

Joint Appraisal report 2018

Country	<i>Lao People's Democratic Republic</i>
Full JA or JA update	<input checked="" type="checkbox"/> full JA <input type="checkbox"/> JA update
Date and location of Joint Appraisal meeting	<i>1 November 2018, National Immunization Program (NIP)</i>
Participants / affiliation¹	<i>NIP, GAVI, WHO, UNICEF, CHAI, WB, SABIN, BMGF, DFAT, GFA</i>
Reporting period	<i>Calendar year 2017 and part of 2018</i>
Fiscal period²	<i>The country has been reporting for calendar years irrespective of fiscal period being different</i>
Comprehensive Multi Year Plan (cMYP) duration	<i>2018 - 2023</i>
Gavi transition / co-financing group	<i>Accelerated transition</i>

1. RENEWAL AND EXTENSION REQUESTS

Renewal requests were submitted on the country portal

Vaccine (NVS) renewal request (by 15 May)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
HSS renewal request	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
CCEOP renewal request	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>

Observations on vaccine request

Population	6,681,818 (for year 2017)				
Birth cohort	190,845				
Vaccine	Vaccine 1 Penta3	Vaccine 2 PCV3	Vaccine 3 IPV	Vaccine 4 MR1	Remark
Population in the target age cohort	178,537	178,537	178,537	178,537	This is under one/surviving
Target population to be vaccinated (first dose)	160,683	160,683	160,683	160,683	This is 90% of the target population
Target population to be vaccinated (last dose)	160,683	160,683	160,683	160,683	This is 90% of the target population
Implied coverage rate	90%	90%	90%	90%	Target for the year
Last available WUENIC coverage rate	85%	83%	77%	82%	2017
Last available admin coverage rate	85%	83%	77%	82%	2017
Wastage rate	5%	5%	10%	50%	
Buffer	25%	25%	25%	25%	
Stock reported	299,902	376,480	70,575	21,210	As of 31 Dec 2017

¹ If taking too much space, the list of participants may also be provided as an annex.

² If the country reporting period deviates from the fiscal period, please provide a short explanation.

Indicative interest to introduce new vaccines or request Health System Strengthening support from Gavi in the future³

Indicative interest to introduce new vaccines or request HSS support from Gavi	Programme	Expected application year	Expected introduction year
		NVS - TCV- TBC	2019/2020

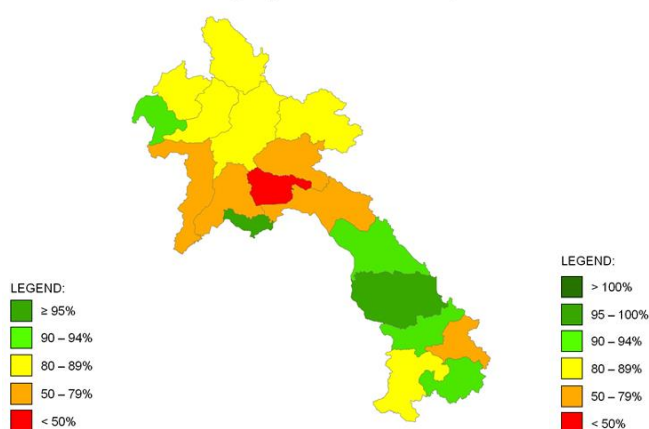
2. RECENT CHANGES IN COUNTRY CONTEXT AND POTENTIAL RISKS FOR NEXT YEAR

The national vaccination coverage in 2017 showed an increase in coverage of all antigens in comparison to the data of 2016. The WHO/UNICEF Estimates of National Immunization Coverage (WUENIC) for DTP3 increased 82% to 85% and measles-rubella (MCV1) coverage grew 76% to 82%.

In 2017, the percent of districts achieving more than 80% DTP3 coverage was 64% (95 of 148 districts). Although Lao PDR achieved an increase in the coverage for MCV1 and Penta3 (MCV1: 82%, Penta3: 85%), the immunization programme is still behind the target coverage set for 90%.

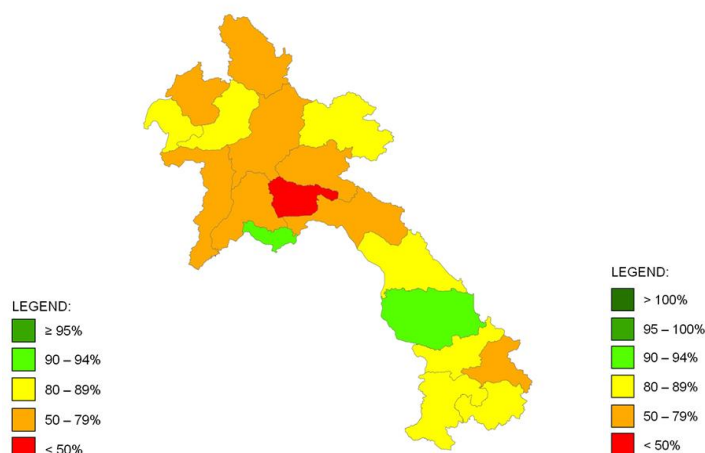
DTP3 Coverage by Province – Lao PDR, 2017

DTP3 Coverage by District – Lao PDR, 2017



MCV1 Coverage by Province – Lao PDR, 2017

MCV1 Coverage by District – Lao PDR, 2017



	2013	2014	2015	2016	2017
Demographic and Health Data (Source: Estimated data from 2004 and 2015 census – and – WHO Global Observatory)					

³ Providing this information does not constitute any obligation for either the country or Gavi, it merely serves for information purposes.

Joint Appraisal

Total population	6,677,540	6,824,752	6,492,228	6,586,683	6,682,696
Estimated birth cohort	186,956	191,043	125,614	184,427	187,115
Under five mortality rate (per 1000)	70.9	68.5	66.1	63.9	-
Immunization Coverage (Source: NIP – and – Coverage survey 2015)					
Administrative coverage Penta3	87 %	88 %	89 %	82 %	85 %
Administrative coverage MCV1	82 %	87 %	88 %	76 %	82 %
Drop-out rate (Penta1-Penta3)	3 %	6 %	4 %	3 %	4 %
Coverage survey Penta3 and MCV1 (same result)	-	81.4 %	-	-	-
Vaccine Preventable Diseases Cases (Source: NCLE and Joint Reporting Form)					
Number of diphtheria (+ve versus total suspected)	6 / 31	0 / 1	70 / 579	3 / 14	0 / 10
Number of pertussis (+ve versus total suspected)	10 / 60	0 / 24	0 / 117	9 / 613	1 / 164
Number of suspected measles/rubella cases reported	573	547	631	512	495
VPD Surveillance Standards (Source: NCLE)					
Non-Polio AFP rate (AFP cases/100,000 for <15 years)	2	1.2	2.6	6.3	5
Percent (%) of AFP cases with adequate stool specimens	65 %	63 %	63 %	74 %	76 %
Percent (%) of suspect measles with adequate lab. spec.	49 %	74 %	79 %	49 %	86 %
Number of laboratory confirmed measles cases (Data source: NCLE)	23	77	13	2	2
Immunization Equity (Source: NIP)					
Percent (%) of districts with DPT3 > 80%	72 %	79 %	78 %	59 %	63 %
Percent (%) of districts with MCV1 coverage >=95%	17 %	19 %	32 %	9 %	20 %
Immunization Financing (Source: Joint Reporting Form – and – WHO Immunization Financing Indicators)					
Routine immunization (RI) total expenditure (USD)	4,000,000	9,244,561	18,254,640	24,754,374	-
Routine immunization Government expenditure (USD)	250,000	4,473,785	6,747,667	10,321,484	-
Percent (%) of RI funded by Government	6 %	48 %	37 %	42 %	-

The NIP finalized the design of a new cMYP 2018-2023 with technical support from WHO. The plan has since been finalized and presented to the ICC in November 2018 for endorsement. The activities outlined in the cMYP are structured based on EPI review 2018 recommendation; the priority areas including strategies and activities to be conducted over the next 5 years to objectively improve the programme performance. The principal focus of the cMYP is to improve quality of immunization service delivery at the district and sub-district levels. In an effort to improve quality and comprehensiveness of services provided, there will be an increased focus on delivery of immunization in a fixed-post. Currently approximately 26% of immunization services are provided through fixed-posts and the promotion of fixed site services will be an important step towards achieving improved quality of care for mothers and children and all health services. It is not considered to be a strategy simply for achieving higher coverage nor for saving money on outreach. It is a strategy of national development and will take some years to put in place.

Table: Funding gap 2019-2023 with secured only and secured and probable financing:

	2019	2020	2021	2022	2023	Total
With secure financing						
Vaccines & Injection supplies	258,103	1,028,909	1,222,782	3,780,396	5,890,936	12,181,126
Personnel	1,019,809	1,027,309	1,635,324	1,922,264	2,039,204	7,643,910
Transport	1,332,621	1,873,204	2,289,264	1,144,641	1,437,492	8,077,222
Activities and other recurrent costs	865,366	-260,085	-68,133	1,870,238	1,845,238	4,252,624
Logistics (vehicles, cold chain and other equipment)	2,671,783	1,617,747	213,303	187,261	215,296	4,905,389
Supplemental Immunization activities	1,296,477	0	0	1,399,339	0	2,695,816
Total funding gap	7,444,160	5,287,084	5,292,541	10,304,139	11,428,166	39,756,089
With secure and probable financing						
Vaccines & Injection supplies	219,803	881,921	1,222,782	1,806,498	2,717,518	6,848,522
Personnel	1,019,809	1,027,309	1,039,809	1,202,264	1,339,204	5,628,395
Transport	1,332,621	1,873,204	2,284,779	1,144,641	1,437,492	8,072,738
Activities and other recurrent costs	865,366	-260,085	-1,174,261	1,245,238	1,230,238	1,906,496
Logistics (vehicles, cold chain and other equipment)	638,520	271,544	213,303	187,261	215,296	1,525,924
Supplemental Immunization activities	1,296,477	0	0	0	0	1,296,477
Total funding gap	5,372,597	3,793,893	3,586,413	5,585,902	6,939,748	25,278,552

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 stock management data collection incorporated and analyzed at district level for monitoring and decision making on stock management supported by the WHO country office. Currently vaccine stocks are managed using VSSM tool at central level and an Excel-based tool at the provincial and district levels; however, the 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 the improved guidelines and policies, training on standard forms (stock record, requisition, issue and arrival, temperature monitoring, and supportive supervision forms) at all levels. Presently, physical stock counts are not routinely done at the central store & sub-national levels. There is also issues with differences between physical stock and vaccine batch cards and VSSM balances were noted for vaccines.

In 2019, the NIP will also assess and trial longer term options for supply chain management for vaccines at central and provincial level. This includes assessing the feasibility of integrating vaccines into the MoH wide supply chain strengthening program. This program, mSupply, focuses on supply chain management, good storage practice, and distribution, uses an electronic pharmaceutical supply chain management system sharing system to facilitate . Rapid scale-up of this system nationally is demonstrating an increase in real-time information availability and promoting active use of data for planning in relation to other health issues, such as reproductive, maternal and child health, Malaria, HIV and nutrition.

NIP may also consider the use of a web-based vaccine stock and management tool Visibility for Vaccines (VIVA) designed by UNICEF and WHO. If implemented, the tool could be used at central level following initial training of MOH staff at central level and development partners and later extended to provincial cold rooms. This tool has the advantage of the existing VSSM, it is web based, simple with data for vaccine management including demanding forecasting, advocacy at country and global level, staff capacity.

