Joint Appraisal Report 2017

Country	*Lao People's Democratic Republic*
Full Joint Appraisal or Joint Appraisal update	*Joint Appraisal Update*
Date and location of Joint Appraisal meeting	*3 July 2017, National Immunization Program (NIP)*
Participants / affiliation	*NIP: Anonh Xeuatvongsa, Phouvanh Vonglokham, Sisouveth Norasing* *WHO: Lauren Franzel* *UNICEF: Titus Angi*
Reporting period	*Calendar year 2016*
Fiscal period	*The country has been reporting for calendar years irrespective of fiscal period being different*
Comprehensive Multi Year Plan (cMYP) duration	*2016-2020*

1. SUMMARY OF RENEWAL AND EXTENSION REQUESTS

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 (pop to be vaccinated)	Indicative amt. to be paid by country	Indicative amt. to be paid by Gavi
Routine	NVS – Inactivated Polio Vaccine in existing presentation	2020	2018	163,498 (updated from 189,848)	US$0	US$ 222,000

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

Type of Support	Vaccine	Starting year	Ending year
Routine	NVS – Pentavalent in existing presentation	2018	2020
Routine	NVS – PCV in existing presentation	2018	2020

1.3. Health System Strengthening (HSS) renewal request

Total amount of HSS grant	*US$ 4,882,144 (2016-2018)*
Duration of HSS grant (from…to…)	In line with the 8th National Health Sector Development Plan (NHSDP) covering 2016-2020
Year / period for which the HSS renewal (next tranche) is requested	2018
Amount of HSS renewal request (next tranche)	US$ 1,326,298

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

Total amount of CCEOP grant	*Lao PDR will consider CCEOP application in 2018*	
Duration of CCEOP grant (from…to…)		
Year / period for which the CCEOP renewal (next tranche) is requested		
Amount of Gavi CCEOP renewal request		
Country joint investment	**Country resources**	US$
	Partner resources	US$
	Gavi HSS resources[1]	US$

1.5. Indicative interest to introduce new vaccines or request Health System Strengthening support from Gavi in the future[2]

Indicative interest to introduce new vaccines or request HSS support from Gavi	Programme	Expected application year	Expected introduction year
HPV (expansion to national)	Routine	2017	2019
Rotavirus	Routine	2017	2019
MR 2nd dose	Routine	APPROVED	2017

2. CHANGES IN COUNTRY CONTEXT SINCE LAST JOINT APPRAISAL

The national vaccination coverage in 2016 showed a decline in coverage of all antigens in comparison to the reported data of 2015. The WHO/UNICEF Estimates of National Immunization Coverage (WUENIC) for DTP3 declined from 89% to 82% and measles coverage fell from 88% to 76%. The decline in national immunization coverage is due to several factors; in part, the decrease in programme performance is explained by the need to respond to the outbreak of cVDPV. The polio outbreak response required 10 national and sub-national SIAs. During these campaigns, routine immunizations were delivered however may not have been recorded in vaccine registers as per normal operations.

The NIP finalized the design of a new cMYP 2016-2020 with technical support from WHO and UNICEF, the plan has since been approved by the ICC. Outlined in the cMYP are priority areas including strategies and activities to be conducted over the next 5 years to objectively improve the programme performance. The principle focus of the cMYP is to improve quality of immunization service delivery at the district level. This cMYP will need to be updated to include the introduction of rotavirus vaccines, as the introduction of HPV vaccine is already included.

In order to improve the cold chain and vaccine stock management, the NIP continues to implement a system of cold chain and logistics inventory management. This includes monthly national and provincial level vaccine and logistics stock management data collection incorporated and analysed at district level for monitoring and decision making on stock management supported by the WHO country office. Currently vaccine stocks are managed using an Excel-based tool at the provincial and national levels; however, the recent data quality improvement plan (DQIP) calls for the strengthening of the management of logistics information including vaccine stock and cold chain management. This will include improved guidelines and policies, training on standard forms (stock record, requisition, issue and arrival, temperature monitoring, and supportive supervision forms) at all levels. During 2017-2019, UNICEF will support the development of a web-based stock management system for implementation at

[1] This amount must be included either in an earlier HSS approval or else in the current HSS renewal request in section 1.4 above.

[2] Providing this information does not constitute any obligation for either the country or Gavi, it merely serves for information purposes.

the national store and all provincial stores to monitor and optimize the performance of the vaccine supply chain.

Two regional vaccine stores have been completely installed and are operational; 90% of health centres in the country have vaccine refrigerators. UNICEF continues to support NIP in the cold chain and logistics area including vaccines forecasting, procurement services support, distribution, monitoring of vaccines and vaccination commodities. Additionally, there is an on-going procurement of 159 fridges (specifically ice-lined refrigerators) and 120 vaccine carriers in 2017 to increase cold chain capacity and to implement the cold chain improvement plan. Lao PDR will continue to assess its cold chain capacity and inventory at all levels to determine what additional investments are required to support new vaccine introduction and improve the cold chain system. Importantly, the country will switch from PCV13 single dose vial to a four dose vial presentation in early 2018; this will save over 25cm^3 cold chain volume per three dose course of the vaccine.

In addition to the above initiatives, the NIP and the National Centre for Laboratory and Epidemiology (NCLE) is supported by the WHO country office to implement the Immunization and Surveillance Data Specialists (ISDS) project. This project is a two year investment from the United States Centers for Disease Control (US CDC) and will enable better reporting and decision making for the immunization programme. ISDS also features in the Lao PDR data quality improvement plan and will contribute to sustainable improvement in reporting through on-the-job training. Five Lao PDR ISDS will be hired and absorbed by the Ministry of Health at the end of the project.

One important development related to NIP's decision making capacity occurred in June 2017 when the National Immunization Technical Advisory Group (NITAG) was reformed under a special decree of the Minister of Health. Expertise from a wide range of disciplines is represented in the elected permanent and temporary membership including epidemiology, paediatrics, vaccinology, laboratory/surveillance, health economics, public health and more. US CDC supported the initial training of the new NITAG on best practices including the importance of objectivity, autonomy, evidence-based recommendations to MOH, etc. The NITAG will play an important role in adding legitimacy to MOH/NIP decision making which will be useful especially during the Gavi transition period and beyond.

In 2017, NIP has been working with the Ministry of Justice (MoJ), National Assembly, and Prime Minister's office to develop an Immunization Law. This will enact immunization policies into law and clearly describe the implementation and relationships of the NIP with other sectors. As of July 2017, the draft law is being reviewed with national and sub-national stakeholders. The law is planned to be submitted to the MoJ in the fourth quarter of 2017.

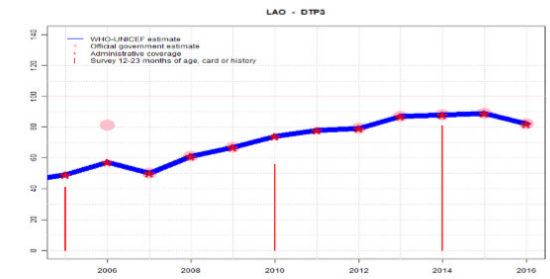
3. PERFORMANCE OF THE IMMUNISATION SYSTEM IN THE REPORTING PERIOD

3.1. Coverage and equity of immunisation

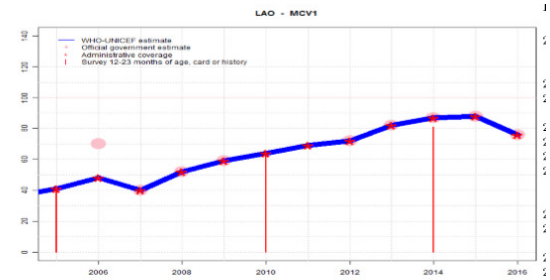
Coverage:

As mentioned above the national vaccination coverage in 2016 showed a decline in coverage of all antigens in comparison to the reported data of 2015. The WHO/UNICEF Estimates of National Immunization Coverage (WUENIC) for DTP3 declined from 89% to 82% and measles coverage fell from 88% to 76%. The decline in national immunization coverage is due to several factors:

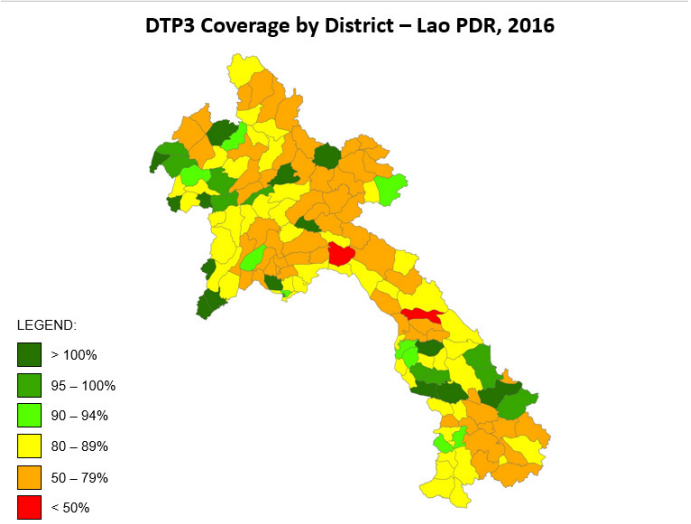
(i) The decrease in programme performance is explained, in part, by the need to respond to the outbreak of cVDPV. The polio outbreak response required 10 national and sub-national SIAs. During these campaigns, routine immunizations were delivered however may not have been recorded in vaccine registers as per normal operations.



