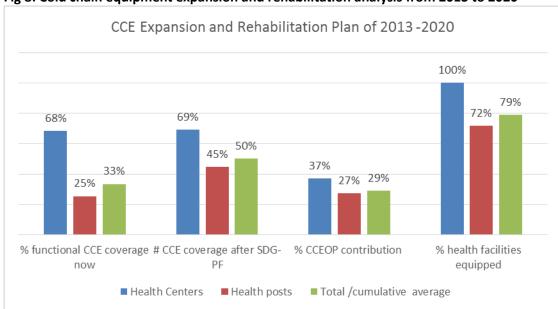
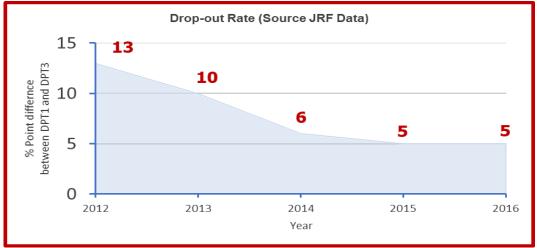


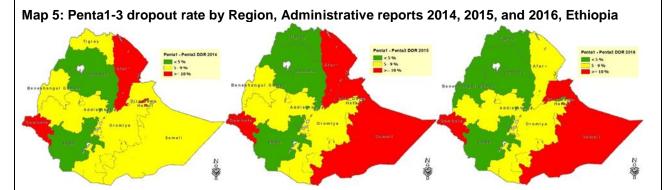
Fig 8: Cold chain equipment expansion and rehabilitation analysis from 2013 to 2020

# 3. Demand generation/demand for vaccination:

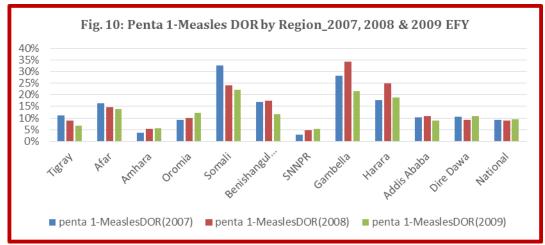




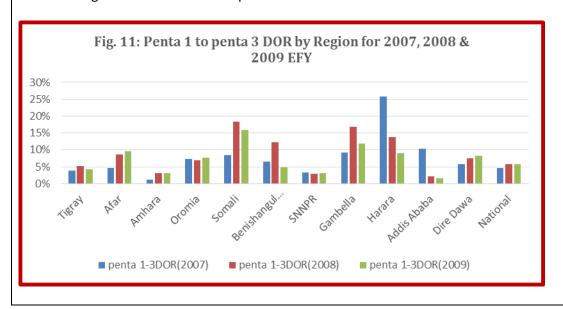
As it can be seen from the above figure on dropout from JRF source, there is progressive decrease from 13 % in 2012 to 5% nationally in 2016.



Based on administrative reports, vaccination dropout rate for Penta 1 to Penta 3 showed improvement in majority of the regions in the previous years, but remained high in Somali and Gambella Regions



The above graph shows dropout rate of Penta 1 to measles for the Ethiopian fiscal year of 2007, 2008 and 2009. Acceptable dropout rate(less than 10%) for the three years was seen in Amhara and SNNPR regions as well as national. And there was progressive decrease in in dropout rate for Tigray, Afar, Somali, Benishangul Gumuz from 2007 to 2009. Decrease in dropout rate from 2007 to 2009 was observed in, Gambella region and decrease in dropout rate from 2008 to 2009 was seen in Harari and Addis Ababa.



The above graph shows Penta 1 to Penta 3 dropout rate by region for the Ethiopian fiscal year of 2007, 2008 and 2009. Accordingly, dropout rate of less than 10 % was seen in Tigray, Afar, Amhara, Oromia, SNNPR Addis Ababa, Diredawa regions as well as nationally. Progressive decrease of dropout rate from 2007 to 2009 was observed in Addis Ababa and SNNPR regions. Decrease of dropout from 2008 to 2009 was seen somali, Benishangul Gumuz and Gambella regions.

According to 2016 EDHS, the possible reasons for immunization service barriers that resulted in higher antigen dropout rate includes, failure of parents or guardians to come back for return visits which was seen among 40% children who are unimmunized for Penta 3 and measles. Additional factors associated to relatively higher immunization dropout were related to immunization services and to caretaker's knowledge, attitudes, beliefs, and practices. Lack of awareness about childhood immunization stands out as a common reason for failure to immunize children or drop otherwise, *unaware for need; forget appointment date; population mobility; change of residence; loss of immunization card; fear of side effects; poor HWs IPC with care taker.* To address the above immunization service barrier as well as variation in immunization service among the regions the following interventions were executed at national and subnational levels.

- Media professional training is one of the activities that accomplished with the objective of revitalizing the involvement of health communication and media professionals towards benefits of immunizations. This activity was conducted in two rounds. The first round was conducted by end of 28th November 2016 and the second round was conducted by the end of December 2016.
- The 7th African Vaccination Week has been officially launched with the theme "Vaccine protects everyone, Get Vaccinated" in Ethiopia, in Fitche town- on April 24, 2017. The launching was very colorful attended by partners including GAVI, WHO, UNICEF, Core Group, CHAI, JSI/UI-FHS, PATH, Save the Children, and CCRDA as well as by the national and local Medias.
- 3. 2016 World Polio Day (WPD) was colorfully celebrated on October 24th, 2016. This year's day was commemorated under the theme of "END POLIO NOW, MAKE HISTORY TODAY".
- 4. IPC tool or desktop flip chart has been prepared and partially printed and distributed to Somali, Afar, Gambelia, DD, Harari and AA. Routine immunization message standardization has been done along with other RMNCH programs
- 5. The second International SBCC Summit, which was conducted in Addis Ababa, Ethiopia on Feb 8-10, 2016 address major program communication issues such as:
  - a. How to ensure the sustainability of behavioral change by supporting the ownership of process and content of communication by individuals and communities most affected?
  - b. How to make communication for behavioral change empowering, horizontal rather than top-down and support the engagement of all in the community, not only the vocal, but also the voiceless?
  - c. How to ensure that communities are change agents of their own change?
  - d. How to shift from persuasion and transmission of information by know it all— to, deliberation, debate and negotiation on issues that resonate with members of the community? And finally,

How to support the development of a conducive atmosphere for SBCC to be owned and managed by communities?

**Gender-related barrier**: though there is no significant gap on gender outcomes in Ethiopia on immunization, patriarchal social practices in some areas limits mother's community participation and decision making on vaccination visits impacting child's vaccination.

**Leadership, management and coordination**: The structure and staffing of for EPI at regional and sub-regional level is not adequate to plan, manage and monitor EPI program effectively. The capacity of health managers at Woreda, and primary health care level to stratify, target, plan, allocating resources and systematically monitor and report progress is limited. In low performing areas, apart from frequent changes of program managers, capacity to identify key barriers, and prioritize underserved children on routine immunization for coverage improvement is weak. Coordination and integration with other sectors

such as agriculture and food security, schools and with social protection programs such as productive safety net, and community based health insurance to maximize immunization uptake is rare in most Woredas. Some areas also require differentiated or context specific approach on diversified vaccine delivery services to meet the needs of the underserved children such as more mobile and regular/sustained outreach services e.g. PIRI, SOS in addition to monthly health post vaccinations. National policy and guidelines are needed to effectively implement special efforts to increase coverage in underserved areas such as the diversified vaccine delivery services, RED/REC approaches.

**Public financial management:** although, financial allocations from the government is increasing progressively however, the Woreda based plans usually are not costed therefore there is no predictable funding for core routine EPI program recurrent yearly costs such as transport for vaccines, SS/monitoring mobile outreach, trainings that impedes reaching more children for vaccination services especially those with inequity dimensions.

**Other critical aspects**: Despite the rigorous efforts, huge discrepancies in coverage among regions remained for long as a major challenge, particularly in pastoralist regions because of multifaceted factors. The barriers stated above need high attention to address the inequity and reduce the observed gaps in the community. Area specific actions geared to these bottlenecks are necessary in the coming years to decrease inequity and increase universal EPI coverage in the country.

#### 3.3. Data

Provide a succinct review of key challenges related to the availability, quality and use **of immunisation data**. This section should at least cover insights on coverage data (target populations, number of children vaccinated) and could also cover topics such as vaccine supply chain data, VPD surveillance data, AEFI data.

Please take the following aspects into account:

- Compliance with Gavi's data quality and survey requirements (the requirements are detailed in the
  general application guidelines available on <a href="www.gavi.org/support/process/apply/">www.gavi.org/support/process/apply/</a>). If you are not
  compliant, explain why.
- Highlight key challenges pertaining to data availability, quality and use, referring to results from most recent annual desk review, any recent assessments and implementation of immunisation data quality improvement plan. For example, are you aware of key limitations / weaknesses related to the quality of the data and data analyses you have used to inform this Joint Appraisal.
- Main efforts / innovations / good practices focused on improving data system strengthening and addressing key issues.

#### **Data Quality**

Quality data provides accurate and timely information to manage services. It also provides good information to manage service effectiveness as well as aids to prioritize and ensure the best use of resources. The health system in Ethiopia uses population based and administrative data sources for planning, monitoring and evaluation of the different programs. Currently, the immunization program aims to vaccinate infants under one year of age and women of child bearing age as denominator or target population. The target population for the national level and each region is provided by the Central Statistics Agency (CSA) which computes the estimated number of infants using total population projection from the 2007 Census, latest Infant Mortality Rate (IMR) and Crude Birth Rate (CBR). The proportion of surviving infants estimated by region. The estimation method itself and use of the same conversion factor for all zones, Woredas and Kebeles with in the region has limitation. This creates huge inconsistency between real population and projected figures especially in urban areas. Enhance and expand vital events registration and digitization of family folder to strengthen community based health information system are some of determinations the country undertaking to tackle such problems.

Many efforts have been undertaking to minimize other data quality problems like over reporting, under reporting, reporting delay and incompleteness. Such as strengthening and scaled up of electronic HMIS; deployment of data professionals called health information technicians (HIT) at every

health facilities (hospitals and health centers), establish Performance Review Teams with defined terms of reference at all level and review data by conducting LQAs (Lot Quality Assurance) on monthly basis. Ethiopian public health institute in collaboration with key stakeholders and partners conducted health data quality review (system assessment and data verification) in 2016. The result showed 83% of referral hospitals and 73% of health centers had all source document and reports for penta 3. 82% of penta3 reports also matched with the source documents findings.