NIP will continue to strengthen cold chain and logistics practices including vaccine forecasting, procurement services support, distribution, monitoring of vaccines and vaccination commodities. The CCEOP application materials showed that 46% of existing CCE in Lao PDR is not WHO PQS listed and 73% are over 10 years old and may need to be replaced in the coming period. There is ongoing procurement of CCE (specifically ice-lined refrigerators) to increase cold chain capacity and to implement the cold chain improvement plan; however, the support from the CCEOP will help to rapidly improve the cold chain system including maintenance and temperature monitoring practices. 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 has switched from PCV13 single dose vial to a four dose vial presentation in mid-2018; this will save over 25cm³ 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) are supported by the WHO country office to implement the Immunization and Surveillance Data Specialists (ISDS)

Joint Appraisal

project. This project began in July 2017 and is a two year investment from the United States Centers for Disease Control (US CDC) to enable better reporting and decision-making for the immunization and VPD surveillance programmes. 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 trainees have been hired for the two year pilot and will be absorbed by the Ministry of Health in Q3 2019 to continue the strengthening of data quality, especially at the subnational level.

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 represented in the elected permanent and temporary membership including epidemiology, paediatric, vaccinology, laboratory/surveillance, health economics, public health and more. US CDC supported the initial training the new NITAG on best practices including the importance of objectivity, autonomy, evidence-based recommendations to MOH, etc. To increase the capacity of staff, 11 representative core members were participated in international technical meeting such as SAGE meeting (3 times), Learning Network for Countries in Transition 2017 Meeting (1 time), Rotavirus meeting/workshop (2 times), Epidemiology and Vaccinology (1 time), Global NITAG meeting (1 time). The NITAG recently re-established in 2017 has demonstrated a good start, with a well-functioning leadership and Secretariat, and meetings are regularly taking place, with minutes issued and shared among the stakeholders. The NITAG has played an important role in adding legitimacy to MOH/NIP decision making on HPV and Rota vaccines application preparation for GAVI and number of research activities which is useful especially during the Gavi transition period and beyond. NITAG currently worked with different institutions within Laos such as University of Health Science, *Institut Pasteur du Laos* (IPL), and Institute of Public Health, National Laboratory and Epidemiology, etc and representative core members have provided technical advices on research studies: (1) Knowledge, Attitudes, and Practice (KAP) on influenza vaccine survey among pregnant women, (2) Knowledge, Attitudes, and Practice (KAP) on influenza vaccine survey among health care worker before additional re-promoted influenza vaccination in district and health center levels under the support of US-CDC, (3) Evaluation of immunogenicity against Human papillomavirus (HPV) vaccine among vaccinated adolescent girls in Lao PDR; a pilot study and (4) ongoing HPV genotyping among healthy population under the co-financing support from *Institut Pasteur du Laos*, University of Health Science and LEARN program at National Institute of Public Health. NITAG connect our national to regional and global NITAG experts to leverage expertise and other resources, however, NITAG has no direct financial support, challenging of evidence based generating process such as funding, technology and expertise remain for the programmatic sustainable development.

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. The main advantage of having the Law on Immunization will be the legal aspect for implementing the immunization program at all levels. The law has been finalized and approved by National Assembly on June 2018 and promulgated under the decree of President of Lao PDR, No. 211/PO dated 9 August 2018. NIP is currently preparing for nationwide launch, dissemination, and implementation of the law in January and February 2019.

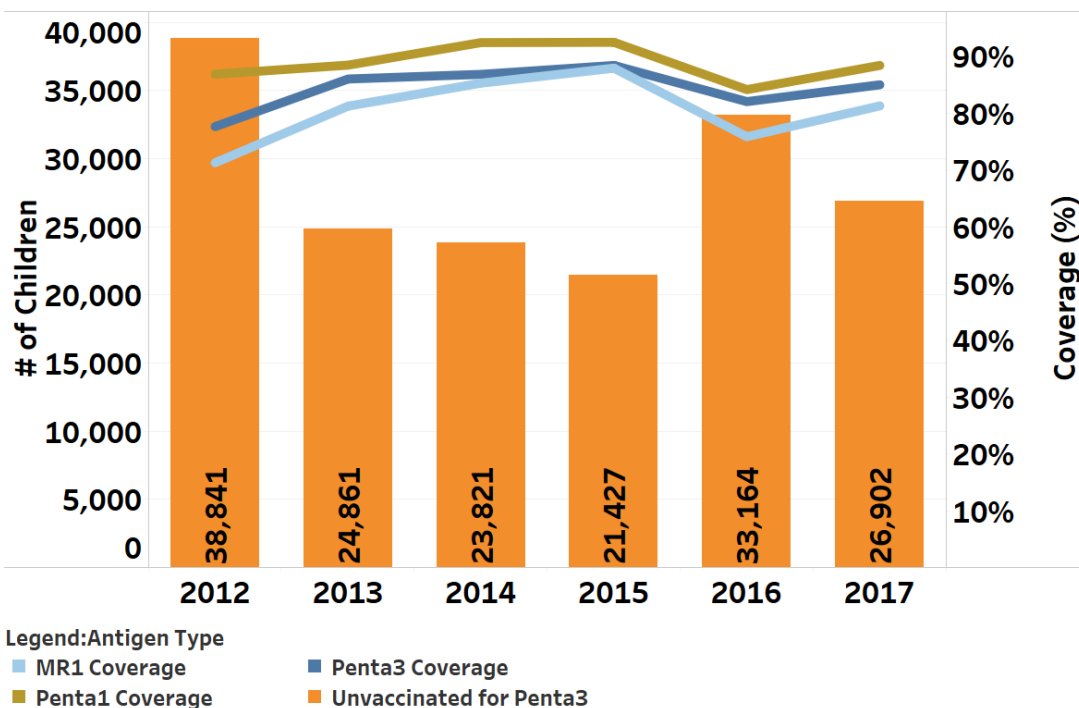
An assessment of the NRA for pharmaceuticals and vaccines was conducted in 2015 identified regulatory gaps, and an Institutional Development Plan and implementation road-map were developed. The NRA basic functionality includes the ability to assess safety, efficacy and quality, register, monitor and regulate vaccines and biological products in both the public and private sector. Overall, however, the FDD is not fully functional yet. In 2017, WHO supported an assessment of the NRA was conducted using the Global Benchmarking Tool (GBT) to assess the nine function areas of the NRA in terms of progress made and identified gaps and the Institutional Development Plan has been revised accordingly.

3. PERFORMANCE OF THE IMMUNISATION PROGRAMME

3.1. COVERAGE AND EQUITY OF IMMUNISATION

Coverage:

As mentioned above the national vaccination coverage in 2017 showed an increase in coverage of all antigens in comparison to the reported data of 2016. The WHO/UNICEF Estimates of National Immunization Coverage (WUENIC) for DTP3 increased from 82% to 85% and measles coverage climbed from 76% to 82%. In 2017, the percent of districts achieving more than 80% DTP3 coverage was 64%. Although Lao PDR achieved an increase in the coverage for MCV1 and Penta3 (MCV1: 82%, Penta3: 85%), the immunization programme is still behind the target coverage set for 90%.

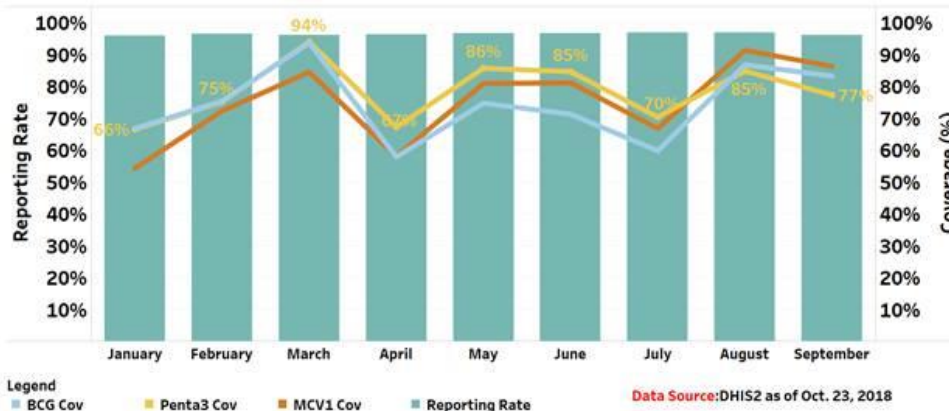


Penta1, Penta3, MR1 Coverage and Unvaccinated Children for Penta3, Lao PDR 2012-2017

In 2018 to date, immunization coverage has been variable from month to month. DHIS2 data including September, ie 2018Q1-3 shows the programme is on track to achieve only 78.4% PENTA3 coverage and 75% MR1 coverage. WHO and UNICEF are working with NIP to increase coverage in Q4 (especially now that the rains have stopped and accessibility has improved). With sufficient planning and coordination for outreach, community engagement, and social mobilization this is feasible, in-country partners are confident that higher coverage can be achieved before the end of 2018.

The monthly target is approximately 15,100 children for PENTA3 and March was the highest performing month achieving 94% of the target population. On average the NIP has been reaching almost 12,000 children per month with PENTA3 during 2018. Reporting in DHIS2 is quite high at 96% - this is an excellent reporting rate and allows us to have greater confidence in EPI data analysis.

Joint Appraisal



Despite slight progress in RI coverage performance in 2017, NIP has faced several challenges, such as the outbreak of circulating vaccine derived poliovirus type 1 (cVDPV) in 2015-2016 and required SIAs until the early 2017 to break the circulation, continuing occurring measles transmission leading to outbreaks as well as pertussis outbreaks in some districts and, low immunization performance and inequitable coverage in some districts, problems of quality of data and of acceptance of vaccines in some communities.

In 2017, Lao PDR reported an incidence of 16 AEFIs cases and of which 12 were serious resulting in death. AEFI 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.

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

1. Update and 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 NCLE, 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 is an essential part of surveillance to achieve elimination. As a result of these activities, measles incidence was at a historic low in 2016, with 1.2 cases per million population.

A measles-rubella vaccine (MR) was introduced into the national immunization program in 2011 as a 1-dose schedule at 9 months of age in Lao PDR. Since then, MR1 vaccination coverage through routine immunization has increased from 69% in 2011 to 82% in 2017 according to WHO and UNICEF estimates of national immunization coverage (WUENIC), and periodic nationwide SIAs conducted in 2011, 2014 and 2017 boosted population immunity. Such efforts contributed to dropping the measles incidence from approximately 300 measles cases per million population in the early 2000s to less than 10 cases per million population from 2015 to date.

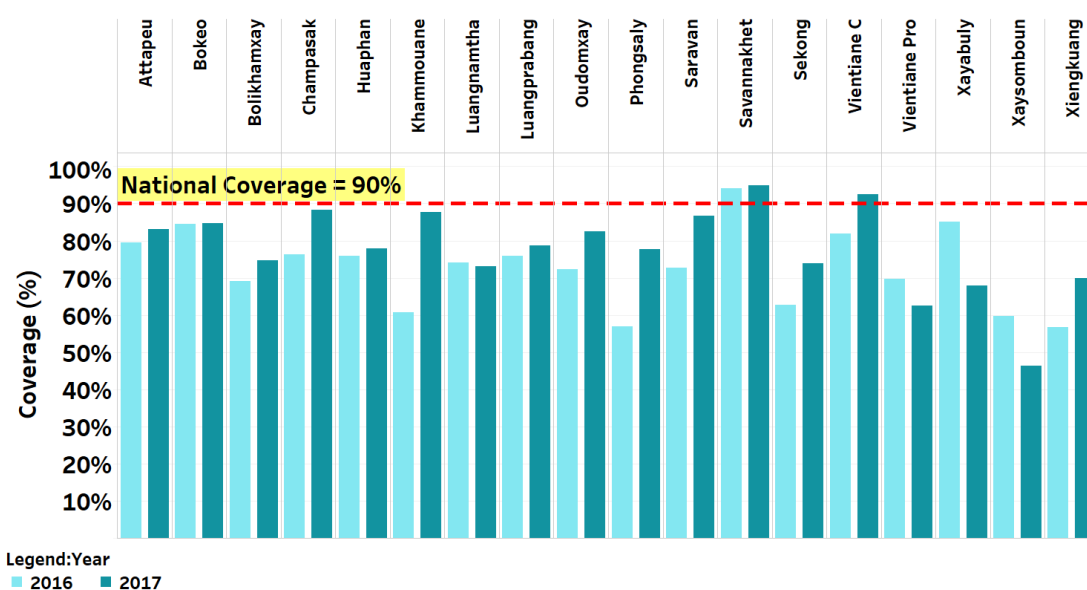
Joint Appraisal

However, MR coverage in the country is still suboptimal and first-dose MR (MR1) has shown to be one of the vaccines with the lowest coverage. Also, MR coverage varies significantly by district. About 13% (19/148) of districts had an MR1 coverage under 60% in 2017 (NIP Excel data). Moreover, coverage of second-dose MR (MR2), which has been introduced in 2017, far lagged behind other vaccines' coverage.