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Estimate	49	57	50	61	67	74	78	79	87	88	89	82
Estimate GoC	•••	•	•••	•••	•••	•	•	•	•••	•••	•••	•••
Official	NA	81	50	61	67	NA	NA	79	87	88	89	82
Administrative	49	57	50	61	67	74	78	79	87	88	89	82
Survey	41	NA	NA	NA	NA	56	NA	NA	NA	81	NA	NA



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Estimate	41	48	40	52	59	64	69	72	82	87	88	76
Estimate GoC	•••	•••	•••	•	•••	•	•••	•••	•••	•••	•••	•••
Official	NA	70	40	52	59	NA	NA	72	82	87	88	76
Administrative	41	48	40	52	59	64	69	72	82	87	88	76
Survey	40	NA	NA	NA	NA	64	NA	NA	NA	81	NA	NA



(ii) In 2016, Lao PDR reported an incidence of more than 15 serious (death) AEFIs cases during cVDPV and routine immunization. AEFI are a cause of concern and hesitancy to immunization that can erode public confidence in vaccines and contribute to a drop in immunisation coverage. Communication around AEFI is far more than an ad-hoc response and needs to be part of a broader communication strategy and plan with trained staff and resources in place to respond correctly and without delay.

To combat the declining coverage trend, the National Immunization Programme (NIP) and technical partners have undertaken numerous important activities including (not exhaustive):

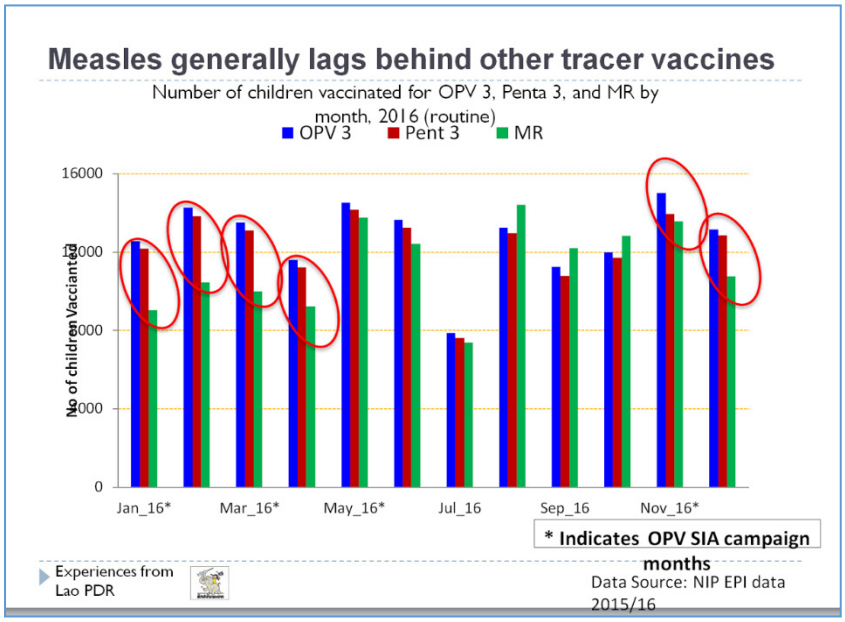
1. Reinforced training on microplan development to strengthen service delivery to hard-to-reach communities;
2. There is an on-going monitoring and supportive supervision to low-performing/priority districts;
3. Adapted mid-level EPI manager training materials to Lao PDR context;
4. Developed and tailored communications materials in local languages to address disparities among ethnic groups;
5. Conducted interpersonal communication (IPC) training of healthcare workers and community volunteers in targeted districts.

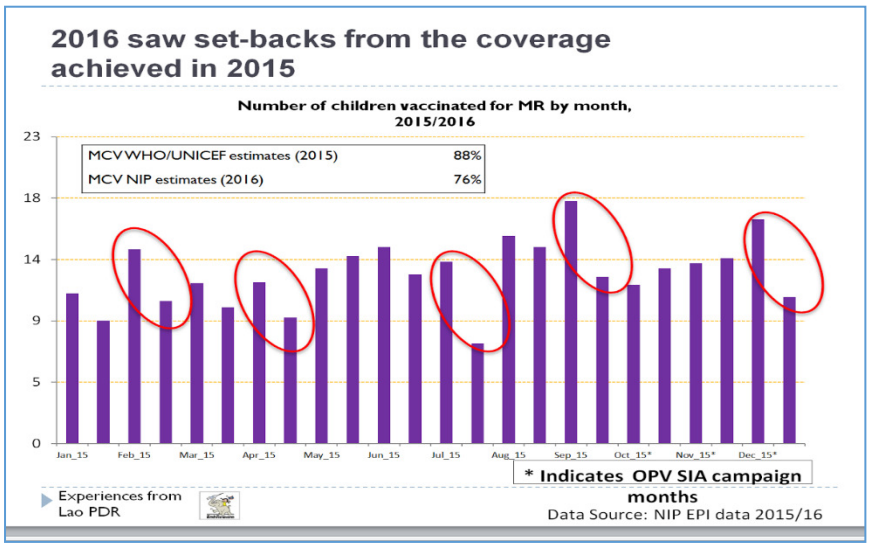
Measles Rubella RI coverage:

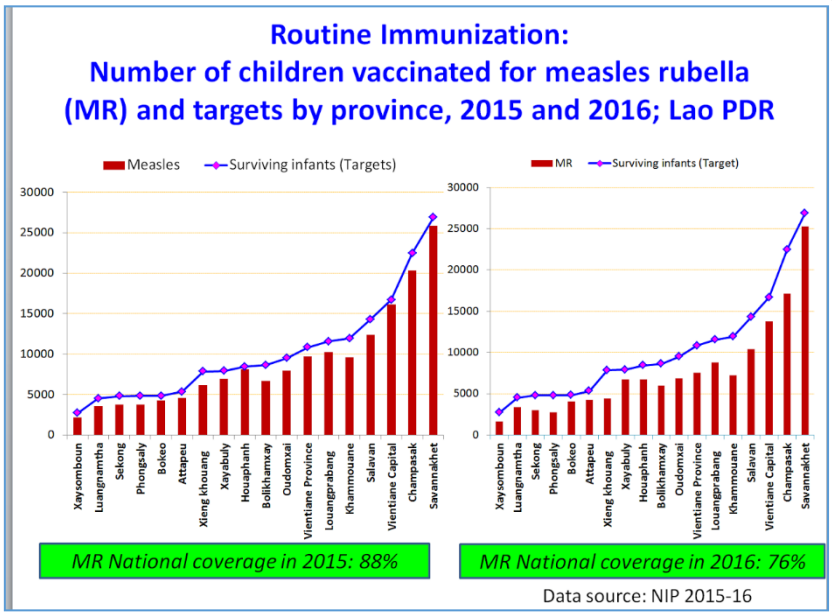
To enhance the elimination of measles, NIP in coordination with WHO and provincial health offices is focusing on improving routine immunization and implementing quality measles surveillance and laboratory diagnosis for confirming measles diagnosis in suspected cases.. As a result of these activities, measles incidence was at a historic low in 2016, with 1.2 cases per million population.

The administrative national measles vaccine coverage (MCV-1) has increased from 40% in 2007 to 76% in 2016. The administrative coverage of Measles and Rubella was 87% in 2014 that showed some improvement in EPI coverage at national level; three districts had less than 50%, 41 districts had 50-80% and 45 districts had 80-90% coverage. Despite an increase in national measles coverage; in 2015, a total of 30 districts had less than 80% coverage.

As per the WHO/UNICEF Joint Reporting Form (JRF) on Immunization for the Government of Lao PDR, the official estimate and administrative coverage of MCV-9m for the year 2015 was 88%. However, the most recent Lao PDR Lao Social Indicator Survey (LSIS) 2011 showed the measles coverage as being 55%.