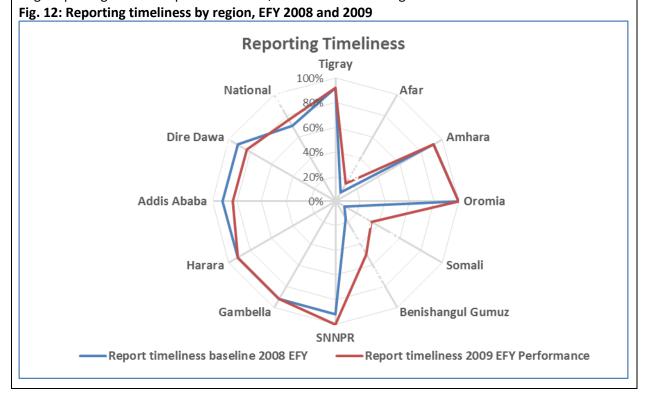
In addition to the above efforts the country also conduct data quality review workshop conducted from 4-8 September 2017 in the presence of National and sub-national (regional) EPI focal persons, stakeholders partner organizations. The workshop capacitated the participant on WHO/UNICEF estimation methods, enables to have national and subnational estimates and helped to review data quality issues in each region.

Regular data triangulation, data analysis and feedback provision were done at national level though it was not strong at lower structures as it is at national level. Developing and piloting District Health Information system (DHIS 2) and electronic community health information system (eCHIS) is ongoing. The continual efforts undertaken by national reproductive, maternal, child and neonatal health research advisory committee in generating evidence and preparation of policy brief contributes a lot towards increasing focus on immunization data quality. The E-NITAG discussion outputs were also useful to highlight the importance of evidence and develop data use culture. Health and immunization card for mothers and children were redesigned and in process of printing to increase the probability of card retention and serving credible source of data to verify the status vaccination during coverage survey and other requirements.

Immunization and surveillance data quality problems and efforts to solve data quality are reflected by major components below.

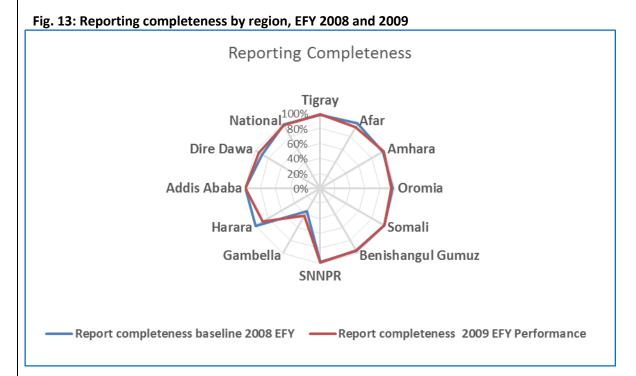
#### **Reporting Timeliness**

The EPI focal person along with the HIT focal persons have tried to monitor and receive reports on timely basis across all administrative and service delivery points. As a result, according the HMIS admin report, reporting timeliness improvement was observed in Ethiopian physical year of 2009 compared to the previous 2008 physical years in all regions except Addis Ababa. However, there were huge reporting timeliness problem in Afar, Somali and Benishangul Gumnuz.



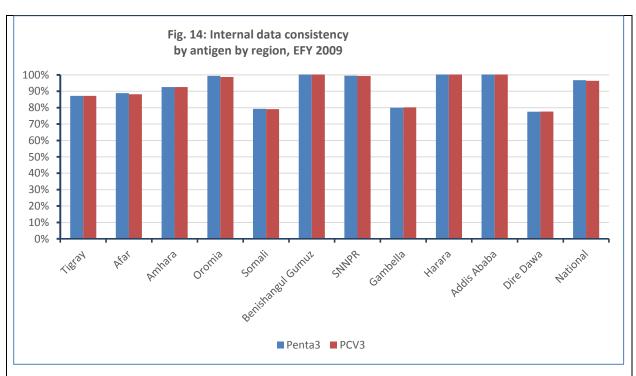
#### **Reporting Completeness**

Health worker in the service delivery points and administrative structure have tried best to receive from all health institution. Ideally, 100% completeness is a standard. However, this standard has not be achieved by all regions except Addis Ababa. A progress has observed in Tigray, Amhara, SNNPR, Gambella and Dire Dawa but regressed in Afar, Oromia, Benishangul Gumuz, Harari and national level. It has stagnated in Somali.



# **Internal Consistency**

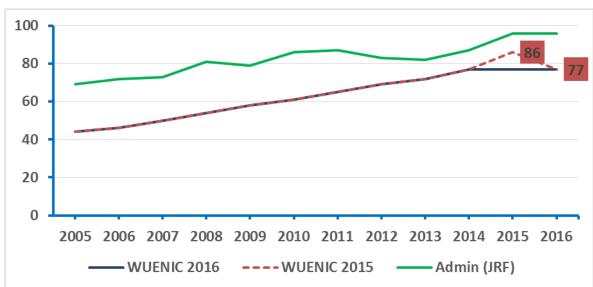
The ministry was monitoring regularly the internal immunization data consistency using different comparing approaches like the discrepancy among different antigens provided at same time, outliers, negative dropout rates, trend analysis etc and take actions accordingly. For example; according to 2009 Ethiopian physical year HMIS Administrative data, Penta 3 and PCV 3 coverages were consistent as displayed in the following figure disaggregated by region. It showed consistent in all regions. (Fig 14)



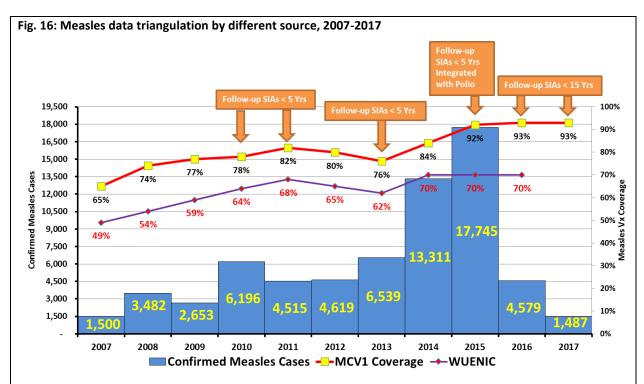
#### **External Consistency**

Discrepancies are observed between HMIS admin reports and WUENIC estimate. The 2017 coverage estimate for the year 2016 showed that the DPT3 coverage remained at 77% from 2014-16 with retrospective reduction of the 2015 values from 86% to 77%. From the trend line below, the difference between the two sources of data has been getting narrower though the difference is huge across the time series.

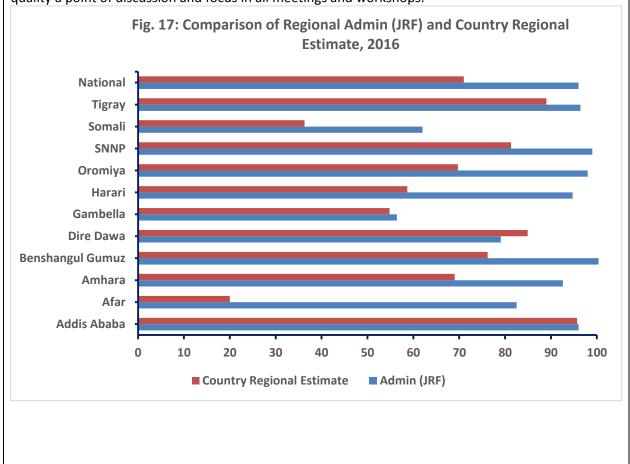
Fig. 15: Trend in external data consistency by penta3 antigen, 2005-2016



Data triangulation among different data sources (Numbers of cases, WUENIC estimate, administrative and SIA interventions) was done to check the external resources. Looking each line, the immunization coverage is increasing overtime and the different between data sources is becoming narrower. The impact of the recent years measles SIA showed significant impact in decreasing the number of confirmed measles cases. However, the data quality problem observed in figure that needs intervention to narrow the gap.



National and sub-national level coverage estimates were produced for each region and come with finding shown inconsistent (over reporting in the admin) in Afar, SNNP, Oromia, Harari, Beneshangul Gumuz and Somali but consistent in Tigray, Addis Ababa, Gambella and Dire Dawa Regions between the administrative and estimates. It also shows inconsistent at national level. These gaps lead to prepare health system and immunization data quality improvement budget plan and making data quality a point of discussion and focus in all meetings and workshops.



#### Data quality challenges /weakness

- Services provided by private health facilities not fully captured.
- Stock out of printed recording and reporting tools
- Inadequate Funding for revision and printing of HMIS tools at lower levels
- Inadequate capacity on data management
- Performance review team do not conduct LQAs on regularly in some service delivery points and administrative structure
- Inadequate triangulation practice using different data source like surveillance data, vaccine consumption data, HMIS Administrative data etc...

#### **Planned Activities**

- Printing and ensuring availability of health and immunization card for mothers and children
- Printing and ensuring reporting and recording tools like immunization registration book, tally sheet and reporting formats in all service delivery points
- Migration of electronic HMIS to DHIS2
- Digitalizing the paper based community health information system (into electronic system)
- Capacity building data quality review, DQS, data management
- Regular supportive supervision at all level
- Enhance regular feedback at all level
- Encourage and capacitate service providers on data use to bring evidence based decisions
- Regular implementation of LQAs and DQA at convenient level
- Triangulation practice using different data source like surveillance data, vaccine consumption data, HMIS Administrative data etc... at all level
- Strengthen Performance review team to conduct LQAs on regularly basis
- Strengthen Research Advisory Committee to use the opportunity for immunization data quality and use for decision making. It includes evidence generation and provide for NITAG to use for action.
- Develop data quality improvement work plan for strategic data quality improvement activities by the EPI in close collaboration with the Plan-Policy directorate.
- Implement the data quality improvement plan including private health facilities
- Strengthening data management and use by using LMC GAVI's new support platform

# 3.4. Role and engagement of different stakeholders in the immunisation system

Please provide relevant information on the role and engagement of the various stakeholders:

- **National Coordination Forum** (ICC, HSCC or equivalent): the extent the forum meets the Gavi requirements (please refer to <a href="http://www.gavi.org/support/coordination/">http://www.gavi.org/support/coordination/</a> for the requirements).
- **Civil society**: the role and engagement of civil society in the immunisation system in the past year (service delivery, demand generation etc.).
- Other donors: the role and investments of other bilateral and multilateral donor in the immunisation system. Please include information on possible reductions in non-Gavi donor support that influence the overall system capacity (e.g. reductions in Global Polio Eradication Initiative funding).
- **Private sector**: public-private sector collaboration, indicating possible vaccine supply between Government and private sector and the percentage of children receiving immunisation through the private sector.
- Cross-sectoral collaboration: e.g. collaboration between health and education programmes.