The administrative national measles vaccine coverage (MCV1) has increased from 40% in 2007 to 82% in 2017. 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) 2017 showed 59.7% of children are vaccinated with MR1 by 12 months of age. LSIS 2011 showed the measles coverage being 55%.

There are several reasons for such a low coverage of MR, especially MR2. MR2 is often not recorded correctly because of the confusion among health workers. Also, healthcare workers were reluctant to open a 10-dose vial in situations when immunisation sessions have a few children in attendance. The MR recording system is being revised to minimize confusion and switching 10-dose vial to 5-dose vial presentation is being considered in the country. Such changes may yield increases in MR coverage.



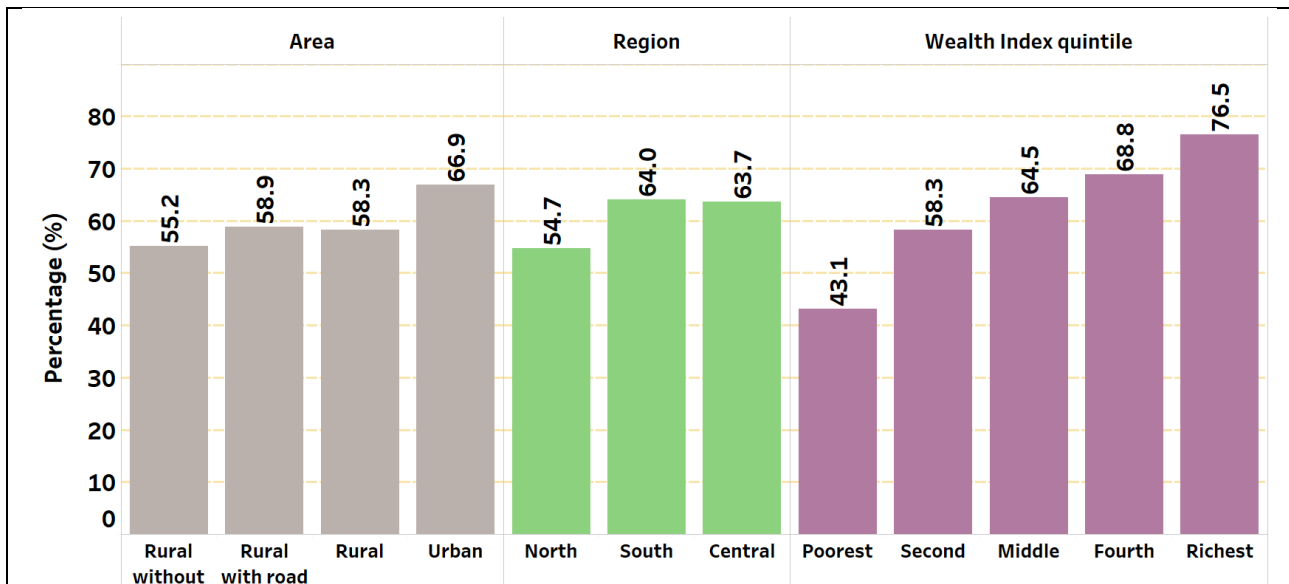
Routine MR1 Coverage by Province, Lao PDR 2016-17

Geographical inequity:

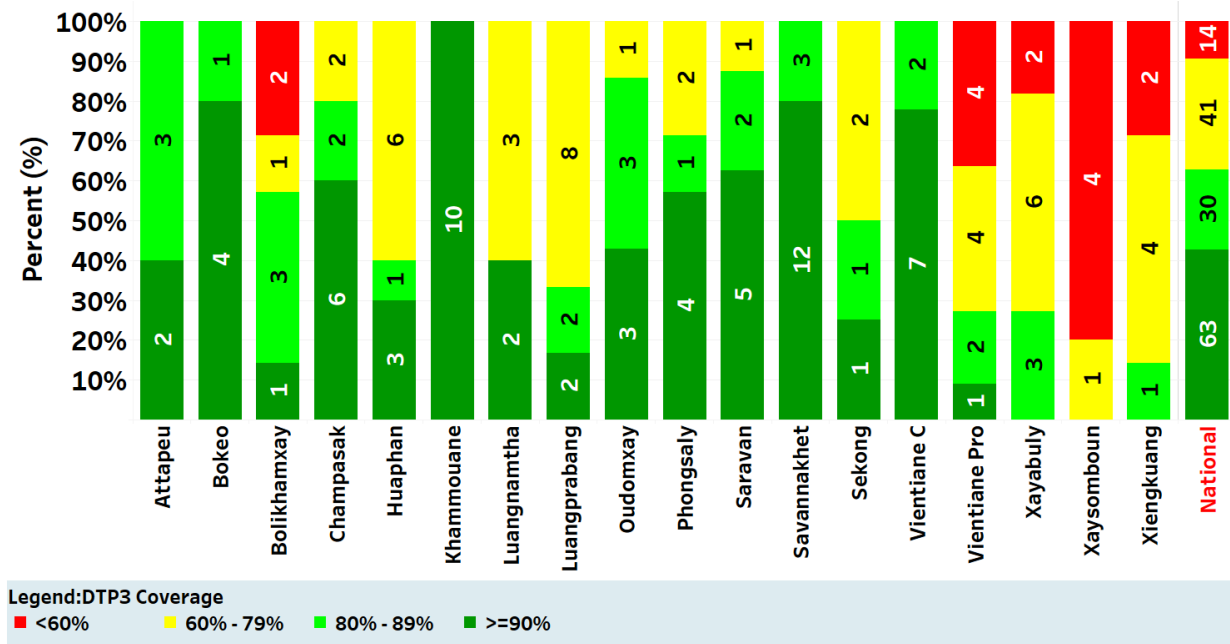
The population and location characteristics of recent outbreaks has highlighted the persistent disparities in the service delivery and utilization in the country and outlined the need to strengthen routine immunization service delivery to these priority hard to reach and high risk population in the country.

As can be seen from the chart below, 5 provinces in particular suffer from consistent poor performance – Bolikhamxay, Vientiane, Xayabouli, Xaysomboun and Xiengkhuang – 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.

Joint Appraisal



Percentage of children age 12-23 months and 24-35 months currently vaccinated for penta3 (Crude coverage) by Area, Region and Wealth, Lao PDR LSIS, 2017



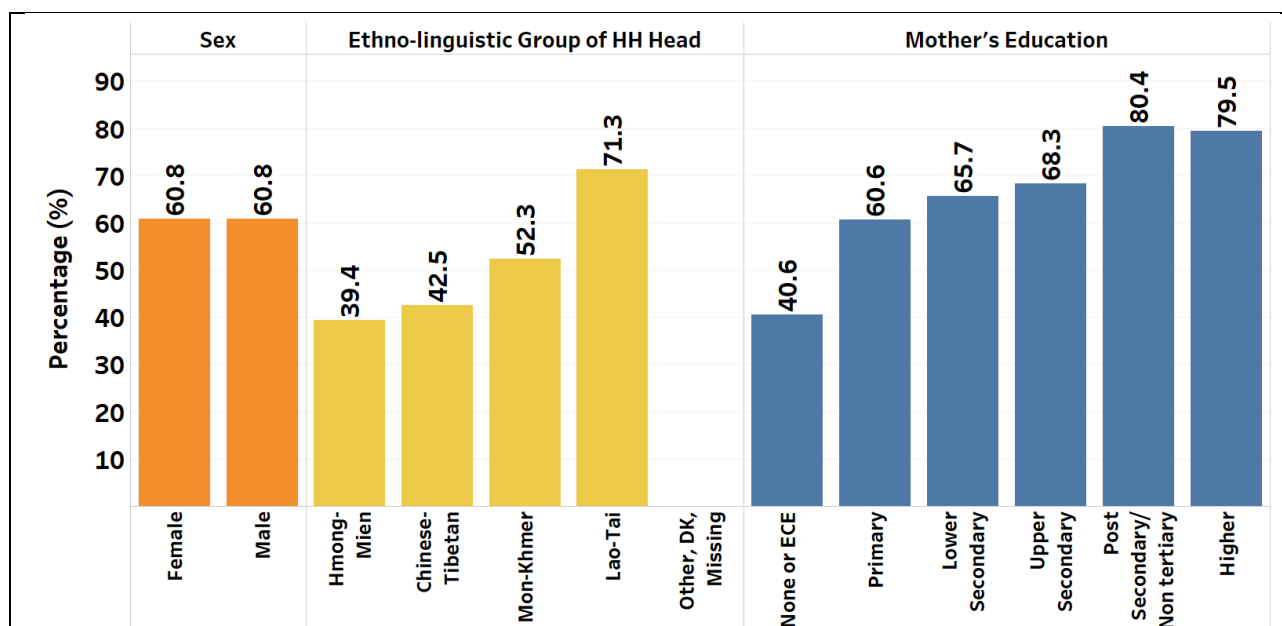
Number of Districts in Province with DTP3 Coverage, Lao PDR 2017

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 (2015-2017) with good community participation. A total of 11 rounds were conducted.

The 2017 LSIS revealed that households headed by Hmong men have significantly lower immunization coverage than households headed by Lao-Tai, followed by Chinese-Tibetan and Mon-Khmer.

Joint Appraisal



Percentage of children age 12-23 months and 24-35 months currently vaccinated for penta3 (Crude coverage) by Sex, Ethno and Mother's Education, Lao PDR LSIS, 2017

Gender:

The 2011-2012 and 2017 LSIS found that immunization coverage did not vary by 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 and 2017 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.

3.2. Key drivers of sustainable coverage and equity

Key drivers of low coverage/ equity

Health workforce:

- *Staff*: The number of health workers has increased and efforts were made to improve planning through using WISN (Workload Indicators of Staffing Needs) and other productivity tools available but these are not yet used systematically.
- *Highly motivated staff (especially, NIP/MCH staff)*: Staff, especially at lower level and health facilities is very motivated and tries to implement activities even with limited funding.
- *Lack of training for staff especially at lower level*: Based on the interviews, training opportunities are limited. Health facility staff requested additional training and capacity building focusing on the following areas: immunization specific issues, cold chain/stock and vaccine management, microplanning. Consequently, they lack the knowledge, capacity, and skills to properly implement the immunization programme. Specifically, vaccine management, running immunization sessions (fixed-posted and outreach), as well as for the appropriate level of monitoring and supportive supervision.
- *Lack of specified job descriptions*: Health facilities have an organigram showing responsibilities of the different staff. However, these do not include detail descriptions of tasks and responsibilities.
- *Lack of systematic and supportive supervision*: Immunization supervision forms and checklists have been developed and are available but they are not used.
- *Cultural adaptation of health staff*: Health facility staff has often a different ethnic/cultural background than the population of the community of the catchment area. Lack of knowledge of ethnic languages and customs limits communication with communities.

For this reason, NIP is ongoing implementing the NIP manager training (targeting provincial and district EPI managers) which should be cascaded down to frontline healthcare workers.

Supply chain:

At national level, the central vaccine storage met good quality standards and used good vaccine management practices. There has been significant improvements in implementing the equipment and infrastructure component of EVM improvement plan 2015 to 2020; with 340 refrigerators, 2 walk in cold rooms (regional), 1001 vaccine carriers, 51 cold boxes procured, distributed and installed in 18 provinces of 2016 and are in use. Similarly, in 2017 179 refrigerators and 208 vaccine carriers were procured, distributed and installed in 13 provinces. These strategic action has positively improved the cold chain infrastructure at all levels of the health system in the country.