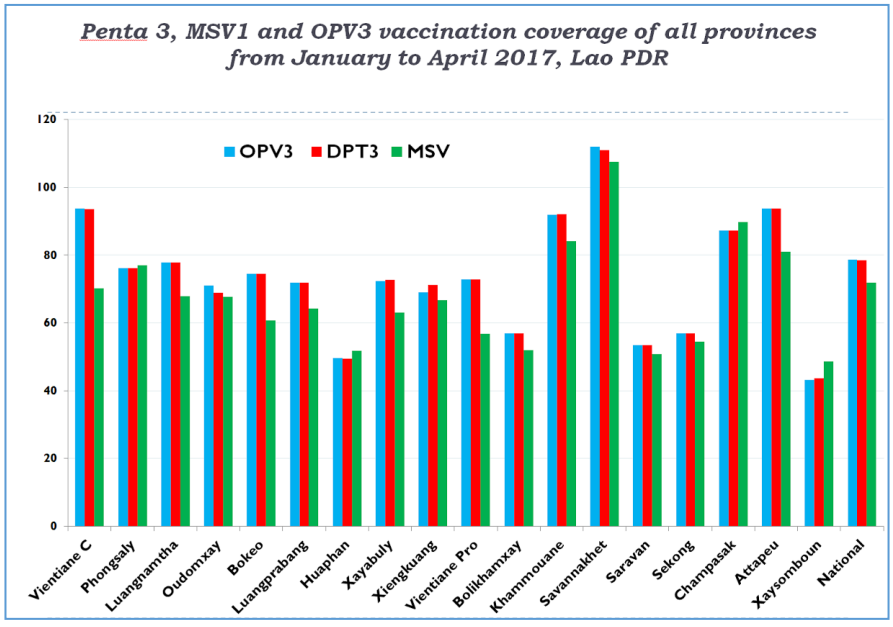


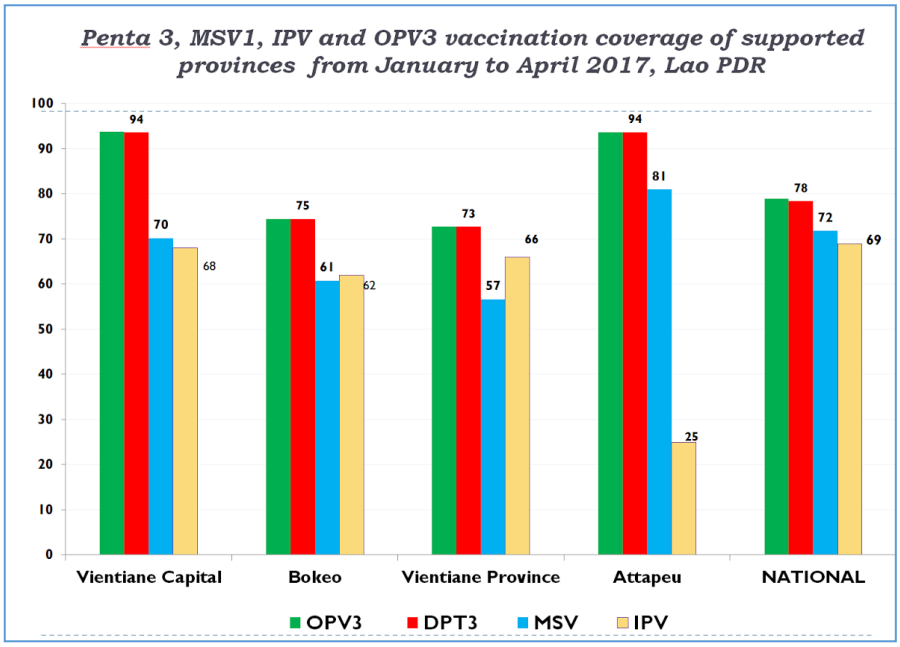
As described above, the decline in national immunization coverage for measles is due to several factors; in part, the decrease in programme performance is explained by the need to respond to the outbreak of cVDPV. In January 2017, a national SIA of OPV and MRV was completed. This campaign achieved 98% coverage for MRV among 9-59 month olds.

Geographical inequity:

The population and location characteristics of recent outbreaks has highlighted the persistent disparities in service delivery and utilization in the country and outlined the need to strengthen routine immunization service delivery to these priority hard to reach and high risk populations in the country.

As can be seen from the chart below, 5 provinces in particular suffer from consistent poor performance – Bolikhamxay, Huaphan, Saravan, Sekong, Xaysomboun – and are therefore the priority for NIP to focus monitoring and supportive supervisory visits. In these settings, supply side issues including low capacity of HCW and hard-to-reach villages result in children being missed for timely immunization. Likewise demand side barriers including low awareness of immunization services (how to access and importance) contribute to chronic low coverage.





Ethnic group inequity:

The Hmong population was at the center of the recent cVDPV outbreak which affected 3 provinces covering 7 districts. Outbreak response activities have been timely implemented with good community participation. A total of 10 rounds were conducted.

The 2016 measles outbreak in Xaysomboun, the diphtheria outbreak in Khammouane, and pertussis outbreak in Xiengkhouang were also all concentrated in ethnic populations (Hmong and Khammu).

A qualitative assessment carried out in August 2015 on the causes of immunization equity coverage problems and spread of polio cVDPV infections was conducted in the five affected provinces of Vientiane, Phongsaly, Oudomxay, Attapeu and Champassak. The assessment identified agricultural work (particularly among ethnic minorities), AEFIs (i.e. non-availability of paracetamol to control fever), lack of IEC materials in languages of ethnic minorities, and lack of appropriate interpersonal skills amongst healthcare workers as key contributing factors. . Additionally, local leaders were found to be key influencers but not sufficiently involved in community mobilization for immunization.

Based on these findings the following recommendations were made and are being implemented:

(i) Government to go into formal cooperation and agreement with community organizations to involve female-focused CSOs like the Lao Front for National Constructions, Singsao and the Lao Women Union which have good networks all over the country even in difficult to access areas;

(ii) Immunization, maternal and child health messages can be disseminated as an integrated package through community volunteers under the supervision of these community organizations;

(iii) Immunization messages should be translated into local languages, train health facility staff and community volunteers in interpersonal communication and mobilization for immunization;

(iv) Local leaders to be trained in coordination of males in support of immunization activities in their areas.

Gender:

The 2011-2012 LSIS found that immunization coverage did not vary by a child's gender. No significant gender barriers to access, utilization or delivery of immunization services have been identified in the country. However, a recent study of four ethnic groups documenting the decision-making dynamic in

these communities showed that women are not empowered to take children for immunization without the approval of husband/father/grandparent.

Socio-economic status:

The 2011-2012 LSIS found that full vaccination coverage increased directly with increases in maternal education – a marker of family wealth / economic resources. While only 24% of children with mothers with no education were fully vaccinated, 73% of children with mothers with higher educational levels were vaccinated. Similarly, only 29% of children in the lowest wealth quintile were fully vaccinated, compared with 61% of children in the highest wealth quintile, even though vaccinations are provided free of charge.

EPI Coverage Survey:

A modified national representative EPI coverage survey was conducted in 2015 and results are expected to be made available by the National Institute of Public Health in the autumn of 2017. The results of the survey will be shared once they have been finalized by the Government of Lao PDR. As of the finalization of the 2017 Joint Appraisal, the below draft results are available reflecting crude coverage of routine immunization among children 12-23 months of age at the time of the survey. Vaccination history is based on evidence from home-based vaccination cards, health facility registries or caretaker recall.

Vaccine/dose	Coverage	95% CI (%)
BCG	**88.8**	**(86.9, 90.4)**
HepB birth dose	**71.8**	**(86.9, 90.4)**
PENTA1: DTP-HepB-Hib, first dose	**88.0**	**(85.8, 89.9)**
PENTA2: DTP-HepB-Hib, second dose	**84.9**	**(82.3, 87.1)**
PENTA3; DTP-HepB-Hib, third dose	**81.4**	**(78.8, 83.8)**
OPV1: Oral Polio, first dose	**88.5**	**(86.4, 90.3)**
OPV2: Oral Polio, second dose	**86.0**	**(83.7, 88.0)**
OPV3: Oral Polio, third dose	**82.1**	**(79.5, 84.4)**
Measles-Rubella	**81.4**	**(78.9, 83.6)**
Fully vaccinated	**63.0**	**(60.0, 65.9)**
No vaccination	**9.0**	**(7.5, 10.6)**
Vitamin A	**18.7**	**(16.6, 21.1)**
Deworming	**6.6**	**(5.6, 07.8)**

3.2. Key drivers of low coverage/ equity

Health Workforce*:* In Lao PDR, the availability and distribution of the health workforce is less the limiting factor to immunization coverage. The health workforce, in many settings, rather lacks the knowledge, capacity, and skills to properly implement the immunization programme. Specifically, vaccine management, running immunization sessions (fixed-posted and outreach), as well as the appropriate level of monitoring and supportive supervision. Many health care workers lack the technical knowledge around vaccine preventable diseases. For this reason, NIP will be implementing the NIP manager training (targeting provincial and district EPI managers) which should be cascaded down to frontline healthcare workers.