#### ICC:

The ICC aims to support and capacitate the MOH to coordinate the immunization program of the country effectively and efficiently. During the previous year alone, the ICC has convened three times to pass key decisions on major immunization issues that include endorsement and resource mobilization for HPV introduction for national rollout; MCV2 introduction in the second year of life and CCEOP

application. The ICC was also able to ensure the establishment and functionality of the National Immunization Advisory Group (NITAG) for major immunization related decisions.

#### CSOs:

Addressing equity through uses of CSO and other community networks is well reflected in the HSTP document, equity plan, draft pastoralist HEP and other strategic and operational documents. Under CCRDA/CORE Group (GAVI sub-grantee), there are 13 CSOs of which 7 have got GAVI cash grant through the MoH to support immunization in hard to reach areas. The other CSOs (EFDA, IWCIDA, KETA and CFID) have entered project agreement with the MoH to support geographically non overlapping Woredas with capacity building. Three professional associations (EPHA, EMA and EPS) have formed a consortium to support immunization program through training and continuous quality improvement. The CSOs and professional associations are supporting routine immunization, SIAs and new vaccine introduction with their area of expertise actively being involved in planning, implementation, and monitoring immunization program at grass root levels.

As per their contractual agreement, the Federal Ministry of health has transferred a total of **USD 1,277,123.16** in the fiscal year 2009 (July 8, 2016 through July 7, 2017) to run their planned activities which was jointly reviewed on quarterly basis.

#### Other donors:

The role and investments of other bilateral and multilateral donor in the immunization system in general is critical. These donors invest financially through the pooled fund at the Ministry of health for overall health system strengthening and also through implementing partners and CSOs. More recently, however, implication of the ramp down in Global Polio Eradication Initiative funding is being felt through the reduction immunization technical support in the country.

World bank, in its Program for results agreement, there are specific Indicators related to Disbursement of the funds related to vaccination coverage such as Pentavalent 3 coverage. As part of the pool fund, more than \$30 million is allocated for the procurement of 6,000 SDD refrigerators to be installed at the lower level Primary Health Care Units.

However, donors such as Global Fund supporting the Health system in general, have indicated a funding will be declining for the coming three years which will adversely affect the immunization program. In addition, there is an intermittent fund coming from WHO that covers the different GAPs in the sector including the emergencies and different vaccine coverage within the country.

#### Private sector:

Public Private Partnership in Health (PPPH) in Ethiopia has a broad goal to contribute towards the overall wellbeing of the Ethiopian population by establishing a collaborative endeavour that combines resources from both the public and private health sectors. The partnership has overarching objectives to improve access to quality and affordable health services for its citizens allowing and enabling the private health sector to operate in a policy-supported partnership with the public health sector.

The role of private sectors in immunization is not negligible particularly in addressing the need at the urban settings.

There is a continued support to the private health facilities that provide immunization services with vaccines and related supplies, training health workers, supervision and joint program reviews by the government. Immunization service report from the private providers is captured through the government HMIS report.

#### Cross-sectoral collaboration:

Since the Millennium Development Goals, net school enrolment rates have been increasing, making school immunization a promising opportunity to reach a large number of children. Having an established school platform for immunization as catch up in early school years will increase the

potential uptake of vaccines (especially additional doses of measles) and other health services which are given or will be introduced in the near future (such as HPV, Meningitis A, Measles-Rubella, Measles 2nd dose, Tetanus-diphtheria, Hepatitis B vaccines).

Taking these and other rationales into account, the Ministry of health and **Ministry of Education** agreed to strengthen school health program where immunization is one of the health service packages. The role of the education sectors ranges from planning/ microplanning to implementation and evaluation of the routine and supplemental immunizations which use the school platform as main stay of the delivery. This has clearly been evidenced in the recently winded up HPV demonstration program and also a series of supplemental immunization activities conducted.

**Ministry of finance and economic development** is vital sector in allocating all health care costs including immunization related funding. Other sectors like women and youth sector have shown their role in advocacy, communication and demand creation during the HPV demonstration program.

FMOH is currently working with the **Ministry of Water and Energy** at national and regional level by identifying facilities without water and electric. Regional Health Bureaus now have MoU with the regional counterparts to electrify and provide water for health facilities. Part of the funds is covered by the SDG-PF.

Ministry of **Agriculture** is working together with our Ministry on nutritional issues, environmental and pollution issues, irrigation and material related preventions, development corridors and work place health needs, inter sectoral communications plans take place.

Ethiopian **telecommunication** is working with technologies related to health, in the Information revolution agenda of the Ministry. Ethio-telecom has delivered SMS to advocate the optimal utilization of routine immunization and subsequent supplemental immunization.

To facilitate the **media engagements**, Ministry of health with its partners has provided a capacity building trainings to national and sub-national level media professionals. Following this, the media outlets have contributed their role in airing spots on routine immunization, in prioritizing immunization during their health round table sessions and more importantly their contribution was significant in disseminating the launching of nationwide measles SIA conducted recently.

# 4. PERFORMANCE OF **GAVI GRANTS** IN THE REPORTING PERIOD

# 4.1. Programmatic performance

Provide a succinct analysis of the performance of Gavi grants for the reporting period. Describe **how Gavi support is contributing to advancing the performance of the overall immunisation programme** and health sector strategies (with a particular focus on those districts/communities with lower coverage), and how the barriers identified in section 3 above are being addressed, stating -as relevant- **good practices and innovations.** 

This analysis should cover all Gavi support received, including NVS, HSS and CCEOP. This section must address the following:

- Achievements against agreed targets, as specified in the grant performance framework (GPF), and other grant-related activity plans. If applicable, reasons why targets as specified in the GPF have not been achieved, identifying areas of underperformance, bottlenecks and risks.
- **Overall implementation progress** of Gavi grants including **NVS**, **HSS** (incl. performance based funding **PBF**) and **CCEOP**.
- Past performance for measles and rubella (immunisation coverage analysis and rubella surveillance, performance<sup>8</sup>) and progress against the country's measles-rubella 5 year plan.

Version: March 2017 22

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<sup>&</sup>lt;sup>8</sup> Please include analysis of MCV1 and MCV2 routine immunisation and MCV campaign coverage at national and subnational levels (admin and survey data), information on case distribution by age, geography, vaccination history, etc. for measles and rubella (including CRS), including outbreaks, at national and sub-national level.

Please mention any other **relevant initiative not supported by Gavi** that addresses the key drivers of low coverage (described in section 3).

#### Achievements against agreed targets

The Government of Ethiopia appreciates the support it is getting from Gavi for NVS, NVI,SIAs and HSS. In 2016, Gavi approved USD 71,000,000 for NVS and is in process to support HSS and CCEOP worth of close to USD 100 million and 20,875,664 respectively, over the project period.

The NVS covers cost of pentavalent, PCV, Rota virus and IPV vaccines where the Government co-finances 0.20 USD. According to the 2016 Gavi Performance Grant, the agreed country targets for Penta 3, PCV3 and Rota 2 were: 92%, 93% and 92%, respectively. The country achieved the targets set for all these antigens. The dropout rate for Penta1-Penta 3 and Rota 1-Rota 2 were in short of the targets. There was no data for IPV coverage because it was not integrated in to the HMIS. In 2017, the HMIS indicators are being revised to include the indicators on IPV, MCV2 and OPV3.

Table 1. Performance of Gavi NVS, 2016

	Penta 3	PCV3	Rota 2	DPT1-DPT3 DOR	RV1-RV2 DOR	IPV
Country Target	92%	93%	92%	3%	3%	93%
JRF/Admin Report	96%	96%	94%	6%	6%	No data
Status	Achieved	Achieved	Achieved			No data

In 2016, Gavi supported Measles SIAs to vaccinate 11 Million children including funding of USD 7,634,788.56 for operational cost and additional support for injection devices and other supplies. The drought situation following the El-Nino effect, the target age group was revised to include older children up to 14 years of age. The campaign was implemented in two phases in April 2016 and March 2017. The post SIA survey result showed the national coverage to be 93.5% (Somali coverage was not included). Despite the extended drought situations which started since 2015, the country was able to mitigate the risk of death due to measles by prioritizing high risk areas and implementing wide age range SIAs; strengthening case management and manage the underlying nutrition related problems.

It is very evident that Gavi support has been instrumental to advancing the performance of the overall immunisation programme and the health sector strategies. The NVS created a platform for predictable vaccine supply which is an essential input for increasing coverage.

The HSS support contributes to strengthen the cold chain system by procuring 1,000 SDD refrigerators and distributed to health posts in 2016.

The revised Gavi policy to support measles SIAs in six priority countries benefited Ethiopia to advance its agenda of measles elimination and the country already achieved marked progress in reducing morbidity and mortality due to measles and other vaccine preventable diseases

#### Past performance for Measles and Rubella and progress towards the Measles five years plan

Ethiopia launched the Measles control program in 2001 and has been implementing the recommended strategies which include: increasing coverage with the first dose of measles vaccination; providing a second opportunity of measles vaccination through Supplemental Immunization Activities (SIAs); implementing sensitive disease surveillance supported with lab confirmation, and improving measles case management.

The Government commitments towards measles elimination through contributing to the recently conducted in 2016 and 2017 measles SIAs by covering the cost of the campaign 5-15 years of age and cost sharing to cover for MCV2 introduction are notable. Moreover two rounds of measles consultation meetings were organized in October 2016 and August 2017 to review progress, understand barriers to measles elimination and propose short and long term solutions. Following the two meetings, Measles five years forward plan is prepared.

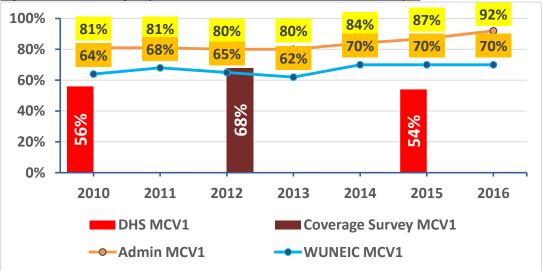
#### Status of MCV1 performance, 2016

MCV1 coverage has shown progress over the last five years from 82% in 2011 to 93% in 2016. The proportion of zones that achieved at least 80% MCV1 coverage increased from 59% in 2014 to 66% in 2015 and 2016.

Map 6. MCV1 Coverage (Administrative data) by zone, 2014-2016, Ethiopia







#### **Measles SIAs performance**

The country implemented wide age range Measles SIAs in April 2016 and March 2017 targeting children under five and under fifteen years in different phases. Concerts efforts that were made to improve the quality of SIAs included: through: establishing a coordination team/command post at national and subnational levels; bottom up microplanning, assessing of status preparedness using the WHO Readiness Assessment Tool in selected districts, timely disbursement of funds. Moreover advocacy and intense mobilization and engagement to aware the communities have helped to reach more children. Deployment of technical assistants to help with microplanning, training, implementation, monitoring and supervision; conducting independent monitoring pre and post implementation; Rapid Convenience Monitoring (RCM) with more focus on high risk areas were instrumental to increase the coverage in the SIAs conducted in 2016 and 2017.