In some health facilities/districts/provinces, good practices have been observed, including:

- Vaccines are kept well inside plastic boxes to reduce risk of freezing;
- Most equipment is younger than 10 years; for those older, replacement plans exist;
- Stock management tools (stock cards) were properly completed;
- Full-time staff responsible for cold chain and supply chain is available at each level.

Although the progress had been made, substantial gap remain as following:

There is more work needed to implement the remaining 4 interventions of the EVM improvement plan 2015 to 2020: policies and procedures, human resources and training, and logistics management information system; identified in the EVM improvement plan.

In 2017, vaccine stock reports from subnational levels and health facilities have highlighted that every regional distribution hub (i.e. provincial vaccine store) experienced at least one vaccine falling below minimum stock each month in 2017. These shortages, stock-outs and oversupplies were observed during our supervision visit in Xiengkhoung, Borikhamxay, Vientiane province, Khammoun and Xaysomboun. Some vaccine stock-outs (e.g. of JE, IPV, BCG, HepB, MR vaccines) were always seen in health facility visited; In some health facilities expired vaccines (Td and BCG, reconstituted MR vaccines) were found;

Over supply of other vaccines was witnessed at the same time, leading to risks of expiration; The causes identified for these stock outs were ineffective ordering and lack of a standardized distribution system.

Challenges related to cold chain management were also identified: In particular, there are missing equipment (such as fridge tags) and old or broken equipment (such as refrigerators and freezers) at the province, district and health facility level. When facing old or broken equipment, the immunization teams could not indicate a contingency or replacement plan. SOPs for what to do when equipment is broken were also found missing. NIP is in the process of procuring cold chain refrigerators to support at the district and health facility levels and expect to be delivered by the first quarter of 2019.

Challenges related to storage infrastructure and practices: In particular, in some areas, vaccines were found stored with other drugs or animal vaccines. The temperature in some health facilities was out of range, often due to power outage, lack of monitoring and absence of voltage regulators.

Challenges related to supply chain management:

- On the transportation side, it was observed that vaccines were transported in ways that might undermine the quality of vaccines (i.e. in bags filled with ice on public buses) in the absence of cold boxes. Transportation and logistics of vaccines and vaccination materials continues to be a major problems 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 and can be delivered by the end of 2018.
- Vaccine and cold chain management practices varied quite a lot, with the following being the most concerning:
 - No Standard Operating Guidelines for Effective Vaccine Management as recommended by WHO;
 - Lack of planning for cold chain maintenance, cold chain inventory tracking system and emergencies;
 - Variance in quality and use of batch cards (tracking lot number; VVM and expiry date; wastage), Incomplete vaccine stock records at all level e.g. vaccine registers, vaccine batch lot cards and Issue/Requisition; vouchers; Issue and/Requisition vouchers not updated in time in VSSm; Vaccine wastage is not monitored and reported routinely;
 - Knowledge gaps of staff found in vaccine management (EEFO, etc), cold chain maintenance and repair, reporting and quality of data for evidence-based decision making
 - Weak oversight of vaccine management supply and cold chain by NIP management and Technical Working Group [for Vaccine, Supplies and Stock Management];
 - Weak management supportive supervision over staff handling vaccines at both the central and sub-national levels.

Future actions planned to overcome challenges listed above will include: human resource training in preventive cold chain maintenance and vaccine management; use of web based vaccine management tool (VIVA and LMIS) for efficient vaccine stock management, design of SOPs and procedures followed by systematic monitoring and supervision.

Demand generation / demand for vaccination:

A costed multi-year integrated communication strategic plan 2015-2020 is being implemented designed to address these barriers access and demand for immunization services.

Major communication and behavior change challenges persist, which were raised by the health staff. For example, gap in explaining to mothers about multiple injections were observed during the vaccination given at the health center. Given the challenges with recent cVDPV1 and other VPD outbreaks, the practice of multiple injections and which vaccines should be prioritized in case of hesitancy by child care taker or reluctance of administration by health staff are critical areas to be addressed.

Another issue is vaccine hesitancy due to cultural or religious beliefs; some groups fear the development of fever in the vaccinated children because the occurrence of fever prevents the caregiver

from working in the field. Whether a better understanding of the importance of vaccination would overcome the fear and inconvenience of fever after vaccination remains to be seen. There was some evidence that fear of more severe adverse events following vaccination including death contributed to vaccine hesitance. The diversity of ethnic dialects within minority ethnic groups also represents communication barriers between health staff and communities.

The absence of budget lines for advocacy, communication and demand generation in the District Health Offices and health facilities hampers coordination and advocacy with communities at village level. While gains have been made in coordination at sub-national level, some areas with limited coordination between the health facility staff and surrounding villages or communities need to be addressed.

One limitation of the monthly review meetings between DHO and health facilities is the multi-sectoral focus; since it covers all relevant sectors at that level, there is limited time for each sector. In addition, the capacity of health staff in preparing key information for sharing is limited. As a result, the monthly meetings have often resulted in suboptimal outcomes.

There appears to be a lack of knowledge on the part of child care takers, parents and communities on the importance of vaccination in preventing childhood diseases which can potentially be addressed through the innovative, multiplatform methods of communication mentioned above. In general, the use of innovative technology, social media, mobile phones are still limited in improving communication and social mobilization for immunization.

To improve demand for immunization, many initiatives have been conducted to support as followings:

- A range of innovative communication strategies have been used. For example, the use of information and communication technology and mobile technology in which memory cards were distributed to about 450 villages in 5 districts of Luang Namtha and about 120 villages in 4 districts of Savannakhet. Portable liquid-crystal display (LCD) projectors and loudspeakers were distributed in 200 villages with immunization audio-visual messages.
- Animation cartoons have been made with messages translated from Lao language into four other minority languages to overcome the barrier of language and cultural differences. The content includes the vaccination calendar and common questions raised by parents or child care takers about vaccination. Districts and villages with low vaccination coverage were targeted with these cartoon animations.
- Other methods of improving communication include training in interpersonal communication for doctors, nurses, community leaders in targeted provinces, districts, health facilities and community volunteers including village leaders.
- In addition, high-level advocacy has led to strong alliances with mass organizations including the Lao Women Union (LWU) and strong partnership with development partners and communities.
- Based on bottleneck analysis of immunization barriers, some communication materials including banners with messages on immunization, flyers, and posters have been produced and distributed in country.

Leadership, management and coordination

Concerning management and coordination, the NIP, within the Mother and Child Health Center (MCHC), is the main unit to ensure the implementation and coordination of the immunization activities at the national level. The NIP works jointly with the relevant departments of the Ministry of Health (MOH) and the provincial and district health authorities (PHO, DHO). An Inter-agency Coordination Committee (ICC) exists since 1992, dedicated to coordination support to the NIP. Specific committees were also established to provide technical oversight for immunization, i.e. the National Advisory Group (NITAG), the National Certification Committee for polio (NCC), the National Verification Committee for measles/rubella (NVC) and the National AEFI Causality Committee. All these committees have defined roles and responsibilities. Although committees exist, gap remain as followings:

- There is the limited availability, understanding and implementation of policy documents and

standard guidelines at sub-national/service delivery level. Currently there is no standard list of immunization policy documents and guidelines available, which should be in the hands of all health staff at all levels. One main operational document used is the Lao translation of the WHO Immunization in Practice guidelines (2004 version).

- Immunization activities planning, the absence of a bottom-up consolidated planning from health facilities to district and further to province health offices represents a major challenge in ensuring the proper definition and implementation of immunization activities. More guidance is therefore required in the process and use of evidence for planning which will then be consolidated by district and province health offices.
- The insufficient translation of existing knowledge (e.g. assessments/reviews conclusions and recommendations) to inform priorities and tailored approaches for the immunization program. It was observed that very few recommendations were translated in actionable plans and monitored in their implementation, leaving an important package of information and knowledge left without proper follow-up and/or implementation, for the MOH and NIP, but also for the partners.
- Immunization governance and coordination, the review of the ICC highlighted a lack of functioning technical working group(s) to support its work, leaving much of the ICC support done on an ad hoc basis. There are obvious advantages to get a minimum of functioning technical working groups in areas like vaccine and supply management, service delivery, data management, communication.
- The quality of supervision recognized to be sub-optimal. Several factors are evoked as far as the quality is concerned, like the adequacy of supervision tools and processes, but also the full implementation of the supervisory visits. There was also discussion around the need to strengthen the culture of accountability among health staff.

Programme monitoring and data analysis (see data section)

Programme Monitoring:

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. At the national level, there are efforts underway to continuously monitoring and operationalize agreed EPI workplans including the HSS workplan. Regular coordination meetings are convened at the MCH Center between NIP and development partners in order to ensure smooth planning and implementation of the agreed workplans so that programmatic objectives are achieved.

In 2019 the NIP and CHAI developed a framework with which provincial and central level staff could better identify and address capacity gaps through targeted follow up and trainings. This framework, consists of a set of “maturity scales” which enable standardized assessment for eleven critical components of good management at the district level. In 2019, this evaluation framework will be trialed in two provinces, Champasak and Oudomxay. In these provinces, the team will work with provincial department of health leadership to evaluate district performance on each of the eleven components, and strengthen both central and provincial level capacity to identify and implement interventions to address gaps, and monitor capacity on an ongoing basis. If successful, the evaluation framework will subsequently be rolled out in other provinces.

3.3. Data

Data:

(1) 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.

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 VPDs 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 years project funded by CDC and implemented by WHO. The ISDS project entail 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 strengthen 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.

(2) ISDS programme:

Stop Transmission of Polio (STOP) Immunization and Surveillance Data Specialists (ISDS) programme launched as a pilot in Lao PDR in July 2017. The overall aim of the project is to improve immunization and VPD surveillance data management, quality, and use across all levels of the health structure. The project targeted 6 provinces (Vientiane Capital, Vientiane province, Oudomxay, Khammuane, Champassack and

Xiengkhuang), 24 districts and 96 Health facilities.

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).

The STOP ISDS participants completed two deployments and now they started their third deployment. Initial result from the midterm review and site visits showed that there is notable improvements in staff knowledge, skills and practices for immunization and VPD surveillance data management at province, district and HF level. Some of them are:

- Availability and use of standardized immunization and surveillance recording and reporting tools improved.
- Recording and reporting of EPI and surveillance data improved
- Knowledge on calculations of immunization and surveillance indicators (dropout-rate, coverage, non-polio AFP (NPAFP) rate improved.
- Improved data analysis and use culture – most provinces and districts now regularly analyze, chart and monitor their immunization coverage and dropout rates.
- Improvements in immunization data archiving and provision of feedback to health facilities on monthly reports.
- Improved congruence between different EPI data sources.

The project will be ending in June 2019. To sustain this improvement after the project ended, discussion is started and initial consensus was reached among partners on sustainability strategy and modality.

(3) DHIS2 Implementation

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. EPI integrated into DHIS2 system in 2016. However, still EPI keeps Excel as a parallel system since some of its needs are not yet fulfilled by DHIS2. In addition, before 2018 the coverage in DHIS2 system is somewhat lower than the Excel. This year the reporting rate in DHIS2 improved very much. The average monthly reporting rate from January – September, 2018 is around 96%. Therefore, starting the end of this year 2018 there is a plan to migrate to DHIS2 completely.