Supply chain*:* An EVM was conducted in 2015 and summary results released and updated in 2016 show that out of 1001 health centres with services of expanded program on immunization, 60 health centres do not have functional cold chain refrigerators and 16 health centres have refrigerators which need repairs. Nine provinces (Khamemouane, Luang Prabang, Oudomexay, Bokeo, Xiengkhouang,

Phongsaly, Luang Namtha, Houaphanh and Xaysomboun) out of 18 provinces have 10% to18% of health facilities without refrigerators. There are 5 walk-in cold rooms, 1 freezer room, 1414 refrigerators and 88 freezers functional in the country. A costed cold chain improvement plan was designed and implemented through the procurement service of UNICEF, the Government has placed a procurement order of refrigerators, cold boxes, vaccine carriers and spare parts as described in section 2 of this document. A stock-out of JE vaccine was registered in the country from last quarter of 2016 to first quarter of 2017 due to production and supply problems from the laboratory; new supplies of the vaccine was received in the country April 2017. NIP has put in place a vaccine stock monitoring system updated monthly at District, Provincial and Central NIP level. Transportation and logistics of vaccines and vaccination materials continues to be a major problem from the majority of districts to health facilities as health facility staff transport vaccines using their personal motorcycles. NIP is in the process of procuring motorcycles to support vaccine distribution at the district and health facility levels.

Demand generation / demand for vaccination*:* Rural community demand for vaccinations remains low. Factors involved as from previous assessment and field supervision are the following:

- There is documented low awareness of immunization services (time, location, importance of immunization)
- The media to disseminate available IEC materials and strategies have been inadequate and cannot reach or educate parents on the importance of immunisation;
- Delays in transfer of funds results in outreach sessions pushed back into the rainy season. During the wet season, most parents are unwilling to wait for outreach teams to arrive reducing the efficiency of outreach services;
- Over-reliance on outreach instead of fixed-site services, that should be accessible to 66% of the population, reflects the low demand on immunization;
- Less adequate monitoring and supportive supervision remain a key problem among the health providers' performance, capacity and the ability to generate accurate performance information.

Gender-related barriers*:* A recent study of four ethnic groups documented the decision-making dynamic in these communities. Women are not empowered to take children for immunization without the approval of husband/father/grandparent.

Leadership, management and coordination*:* Disparities in immunization performance at sub-national level (for example, DTP3 coverage in 21% of districts is below 80%) indicate the need for better programme management in immunization service delivery at the sub-national level. Though a central level task force consisting of Ministerial staff, Deputy Governors, senior health officers from various MoH departments, central hospitals, paediatricians and professors in the MCH area have been charged with conducting monitoring and supervision visits to provinces and districts two times per year, however, these visits have demonstrated limited impact on terms of improving immunization program management and service delivery. Thus, stronger accountabilities are needed for monitoring and supervision of immunization program implementation at the provincial and district level.

Programme monitoring and data analysis*:* Another significant gap is the weakness in programme monitoring and data analysis, which is a barrier to improving data-based decision-making for programme management. According to the recent HSS application, there is still limited use of data at the provincial and district level through the health information management processes. As a result, the budgets that districts and provinces submit each year to the NIP outlining the cost of their planned activities for the following year are often a duplication of activities that were conducted the previous year, with a 10%-20% rate of increase applied. Moreover, it is not clear that there is any process in place at the provincial or district level to regularly review progress against planned activities and identify and resolve any bottlenecks to implementation.

Immunisation Financing and public financial management*:*

1. Need to Increase Resources Available for Immunization

Of the estimated US$90.5M required for the immunization program between 2016 and 2020, 36% (US$32.58M) is expected to be financed by external donors, with 76% (US$24.76M) of that funding coming from Gavi in the form of New Vaccine Support (NVS) and Health Systems Strengthening (HSS) support. While government spending on RI is expected to increase from 28% of total expenditure in 2014 to 44% over the 2016-2020 period, a 20% funding gap for the 2016- 2020 period remains, after external donor contributions (36% of total resource need for 2016-2020) are taken into account.[3]

As such, current government expenditure will need to be significantly increased to compensate for the progressive reduction of Gavi and partner support for the RI programme (both vaccine procurement support and HSS) over the next five years, and the cessation of Gavi support in 2022. Through the Gavi Transition Plan, the Government of Lao PDR – and specially the Minister of Health – has agreed on the proposed trajectory and confirmed that they will make and attempt to allocate budget for the equivalent increasing costs during this period so that by 2022 the Government is fully self-financing the NIP.

2. Need for Strengthening Financial Planning & Prioritization

Transition from Gavi funding emphasizes the need to strengthen Lao PDR's financial planning to ensure antigen costs and critical immunization program management and support activities are fully funded. This is evidenced by the US$7.56M Gavi HSS3 grant (2016-2020), which provides funding for key service delivery interventions, including outreach (US$0.85M) and supportive supervision (US$0.344M), as well as for strengthening the management capacity of the immunization program, including financial staff and annual review meetings (US$2.57M). After Lao's transition from Gavi support, these are key recurrent operational costs that will 1) need to be absorbed by the government at the relevant administrative level, and/or 2) integrated with other health program areas in order to reduce overall immunization program costs, ensure minimal disruptions to service delivery, and avoid decreases in coverage and equity post-Gavi transition.

3.3. Data

DQIP developed at the end of 2016

The data quality improvement plan (DQIP) covers the same timeframe (2016-2020) as the cMYP for the National Immunization Programme, where needs to strengthen the data management and data quality for EPI are mentioned.

In the last few years several assessments have been conducted that include data management and data quality as main topic or one of the components of the assessment:

1. EVM assessment, conducted in 2014 & "Comprehensive EVM Improvement Plan 2015-2020" developed in May 2015
2. VPDs surveillance review, conducted in September 2015
3. Data quality assessment (DQS), conducted in December 2015 and September 2016 in selected provinces

In August 2016 training on AEFI was conducted in Vientiane and the criteria for AEFI surveillance were discussed. Routine AEFI surveillance is not in place yet.

[3] World Bank Presentation, December 2016

Based on the assessments' findings and recommendations a draft of a comprehensive data improvement plan has been developed for all information systems that provide key data for the monitoring and management of the immunization programme.

In the DQIP there are four objectives to be achieved through main strategies and corresponding activities:

- Objective 1 - Strengthen the quality of immunization coverage monitoring
- Objective 2 - Strengthen the quality of data of the supply management system
- Objective 3 - Strengthen the quality of data of VPD surveillance
- Objective 4 - Strengthen the quality of data of the AEFI surveillance

For each activity the government department responsible has been identified, as well as supporting partner and expected timeline. The institutional partners responsible for the plan implementation are primarily NIP, NCLE and DPIC/DHIS2. Close coordination and collaboration between them is required for successful implementation of the plan. If funds would be available for the operational costs and TA, the fulfilment of objectives is feasible given that the timeline is adjusted to the current implementation status. Gavi funding is supporting training and supervisions related to data and surveillance, DQAs, TA for data desk reviews and revision of coverage estimates, TA for revision/development of data collection tools/SOPs.

For objective 2, and depending on the selected approach, a major investment would be needed for the setup of a vaccine and supplies monitoring system. This activity, along with others in the DQIP, will be implemented using unallocated HSS funds.

Many activities in the DQIP will be implemented through the support of STOP ISDS project which is a 2 year project funded by CDC and implemented through WHO support. The ISDS project entails the appointment of one international STOPer and one national staff to each of 6 selected provinces for a total duration of 2 years; this staff will be dedicated to strengthening the quality of subnational EPI and VPDs surveillance data through intensified monitoring and mentoring of health facility, district and provincial staff. The 5 national staff would be integrated in the NIP at the end of their assignment to the project to act as trained staff to support data management and data quality strengthening.

ISDS programme

In July 2017, Lao PDR became the first country in the WHO Western Pacific Region to introduce the Stop Transmission of Polio (STOP) Immunization and Surveillance Data Specialists (ISDS) programme, and the second country in the world after Kenya.

US CDC and WHO are supporting Lao PDR with the implementation. The ISDS programme will improve immunization and surveillance data in the country, which will be used for policy-making and introducing key interventions that will effectively address vaccine preventable diseases Under the ISDS programme, five international ISDS will partner five Lao PDR ISDS Trainee (LPIT) to improve data management, immunization and VPD surveillance systems in five provinces in the country for two years (July 2017-June 2019 with possibility for expansion/extension). The provinces include Vientiane, Oudomxay, Khammuane, Champassack and Xiengkhuang provinces.