As a result of the high quality and high coverage measles SIAs, the incidence of Measles declined significantly in 2017.

Table 2	Moselec	SIAc	performance.	2016-2017
i abie 2.	ivieasies	SIAS	performance.	ZUTP-ZUT/

	Target population	Coverage		_
Year	6 months to 14 Years	( )\/\text{\rank}\}}}}}}}}}}}}}} \rimetimtile\timetitta}}}}}}}} \rimetimtiltin	RCS9/Coverage survey (%)	Remarks
2016	24,981,447	97	94	62 Zones covered
2017	23,785,363	97		Preliminary survey result. Somali SIA result is not included

### Measles and Rubella Surveillance in Ethiopia

Case-based measles surveillance was initiated in Ethiopia in 2003 and measles laboratory surveillance started in 2004. The measles surveillance is integrated with Acute Flaccid Paralysis (AFP) and Maternal and Neonatal Tetanus (MNT) surveillance. In the absence of confirmed outbreak, all cases fulfilling the measles standard case definition will have blood sample collected and tested at measles laboratory. The country has three measles laboratories, a national and two subnational levels (Bahir Dar and Hawassa) which are accredited every year by WHO. The national measles laboratory is located in the same premise with polio laboratory and was first accredited in September 2005.

More than 4,700 blood samples were tested annually between 2013 and 2016. Similarly, 2649 measles IgM negative samples were also tested for rubella IgM testing on annual basis. These indicate the presence of relatively high workload for the measles laboratories. The sample collection and transportation requires reimbursement for health workers. However, there is no measles surveillance budget and thus it is covered by polio funds.

# **Progress on Measles Surveillance**

Major measles surveillance indicators were achieved over the last five years, except 2015, as indicated in the Table below.

<u>Table 3. Measles surveillance indicator, 2009-2017, Ethiopia</u>

INDICATORS	TARGET	2009	2010	2011	2012	2013	2014	2015	2016	2017
Annualized rate of investigation of suspected measles cases (/100,000)	>=2	3.7	3.8	7.3	5.1	6.2	6.0	4.8	3.6	3.4
Proportion of woredas with >=1 case per 100,000 with a blood specimen (%)	>=80	90	83	96	99	100	80	76	63	62
Proportion of reported measles cases with blood specimen (%)	>=80	100	100	100	96	99	91	42	100	82

Version: March 2017 25

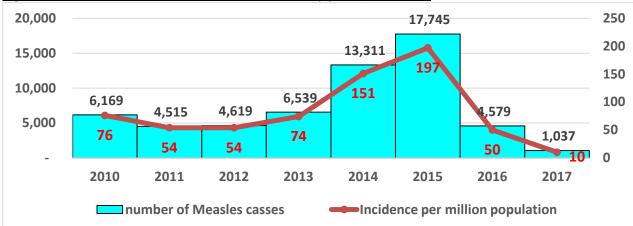
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<sup>&</sup>lt;sup>9</sup> Rapid convenience survey

#### **Burden of Measles in Ethiopia**

Measles incidence has been higher than 5 cases per 1,000,000 since 2006 in Ethiopia. The highest number of confirmed measles cases was recorded in 2015(17,745), putting the measles incidence to 197 cases per million populations.

Figure 19. Confirmed measles cases and incidence by year (2010-2017).



The country reported a total of 297 measles outbreaks in 2015 followed by 243 in 2014 and 146 outbreaks in 2013. In 2016; a total of 128 measles outbreaks were reported from 113 Woredas/districts with the majority of the outbreaks being reported from the populated regions.

Table 4. Number of measles outbreaks, woredas affected with outbreaks and measles cases 2009-2017

Indicators	2009	2010	2011	2012	2013	2014	2015	2016	2017*
No. of Measles Outbreaks episodes	129	76	60	196	146	243	297	128	58
No. of woredas with one or more measles outbreak episodes	89	59	51	143	125	192	243	113	55
Outbreak cases Confirmed by Lab	564	309	248	945	623	1402	1590	685	276
Epi-linked cases	533	3092	1530	2582	3178	3982	9097	2159	936
Total Confirmed Outbreak Cases	1097	3201	1776	3527	3801	5384	11433	2871	1212
Total cases	2653	6196	4515	4619	6539	13311	17745	4567	3282

<sup>\*</sup>Data as of September 2017

Most of the measles cases occurred in the three big regions; Amhara, Oromia and SNNPR. In the last five years, more than 75% of the cases were reported from Oromia and SNNPR except in 2014 when Amhara region accounted for 40% of the cases. In 2015, 87% of the cases are reported from Oromia region. In 2017, following the wide age range campaign conducted in 2016/17, the measles incidence declined in all regions except in Amhara when compared with that of 2015. Overall, the incidence of measles in Ethiopia is high and was remained more than 50 per 1000,000 for the past five years. This is far above the target set for measles pre-elimination (less than 5/1,000,000 by 2015) or measles elimination (less than 1 per

1,000,000).

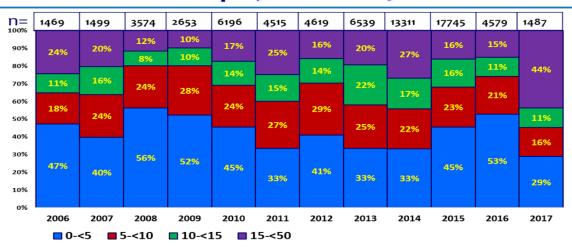
<u>Table 5. Measles incidence rate (January – August), 2015-2017 by region in Ethiopia.</u>

Region	Incidence Per 1,000,000		Age Gr	oup Distr	ibution 20	Number of Outbreaks	Number of Outbreaks	
	2016	2017	0-<5	5-<10	10-<15	15+	2016	2017
Addis Ababa	23	26	46	21	5	28	8	9
Afar	100	5	89	11	0	0	5	1
Amahara	6	23	27	14	12	47	23	20
B/Gumuz	1	3	0	67	О	33	O	0
Dire Dawa	0	0	0	0	О	0	O	0
Gambella	52	0	100	0	0	0	2	0
Hareri	8	0	0	0	О	0	O	0
Oromia	25	8	45	17	10	28	36	12
SNNPR	108	3	53	17	16	14	16	4
Somali	67	93	16	17	13	54	12	8
Tigray	2	5	15	0	11	74	O	4
National	40	16	29	16	11	44	102	58

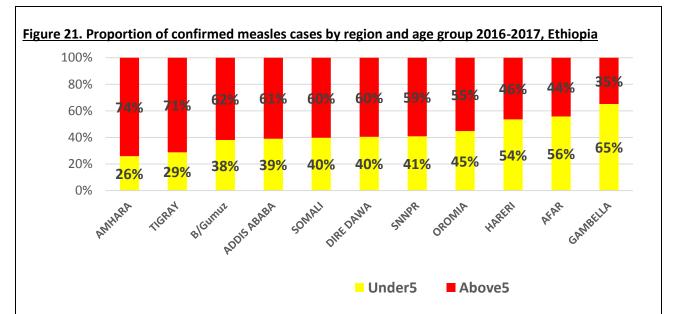
Data from measles surveillance shows that children under 15 years of age are among the most highly affected population group where 84% of the reported cases in 2015. Children under 5 years of age are also significantly affected, contributing to 45% of reported cases in 2015. In 2017 following wide age group SIAs, a significant upward age shifting is noted where the above 15 age group has been affected.

Figure 20. Age distribution of confirmed measles cases and incidence by year (2006-2017).

# Age Distribution of \*Confirmed Measles Cases, Ethiopia, 2006 - 2017\*



Median age of measles cases varies from region to region. The cases based measles surveillance data of 2006-2016 showed that Tigray and Amhara regions have higher median age of cases and relatively lower measles incidence rates compared to SNNPR and Oromia regions where median age was lower and measles incidence is relatively higher. On the other-hand Tigray and Amhara have lower proportion of under five cases, whereas the under five cases proportion is higher in SNNPR including the four developing regions.



#### **CRS Surveillance in Ethiopia**

There is no rubella surveillance in Ethiopia. Rubella detection is the by-product of measles surveillance. Only samples negative for measles IgM are tested for rubella. The 14-years cumulative data analyses of the rubella positive cases indicated that 52% of them are female, and of these, 72% are less than 10 years of age while the remaining are 15 years and older thus establishes that the risk for congenital rubella infection is very high. The exact burden of Congenital Rubella Syndrome (CRS) is unknown in Ethiopia., . A retrospective record review that was conducted in nine major hospitals revealed 224 clinically confirmed CRS cases. . The sentinel surveillance sites that were established in Black Lion and Mekelle referral hospitals are yet to be functional. There is a plan to reactivate existing sentinel sites and possibly expand to more hospitals in other parts of the country.

#### Challenges in measles surveillance

- Sub-national gaps in measles surveillance performance
- Shortage of skilled human, vaccine and financial resources for outbreak investigation and documentation at sub-national levels
- Stock out of lab reagents for the measles labs as an important gap in measles and rubella surveillance
- Inadequate program funding and continued dependence of the measles surveillance on AFP surveillance system for funding for staff, for vehicles used in active surveillance visits. The fact that measles surveillance funding, laboratory and technical supports rely on polio is weakness for the program in addition to the reliance on WHO officers.

#### Planned activities:

- Introduce Measles second dose
- Apply for support for follow-up measles SIAs
- Strengthen measles case management using IMNCI approach.
- Strengthen CRS sentinel surveillance and generate information for decision making.
- With the global polio fund ramp down to support technically, VPD surveillance needs special focus to get support for timely identification and early warning of potential disease outbreaks.

#### Relevant initiatives not supported by Gavi

- Deploying Zonal Technical Assistance (ZTA) in 51 selected low performing zones for two years has improved coverage. The initiative was supported by partners and was discontinued due lack of support.
- Unicef has a plan to deploy technical assistance to improve equity in selected Ten zones
- School Health initiative of the MoH is one of the flagship initiatives of the two sectors with different health service packages using the school platform where immunization would benefit much from the initiative.
- The Ministry of Health is planning to intensify routine immunization activities periodically to boost immunization and to reach unreached children in equitable manner (PIRI).
- EVMA assessment is also planned to be implemented in 2018.

#### 4.2. Financial management performance (for all cash grants, such as HSS, vaccine introduction grants, campaign operational cost grants, transition grants, etc.)