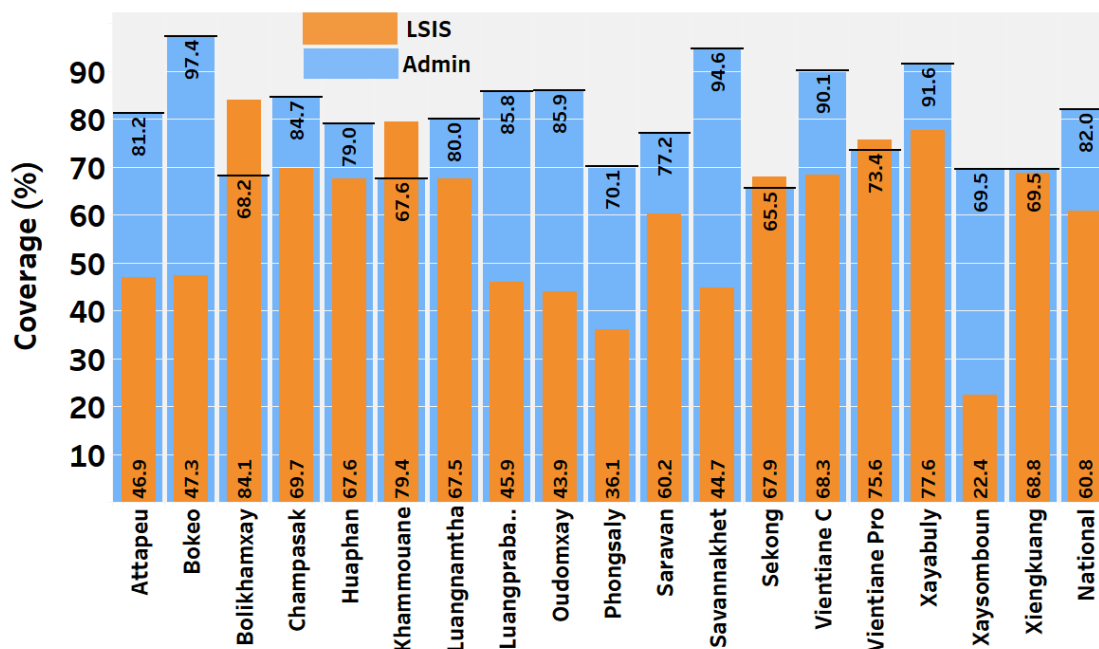
There are two type of DHIS2 data capturing. The first one is aggregate data capturing; monthly health facilities compile immunization data and send it to the district using standardized immunization reporting form. At the district the statistician enter the data in to DHIS2 web based online system. The second one is event capturing; this system is still on pilot stage. Initially it is started in only in Luangprabang. But right now it is expanded to 12 provincial hospitals and all district hospitals located in 12 provinces.

EPI dashboards are created in the DHIS2 system. The dashboards shows the performance at national, province and district level for selected indicators in table, graph and map forms. The main indicators included in the dashboards are reporting and timeliness rate, coverage for selected antigen, dropout rate and percent of children reached by service delivery strategy. At this time, DHIS2 does not include indicators related to supply chain management; however, initial discussion started with DHIS2 team to include it in the system.

(4) Lao PDR Social Indicator Survey (LSIS II)

In addition to admin data, Lao PDR uses surveys as an additional data source to generate information to validate immunization coverage and inform decision making. In 2017, the country conducted the second

Lao PDR Social Indicator Survey (LSIS II). Comparison of coverage between routinely collected administrative data and survey showed that there is discrepancy. For instance, national penta3 coverage in the survey was 60.8%, however in the routine it was 82% for the same cohort of children. Province level comparison shows that in 14 of the 18 provinces the coverage in admin data is higher than the coverage in LSIS. See Figure 'Comparison of 2016 Admin and 2017 LSIS Penta 3 coverage, Lao PDR' below for the detail.



Comparison of 2016 Admin and 2017 LSIS Penta 3 coverage, Lao PDR

Immunisation financing

1. Need to Increase Domestic Resources Available for Immunization

Lao PDR has increased government spending on health since 2011 and undergone substantial health financing and service delivery reforms. Currently, the Ministry of Health is developing an essential services package that consists of three major parts – RMNCH, communicable diseases, and non-communicable diseases – with a total of 113 services delineated across the health facility levels. The essential services package, which includes immunization services, may be funded by multiple sources, including government budget and national health insurance.

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.⁴

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 an attempt to allocate budget for the equivalent increasing costs during this period so that by 2022 the Government is fully self-financing the NIP.

⁴ World Bank Presentation, December 2016

2. Need for Strengthening Financial Planning, Prioritization & Timely disbursement

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\$ 9M Gavi HSS3 grant (2016-2020), which provides funding for key service delivery interventions, including outreaches and supportive supervision (US\$1,98M), as well as for strengthening the management capacity of the immunization program, including financial staff and annual review meetings, communication and programme management (US\$2.5M). Concerning the transition from Gavi financial support, the recent EPI review concluded that the understanding of the transition plan and its process is sub-optimal at all levels, except among NIP and the partners at the national level. At the sub-national level, health authorities also mentioned issues like the need for sufficient time to integrate all aspects of the transition, and technical assistance during the "risk period". The need for placing the immunization transition plan in a broader health sector context was emphasized, especially as there are several fragmented transitions plans (HIV, Malaria, TB, and Immunization). After Lao's transition out of 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. The recent cMYP exercise has served to quantify the future financial needs of the national immunization programme. Both operational costs as well as vaccine procurement costs will need to be increasingly supported by Government of Lao PDR budget. Domestic resource mobilization will be required to ensure sufficient budget is available to replace Gavi funding during and after the transition period.

Regarding budgeting and expenditure tracking in the planning process, the lack of a bottom-up approach does not allow a good planning and budgeting from the health facility level to district and to province, and potentially does not capture the immunization services needs at the subnational level. The NIP may also review and advise provinces on planning and budgeting. Since late 2017, the Department of Finance, Ministry of Health initiated an annual budgeting and expenditure tracking system for programs across various donors in 5 pilot provinces. While there has been progress made on strengthening the public financial management system, financial management capacity is still limited at provincial, district, and health facility levels.

In terms of the government disbursement of funds, some longer delays were experienced in 2017, potentially due to the adjustment of aligning the calendar year as the fiscal year. The national health insurance was also being implemented, which may have also caused delay in reimbursements. However, given the delays, there was some flexibility in the government budget to be able to temporarily cover the expenses at the provincial level. The expiration of funds was also extended by several months to account for the delays. Several districts visited during supportive supervision cited lack of funds for VPD surveillance, advocacy, and communication activities. In addition, at the district levels, there has been some evidence that there may be incoherent incentives to health workers for providing immunizations compared to integrated outreach services. For example, the financial incentives for providing immunization outreach may be greater than integrated outreach services in some districts.

An analysis of existing plans (undertaken in the first half of 2018), including the Transition Plan, Gavi HSS Plan and the NIP budget for 2017-2020 conducted by the NIP and CHAI also identified disconnects between the transition planning process and routine government resource planning and allocation decisions, including the cMYP and annual budgeting process. Specifically

- The total government budget is not currently scaling up in line with planned decreases of Gavi HSS funding. Ways of increasing domestic funding for HSS activities must be explored, including through identification of efficiencies to reduce cost of support activities; and
- There is misalignment between the activities listed within the NIP budget and those in the Transition Plan. Only 5 activities in the Transition Plan are currently reflected in the NIP's multi-year planned budget (2017-2020). Conversely, the NIP plan contains seemingly new activities which are not included in the Transition Plan, such as an MR campaign. It is important that the Transition Plan reflects government priorities for HSS scale up to ensure limited funding from both

government and partners is effectively aligned to the national strategy.

The Transition Plan should be aligned with in-country planning and budgeting processes. A first step will be to ensure the Transition Plan reflects the priorities outlined in the upcoming cMYP. In 2019, CHAI will support the NIP to ensure that both the cMYP and the Transition Plan can be sufficiently referenced and incorporated in the government's annual budgeting process, to ensure its activities are prioritized appropriately alongside routine government spending, and monitored to reduce the risk of activities being inadvertently underfunded or not included in any budget.

4. PERFORMANCE OF GAVI SUPPORT

4.1. Performance of vaccine support

With Lao's recently drafted cMYP, NIP and the Ministry have set targets for >90% coverage across all antigens 2019 onwards.

Over the past decade, several new vaccines were introduced in National immunization program of Lao PDR, including the pentavalent vaccine, Japanese encephalitis (JE) vaccine, pneumococcal conjugate vaccine (PCV), inactivated polio vaccine (IPV), bivalent oral polio vaccine (bOPV), a 2nd dose of measles rubella (MR) vaccine and human papillomavirus vaccine (HPV) as a demonstration project.

Pentavalent

The implementation of the pentavalent vaccine and other vaccines in the national immunization schedule is ongoing and is being used in all levels. However, the coverage performance of each of the vaccines used in the national immunization schedule especially PENTA3 has shown an increase in coverage in 2017 (PENTA3= 85%) compared to reported coverage of 2016 and the target of 90% for PENTA3. The NIP is considering switching from a single dose vial to a preserved low-multidose vial (ideally 5-dose vial) if available from UNICEF SD.

Pneumococcal conjugate vaccine

Lao PDR has introduced with Gavi support the PCV13 vaccination in to the program in 2013. PCV introduction in Lao PDR is a powerful example of the impact of new vaccine introductions. A recent impact study shows that PCV has significantly reduced the carriage (and therefore transmission) of vaccine types in the community and is likely to contribute to a reduction in child mortality. In the study, there was a 31% decline in toddlers and 24% decline infants too young to be vaccinated which is an exciting finding as this indicates the community is also benefiting from herd immunity. Despite the progress made, the challenges of implementation remain with poor acceptance of multiple injections at a single visit particularly amongst the ethnic community causing limited utilization in several communities in the country. Consequently the administrative coverage of PCV13 in 2017 was 83%; 7% lower than the target of 90%. Health workers need a better understanding that it is safe to give 3 injections simultaneously. Lao PDR currently switch from the single dose vial PCV13 to the preserved 4-dose vial presentation in mid-2018. The training, social mobilization/communication and updating of various immunization forms regarding the switch has been conducted.

Job aid for PCV switch

ການນຳໃຊ້ ແລະ ຄຸ້ມຄອງການເປີດກ່ອງວັກຊີນທີ່ມີຫຼາຍໂດສ

ວັກຊີນ PCV13 ກ່ອງໜຶ່ງຫຼາຍໂດສ ແມ່ນຫຍັງ?

ຮູບແບບການບັນຈຸໃໝ່ຂອງວັກຊີນ PCV13:

- ໜຶ່ງກ່ອງ ມີ 4 ໂດສ
- ໃຊ້ໄດ້ເຮອດ 28 ວັນ ຫຼັງເປີດກ່ອງ

ບໍລິມາດບັນຈຸ ເທົ່າກັນ 2 ml

ນະໂຍບາຍການເປີດກ່ອງວັກຊີນ ທີ່ມີຫຼາຍໂດສ ແມ່ນແນວໃດ?

ວັກຊີນເປີດໃຊ້ແລ້ວຕ້ອງໄດ້ເອົາຖິ້ມ

ພາຍຫຼັງສິ້ນສຸດການໃຫ້ວັກຊີນໃນມື້ນັ້ນ ເປີດກ່ອງວັກຊີນໃຊ້ແລ້ວເກັບ 6 ຊມ

ບໍ່ວ່າອັນໃດມາກ່ອນ

ວັກຊີນຢູ່ນອກຖິ້ມ

ແຕ່

ວັກຊີນທີ່ເປີດກ່ອງແລ້ວໃຊ້ໄດ້ເຮອດ 28 ມື້

ໂດຍອີງຕາມເງື່ອນໄຂດັ່ງນີ້:

1. ວັກຊີນຮັບຂອງໂດຍອີງການອະນາໄມໂລກ
2. ມີຂໍ້ບົ່ງຊີ້ໃຊ້ໄດ້ເຮອດ 28 ມື້ ພາຍຫຼັງເປີດກ່ອງວັກຊີນ
3. ຍັງບໍ່ໝົດອາຍຸ ແລະ

4. ຢູ່ໃນອຸນຫະພູມ +2 ຫາ +8 ອົງສາເຊ

ວັກຊີນຢູ່ໃນອຸນຫະພູມ +2 ຫາ +8 c

ອຸຕາ ຍັງຢູ່ຂຶ້ນໃຊ້ໄດ້

ວັກຊີນບໍ່ຖືກກ້າມແຂງ

ຫົດສອບການກ້າມແຂງ

ຕົ້ນປະໂຫຍດຂອງການໃຊ້ວັກຊີນໜຶ່ງກ່ອງທີ່ມີຫຼາຍໂດສ

ການໃຊ້ວັກຊີນໜຶ່ງກ່ອງທີ່ມີຫຼາຍໂດສ ທີ່ເໝາະສົມສາມາດລູກການເຮັບເສຍຂອງວັກຊີນ ແລະ ຮັບປະກັນຄວາມປອດໄພໄດ້.