The specific objectives of ISDS are the following:

1. Improve the accuracy, completeness and timeliness of recording and reporting of VPD surveillance and immunization data
2. Improve data archiving, analysis, interpretation and use of VPD surveillance and immunization data for evidence-based decision making and action
3. Identify VPD surveillance and immunization data quality challenges and develop targeted, actionable recommendations

ISDS support will facilitate the implementation of the DQIP and contribute to the achievement of the intended outcomes, specifically related to objectives 1 and 3 (Objective 1: Strengthen the quality of immunization coverage monitoring and Objective 3: Strengthen the quality of data of VPDs surveillance).

DHIS2 Implementation

For objective 1, DHIS2 is the backbone of the HIMS in Lao PDR and therefore the tool that will strengthen the quality of immunization coverage monitoring in the future. However, as of August 2017 EPI keeps a parallel system since its needs are not yet fulfilled by DHIS2. The module for EPI is already in DHIS2 but it needs to be revised in terms of data entry fields and validations. In August 2017 a final roadmap for integration of EPI reporting system to DHIS2 was discussed and agreed, as well as the coordination mechanism, roles and functions of staff lines between NIP, MCH, NNC and DPIC /HIS team.

EPI dashboards will be developed to visualise the number of children immunized per antigen/dose, the standard immunization chart per district/province/national, and the drop-out rate. Dashboards on completeness and timeliness of data will also be considered. At this time, DHIS2 does not include indicators related to supply chain management; however, this may be considered in the future.

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

National Coordination Forum:
The ICC is engaged as required to discuss cross-cutting topics including the Gavi transition (meetings held in December 2016 and March 2017) as well as new vaccine introduction (August 2017). At these meetings, the Ministries of Health, Finance, Planning & Investment, and Foreign Affairs, as well as the development partners, are invited to discuss topics relevant to the National Immunization Programme.

Civil society/mass organizations/NGOs:
Lao PDR Women's Union. A vertical mass organization in Lao PDR that played the key role in the area of social mobilization and dissemination of immunization information to villages (with focus on ethnic groups), being part of communication's trainers, and monitoring and supervision. In community, they were the key focal point in facilitation and coordination with health workers during routine immunization and previous SIAs.

Lao Front for National Construction (LFNC). A socio-political organization and one of its role is in charge of certain ethnic minority and religious affairs in Lao PDR. It was working closely with NIP during previous polio SIAs. It played an important role in partnership with NIP communication team to coordinate with and facilitate accessing to ethnic communities and mobilize different ethnic groups especially Hmong community in hard to reach and high risk villages including ethnic families that hesitated to take part in immunization events both SIAs and routine immunization. Many of LFNC staff have been trained on communication particularly IPC and currently become part of the NIP communication team.

CHAI - CHAI has a scope of work to support the NIP to prepare for transition from Gavi funding through the identification of key risks and mitigation plans, and strengthening the core elements of financial management and planning processes required to realize efficiency gains and effectively deliver services as resources diminish.

PATH - technical support on Japanese encephalitis.

PLAN International - financial support on microplan training in selected provinces.

Other donors:
WHO - WHO is providing technical and financial support to EPI across numerous areas including implementation of new vaccine introductions, routine monitoring and supportive supervision, developing capacity on AEFI management and causality assessment at National and provincial/district level. During 2016, WHO supported NIP and NCLE in the response to the cVPDV outbreak including the successful completion of 10 SIAs. Additionally, the WHO Lao PDR country office is implementing the ISDS project (mentioned above) during 2017-2019 and will be a key element of the DQIP.

UNICEF - UNICEF is providing technical assistance in designing cartoons with immunization messages in four local languages, training and follow up visits of health staff, community leaders in IPC for vaccination in 3 target provinces; other areas of technical assistance include: vaccine and cold chain forecasting, updating cold chain inventory and vaccine stocks at all levels. UNICEF is procuring BCG vaccine and vaccination materials; providing procurement service to Government in procuring all cold chain fridges, vaccine carriers as mentioned in (pages 4 and 5) in this document including procurement service for all vaccines used in the country's EPI calendar.

US CDC - U.S. CDC's support through cooperative agreement with the National Immunization Program (NIP), Ministry of Health, Lao PDR. The supports are to conduct activities that will lead to evidence-based policy decisions related to the expansion of seasonal influenza vaccinations and to support the implementation of national influenza vaccination strategy that includes logistical infrastructure that would be rapidly utilized in pandemic scenarios as well.

World Bank - As part of the Health Governance and Nutrition Development Project (HGNDP), the World Bank is including new disbursement linked indicators (DLI), 'Number of Immunization Target Districts which have increased their coverage of Pentavalent 3 (DPT-HepB-Hib2) and Measles and Rubella (MR)' that would enable a Provinces will be rewarded at the rate of US$ 15,000 for each district in that province that has achieved the target. The project also includes a DLI intended to promote programme integration, 'Number of villages in Zones 2 and 3 in which Complete Integrated Outreach Sessions are conducted at least three times during the Year' where integrated outreach package of services includes EPI, FP, ANC, PNC, growth monitoring and promotion for children <5 years.

Global Fund – Currently, the MOH is transitioning the functions of the Principal Recipient to align funding flows and comply with the ODA policy of the Ministry of Planning and Investment. This is an opportunity to strengthen health financing and planning mechanisms within the MOH, Department of Finance and Department of Planning and Cooperation. This alignment can be used to strengthen also the fund flow for Gavi funding within the MOH and improve visibility of donor funding within National Budgets. Additionally, the New Funding Model Health Systems Strengthening Grant (US$ 4m) was a starting point for addressing specific health systems challenges related to service delivery, procurement and supply chain management, health information systems, community based health workforce and coordination and planning that were key constraints to improving performance of the three disease programmes. Some of the activities were considered to 'catalytic' – in that they were planned activities that kick-started larger reform activities that are now being funded other key health sector donors including the Asian Development Bank and the World Bank.

Cross-sectoral collaboration:
Ministry of Education & Sport - To support the introduction of HPV vaccines, NIP is expanding its collaboration with the Ministry of Education & Sport. The vaccine will be delivered at schools and integrated into an adolescent health day so boys and girls would benefit from healthcare workers at schools and the girls would receive the HPV vaccine.

Ministry of Information and Culture - provides training for journalists and provincial and district media outlets (ie as with communication around polio SIAs).

4. PERFORMANCE OF GAVI GRANTS IN THE REPORTING PERIOD

4.1. Programmatic performance

As part of the national polio-endgame plan, Lao PDR has rolled out IPV and bOPV nationwide. The administrative coverage of IPV in 2016 was however 59%, far behind the target of 92%. The implementation of the IPV vaccination has been continuously challenging throughout the country. The utilization is limited in several communities as evidenced from monthly reports and in field supportive

supervision. The issues included hesitancy from both health service providers and the recipients due to multiple injections at one point of time visited. Measures taken to ensure improvement of IPV coverage include increased supervision; trainings on IPC for the health workers and community volunteers rolled out and social mobilization at local level in the community on the issue of multiple injection use has been strengthened. However, communications and social mobilization activities need to be strengthened particularly the more practical activities such as role playing is needed in IPC training for health workers; training on purpose and use of IEC materials needs to be consistently delivered and updated, in-depth understanding of attitudes toward vaccination among health workers and families in persistently low coverage communities is needed. Apart from the above, NIP and WHO are planning to conduct a periodic intensification of routine immunization (PIRI) in October 2017. This PIRI will boost the coverage of IPV as well as other antigens by reaching more than 30,000 missed children in 4 priority provinces (Borilhamxay, Saysomboun, Vientiane and Xiengkhoung) where chronic low IPV coverage exists. This provinces were also directly affected in the 2015-2016 cVDPV outbreak.

Lao PDR has effectively implemented PCV-13 vaccination in all health centres in the country. However, the challenges of implementation remain with poor acceptance of multiple injections at a single visit, particularly amongst the Hmong community, causing limited utilization in several communities in the country. Consequently the administrative coverage of PCV13 in 2016 was 78%, 7% lower than the target of 85%. Health workers need a better understanding that it is safe to give 3 injections simultaneously. Lao PDR currently plans to switch from the single dose vial 13-valent pneumococcal conjugate vaccine (PCV13) to the preserved 4 doses PCV13 vial presentation in 2018. This requires preparatory activities in parallel with switch activity; training, social mobilization/communication and updating of various immunization forms. Lao will be requesting a switch grant from Gavi to contribute to the costs of switch activities.

The implementation of the *Pentavalent* vaccine and other vaccines in the national immunization schedule is ongoing and is being used at all levels. However, the coverage performance of each of the vaccines used in the national immunization schedule especially penta3 and MR has shown a decline in coverage in 2016 (penta3= 82%; MCV1= 76%) compared to reported coverage of 2015 and the target of 90% for both penta3 and MCV1. The explanation of the decline and measure taken to improve the coverage has been elaborated in section 2.