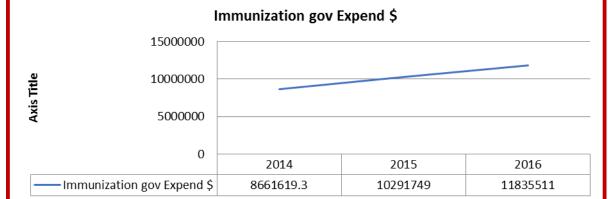
Provide a succinct review of the performance in terms of financial management of Gavi's cash grants. This should take the following aspects into account:

- Financial **absorption** and utilisation rates<sup>10</sup>:
- Compliance with financial reporting and audit requirements;
- Major issues arising from cash programme **audits** or programme capacity assessments;
- Financial management systems<sup>11</sup>.

Looking at what health funding is spent on, based on the most recent national health accounts (2013/14), 7 percent of the health funding goes to vaccine-preventable diseases. As seen in the graph below, the government expenditure on immunization has progressively increased in recent years and has reached to USD 11,835,511 in 2016 (JRF).

Immunization gov Expend \$

Fig. 22: Trend in government expenditure on immunization, JRF 2014-2016



The fund utilization rates for all GAVI budget items has shown increment compared to the previous year.

#### Financial absorption and utilisation rates - FMoH

In the reporting period the FMoH received a total amount of USD 26,824,788 for Measles campaign operational cost and HSS support. The following table shows the cash utilization performance from July 8, 2016 – July 7, 2017.

Table 6. Cash utilization performance of the FMoH from July 8, 2016 – July 7, 2017

<sup>&</sup>lt;sup>10</sup> If in your country substantial amounts of Gavi funds are managed by partners (i.e. UNICEF and WHO), it is recommended to also review the fund utilisation by these agencies.

<sup>&</sup>lt;sup>11</sup> In case any modifications have been made or are planned to the financial management arrangements please indicate them in this section.

Grant Name	Program		Program	Program	Program		Amount	die	Amount sbursed in	Local currency in	In Local Cur	rency - Birr	USD equ. (1 U ) date 07/.		Utilization	Unutilized	Remarks
Grant Name	Duration	арр	roved in USD		2016/2017		Cash balance in Birr	Advances in Birr	Cash balance	Advances	%	%	nemarks				
													Committed to PFSA & cold chain equipment				
ETH-Measles SIA -OPC	2016	\$	7,657,500	\$	7,634,788	168,780,289	67,256,007	31,755,939	\$ 2,907,877	\$1,372,998	60%	40%	procurement				
Health Systems Strengthening	2016-2020	\$	80,590,000	\$	19,190,000	424,228,383	N/A*	N/A*	N/A*	N/A*							
Grand Total		\$	88,247,500	\$	26,824,788	593,008,672	67,256,007	31,755,939	\$ 2,907,877	\$1,372,998							
Note:- As HSS grant is managed	through SD	)G p	ool funding	mech	anism, it is	not possible	to show utili	zation separ	ately.								

As depicted in the above table, Measles SIA from \$2,907,877 (40%) unutilized was the committed amount to PFSA for logistic distribution & management and procurement of cold chain equipment. The distribution payment was delayed due to the fact that Ethiopia Somali Regional State campaign activities were deferred from the planned timeframe because of the ongoing Nutritional response due to climate change and other health emergency. On a related note, the procurement of cold chain equipment is in the finalizing stage.

For detail financial utilization analysis for HSS fund refer the SDG quarter reports.

On the other hand, the ministry utilized the balance brought forward from MENA OPC & HSS CSOs funds by after getting prior approval from Gavi's. The below table shows the details:-

Table 6. Cash utilization performance of the FMoH by funding item from July 8, 2016 – July 7, 2017

		BBF as of Ju	ly 8, 2016	Utilization/0	Commitment	Balance as of	July 7, 2016	Unutilized	
No	Grant Name	In local Currency	USD	In local Currency	USD	In local currency	USD	%	Remarks
1	ETH-HSS CSOs	30,210,525	\$ 1,306,181	29,990,920	\$ 1,296,686	219,605	\$ 9,495	1%	For annual audit
2	ETH-DEMO-HPV	2,322,720	\$ 100,425	2,303,675	\$ 99,602	19,045	\$ 823	1%	fee
3	ETH-MENA OPC	43,051,865	\$ 1,861,388	36,756,616	\$ 1,589,207	6,295,250	\$ 272,181	15%	
4	ETH-VIG-IPV	1,708,972	\$ 73,889	117,530	\$ 5,082	1,591,442	\$ 68,808	93%	D
5	ETH-VIG-ROTA	9,166,132	\$ 396,306	77,435	\$ 3,348	9,088,697	\$ 392,958	99%	Reprogramming to PIRI
6	ETH-VIG PCV/PNEUMO/	8,180,180	\$ 353,678	1	\$ -	8,180,180	\$ 353,678	100%	
7	ETH-CSO B	4,001,221	\$ 172,997	-	\$ -	4,001,221	\$ 172,997	100%	
	Grand Total	98,641,615	\$ 4,264,864	69,246,176	\$ 2,993,924	29,395,440	\$ 1,270,940		

As can be seen in the table CSOs implementers utilized 99% of the committed budget and it is good achievement. EPI & GMU was reviewed their quarter progress and indemnified gaps were addressed with relevant corrective measure. As per the contractual agreement with the IPOs the grant will be closed as of December 31, 2017.

The HPV demonstration project which has been successfully implemented for the previous two years (Dec 2015 through June 2017) had a financial utilization rate of 100%

For those unutilized balances from #3-7 the ministry has been requested reprogramming approval.

#### Financial absorption and utilisation rates - Partners

Table 7: TCA financial absorption and utilization rates, 2017

Partner	Budget Line	Amount allocated(USD)	Amount Utilized, (%)	Balance	Remark
WHO	Activity	268,510	129,429	139,081, (48.2)	Fund released in May
WHO	Salary	326,422	125,334	201,088, (38.4)	

	Salary				Allocated up to June
UNICEF	Calary	527,980	452000	75,980 (86%)	2018
UNICEF	Operational				Allocated for the follow
UNICLI	cost	300,000	190,000	110,000 (63%)	up of BDS under process
PATH	VITAC Extension Gavi Grant	387,162 USD	387,162 USD (100%)	0(0%)	The grant was between July 2016 to May 2017
PATH	HPV TCA support	\$251,078	17,095.80 (7%)	233,982(93%)	Approved as of March 2017
PATH	2017 TCA (Demand generation and Data)	\$824,992	0	824,992(100%)	The agreement is not yet finalized
PATH	Bridge funding (PATH)		28,742.42		funded by PATH to continue the technical support during transition period from VITAC to TCA.
WB					
UNFPA	AHI integration	15,000	11250(75%)	3750(25%)	expected to be fully utilized for the assessment and related activities till the end of December 2017.
TOTAL					

#### Compliance with financial reporting and audit requirements

Overall Gavi is the major contributor for the health sector for the last years. The above table shows the contribution from EFY 2001 till 2008 in Ethiopian birr currency. As can been seen EFY 2008 Gavi's contribution is higher than previous years. In the year 2008 the number of program that supported by Gavi's fund is increased.

In the reporting period the utilization is improved. Besides that with smooth communication from the donors all old grants funds are regrouped for better follow up and proper closure of the grants. Gavi's contribution for the health sector in the EFY 2009 is the third bigger next to SDG pool fund and Global fund.

The ministry adheres the financial reporting and audit requirements that are stated on the Gavi Aide Memoire/Financial management requirements. FMoH managed all the grant funds according to approved budgets in a transparent and accountable manner with financial records and accounts meeting the requirements of GAAP and IFRS.

Currently, FMoH has started conducting the external audit for 100% active grants unlike experience before 10years. Each grants are subject for both internal and external audit.

Major issues arising from Cash programme audits or Programme capacity assessments

Based on the Cash Programme Audits findings the ministry higher officials are closely following the implementation as per the corrective action plan. The finding helps the ministry to improve Financial Management, Logistic and Program management system. Besides, a total of \$378,011 was decided to return back to Gavi and the ministry has committed to return the amount on the agreed date.

#### Financial Management Systems

The number of grants that FMoH receives from development partners is steadily increasing both in volume and diversity. With this increase comes the responsibility to effectively and efficiently monitor program and financial performance of each grant and ensure that we are in compliance with applicable development partners (DPs) requirements. Hence, it becomes more important for FMoH to improve its

grant management capacity and meet DPs' expectation to be recognized as a dependable partner and to attract future funding. Despite magnificent resources exerted so far, one could not have the gut to say liquidation improved, perfect coordination reached among finance and program directorate, attract additional revenue which emanate from effective use of resource on hand. From this one could easily understand that currently all projects of the FMoH took at least two years beyond the original agreement, GMU restructuring literally create a challenge to ensure the value for money. Then, to alleviate this challenge the primary directive of FMoH has restructured the existing grant management system by separating the GMU from FPD in a way to support the efficient resource allocation through giving higher attention.

## 4.3. Sustainability and (if applicable) transition planning

Provide a brief overview of key aspects and actions concerning the sustainability of Gavi support to your country. Please specify the following:

- **Financing of the immunisation programme**: key challenges related to the financing of the immunisation programme, including co-financing requirements.
- **Gavi transition planning**: if your country is transitioning out of Gavi support, specify whether the country has a transition plan in place. If no transition plan exists, please describe plans to develop one and other actions to prepare for transition.
- If a transition plan is in place, please provide information on the following:
  - Implementation progress of planned activities;
  - Implementation bottlenecks and corrective actions;
  - Adherence to deadlines: are activities on time or delayed and, if delayed, the revised expected timeline for completion;
  - Transition grant: specify and explain any significant changes proposed to activities funded by Gavi through the transition grant (e.g., dropping an activity, adding a new activity or changing the content/budget of an activity);
  - o Submit a consolidated revised version of the transition plan.
- Polio transition planning: If your country is transitioning out of immunisation programme support from
  other major sources, such as the Global Polio Eradication Initiative, specify whether the country has a
  transition plan in place. If such a transition plan exists, please briefly describe it. If no transition plan
  exists, please describe plans to develop one and other actions to prepare for polio transition.

#### **Co-financing challenges**

The country always secures budget required for the co-financing share and has never been in default by GAVI. However, there is always delay in effecting the budget transfer for the procurement of vaccine in a timely manner. This is due to the fact that there is a difference in the Fiscal year of the Country from the G.C. and the country is not also benefiting from pre-financing to fill these gaps.

The annual process of the FMOH follows the below listed major activities and timeline for the execution:

#### 2011 EFY

- Development of the annual core plan: March 2010 EFY (March 2018)
- development of annual comprehensive plan: June/July 2010 EFY (June/July 2018)
- SDG-PF Budget approval: Sep 2011 EFY (Aug/Sep 2018)
- Co-financing Payment for 2018 obligation Initiation: From September 2018 on wards
- Payment Effected: Nov or Dec 2018 (towards the end of the Gregorian year)

#### 2012 EFY

- Development of the annual core plan: March 2011 EFY (March 2019)
- Development of annual comprehensive plan: June/July 2011 EFY (June/July 2019)
- SDG-PF Budget approval: Sep 2012 EFY (Aug/Sep 2019)

- Co-financing Payment for 2019 obligation Initiated: From September 2019 on wards
- Payment Effected: Nov or Dec 2019 (towards the end of the year)

Therefore, by considering the above listed timeline the Country request GAVI to consider the alignment of the co-financing payment with the Ethiopian fiscal years.