ໜຶ່ງກ່ອງ ມີ 4 ໂດສ ໃຊ້ໄດ້ເຮອດ 28 ມື້ ຫຼັງເປີດກ່ອງ

ຫຼຸດອັດຕາການເຮັບເສຍ

ອຸປະກອນຕິດຕາມກ່ອງຢາວັກຊີນ (ອຕາ)

ອຕາ ຂອງ PCV13 ສະນິດ ກ່ອງໜຶ່ງ ມີ 4 ໂດສ ຕິດຢູ່ໃສ?

ອຕາ ຕິດຢູ່ສະຫຼາກດ້ານຂ້າງຂອງກ່ອງວັກຊີນ

ວິທີການ ອ່ານ ແລະ ເຢດິນ ອຕາ

ອຕາ ໃຊ້ໄດ້ ອຕາ ໃຊ້ບໍ່ໄດ້

ຈຸດ 4 ວຽມ ແຈ້ງ ຮາວ ກວ່າ 0.5 ວຽມ ສີຈຸດ 4 ວຽມເທົ່າກັບ 0.5 ວຽມ ສີຈຸດ 4 ວຽມດຳກວ່າ 0.5 ວຽມ

ຈຸດເອົາຖິ້ມ ແຈ້ງເທິງລິດເທົ່າລັບຮູ ບໍ່ອ່ານການສະສົມຄວາມສອນ

ວິທີກະກຽມ ວັກຊີນ PCV13 ສຳລັບລົງໃຫ້ບໍລິການແບບເຄື່ອນທີ່

ກວດອຸນຫະພູມ ຖ້າສົງໄສກ້າມແຂງ ຖ້າບໍ່ກ້າມແຂງ ຖ້າມີການກ້າມແຂງ ເອົາອອກຖິ້ມ

ກວດສອບການກ້າມແຂງ ຖ້າບໍ່ກ້າມແຂງ ຖ້າກ້າມແຂງ ອຕາ ໃຊ້ບໍ່ໄດ້ ອຕາ ໃຊ້ໄດ້

ເຮັດວັກຊີນໜຶ່ງກ່ອງ ກວດອຕາ ເປີດບໍລິມາດໃນຖົງພາຍວັກຊີນ

ເລືອກໃຊ້ວັກຊີນໃນຖົງເປີດຕາມຂໍ້ແນະນຳດັ່ງນີ້:

- ບໍ່ໃຊ້ວັກຊີນກ່ອງທີ່ເປີດແລ້ວກ່ອນໝູ່
- ບໍ່ໃຊ້ວັກຊີນກ່ອງທີ່ບໍ່ທັນໄດ້ໄຂ ແຕ່ ເຫຼືອມາຈາກການລົງເຄື່ອນໄຫວສອບທີ່ຜ່ານມາກ່ອນ
- ບໍ່ໃຊ້ວັກຊີນກ່ອງໃດ ທີ່ ອຕາ ເລີ່ມມີການປ່ຽນສີກ່ອນໝູ່ ແຕ່ຍັງຢູ່ຂຶ້ນໃຊ້ໄດ້

ວິທີຂົນສົ່ງ ວັກຊີນ PCV13 ລົງເຄື່ອນໄຫວໃນຊຸມຊົນ

ໃຊ້ໂກນບອກ ຫຼື ຖົງພາຍວັກຊີນ ທີ່ມີບາຫຼອດຕິດຕາມອຸນຫະພູມ ຕາບອາກາດວາຊີນ:

2 - 8 °C ບໍ່ອາກາດບໍ່ໃຫ້ກ້າມແຂງ ບໍ່ໃຫ້ຖືກຄວາມຮ້ອນ ແລະ ແສງແດດ

ໃຊ້ບັງນຳກ່ອນທີ່ລະລາຍແລ້ວ

ການນຳໃຊ້ ວັກຊີນ ໜຶ່ງກ່ອງທີ່ມີຫຼາຍໂດສ

ວິທີປະຕິບັດທີ່ດີ ຄວນເຮັດດັ່ງນີ້

4 ໂດສ = ເຮັດແຈ້ງ 4 ດວງ

ບັນທຶກວັນເດືອນປີທີ່ເປີດກ່ອງວັກຊີນ

ໃຊ້ເຮັດແຈ້ງ ແລະ ເຮັດໃໝ່ທຸກຄັ້ງ

ບໍ່ຄວນປະເຮັມເຮັດແຈ້ງຄຸກໄວ້ກ່ອງວັກຊີນ

ບໍ່ຄວນໃສ່ຕົວເມືອເຖິງແຖບສິດແຈ້ງ

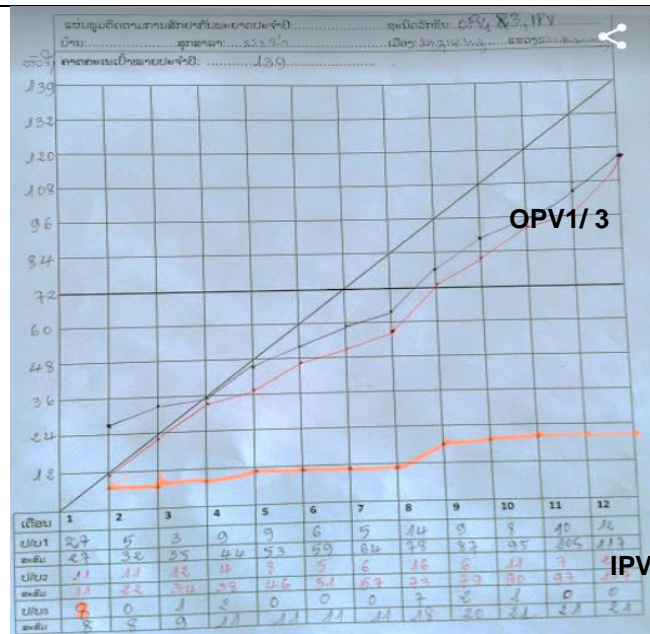
ໃຊ້ກັບນິລະໄພຢ່າງເໝາະສົມ

ຫ້າມຖິ້ມ ຫຼື ຫ້າລາຍກັບນິລະໄພໃນສະຖານທີ່ເປີດ

Inactivated Polio Vaccine

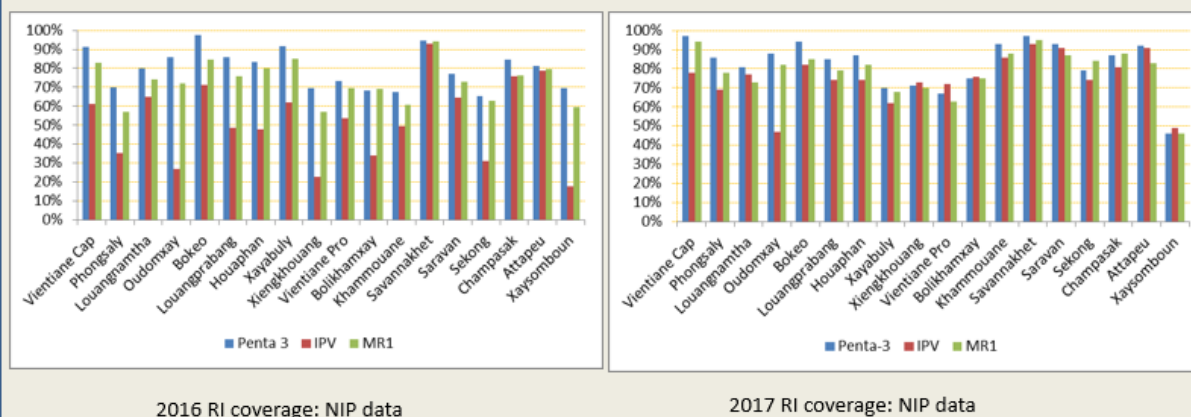
As part of the national polio-endgame plan, Lao PDR has introduced IPV & bOPV in to the program in October 2015. The administrative coverage of IPV in 2017 is 77%. However, the overall coverage of IPV is low at the national level (90%) and variable across the country; according to the NIP administrative coverage in 2017, the IPV coverage ranged from 47% to 93% at the provincial level and 12 districts performed below 50%. Below table shows an example of IPV coverage on monitoring chart in Naxaythong district, Vientiane capital 2017.

20



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. More than two multiple injections during the same immunization session are not well accepted. Multiple injections occur mainly in outreach situations, when only quarterly visits are implemented and therefore more than two (delayed) injectable vaccines would need to be provided to the same child at a given session. However, it appears as if caregivers may have fewer problems with this issue compared to health care workers, since 72% of mothers show good acceptance of multiple injections (EPI review 2018). IPV coverage could potentially be in danger due to this issue, since IPV injections are often not being administered if already two multiple injections have been given. 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 issue of multiple injection use has been strengthened. However, communications and social mobilization activities need to be strengthened particularly 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 above measures, NIP and WHO was conducted a periodic intensification of routine immunization (PIRI) in October 2017 to boost the immunity of the community to maintain the complete interruption of cVDPV in Lao PDR. The intensification of IPV was given in 32 districts of three affected provinces (Xaysomboun, Bolikhamxay and Vientiane provinces) and Xieghouang province where chronic low IPV coverage exists. This provinces were also directly affected in the 2015-2016 cVDPV outbreak. Overall the PIRI contributed to increase the coverage of routine immunization for <1 year children in 2017. PIRI contributed to a 30% coverage increase for IPV.

Closing the IPV gap



The IPV coverage was very low in 2016, the support of PIRI in 4 provinces has helped for other provinces to learn on how to boost the IPV coverage in 2017. In most provinces, the IPV coverage has increased.

Measles rubella vaccine

Lao PDR will also continue to use the MR vaccine in its national immunization schedule. The coverage performance of MR has shown an increase in coverage in 2017 (MR1= 82%) compared to reported coverage of 2016 and the target of 90% for MR1. In line with the measles elimination as agreed by the NITAG, the Lao PDR has introduced Measles second dose and the launch in October 2017. This is particularly important to ensure a higher immunity towards the measles virus. With the slightly increase in MR1 coverage in 2017, the challenges remain which involved 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. The implementation of MR2 faced some challenge such as– not well oriented at different level causing health care workers’ confusion on age group and schedule. Consequently affected on performance - low performance coverage and inconsistency of data recording/reporting as well as accuracy of data.

MR missed opportunities

The unsatisfactory MR1&2 vaccine coverage nationwide (2017), is likely related to issues related to vaccine management and the fact that MR vials are not opened at the delivery site if fewer than 3 to 5 children are present. In order to reduce vaccine wastage, an ‘informal’ practice has been established of instituting specific ‘high wastage days’ once per month, during which MR vaccines are offered only. 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. NIP will switch from the 10-dose vial to a lower multidose vial (5-dose vial) in 2019; this will hopefully reduce missed opportunities for immunization as HCWs will be encouraged to open a vial for any child under 5 years of age who has not received a full course of MR vaccine.

The most recent nationwide MR SIA was conducted in January 2017. It targeted 702,756 children aged from 9 to 59 months and reached overall 100% without serious AEFIs.

In accordance with the global and regional initiatives to achieve measles and rubella elimination, the Government of Lao PDR, along with partners, developed the National Plan of Action for Achieving and Sustaining Measles and Rubella Elimination, 2018—2022 in November 2018. It is a comprehensive plan to strengthen the current immunization program and strengthen surveillance activities. Its activities range from strengthening the National Adverse Events Following Immunization Commission to establishing congenital rubella syndrome (CRS) surveillance, taking a tailored approach using the programmatic risk assessment tool and convening high-level advocacy meeting.

MR1 coverage has largely stalled since 2013 and never reached 90% yet in Lao PDR. Considering the

Joint Appraisal

high transmissibility of measles, over 95% coverage of two-dose measles-containing vaccines should be achieved and sustained to eliminate measles across the country. In this regard, the Plan of Action will provide an opportunity to enable the country to maximise the MR2 coverage.