2016 Target Achievement: Coverage **Coverage (2016 administrative data)**	*Targets taken from renewal requests	
Indicators	**Target**	**Actual**
Penta3 Coverage	90%*	82%
PCV3 Coverage	85%*	78%
IPV Coverage	92%*	59%
MCV1 Coverage	90%*	76%
% of districts with Penta3 coverage greater than 80%	75%	62%

Lao PDR will also continue to use the MR vaccine in its national immunization schedule. With the repeated outbreaks in one province in 2016 and the decline in coverage at the national level of measles in 2016, the challenges involved fever following vaccination, poor knowledge of parents about measles immunization and difficulties in accessing vaccination centres because of distance, scattered populations and lack of mobility/transportation as evidenced from an assessment by the University of Health Science and field monitoring and supervision. Obtaining an effective MR coverage requires strengthening capacity of the EPI staff, programme review support and a reinforcement of health education on dangers of

measles and safety of immunization for target populations in all provinces. In line with the measles elimination as agreed by the NITAG, the Lao PDR application for Measles second dose to Gavi has been approved and the launch is expected in October 2017. This is particularly important to ensure a higher immunity towards the measles virus.

The introduction of the JE vaccine in the national immunization schedule was done in 2015, implementation is ongoing at all levels with steadily increasing coverage from 20% in 2015 to 44% in 2016 but still lagging behind the national target coverage. The main challenges involved a shortage in supply of JE vaccine due to production and supply issues in the laboratory. Lao PDR had a JE vaccine stock out for 6 months in 2016.

The implementation of HSS3 had a delayed start in 2016.Some key progress achievements based on objectives are described as follows:

Strengthening management capacity of immunization programme at all levels

- Completed finalization of the revised manual for EPI activity supportive supervision including simplified checklist tools and basic demographic, health and MCH, EPI information board including printing.
- Training on introduction and utilization of the above manual for EPI activity supportive supervision and tools was rolled out nationwide for National, provincial and district EPI staff to make sure that staff at each level are able to clearly understand and use the tools effectively to improve the quality of monitoring and supportive supervision.

Improving service delivery and coverage rates with current vaccines

- The micro planning guideline was completely updated and presently served as an operational implementation guideline for healthcare workers on micro planning for delivery of integrated mother and child health and immunization services. Currently 47 districts, 338 health centers and 944 district and health center staff of 9 provinces have been trained on micro planning using updated guideline.
- Ten rounds of mini-campaign on routine immunization session conducted in 9 provinces of identified hard to reach and high risk areas. This is in supplement to the normal routine outreach activities for districts with low immunization coverage.

Strengthening the community demand for immunization

- NIP has implemented the key communication strategies such as advocacy, interpersonal communication, and social media and community mobilization. Relevant stakeholders are involved in advocacy activities to share information on importance of immunization, highlighting the gaps in coverage, and their contributions in increasing demand for ethnic population. Interpersonal Communication (IPC) training is being provided for the health workers as well as the community leaders and village health volunteers in high risk districts; materials to support effective IPC include Q&As, immunization flip chart in local languages, loud speakers provided, and a job-aid (standing banner) to remind caregivers.

Maintaining and improving the cold chain and logistic system

- The NIP implements a system of regular cold chain and logistics inventory management. This includes regular national and provincial level vaccine and logistics stock management data collection incorporated and analyzed at district levels for monitoring and decision making on stock management.
- Two regional vaccine stores have been completely installed and are operational; there is an on-going procurement of 159 refrigerators (specifically ice-lined refrigerators) and 120 vaccine carriers in 2017 to increase cold chain capacity and to implement the cold chain improvement plan.

Two normal trucks for transportation of the dry equipment were purchased and handed over to regional depots of Udomxay and Champasack provinces; six pick up cars (4 WD) have been procured and handed over to 6 provinces, and 30 motorbikes for the health centers and 10 motorbikes for the districts have also been procured and all completely handed over.

Despite having some of a good progress in implementation, substantial gaps still remain. Some key challenges calling for attention and close follow-up, are as follows:

- Monitoring and supportive supervision: The activity has not been fully implemented; it may be due to a number of factors such as the availability of human resources and the decrease in programme performance explained by the need to respond to the outbreak of cVDPV. The polio outbreak response required 10 national and sub-national SIAs.
- AEFI cases during SIAs and routine immunization sessions are a cause of concern and hesitancy to immunization that can erode public confidence in vaccines and contribute to a drop in immunization coverage. Communication around AEFI is far more than an ad-hoc response and needs to be part of a broader communication strategy and plan with trained staff and resources in place to respond correctly and without delay.
- Fund flows are still a significant issue with cash transfers from NIP to recipient provinces blocked due to issues related to provincial banking constraints. Strengthening financial management at sub-national level is an ongoing process with support from CHAI starting in the autumn of 2017 as part of the Lao Transition Plan.

Intermediate results for HSS3 are present in below tables:

2016 Target Achievement: (2016 administrative data), *Targets taken from renewal requests

Indicators	Target	Actual
Percent of functional cold chain equipment in health facilities	85%	89%
Number of planned periodic DQA conducted against plan	3	3
Number of EPI/MCH managers trained on supportive supervision (SS)	170	170

2016 Targets not met:

Code	Indicators	Clarifications
IRT-5:	Percentage of facilities offering immunization services as per the revised microplan guidelines Target = 90%, Actual = 85%	The low percentage is due to several factors; in part, the decrease in programme performance is explained by the need to respond to the outbreak of cVDPV in 2016. The training on micro-planning just started in 2017 and is ongoing activity. So far, it implements almost 85% completed and country will update in GPF
IRT-6:	% of outreach activities conducted in high risk areas compared to target. Target = 80%, Actual = 37%	In 2016, resources were diverted to focus on SIAs to respond to the cVDPV outbreak. Each round of SIAs were recommended to combine with outreach activities; practically was not in many communities. There is also evidence of under-recording of other immunizations delivered during the OPV SIA.
IRT-9:	Number of incinerators installed and functioning Target = 20, Actual = 10	10 incinerators is planned to procure and install in 10 provinces.
IRT-11:	Number of supportive supervision visits conducted. Target = 404, Actual = 62	In 2016, resources were diverted to focus on SIAs to respond to the cVDPV outbreak. Each round of SIAs were recommended to combine with outreach activities; practically was not in many communities. There is also evidence of under-recording of other immunizations delivered during the OPV SIA.

Metrics considered "invalid":

Out of two metrics considered invalid, one (% of FIC) will be removed from the GPF, as per agreement from Gavi Secretariat, in view of the fact that this is not routinely monitored in Lao PDR as yet (may be in the future). On the second metric relating to timely submission of quarterly provincial financial statements, Lao will set targets for future years and continue to report on this going forward

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

Status of the programmes

The following table demonstrates the status of funds as per the last reported period ended 31 December 2016 based on expenditure reported.

Grant overview:

Grant	Start Year	End Year	Disbursed (2015) USD	Expenditure (2015) USD	Balance (2015) USD	Disbursed (2016) USD	Expenditure (2016) USD	Balance (2016) USD
HSS3	2016	2020	-	-	-	930,774	852,922	77,852
VIG-IPV	2015	2015	145,000	200,834	-55,834		-	Closed
OPC-JE	2015	2015	1,047,500	855,843	191,657		191,657	Closed
VIG-JE	2015	2015	156,500	95,841	60,659		60,659	Closed
HSS2	2012	2015	3,554,588	3,542,834	11,754		11,754	Closed
VIG-MR	2013	2013	150,000	123,602	26,398		26,398	Closed
VIG-PNEUMO	2013	2013	150,000	150,000	-		-	Closed
HPV Demo	2013	2014	196,500	188,285	8,215		2,747.97	5,467

It was noted that with Gavi approval many of the remaining balances in 2015 were spent on other activities in 2016 to the amount of $293,216. The funds mainly supported the activities of IPV introduction and launching diphtheria, pertussis, MR outbreak responses, supportive supervision trainings on cold chain and communication.

Lao PDR started the implementation the new grant of HSS3 from 2016. In 2016, the country received $930,774. Of which $11,754 was from previous balance of HSS2 in 2015. An additional $930,774 was disbursed in early 2017.

Implementation of this grant in 2016 has been in progress for each cost-line item matched against cost-activities delineated in the HSS3 grant with $852,922 expended. Full details of programme spending are listed in the table above.

Programme Capacity Assessment (PCA)

The final PCA report was shared with Lao Ministry of Health and NIP in 2016, highlighting areas of improvement, in particular around financial management and reporting detail and quality. The NIP is anticipating receiving embedded technical assistance in the autumn of 2017 for up to 12 months to strengthening their financial management systems and reporting capacity ahead of the Gavi transition.