#### Polio transition planning:

The polio transition planning exercise started in June 2016. A draft polio transition plan has been developed and it is set to mainly cover the period 2017-2020 to maintain the official polio free status and to prepare the country to move progressively to the post-eradication era.

The polio transition planning exercise has achieved so far various outcomes such as: i) a mapping of polio personnel and physical assets; ii) a set of key transition strategies for essential and non-polio functions. In addition, the following supportive documents have been developed: a) a list of polio best practices and lessons learnt; b) a documented Ethiopian particularity on polio high risk status (Pastoralist population, border and low performing Woredas), c) a resource mobilization strategy, d) a communication and advocacy strategy, e) a capacity assessment and capacity building plan for polio transition and g) an asset business case document.

The Ethiopia polio transition plan 2017-2020 has in —depth assessed strengths and weaknesses in health in general, in particular within EPI and PHEM. The polio transition strategy for Ethiopia is to maintaining key essential Polio functions such as immunization, disease surveillance & outbreak response and Lab testing & bio-containment until polio eradication is declared and transfer them gradually to government and most importantly enhancing increased resilience of the health system through strengthening and operationalizing PHEM in post —polio eradication era.

#### 4.4. Technical Assistance (TA)

Briefly summarise key insights generated during the appraisal of Gavi supported Targeted Country Assistance (TCA) activities and milestones. <sup>12</sup> Specify whether amendments to the currently planned and ongoing Technical Assistance activities and milestones are envisaged (short term). If changes are envisaged please provide a justification.

Note: New Technical Assistance requirements for the next calendar year should be indicated in section 6 rather than this section.

#### UNFPA: Supporting the adolescent health assessment for identifying potential priority intervention

Adolescent health assessment has been undertaken for identifying priority interventions that can be integrated during the national scale up HPV vaccination in Ethiopia. Data has been collected from desk review and using qualitative methods (18 FGDs and 14 KII). Field level data has been collected from Oromia, Amhara, Tigray, Addis Ababa, Afar, and Gambella Regions. Field level data has been collected also from Ahferom and Gomma woredas which are HPV Demo districts. Prioritization exercise has been undertaken at National and Regional levels using the GAVI scoring card. According to the assessment the top five adolescent health interventions selected to be integrated with HPV vaccine are education (HIV/SRH, Menstrual Hygiene management, and life style), iron folic acid supplementation, deworming, skin examination and vision screening. The main platform to deliver integrated adolescent health interventions and HPV vaccine will be primary schools. In addition health posts and community outreach will be used to deliver intra and inter-vaccine period interventions for out of school youth.

Overall there is policy environment that support delivery of integrated adolescent health interventions

Version: March 2017 33

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<sup>&</sup>lt;sup>12</sup> A summary of Technical Assistance approved under Gavi's Partner Engagement Framework (PEF) for the year under review and reporting status can be accessed via the PEF portal by registered users, or by contacting the Gavi Secretariat.

along with HPV vaccine. The integrated package of adolescent health interventions can be implemented along with HPV vaccine at a cost of less than a dollar per child per year. The integrated package of adolescent health interventions should be considered as an interim period strategy and closely coordinated with or be parcel of school health program. Successful Implementation of integrated adolescent health interventions along with HPV vaccine needs strong coordination platform, joint planning and pooling of resources at all levels (Federal, Regional and Woreda). The assessment has brought a lot of information which will be useful for future decision making depending on the priorities of the health system and availability of resources.

#### WHO:

## a. Country Planning Management and Monitoring:

i. Measles SIAs implemented in February/ March 2017 targeting 22.5 million children in all regions: Technical support provided for TOT training at national level, Including for 31 WHO surveillance officers who cascaded the training and microplaning development in their respective zones, Monitoring of SIAs preparedness using readiness assessment tools. A total of 130 woredas were prioritized by the Ministry and partners for close follow up. WHO Field officers submitted status report from all regions and 79 of these priority Woredas. The information was used to give feedback to Woredas by the Ministry and deployment of central supervisors.

End process independent monitoring was conducted in FMOH selected 296 Woredas. A total of 20 Woredas found to have less than 90% coverage. Therefore, the sites with more than 10% un-reached children during an end-process Independent monitoring were 6.8%.

ii. Supported Measles consultative workshop

Supported measles consultative workshop from 27-29 October 2016 in collaboration with in country EPI partners. Total of 43 participants from FMOH, local and international EPI partners attended the meeting. The meeting assessed the progress towards the measles pre-elimination target of 2015 as compared to the set targets by WHO AFRO using the presented data for each strategy and concluded that the progress was off track. In addition it provided key recommendations for implementation for the achievement of the 2020 measles elimination. As an outcome the opportunity was used to assess the progress towards the measles pre elimination target as per WHO AFRO standard.

The action points from the recommendations were identified and incorporated into the TCA plans as well the FMoH EPI operational plan.

iii. Supported reviewing and updating of EPI comprehensive review proposal which was endorsed by the ICC in 2017.

iv. Supported performance monitoring through quarterly review meeting with MoH and EPI partners v. Conducted supportive supervision in 2016 in Gambella, Addis Ababa, Oromia and SNNPR regions. On job training and feedback was given to the supervised facilities and shared with regions and Ministry of Health. However, the frequency of supervision was not optimal to assess changes as a result of supervision which is due to competing priorities including health and nutrition humanitarian emergencies.

#### b. Vaccine implementation:

- i. Technical Support provided to revise the RED guidelines and pre-testing the RED tools.
- ii. Technical Support provided for development of applications for HPV and MCV2 introduction
- iii. Supported new vaccine surveillance activities in addition to the routine AFP and measles surveillance. Support was provided for Rota sentinel surveillance sites in 3 hospitals in Addis Ababa, PBM surveillance sites in 3 hospitals (2 in Addis Ababa and 1 in Gondar) and 7 intussusception sentinel surveillance sites in Addis Ababa and Regions. Retrospective record review was done in 9 hospitals to estimate the burden of congenital rubella in Ethiopia. A total of 266 suspected cases were identified out of which 83% were clinically confirmed.

#### c. Data Quality:

- i. DQS training conducted in June-July 2017 for Amhara, Gambella, SNNP and Oromia regions.
- ii. Technical support provided for HMIS revision and indicators on OPV3, and newly introduced vaccines incorporated

Technical support provided to organize a workshop on EPI coverage estimates for the national level and 11 regions with support of WHO/HQ and IST. The workshop was conducted in Addis Ababa from 4-9 September 2017 and produced national and sub-national coverage estimates for DTP1, DTP3, MCV1, OPV 3, Rota 2 and PCV3. Recommendations were made to strengthen the Health Management Information System. Ministry was debriefed on the findings and the report is being finalized taking into account the inputs from the MNCH director of FMoH.

### d. Supply chain and vaccine wastage:

i. Provided support to logistics management information system through regular SMT reporting on a monthly basis. The availability of HCMIS is limited at Zonal level and in few cases at Woreda level. And hence, getting the actual consumption data for all health facility is challenging. The plan is now to use the available data as a proxy indicator for consumption and do the actual triangulation with HMIS and survey data.

ii. Technical support provided for development of CCEOP proposal to GAVI, and installation of 19 incinerators in 19 hospitals.

**UNICEF:** The TCA benefited FMOH Immunization program through the following UNICEF human technical and financial support:

- High quality technical expertise on areas under UNICEF comparative advantage such as Supply Chain and Logistics, Communication, Equity and Immunization systems strengthening, Immunizations in Emergency and Humanitarian Response were sustained.
- All 4 UNICEF milestones were achieved as of reporting date. These were:
- Supply chain: Finalization and approval of high quality GAVI CCEOP proposal submitted in May 2017 through the collective support from UNICEF in country and ESARO staff and additional international Cold Chain expert consultant that was coordinated effectively by FMOH with partners and by UNICEF embedded FMOH EPI Logistics officer. Completion of the country national vaccines inventory count/report at central level was also supported last June to July 2017. The report is important input for multiyear forecasting and budgeting exercise at the start of the country's fiscal annual budgeting cycle and planning. 2017-2018 forecasting and timely submission were supported. Preparations and ongoing Cold chain and vaccine management trainings including cold room preventative maintenance system targeting 40 senior technicians from Central PFSA and 17 regional hubs have been conducted. Also supported the Protocol development for the 2018 CCEI and EVMA. Provision of procurement service package (including readiness assessments, installations/commissioning, onsite trainings) of 6000 SDD in 6,000 health facilities in the country.
- 2) Country planning Management and Monitoring. The assessment report on Routine EPI Improvement Plan (RIIP) was completed and endorsed by FMOH. The report generated important findings to inform development of RED/REC guidelines and shifts in the support of Zonal Technical assistants to contribute to equitable coverage in priority woredas. Immunization Program in Ethiopia is ahead on translating the FMOH Equity agenda in its current Health Sector Transformation Plan. With UNICEF technical and financial support (in complementarity with other donor funds), Subnational equity assessments and microplanning have been initiated in 4 regions— Amhara, SNNP, Oromia and Addis Abba urban slums.
- 3) Demand generation: FMOH development and adaptation of IPC materials have been initiated

and on progress. IPC skills improvement for health workers has been identified as key solution to ensure caregivers and parents receive the correct messages in each vaccination opportunity and increase return vaccinations, reduce drop outs. The proposed plan is to integrate the IPC training in the existing immunization in practice training to be effective. Barrier analysis study on immunization (and MNCH) in DRS regions is on contracting stage. This will inform a more context specific communication strategy support on routine immunization by 2018.

4) Vaccine Implementation: May 2017 submission and final GAVI approval of the HPV and Measles 2<sup>nd</sup> year of life proposals.