Japanese encephalitis

NIP has introduced the JE vaccine in the national immunization schedule in 2015, implementation is ongoing at all levels with steadily increasing coverage from 20% in 2015 to 44% in 2016 but again declined in 2017 (JE: 39%) that is 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. While JE vaccine is presently not in use due to long-lasting vaccine stock-outs, the further continued implementation of this vaccine could aggravate this situation. Lao PDR had a JE vaccine stock out for 6 months in 2016 and first quarter of 2017.

New Vaccine Introduction

Human papillomavirus (HPV) vaccine

In 2019, NIP will introduce HPV vaccines in all 18 provinces. The vaccine will be delivered in schools and also target out-of-school girls through social mobilization and community engagement activities. The routine HPV schedule will target 5th grade girls (approximately 9 years of age) and in the first year, Lao PDR will undertake a multi-age cohort (MAC) campaign. The MAC will target girls in grades 6-9 and be primarily delivered in secondary schools.

Partners including WHO, UNICEF and US CDC will support HPV introduction. UNICEF largely supports national communication, WHO supported developing training materials and PIE, and US CDC is planning to support evaluation of the vaccine introduction preparation. NIP recognizes that HPV vaccination is very different from other vaccinations. Special consideration and support need to be offered as the experience from the successful introduction of other routine childhood vaccination is not usually transferable to HPV introduction. Lao PDR did run a successful demonstration project in two provinces and therefore has some initial experience on how to establish a national program. To ensure the success of the HPV introduction, MOH/NIP will be required to expand collaboration with Ministry of Education. Other health partners will also be engaged including reproductive health, adolescent health, gynecologists, and oncologists.

In mid-2019, joint training activities will be undertaken to sensitize/raise awareness of HCW, teachers and headmasters has been successfully conducted (e.g., Day 1. Vaccine impact and communication; Day 2. Technical aspects). NIP is considering integrating Td into HPV MAC campaigns. This has been proven as an efficient way to deliver 2+ vaccines by using the same platform and it has been recommended by WHO. However, some countries experienced bad outcomes (e.g., Rwanda, Uganda) from HPV-MR or HPV-Td campaigns because it detracted from each other. It can work if HCWs are able to handle both vaccines very well.

Baseline study to measure/monitor impact

- Conducting a baseline study of HPV infection is expensive and difficult to do. So WHO is not recommending countries to do it.
- Instead, WHO recommends to monitor coverage and start cancer registry

Suggested time frame:

- D-6 months: Identify all actors and get everyone on board
- D-4 or 5 months: Monthly international coordination
- D-4 months: Review/Tracking by UNICEF
- D-1 month: Local Assessment led by NIP
- Small international mission several weeks before initiation

Rotavirus vaccine (RVV)

NIP's original plan was to introduce RVV in 2019; however international supply availability has delayed

Joint Appraisal

introduction into 2020 at the earliest. In October and November 2018, the NITAG considered switching from the GSK rotarix to another supplier but decided to wait for their original choice after carefully considering the programmatic characteristics of the alternative RVVs. Forms and other materials will be updated in 2019 at the same time as HPV is reflected.

WHO is currently working with two Lao hospitals to develop a baseline of rotavirus diarrhea burden. This data was also available to inform the NITAG recommendation to introduce RVV. In 2018, a second sentinel site was added in southern Lao PDR (Champasak Provincial Hospital). This data will allow MOH to assess the impact of the RVV introduction. In 2019, this surveillance will be expanded to include intussusception surveillance as well.

4.2. Performance of Gavi HSS support (if country is receiving Gavi HSS support)

The implementation of HSS3 in 2017 has a good start and numbers of activity has been conducted that therefore key progress achievements based on objectives are described in below table as following.

In terms of the grant performance framework, 2017 performance shows progress from 2016 (positive trends) for most indicators, albeit few meeting original targets set. While we do not propose changing targets, we do feel some of these are very ambitious.

Objective 1	Actual 2016	Actual 2017	Target 2017	Status
Number of EPI/MCH managers trained on SS	170	NA	NA	NA as 2016 & 2018 activity
Percent of facilities received MCH/EPI service delivery funds on time	76	80	90	Although not reaching target, progress from 2016
Percent of timely submission of quarterly provincial financial statements	60	70	No Target Set	Target missing
Objective 2		Actual	Target	Status
Proportion of children fully immunised - % of children aged 12-23 months who receive all basic vaccinations in a country's routine immunisation schedule	Blank	Blank	52	No reporting provided
Percent of facilities offering immunization services as per the revised microplan guidelines	15	50	90	Although not reaching target, progress from 2016
Percent of outreach immunization activities conducted in identified High risk areas	37	70	80	Although not reaching target, progress from 2016
Objective 3		Actual	Target	Status
Percent of social mobilisation activity per villages implemented	100	70	90	Not reaching target and drop from 2016
Objective 4	Actual 2016	Actual 2017	Target 2017	Status
Number of districts with vaccine stockouts	42 (as of June 2017)	NA	0	No reporting provided
Percent of functional cold chain equipment in health facilities	89	90	87	Target surpassed and growth from 2016
Objective 5		Actual	Target	Status
Number of health facilities where incinerator installed and functioning	10	8 (assume cumulative so actually #18?)	20	Although not reaching target, if cumulative, improved from 2016
Objective 6		Actual	Target	Status
Number of planned periodic DQA conducted against plan	3	5	3	Target surpassed and growth from 2016
Number of supportive supervision conducted by each level (National + Provinces + Districts)	62	150	404	Although not reaching target, progress from 2016

Objectives 1 demonstrates that fund flow and management continue to be challenging in Laos. Objective 2 is also impacted as a result, with microplan implementation being impacted by unpredictable funding and delays in funds reaching all levels. Microplanning guidance is currently under revision and it is

Joint Appraisal

hoped that training on revised guidelines will also help identify funding challenges and help lower levels on how and when to submit proposals / flag challenges. Objective 3 requires reconsideration and discussion during reallocation exercise (ongoing). Objectives 4 and 5 were discussed at length. While cold chain equipment replacement looks on-track and with more to come with CCEOP, issues with stock management and reporting were acknowledged and additional technical support in this area will be prioritised for 2019 and 2020. For objective 6, it is important to note that the supportive supervision guidance has recently been revised to align to a fully integrated approach (meaning supportive supervision visits and checklists now integrate all MCH programme components, not just EPI). While positive in terms of an overall approach, this has experienced some challenges in implementation (requiring further training and additional time to now perform supervision visits) particularly when there are also human resource constraints. Data continues to be an ongoing focus area in Lao and the reallocation discussions helped to re-prioritise activities, particularly in view of DHIS2 expansion and data analysis and use training.

Objective 1: Strengthening management capacity of immunization programme at all levels

Objective of the HSS grant (as per the HSS proposals or PSR)	This objective is focused on 1) programme management (planning and administration) and 2) support capacity building and retain skilled health and community workforce
Priority geographies / population groups or constraints to C&E addressed by the objective	The main priority areas are 12 districts of 5 provinces as identified in proposal where issue on programme management, capacity of health workers, low performance on IR coverage exist and ethnic majority. It also provide the support to 26 hard to reach districts of other provinces.
% activities conducted / budget utilisation	Total budget of this objective is \$2,579,000. In 2017, budget utilization was \$515,000, equal to 20% of the total budget for this objective.
Major activities implemented & Review of implementation progress including key successes & outcomes / activities not implemented or delayed / financial absorption	<ol style="list-style-type: none"> 1. Regular conduct supportive supervision from central to the provinces, from provinces to districts and from districts level to the point of delivery at health centres. 2. Implement additional technical staff to support project implementation (project coordinator, financial Manager and 3 supporting staff). 3. Administrative supports for central, province, district and health centre levels 4. Cost of services delivery that covers outreach service, transport of outreach, delivery fees, MCH/ANC services and children under five admitted hospital <p>Based on the above activities' implementation, key progress has been made as described following:</p> <ul style="list-style-type: none"> ● Completed an update guideline for EPI supportive supervision including simplified checklist tools and basic demographic, health and MCH, EPI information board including re-printing. ● On the job training on utilization of the above guideline for EPI activity supportive supervision and tools were conducted for provincial and district EPI staff focusing on new EPI managers and new technical 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. ● Supportive supervision: The activity has regularly conducted but not fully implemented as planned (4 times per year); it may be due to a number of factors such as availability of human resources and the decrease in programme performance is explained by the need to respond to the outbreak of cVDPV. The polio outbreak response require 11 national and sub-national SIAs (it run till March 2018). ● Immunization management guideline for EPI managers: It is

Joint Appraisal

	<p>ongoing finalization (adapted from WHO immunization in practice 2015 and Udon Model, Thailand) and expect to complete by the end of 2018.</p> <ul style="list-style-type: none"> • Training on immunization management: Six EPI staff (3 from central and 3 provincial EPI managers) have trained on immunization management in Thailand • Implement additional technical staff (programme coordinator recruited with updated TORs) to support project implementation. • District-level evaluation framework developed, which allows benchmarks for planning, management and execution of immunization activities at the subnational level to be assessed.
<p>Major activities planned for upcoming period (mention significant changes / budget reallocations and associated needs for technical assistance)</p>	<p>Based on existing and reallocation planning and new budget, the major activities planned for upcoming period are as following:</p> <ul style="list-style-type: none"> • Develop standard operating procedures specifically for the district level, including relevant job descriptions • Train the District Health Management Team (DHMT) on all governance issue • Appoint Village MCH Promoters and provide incentives and materials • Establish quarterly review meetings on MCH outcomes at district and community level • The ICC supported by NIP and partners to review and update its TOR including setup and SOP of respective working groups • Conduct supportive and supervision to the prioritized districts as planned • Finalized immunization training manual for provincial and district EPI managers and conduct cascade training for provincial and districts • Implement additional technical staff (1 technical staff and 1 solid financial & accounting staff with agreed TOR between Gavi and NIP) to support the project implementation. • Trial of evaluation framework of district level planning, management and execution in two provinces, to identify and address specific gaps in these areas (also relevant to objective 2). • Develop and implement operational/activity monitoring mechanism
<p>Objective 2: Improve service delivery and coverage rate with current vaccines</p>	
<p>Objective of the HSS grant (as per the HSS proposals or PSR)</p>	<p>This objective is focus on scale-up and improve accessibility and quality of service delivery (including community level services and implementation support: outreach, access, social mobilization).</p>
<p>Priority geographies / population groups or constraints to C&E addressed by the objective</p>	<p>The main priority areas are 12 districts of 5 provinces as identified in proposal where issue on programme management, capacity of health workers, low performance on IR coverage exist and ethnic's majority. It also provide the support to 26 hard to reach districts of other provinces.</p>
<p>% activities conducted / budget utilisation</p>	<p>Total budget for this objective is \$1,622,000. In 2017, budget utilization was \$325,000, equals to 20% of this objective.</p>
<p>Major activities implemented & Review of implementation progress including key successes & outcomes / activities not implemented or delayed / financial absorption</p>	<ol style="list-style-type: none"> 1. Implement district and health centre micro planning 2. Periodic Intensification of routine immunization in identified Hard to Reach & High Risk Area <p>Some major progress has been made and recent achievements include the following:</p> <ul style="list-style-type: none"> • The micro planning guideline was completely re-updated and currently served as an operational implementation guideline for healthcare workers on micro planning for delivery of integrated