4.3. Sustainability and transition planning

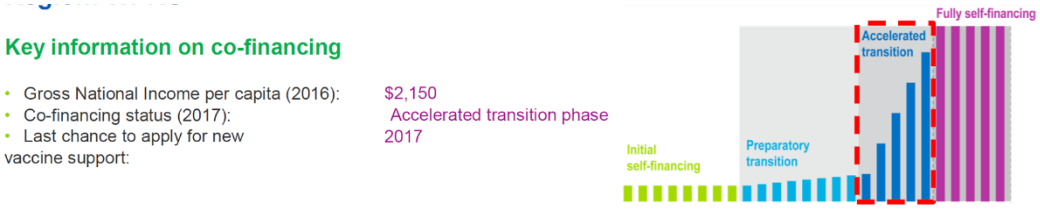
As of 2017, Lao PDR has entered the accelerated transition following the GNI passing the eligibility threshold of US$1580 p.c. Spending on health has more than doubled to about US$ 182 million in 2013/2014 from US$ 70 million in 2009/2010. Budget plans indicate further increases with the commitment of meeting the spending target of 9% (or about US$ 290 million).[4]

Overall spending on immunisation in Lao PDR has increased from US$ 6.9 million in 2010 to US$ 13.1 million in 2014 excluding shared health system costs (cMYP 2016-2020). Total expenditure on routine immunisation from all financing sources was estimated to be around US$ 10.7 million in 2014. The immunisation programme has been largely dependent on funding from donors until recently. The government spending accounted for 33% of total routine immunisation expenditures (or $3.5 million) in 2014. External assistance included Gavi covering 23% of the programme in 2014.[5] With decline of external financing, the government co-financing for immunisation programme as well as other health programs becomes a real challenge in ensuring financial sustainability of priority health programs in the coming years.

Historically, the government had not been used to pay for vaccines and thanks to Gavi co-financing the country had to demonstrate (from 2009) that the money from domestic sources can be spent on vaccines.

The situation has been improving dramatically for the last five years toward the country ownership of vaccine financing after 20 years of history of full dependence on external financial support. Government funding for vaccines reached almost US$ 1 million in 2016 (including US$ 321,000 for co-financing), thus covering 23% of total vaccine costs (see table below). Given the stepped up domestic financing, UNICEF's share in supporting traditional vaccines is expected to decrease to as low as 14% by 2017.

Since August 2016, the NIP has been working with partners to develop a transition plan that describes the key activities and increasing domestic financing required to successfully transition to full self-financing.



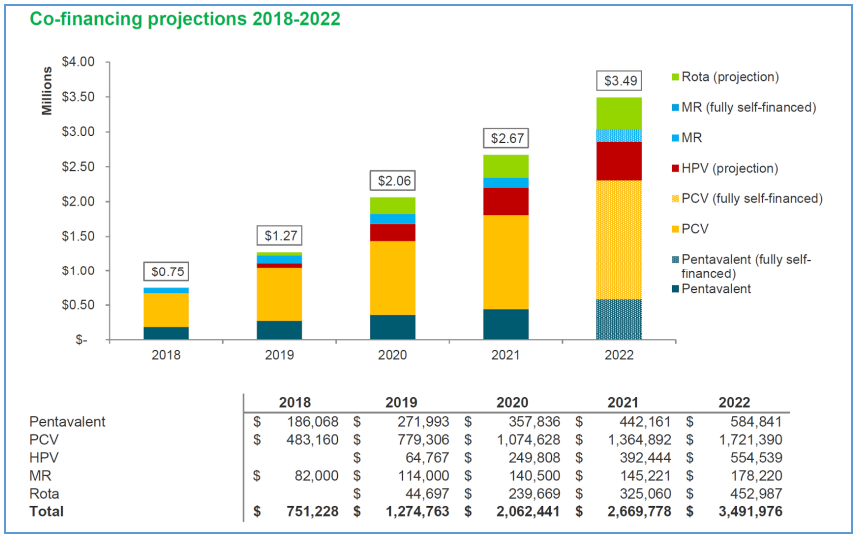
From June to August 2016 there was a desk review of transition-related issues in the country, followed by a multi-partner transition assessment mission. In December 2016 there was a transition planning mission supported by WHO, UNICEF and other partners which featured initial discussions on the required areas of support to be included in the transition plan. The ICC had the opportunity to review and discuss the transition plan in March 2017, including the 6 focus areas:

1. Immunisation financing

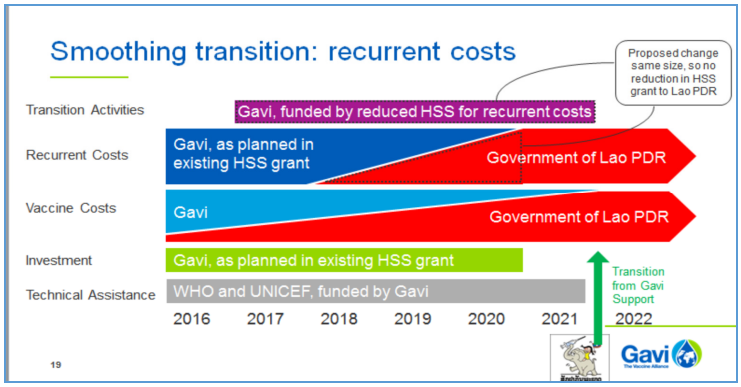
- Current vaccine costs (co-financed by Gavi) appear secured/promised
- Technical Working Group on Health Financing and Planning revitalised
- Mapping of PFM support from various partners and strengthening PFM in health sector
- Support development of a 5-year financing plan for immunisation reflecting evolutions in donor support (EPI and health sector), efficiency gains through integration, Health Sector Reform etc.
- Integration into national and provincial annual plans for health
- Gradual phase-out by 2021 of operational costs currently supported by Gavi HSS; increase of GoL funding

[4] World Bank analysis, 2017

[5] Data based on cMYP 2016-2020. Gavi support is underestimated (cMYP quotes US$2.5 million, while internal Gavi data indicate US$7.1 million)



	2018	2019	2020	2021	2022
Pentavalent	$ 186,068	$ 271,993	$ 357,836	$ 442,161	$ 584,841
PCV	$ 483,160	$ 779,306	$ 1,074,628	$ 1,364,892	$ 1,721,390
HPV		$ 64,767	$ 249,808	$ 392,444	$ 554,539
MR	$ 82,000	$ 114,000	$ 140,500	$ 145,221	$ 178,220
Rota		$ 44,697	$ 239,669	$ 325,060	$ 452,987
Total	**$ 751,228**	**$ 1,274,763**	**$ 2,062,441**	**$ 2,669,778**	**$ 3,491,976**



2. Immunisation legislation and advocacy

- GoL work to lead development of Immunisation Law
- Drafting of Immunisation Law in progress through WHO (RO) support
- Partner support for drafting Immunization law and related advocacy with the Parliamentarians & stakeholders at National, Provincial, and district levels as well as private sector

3.Strengthening technical advice (NITAG)

- Support to establish high-functioning NITAG
- Significant investments into training and capacity building of NITAG members – training, study tours, participation in regional consultations

4.Strengthening of microplanning, supervision and outreach

- Concerns around quality and quantity of microplanning, supervision and outreach – efficiencies, integration
- Incremental uptake of operational costs by the GoL over transition period
- District-centric approach to planning and budgeting; Provincial capacity -level budgeting
- Robust microplans (including efficient outreach and promotion of fixed-site)
- Focus on improved equity, especially in 48 low-performing districts, particularly in hard-to-reach settings
- Partner support to NIP to improve efficiency and quality of supervision

5. Improving data quality and surveillance

- Activities in data quality improvement plan, including integration with DHIS2
- Introduction of innovative 'My Child Card' (eRegistration and record)

- Significant partner support on immunization and surveillance data – international and national staff in five provinces
- Regular data quality self-assessments
- Use of VPD surveillance data for NITAG including for new vaccine introductions such as HPV, rotavirus, and other vaccines

6. Increasing communication and demand generation

- Ensure community confidence in immunisation through effective communication strategies
- Stronger linkages to ethnic groups, address vaccine hesitancy/AEFI

A **Transition Plan** building on the assessment was developed in 2017 and endorsed by the Government of Lao PDR and partners in August 2017.

The plan takes into account all types of Gavi support, funding by the external donors and most importantly the need for stepped-up domestic financing. As the implementation of the transition plan proceeds, Gavi will be phasing out its support to recurrent costs and the Government has committed to gradually take over all those costs for the immunisation programme, such that in 2021 they bear full responsibility.