## Other critical results supported:

- Vaccine Implementation: Additional technical and financial (complemented with other flexible donor funds, printing/distribution of measles campaign forms) support on the successful conduct of FMOH April 2017 nationwide Measles SIA (except Somali) and in June to July 2017 Somali region Measles SIA. Measles campaign Communication support focused on development of messages translated in local languages for print and mass media dissemination, trainings of media professionals, activation of UNICEF supported communication networks and support to command post meetings.
- Coordination and technical support for the Measles Meeting and high level advocacy last Aug 2017 as Ethiopia is one of the big 6 high burden country globally on measles.
- Polio Transition Planning with key stakeholders and with HOA countries through financial and technical support using other funds in April 2017, ongoing polio assets documentation, business case and plans for resource mobilization with key donors.
- Technical and financial support using other funds on the Development and Finalization of the Revitalized/Optimized Health Extension Program Strategy for both agrarian and pastoralists regions that will contribute to strengthen EPI and Health system

Data Improvement: Technical support on the redesigning and pretesting/finalization of the Ethiopia FMOH EPI Home based EPI /MCHN card that is now fully endorsed and will be for production/distribution by UNICEF (using other donor funds). This will contribute to high card retention and survey data accuracy. Also supported the testing of integration of Birth registration and CRVS in selected woreda in coordination with WB. Contributed to printing of HMIS forms on EPI/MNCH per MOH request using other funds.

#### PATH:

PATH has contributed in strengthening the capacity of the MOH/EPI in the planning, implementation, and evaluation of strategic advocacy and communications and demand generation activities. PATH immunization experts have been participated and contributed in sixteen immunization communication working group regular meetings where the group has been discussed and accomplished the major activities.

- 1. Measles SIA has supported with well communication plan, execution. PATH has provided financial support to measles campaign launching at Oromia region and supporting printing of communication materials for three regions (Afar, Ethiopia Somali and Oromia). The campaign monitoring has supported in two regions (Afar and Addis Ababa).
- 2. 7th African vaccination week has been colorfully celebrated in Fitche town, Oromia region. PATH has supported a number of activities for 7th AVW launching events including extensive technical support. PATH has printed IEC Materials (banners, caps and t-shirts) which contained core messages and also financial support to the hosting region Oromia.
- 3. Interpersonal communication material (desktop flip chart) has developed which intends to solve the communication barriers between health care providers and mothers/care givers
- 4. Polio transition plan has done and PATH has contributed in best practice documentation
- 5. Different communication materials has developed to strengthening the improvement of

#### routine immunization

PATH has contributed in re-establishment of communication working groups in three regions (Afar, Somali and Oromia). PATH has supported printing of 2300 desktop flipchart interpersonal communication tool in three different languages (Amharic, Af Somali and Afar af) and supported distribution to four regions (Afar, Somali, Harari, DD and Addis Ababa). This material can be used in all health facilities, including health posts.

PATH has supported the planning and implementation of demand generation activities with communities and religious leaders in four districts of AFAR region (Berhale, Yallow, Chifra and Ewa). A fruitful coordination meeting was conducted between PATH project staffs and Afar regional health bureau officials. As a result of the discussion, the teams were able to decide which districts should be supported with this agreement. Situational analysis assessment was conducted in collaboration with the Afar regional health bureau and the findings were shared on organized a consultative workshop attended by the regional health bureau and officials from all Woredas which yielded a very productive discussion and agreement on next steps. Following the assessment and consultative workshop the following major activities were performed as part to capacity building activities

- 1. PATH has provided immunization in practice (IIP) training to 100 health facility and Woreda EPI focal persons
- 2. PATH produced and printed 20,000 brochures which were designed based on the findings from the community which is very helpful in delivering key messages to mothers and caretakers including immunization schedule.
- 3. Sensitization workshops have been organized for district and Kebele levels social mobilization committee members where a total of 146 participants were attended from different sectors (Administration, health taskforces including HEWs, political party leaders, education sector, women and children affairs sector, agriculture sector, religious leaders).
- 4. Ongoing periodic monitoring (joint monitoring visits and quarter review meetings) have been conducting.

PATH has provided technical support in finalizing HPV demo evaluations (PIE, Coverage survey and costing). PATH has also provided both global and local technical support in HPV national application writing up.

The World Bank: linkage between birth registration and immunization pilot project

**Overall objective of the support**: to Enhance a well-functioning civil registration and vital statistics system through integrating community health structures/immunization program with the civil status offices.

#### **Specific objectives:**

- i) Assess the effect of utilizing existing community health structures and immunization processes for improving birth registration
- ii) Examine the processes of notification and registration of births through the use of health extension workers, women development armies, and Civil Status Officer.

#### Progress update as of the reporting period:

- 1) The Work Plan and Micro Plan were developed in collaboration with the regions in project locations/Afar, Tigray and Amhara/.
- 2) Notification form for community births that occur outside of the health facilities were developed
- 3) Detail ToR for the rapid assessment was prepared

# Future work plan:

- 1) Undertake rapid assessment in project locations (will be conducted soon in collaboration with the ministry of health, HMIS team)
- 2) Train community health workers, religious leaders, civil status officers and kick of the pilot implementation in these specific areas
- 3) Monitoring and supervision

# 5. UPDATE OF FINDINGS FROM PREVIOUS JOINT APPRAISAL

Provide the status of the prioritised strategic actions identified in the previous Joint Appraisal<sup>13</sup> and any additional significant IRC or HLRP recommendations (if applicable).

Prioritised actions from previous Joint Appraisal	Current status
1. Measles Elimination Efforts	<ul> <li>As part of the country's measles elimination control effort nationwide measles supplemental immunization activity (SIA) has been conducted from February to August 2017 and total of 23,696,009 children were vaccinated. This SIA covered U5 nationwide and 60-179 months in 517 woredas which were not reached during April 2016 SIAs. However for Somali region target age group was re-adjusted 6 months - 179 month (6 month-15 years) taking in to account the current drought situation in the region. The administrative coverage of this campaign was 96.3%. Measles SIA coverage survey has been conducted in all regions except Somali region which is pending issue due to security concern. Accordingly, preliminary result showed 93% national coverage (excluding Somali region). This result is comparable with the administrative coverage. Additionally, this SIA is also integrated with nutritional interventions for efficient utilization of resource in the sector.</li> <li>Measles consultative workshop was conducted 26th and 27th October 2016 which the EPI program used this opportunity to draw important international experiences and best practices for measles elimination effort.</li> <li>5 years measles forward plan is prepared along with detailed</li> </ul>
	activity, budget and M and E plan and important action points are identified by the ministry. The plan is ready for next year submission.
	As part of the global Polio eradication activities, the county give due focus for polio surveillance and conducted wider area of polio supplemental activities on top of strengthening routine immunization. Accordingly, the recent polio SIA is being conducted since August 2017 targeting 357 woredas. This SIA is being completed in most of the regions.
2. Polio Eradication activities	Additionally, as part of polio transition planning committee was established and the participants meet on a regular basis. A plan of action was developed and all polio best practices were reviewed and identified. Including resource mobilization activities, asset mapping and capacity building activities. Communication activity of polio transition plan is included in the national communication plan and best practices were documented.
3.NVI-HPV	# HPV demo coverage survey and costing analysis were finalized

<sup>&</sup>lt;sup>13</sup> Refer to the section "Prioritised Country Needs" in last year's Joint Appraisal report

	and lessons learned and immediate information/a
4.NVI-MCV2	and lessons learned and important information's were used for decision for national rollout.  The country has submitted and got approval for HPV national rollout Because of the global shortage of HPV the national introduction date is postponed to October, 2018.  High level decision was with obtained from NITAG and ICC following serial discussion for introduction of MCV2. To this end, concept note & policy brief was prepared & decision is made to proceed with MCV 2 in 2017/8 and the country submitted MCV2 application for Gavi after finalizing all mandatory requirements and the application is conditionally approved by Gavi. In line with effort the additional requests were addressed on August 09, 2017, Co-financing is signed, task force is already established, Cold chain assessment was done and HMIS is revised and accommodative of MCV2 indicators. The country is looking for response from Gavi.
	Working group, taskforce, ICC and NITAG meetings have been conducted as per the request by EPI. Additionally, EPI coordination platform (RMNCH_EPI cluster was established and conducting regular meeting.
	cMYP annual revision was done in order to align with the country programmatic demand and interest. Besides RED/REC revision has being done. Additionally, EPI training database was developed and the trainings have been tracking regularly. Another important HMIS revision. As result new vaccines such as IPV and the upcoming MCV2 and HPV are included in the newly revised HMIS. This will make easy for monitoring coverage of these new vaccines.
5.M and E and program coordination	<ul> <li>Revision of the EPI card to health passport is another important milestone in the EPI program. This revision is expected to increase card retention which is very low according to the current EDHS. Additionally this revision allows to accommodate additional information for monitoring the program. After the pre-testing 3 million copies will be printed for 2010 Ethiopian fascial year.</li> <li>Data quality triangulation workshop was conducted from September 5-8, 2017. Participants from key EPI stakeholders were participated. All regions came with coverage figures and this</li> </ul>
	activity takes in to account comparison of national estimates as well as WHO and UNICEF joint report. Accordingly, the final national estimate is closer to WHO/UNICEF coverage figure.  Cold chain equipment inventory was revised at the beginning of
6. Immunization Logistics	the 2017 with an objective of quantifying and characterizing the condition of cold chain equipment throughout the country. According to this revision over 2,600 new refrigerators/freezers deployed in the last two years, and 23,189 refrigerators/freezers were available at different levels of the health system (health post, clinic, health centre and hospital, woreda, zone and region) with 1,674 Obsolete. Due to maintenance campaigns (3,921 non-functional refrigerators) 81% of the refrigerators/freezers at

	health system were functional. However, the functionality varied
	across the regions of the country.  Lack of maintenance is mostly due to shortage of spare parts which is major reasons for non-functionality of the freezers/refrigerators. Kerosene and electricity are major sources of energy for almost all refrigerators/freezers. Because of the SDD refrigerators deployment in the country utilization of solar energy is also improved from 2% in 2103 to 12% by 2017.  Cold chain inventory data base is another important activity that is being done to support the cold chain inventory of the country. Accordingly, national level TOT was given for regional and zonal level staffs so that they will lead data entry as well as cascading and installing of the application at regional and zonal level.  Another important activity that was accomplished with regard to this thematic area is Ethiopia has submitted CCEOP application on 2017 Gavi window with the revised application portal.
7.Program Communication	<ul> <li>Media professional training is one of the activities that accomplished with the objective of revitalizing the involvement of health communication and media professionals towards benefits of immunizations. This activity was conducted in two rounds. The first round was conducted by end of 28th November 2016 and the second round was conducted by the end of December 2016.</li> <li>The 7th African Vaccination Week has been officially launched with the theme "Vaccine protects everyone, Get Vaccinated" in Ethiopia, in Fitche town- on April 24, 2017. The launching was very colourful attended by partners including GAVI, WHO, UNICEF, Core Group, PATH, CHAI, JSI/UI-FHS, Save the Children, and CCRDA as well as by the national and local Medias. Moreover, Sabrina CLEMENT, a representative from GAVI Geneva head quarter took part in this important event and delivered keynote speech.</li> <li>2016 World Polio Day (WPD) was colourfully celebrated on October 24th, 2016. This year's day was commemorated under</li> </ul>
	the theme of "END POLIO NOW, MAKE HISTORY TODAY".  FIPC tool or desktop flip chart has been prepared and partially printed and distributed to Somali, Afar, Gambella, DD, Harari and AA. Routine immunization message standardization has been done along with other RMNCH programs
8.Periodic intensification of routine immunization (PIRI) for enhancing routine immunization	Pastoralist communities throughout Ethiopia particularly in Afar, Gambella and Somali regions, have very low routine immunization coverage. Similarly, selected woredas of agrarian and urban settings which have the highest number of unimmunised children are a key target for FMoH. To this end ministry has developed proposal for Periodic intensification of routine immunization (PIRI) for enhancing RI performance in those areas. Proposal is developed and it is expected to be

	endorsed by ICC to proceed to next steps.
Additional significant IRC / HLRP recommendations (if applicable)	Current status

If findings have not been addressed and/or related actions have not taken place, provide a brief explanation and clarify whether this is being priorities in the new action plan (section 6 below).

# 6. ACTION PLAN: SUMMARY OF FINDINGS, ACTIONS AND TECHNICAL ASSISTANCE NEEDS IDENTIFIED AND AGREED DURING THE JOINT APPRAISAL

Briefly outline the key activities to be implemented next year with Gavi grant support.

In the context of these planned activities and based on the analysis provided in the above sections, describe the five **highest priority findings and actions to be undertaken to enhance the impact of Gavi support**, indicating timelines and Technical Assistance needs.

Please indicate if any modifications to Gavi support are being requested, such as:

- Changes to country targets as established earlier, either from the agreed Grant Performance Framework (GPF) or as part of the NVS renewal request submitted by 15 May;
- Plans to change any vaccine presentation or type;
- Plans to use available flexibilities to reallocate budgeted funds to focus on identified priority areas.

Note: When specifying Technical Assistance needs, do not include elements of resource requirements. These will be discussed in the context of the Targeted Country Assistance (TCA) planning, which will be informed by the needs indicated here.

#### Overview of key activities planned for the next year:

#### A. Planning, Management, Monitoring, Coordination

- Coordination platforms at regional, zonal and Woreda level for smooth implementation and rapid response
- Emphasis on disease specific outcome/impact monitoring as well as strengthening the VPD surveillance upon the extent of gap in TA (including the effect of Polio budget ramp down)
- Finalize the preparation of Polio legacy plan and start implementing the transitioning of polio eradication activities to government routine immunization program
- Application for Measles SIAs for the 2019
- LMC support to begin in 2018
- Strengthening immunization Supply Chain
- Vaccine transition implementation, CCEI and EVMA will be focused.

#### B. Reduce immunization inequities and improve coverage

- The MoH will work closely with the EPI partners to narrow the gaps for developing regional states. Work on equity service delivery
- Focus on pocket areas and population groups unimmunized; private facilities
- Periodic intensification of routine immunization (PIRI) in immunization low performing districts
- Immunization target setting in major cities and towns of regions and city administrations.
- Nationally contextualize and implement the revised African regional RED/C guide
- Improve Demand for immunization services and sustain public trust
- Enhance demand generation and communication

# C. Data Quality Improvement

- Health and immunization data quality improvement plan (2018-2020):
  - ✓ Advocate for immunization data quality
  - Capacitate HIT and EPI managers and EPI focal persons on DQR and data management
  - ✓ Institute data quality performance monitoring system
  - ✓ Avail standardized immunization HMIS tools

# D. New Vaccine introductions

- Preparatory activities for MCV2 introduction in Q1/Q2 of 2018
- Preparatory activities for national scale up of HPV
- Yellow fever vaccine introduction/application

Key finding 1	<b>EPI service quality</b> is major focus area in FMOH immunization program in the 2018 reporting period
Agreed country actions	<ul> <li>Implementation of standards for quality immunization program including the interpersonal communication between service providers and mothers/care takers is of high importance</li> <li>Intervention integration, birth registration &amp; robust microplanning, capacity building focusing on technical skills, Mentoring &amp; supervision.</li> <li>Frequency &amp; regularity of sessions, invalid doses will need more focus to avert the current problems.</li> <li>Using evidence, advocate for provision of measles immunization</li> </ul>
Associated timeline	2018 reporting period
Technical assistance needs	There is technical assistance from partners in areas in the areas of:  ✓ Intervention integration,  ✓ birth registration & robust microplanning,  ✓ capacity building focusing on technical skills,  ✓ Mentoring & supervision.
Key finding 2	Evidences from DHS 2016 suggest that there is <u>immunization service inequality</u> in terms of educational status, economic status and place of residence.
Agreed country actions	<ul> <li>Address the 3 elements within the HSTP including immunization services (translate into action): equal access, utilization &amp; quality of care for all.</li> <li>Using PIRI to reach more unreached. PIRI will not be a blanket investment across the country but targeted approach to regions with the highest number of unimmunised children. The objective of the PIRI implementation in the selected Woredas is to improve routine immunization coverage and reduce number of un immunized nationally by targeting children in 140 Woredas with low access (Penta1 coverage&lt;80%) and high Penta dropout rate. It is planned to increase Penta1 coverage in the selected 140 Woredas from the current</li> </ul>

	88% to 98% by end of 2019 and to reduce number of unimmunized children by 41% nationally from 150,135 in 2016 to 88,864 by end of 2019.
	<ul> <li>Equitable &amp; targeted resource allocation, evidence based advocacy &amp; communication.</li> </ul>
	RED guide finalization and implantation
Associated timeline	Strategies and activities that will be implemented to address immunization service inequality will be implemented in the 2018 reporting period.
Technical assistance needs	There is a need for technical assistance to address immunization service quality in the areas of microplanning, RED/C implementation; AEFI surveillance, dropout reduction and equity analysis.
Key finding 3	There is improvement in <u>Immunization &amp; Surveillance Data Quality</u> in Ethiopia expanded program on immunization, however with ramping down polio budget, there will be financial gap to undertake VPDs surveillance and data quality activities. Hence, resource mobilization is required for sustainability & scaling the interventions which are there is also observable gaps that needs to be addressed.
Agreed country actions	<ul> <li>Systematic data review mechanism &amp; Triangulation: consider vaccine consumption data, surveillance data, administrative data, Surveys data at all level &amp; regularly.</li> </ul>
	<ul> <li>Verify the incentive mechanism; Joint engagement in data verification; alternative denominator sources like vital event registration; regular Feedback mechanism; strong accountability system at all level; digitization/electronic system, find &amp; use best experiences.</li> </ul>
Associated timeline	2018 Targeted country assistance time period
Technical assistance needs	There is need on technical assistance on areas of agreed country actions.
Key finding 4	Introduction of NVI (HPV) and MCV2 and creating access to these vaccines is priority in Ethiopian Expanded Program of immunization in 2018 which will have significant impact in reducing both infant and maternal mortality.
Agreed country actions	<ul> <li>The sources of fund for measles forward plan is expected from stakeholders, donors &amp; DP then a resource mobilization will be done.</li> </ul>
	<ul> <li>MCV2 introduction will be integrated with health care provider training, strong community mobilization to address the anticipated low MCV2 coverage.</li> </ul>
	<ul> <li>HPV Vaccination is need to be an integrated part with other cervical cancer prevention and control activities.</li> </ul>
	The recommended months for HPV based on Demo findings will be for HPV1 in Mid-October and for HPV2 in Mid-March taking into account the lessons from the demo.
	<ul> <li>The involvement of private facilities on HPV program will be seen further by</li> </ul>

	the ministry.
Associated timeline	Both vaccines planned to be introduced 2018 reporting period
Technical assistance needs	There is technical assistance need for <b>NVI as well as MCV2 introduction.</b>
Key finding 5	MOH recognizes the <u>delay of budget utilization</u> and this will be addressed in relation to the current reform undergoing on PFSA which is procurement agency for FMOH.
Agreed country actions	PHEM/EPHI engagement in HSS/SDG pool fund planning, implementation & evaluation for the sake of using the budget for VPDs surveillance (to be considered as one of the key priority.
Associated timeline	In 2018 reporting period and beyond
Technical assistance needs	No specific areas of technical assistance identified at the moment.

# 7. JOINT APPRAISAL PROCESS, ENDORSEMENT BY THE NATIONAL COORDINATION FORUM (ICC, HSCC OR EQUIVALENT) AND ADDITIONAL COMMENTS

Briefly describe how the Joint Appraisal was reviewed, discussed and endorsed by the relevant national Coordination Forum (ICC, HSCC or equivalent), including key discussion points, attendees, key recommendations and decisions, and whether the quorum was met. Alternatively, share the meeting minutes outlining these points.

If applicable, provide any additional comments from the Ministry of Health, Gavi Alliance partners, or other stakeholders.

Joint Appraisal Team was formed by participants from WHO, UNICEF, CCRDA, L10K, CHAI, PATH, UNFPA and from different directorates of the Ministry of Health including EPI from MCHD, Grant Management Unit, Plan Policy Directorate and Pharmaceutical Logistics management Directorate. Role and responsibilities were divided among all team members and successive meetings were continuing and exchange of communications was in place to monitor progresses including revision after feedback at different levels. Therefore, this Joint Appraisal Report is the work of all relevant stakeholders. The draft Joint Appraisal report was further enriched after the feedbacks obtained in the three days' workshop held 13-15 Nov 2017 in Addis Ababa in the presence of national, regional and global stakeholders and partners. After finalizing the report ICC meeting was convened on 20 November 2017 to endorse the JA report along with the detailed TCA 2018 plan of partners.

# 8. ANNEX

# **Compliance with Gavi reporting requirements**

Please confirm the status of reporting to Gavi, indicating whether the following reports have been uploaded onto the Country Portal.

It is important to note that delayed reporting may impact the decision by Gavi to renew its support.

	Yes	No	Not applicable
Grant Performance Framework (GPF) reporting against all due indicators	<b>√</b>		
Financial Reports			
Periodic financial reports	✓		
Annual financial statement	✓		
Annual financial audit report	✓		
End of year stock level report	✓		
Campaign reports	✓		
Immunisation financing and expenditure information	✓		
Data quality and survey reporting			
Annual desk review			✓
Data quality improvement plan (DQIP)	✓		
If yes to DQIP, reporting on progress against it	✓		
In-depth data assessment (conducted in the last five years)	✓		
Nationally representative coverage survey (conducted in the last five years)	✓		
Annual progress update on the Effective Vaccine Management (EVM) improvement plan	✓		
Post Introduction Evaluation (PIE)			✓
Measles-rubella 5 year plan	✓		
Operational plan for the immunisation program	✓		
HSS end of grant evaluation report			✓
HPV specific reports	✓		
Transition Plan			✓

In case any of the required reporting documents is not available at the time of the Joint Appraisal, provide information when the missing document/information will be provided.