As a result of this gradual phasing-out of Gavi funding for recurrent activities, $1.8 million previously programmed for recurrent activities became available from the current HSS envelope for reallocation. The GoL endorsed transition plan proposes the reinvestment of this funding in a more sustainable manner for new activities of a total value of $1.1 million. The country is in due course expected to request the unallocated balance of $730,103 from the original HSS funding to be reallocated. It should be noted that new Gavi policy around full funding for HSS, incorporating the PBF portion of the grant (estimated at 20% of the envelope each year) will also become additionally available increasing the amount available for reallocation.

4.4. Technical Assistance (TA)

Key TCA milestones as of mid-2017 are on track, highlights at the time of JA preparation include:

- Support NIP to introduce MR2 including developing comprehensive plan, communication materials, microplanning for national MR2 introduction in Q4 2017 is on track with introduction planned for mid-October 2017. WHO is providing technical support to ensure strong planning.
- Developing and finalization HPV costing tool and compilation of the HPV national and rota application HPV. WHO led the organization of a partner mission the week of July 24 to develop the HPV and rota applications. USCDC, JSI, IVAC and others worked with the NIP to prepare the required materials and update the cMYP to include rota. WHO provided TA to NIP throughout the application development process
- Strengthening data recording and reducing reporting errors. Partners are providing on-going support to NIP immunization coverage collection, validation, and aggregation as well as supply chain performance. WHO is supporting the analysis of vaccine stock levels at all levels of the health system. Monthly coverage reviews are held to discuss progress towards targets; provincial feedback mechanisms are being developed to improve use of data to make decisions and prioritize/focus support. Other relevant developments:
  - WHO is supporting the implementation of DHIS2 and integration of NIP data into DHIS2 including the sub-national reporting and validation of immunization data;
  - Under the supervision of WHO and with support from USCDC, the Immunization & Surveillance Data Specialists (ISDS) project was launched in July 2017 and will contribute to the reduction of errors in data recording and reporting in 5 provinces.
- Sustaining the VPD surveillance improvement from 2016 at the national level and improve the AFR surveillance for the regional measles elimination goal. Supporting is being provided towards the achievement of the national and regional goals of measles elimination, WHO has been supporting

the strengthening of NCLE's capacity for VPD surveillance, especially as related to AFP and AFR surveillance.

- Microplanning. WHO is providing overall technical support to NIP to continue the cascade training of microplanning, intensification of supportive supervision, implementation of MSD and other activities as per the Annual work plan. WHO team has supported more than 10 microplanning and monitoring/supervision field visits; the team is also developing an EPI managers training for provincial EPI managers to strengthen their programmatic knowledge. The curriculum is being translated into Lao and will be rolled out in Q3. For all activities, low performing provinces/districts are prioritized based on NIP immunization coverage data.
- Communication for immunization activities: UNICEF has supported the revision of the comprehensive communication strategy and action plan. PCMC and DCMC targeted advocacy meeting carried out.
- UNICEF supported Immunization Specialist and Immunization officer are active in supporting NIP/MOH. They are providing technical assistance in cold chain planning and procurement process, traditional and co-financed vaccine estimates, including procurement; outreach EPI macro and micro planning at central and sub national levels.

Activities supported by partners going forward have been incorporated into the Transition Plan.

5. UPDATE OF FINDINGS FROM PREVIOUS JOINT APPRAISAL

Prioritised actions from previous Joint Appraisal	**Current status**
1. Finalize transition plan	MoH signed transition plan endorsement letter (Aug 2017) for final approval by Gavi and release of transition grant; ongoing need for advocacy to achieve increased GoL contributions to immunization programme during 2017-2022
2.Improve HSS program monitoring, financial management, and reporting	Technical assistance needed for supporting the NIP in monitoring and management of HSS grant as per the Gavi reporting needs
3. EVM improvement plan implementation – temperature monitoring, vaccine distribution, Logistics MIS linked to HMIS/DHIS2, eHealth strategy development	Ongoing implementation of improvement plan -
4. Strengthen VPD surveillance	NCLE is conducting targeted training in 'silent' provinces in addition to routine supportive supervision; WHO ISDS programme has been rolled out in 6 provinces to strengthen VPD surveillance; 4 additional provinces are benefitting from US CDC STOP support to improve VPD surveillance activities
5. Development and implementation of communication plan	in process of implementation
Additional significant IRC / HLRP recommendations (if applicable)	**Current status**
Gavi Secretariat commented that HLRP found 2016 JA to be light on analysis	Addressed in current JA

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

Overview of key activities planned for the next year:

- Preparation for new vaccine introduction in 2019 (Rota and HPV vaccines) and monitoring of MR2 roll-out; introduction of new presentation of PCV (Switch from single to four dose vial)
- MR-OPV campaign
- International EPI review (following previous review in 2012)
- Implement intensification of routine immunization in hard to reach and high risk areas
- Strengthening the capacity of the provincial and district EPI managers
- Improving cold chain and logistics management at province and district levels
- Implement microplan training at district and health centre levels
- Implement supportive supervision
- Implement DQIP plan
- Implement communication immunization activities based on communication plan 2016-2020, including KAP study
- Strengthen AEFI reporting and management including re-establishment of AEFI committee
- Preparations and planning for potential CCEOP application

Key finding 1	There is a need to strengthen the capacity of the Provincial and District EPI managers. There is a frequent turnover of provincial and district EPI managers and replacement is not well planned. At the national level, support to NIP is needed during leadership transition.
Agreed country actions	Organize the formal training course for Provincial and District EPI managers Develop a standard training modules for Provincial and District EPI managers
Associated timeline	Second half of 2017 and first half of 2018
Technical assistance needs	Technical assistance from WHO, UNICEF and CHAI through the Transition Plan with a need for further Gavi LMC support: - national level - to support capacity building during NIP leadership transition; ideally this should be in-country support to acting NIP Manager and other members of the NIP leadership team. Capacity to plan, delegate, empower needs to be reinforced in order to build a culture of accountability within the team. - sub-national level - as documented in the Gavi HSS grant and the World Bank Health Financing System Assessment (HFSA), planning and implementation at subnational levels is weak, especially with regard to financial planning. As a result, the budgets that districts and provinces submit each year are often a duplication of activities that were conducted the previous year. It is not clear that there is any process in place at the provincial or district level to regularly review progress against planned activities and identify and resolve any bottlenecks to implementation.
Key finding 2	Strengthening the capacity of health centre staff on Micro-planning
Agreed country actions	Strengthening of micro-planning with focus on quality and quantity of micro-planning training
Associated timeline	Throughout the year
Technical assistance	Yes, from WHO and UNICEF through the Transition Plan

needs	
Key finding 3	Lack of understanding of the benefit of vaccination amongst several ethnic minorities remains a public health concern
Agreed country actions	Develop communication materials for specific ethnics and promote community participation and ownership.
Associated timeline	Early 2018
Technical assistance needs	Yes, from WHO and UNICEF through the Transition Plan. Communication - support to strengthening mapping and collaboration with local organizations to increase demand for immunization; reinforce IPC
Key finding 4	Routine immunization needs strengthening; preparation for NVI in 2019
Agreed country actions	Maximizing the routine outreach vaccination, improve supervision and monitoring Implement the Outbreak Response Assessment (OBRA) recommendation
Associated timeline	throughout the year
Technical assistance needs	Yes, from WHO and UNICEF through the Transition Plan NVI - detailed planning for introduction of new vaccines (rota and HPV) and scale-up of IPV and MR2/2YL platform
Key finding 5	DQIP implementation: Strengthening Cold chain and vaccine stock management
Agreed country actions	Lao PDR will prepare a CCEOP application for submission in 2018
Associated timeline	throughout the year
Technical assistance needs	Yes, from WHO and UNICEF Cold chain – international support needed for updating CCE inventory as the basis for projecting/quantifying future needs in view of planned new vaccine introduction and routine replacement of older/suboptimal equipment during 2018-2022
Key finding 6	DQIP implementation: VPD surveillance
Agreed country actions	yes
Associated timeline	throughout the year
Technical assistance needs	Yes, from WHO and UNICEF Data: consideration of expanded investment in VPD surveillance (especially for HPV and rota) given transition timelines and need to clearly document impact of NVI.

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

The joint appraisal was conducted and combined with the new vaccine renewal request that was conducted prior and independent of the in-country JA process. The renewal process consisted of completion of grant performance and targets through Gavi country portal.

The dedicated JA related discussions focused on progress with New Vaccine Support and HSS grants, challenges in implementation within the context of overall immunization program such as continued Polio outbreak response, outbreaks of Pertussis, Diphtheria, MR and long-time taken for completion of immunization coverage survey.

The JA report was jointly drafted to be presented to the ICC/HSCC for discussion and in-principle endorsement along with the presentation of the Gavi transition plan, applications of Rota and HPV vaccine.

The final version of the JA was shared with the ICC/HSCC by email for endorsement on a no-objection basis.

8. ANNEX

Compliance with Gavi reporting requirements

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