	<p>mother and child health and immunization services (fixed sites and outreach). Currently 54 districts, 400 health centers and 1000 district and health center staff of 12 provinces have been trained on micro planning using updated guideline.</p> <ul style="list-style-type: none"> ● Two additional rounds of catch-up campaign on routine immunization session conducted in 10 provinces of identified hard to reach and high risk areas. This was in supplement to the normal 4 routine outreach activities for districts with low immunization coverage. ● There is a good set-up of fixed site delivery across the country with regular (usually 5 days/week) provision of routine immunization. ● Outreach is performed regularly at least 4 times/year (albeit not always as planned). ● The practice of vaccine administration is appropriate and in line with safe injection standards. ● Immunization waste management is generally respecting recommended practices. ● In several district hospitals, the delivery of hepatitis B birth dose within 24 hours is being achieved. ● A good integration of immunization with the MCH services has been observed in some health facilities and at district and province levels. ● Fund flows are still a significant issue with cash transfers from NIP to recipient provinces blocked smoothly 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. ● Fund flow and budget planning at all level is highlighting areas of improvement, in particular around financial management and reporting detail and quality that impact on low budget absorption and expenditure entire the programme implementation.
<p>Major activities planned for upcoming period (mention significant changes / budget reallocations and associated needs for technical assistance)</p>	<p>Based on existing and reallocation planning and new budget, the major activities planned for upcoming period are as following:</p> <ul style="list-style-type: none"> ● Continue to implement microplan training for remaining districts and health enters and refresher may be delivered to some districts where low IR coverage remain dominant. ● Work across MoH services to strengthen fixed site services as part of the Health Sector Reform ● Conduct sub-national immunization days with intensified routine immunization during Q4 of each year in identified hard to reach districts ● Train teachers in Kindergarten, primary and secondary school on MCH/EPI card check (including HPV after 2019) ● Perform a check vaccination status at Kindergarten and school entry ● Provide guidance on the number of simultaneous injections to be given during the same outreach session based on NITAG recommendation ● Set up a service delivery accreditation system including SOPs ● Conduct regular mentoring and accreditation visits in collaboration with Paediatric and Obs/Gyn associations

Joint Appraisal

Objective 3: To strengthen the community demand for MNCH and Immunization services	
Objective of the HSS grant (as per the HSS proposals or PSR)	This objective is focus on 1) Empower community and other local decision makers and actors; and 2) Improve and use area-specific IEC activities at the community level
Priority geographies / population groups or constraints to C&E addressed by the objective	The main priority areas are 12 districts of 5 provinces as identified in proposal where issue on programme management, capacity of health workers, low performance on RI coverage exist and ethnic majority. It also provide the support to 26 hard to reach districts of other provinces.
% activities conducted / budget utilisation	Total budget for this objective is \$ 491,000. In 2017, budget utilization was \$100,000, equal to 20% of this objective
Major activities implemented & Review of implementation progress including key successes & outcomes / activities not implemented or delayed / financial absorption	<p>1. Demand creation intervention at community level for high risk areas with focus on social mobilization for traditional leaders in ethnic minority areas; school teachers; loudspeakers, development of IEC materials.</p> <p>Some major implementation progress has been made and recent achievements include the following:</p> <ul style="list-style-type: none"> • Major achievements have included strong coordination for immunization at all levels of the health system and creative and innovative use of new technologies to address communication challenges particularly with ethnic groups. • Influential authoritative support from District Administrators or Governors and village leaders appears to have a significant impact on social mobilization for immunization activities as evident from routine immunization and catch up campaign. • The use of information and communication technology and mobile technology in which USB cards were distributed to about 450 villages in 5 districts and about 120 villages in 4 districts. Portable liquid-crystal display (LCD) projectors and loud speakers were distributed in 200 villages with immunization audio-visual messages. • Cartoons animation have been developed distributed with messages translated from Lao language into five other minority languages to overcome the barrier of language and cultural differences. The content includes the vaccination calendar and common questions raised by parents or child care takers about vaccination. Districts and villages with low vaccination coverage were targeted with these cartoon animations. • Training in interpersonal communication (IPC) for doctors, nurses, community leaders in targeted provinces, districts, health facilities and community volunteers including village leaders. In addition, high-level advocacy has led to strong alliances with mass organizations including the Lao Women Union (LWU) and strong partnership with development partners and communities. • IEC 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 all conducted.
Major activities planned for upcoming period (mention significant changes / budget reallocations and associated needs for	<p>Based on existing and reallocation planning and new budget, the major activities planned for upcoming period are as following:</p> <ul style="list-style-type: none"> • Use WHO TIP tool or similar methodology to identify MCH/EPI communication and behaviour change approaches to improve

Joint Appraisal

technical assistance	<p>vaccine acceptance, specifically in ethnic and some specific urban populations and derive lessons learned;</p> <ul style="list-style-type: none"> ● Establish regular village health nights in priority villages and communities ● Set up loudspeaker systems in remote villages ● Conduct advocacy meetings with medical and nursing associations and relevant ministries including MoE and others and partners to enhance communication approaches ● Identify key messages on immunization law into other immunization materials produced by MOH, partners and printing ● Conduct immunization Law advocacy and dissemination meetings ● Develop and distribute training packages for parents / caregivers (parent schools) ● Provide guidance on provision of IEC at immunization sessions and conduct appropriate district and HC level trainings.
Objective 4: To maintain and improve the cold chain and logistic system including cold chain vaccine management	
Objective of the HSS grant (as per the HSS proposals or PSR)	<p>This is mainly focus on strengthening procurement & supply chain management system (including access to essential medicines and commodities management)</p>
Priority geographies / population groups or constraints to C&E addressed by the objective	<p>The main priority areas are 12 districts of 5 provinces as identified in proposal where issue on programme management, capacity of health workers, low performance on RI coverage exist and ethnic majority. It also provide the support to 26 hard to reach districts of other provinces.</p>
% activities conducted / budget utilisation	<p>Total budget for this objective is \$1,400,000. In 2017, budget utilization was \$284,000, equal to 20% of this objective</p>
Major activities implemented & Review of implementation progress including key successes & outcomes / activities not implemented or delayed / financial absorption	<p>Major activities implemented as following:</p> <ol style="list-style-type: none"> 1. Cold Chain Inventory update 2. Training on cold chain preventive maintenance and vaccine management at the district level 3. Cold Chain replacement plan (5 years) 4. Transportation (motorbikes) for the health center staff and district EPI managers, for outreach services and supervision 5. Improvement and branding of the vaccination room <p>Some major implementation progress has been made and recent achievements include the following:</p> <ul style="list-style-type: none"> ● 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. ● Currently 54 districts, 400 health centers and 1000 district and health center staff of 12 provinces have been trained on micro planning using updated guideline. ● Training: It is ongoing implemented and currently 54 districts, 400 health centers and 1000 district and health center staff of 12 provinces have been trained on cold chain preventive maintenance and vaccine management at the district level.
Major activities planned for upcoming period (mention significant changes / budget reallocations and associated needs for technical assistance)	<p>Based on existing and reallocation planning and new budget, the major activities planned for upcoming period are as following:</p> <ul style="list-style-type: none"> ○ Under ICC, establish national logistics working group ○ Establish 5 cold chain hubs ○ Procure 5 cold chain maintenance trucks with respective maintenance equipment

Joint Appraisal

	<ul style="list-style-type: none"> ○ Procure basic maintenance equipment for 13 provinces (those without hub) ○ Develop and trial new solutions to improve supply chain for vaccines, including potential integration with MoH wide supply chain strengthening program. ○ Improve and institutionalize regular inventory tracking system at national level and support inventory tracking at lower levels ○ Identify individuals in the MCH and NIP team and define responsibilities. ○ Work with partners to prepare for the transfer of responsibilities
Objective 5: To improve immunization safety including AEFI management and monitoring and health care waste management	
Objective of the HSS grant (as per the HSS proposals or PSR)	
Priority geographies / population groups or constraints to C&E addressed by the objective	<p>The main priority areas are 12 districts of 5 provinces as identified in proposal where issue on programme management, capacity of health workers, low performance on RI coverage exist and ethnic majority. It also provide the support to 26 hard to reach districts of other provinces.</p>
% activities conducted / budget utilisation	<p>Total budget for this objective is \$ 150,000. In 2017, budget utilization was \$30,000, equal to 20% of this objective</p>
Major activities implemented & Review of implementation progress including key successes & outcomes / activities not implemented or delayed / financial absorption	<p>Major activities implemented as following:</p> <ul style="list-style-type: none"> ● Drafted AEFI committee updated terms of reference, under review by Ministry of Health ● Strengthening management of Adverse Events following Immunization through national and subnational training activities ● Provision and installment of incinerators at provincial, district and health center level <p>Some implementation progress has been made and recent achievements include the following:</p> <ul style="list-style-type: none"> ● Completed procurement of 8 incinerators for provincial and districts ● All 8 incinerators handed over and completely installed (4 for districts and 4 for health centers) ● AEFIs trainings: in 2017, a national training of trainers on AEFI was conducted for 61 participants - 13 from Central + 48 participants from 8 provinces. This training brought together with EPI stakeholders responsible for reporting and managing AEFI with Food and Drug Department (FDD) stakeholders responsible for reporting and managing adverse drug reactions (ADR) ● In 2018, the AEFI training was rolled out in six provinces for provincial, district and health center staff including hospitals. About 303 Health worker benefited from the training.
Major activities planned for upcoming period (mention significant changes / budget reallocations and associated needs for technical assistance)	<p>Based on existing and reallocation planning and new budget, the major activities planned for upcoming period are as following:</p> <ul style="list-style-type: none"> ● Finalize revised AEFIs committee ● Finalize SOPs for AEFIs implementation based on Immunization law ● Train provincial and district teams in AEFI monitoring, reporting, field investigation and response

Joint Appraisal

Objective 6: Strengthen monitoring and evaluation capacity of EPI/MNCH	
Objective of the HSS grant (as per the HSS proposals or PSR)	Strengthen facility reporting and health information systems
Priority geographies / population groups or constraints to C&E addressed by the objective	The main priority areas are 12 districts of 5 provinces as identified in proposal where issue on programme management, capacity of health workers, low performance on RI coverage exist and ethnic majority. It also provide the support to 26 hard to reach districts of other provinces.
% activities conducted / budget utilisation	Total budget for this objective is \$ 1,290,000. In 2017, budget utilization was \$260,000, equal to 20% of this objective
Major activities implemented & Review of implementation progress including key successes & outcomes / activities not implemented or delayed / financial absorption	<p>Major activities implemented as following:</p> <ul style="list-style-type: none"> ● Strengthening Supportive Supervision for Vaccine Preventable Disease (VPDs) surveillance ● Annual meeting for central, provincial and district level ● Periodic Immunization Data Quality Assessment (3 provinces/year) <p>Some implementation progress has been made and recent achievements include the following:</p> <ul style="list-style-type: none"> ● Regular supportive supervision on VPDs was conducted (4 time per year) for low performance provinces namely Vientiane province, Xiengkhoung, Savannakhet, Phongsaly and Oudomxay. The major achievements were noted as following: <ul style="list-style-type: none"> - Weekly reporting of VPDs (AFR, AFP, diphtheria, pertussis, neonatal tetanus, non-neonatal tetanus) with zero-reporting and active search of AFP, AFR cases was implemented at the provincial level; - At least one dedicated surveillance focal point was available at all health facilities; - A budget dedicated for VPD surveillance activities was available at the provincial level with support from WHO; and - Sufficient supply and other necessary documents for VPD surveillance were available in the provincial health office. <p>Despite the achievements, some challenges remain:</p> <ul style="list-style-type: none"> - Not all suspected VPDs are fully investigated for appropriate response and some health facilities are relying on village health volunteers on investigating and reporting VPDs to the health facilities; - There is lack of adequate knowledge on the case definitions of VPDs among the health staff at the health facility level; - Supervision and communication on data issues and surveillance performances is weak between health staff from district health office and health facilities. <p>Communication through informal means (ex. WhatsApp) is increasingly replacing official channels.</p> <ul style="list-style-type: none"> ● Annual meeting at each level: Influential authoritative support from District Administrators or Governors and village leaders appears to have a significant impact on social mobilization for immunization activities. Efficient coordination is evident at

provincial, district and health facility levels as evidenced by monthly review meetings with community volunteers and leaders. These meetings with EPI at each level including hospitals and all health facilities are convened by the Provincial/District Health managers and are used as forums for reviewing progress, discussing issues, identifying solutions and providing feedback.

- Periodic Immunization Data Quality Assessment (DQAs) was conducted in 5 provinces (selected based on low performance coverage) in 2017 and the results are present as following:

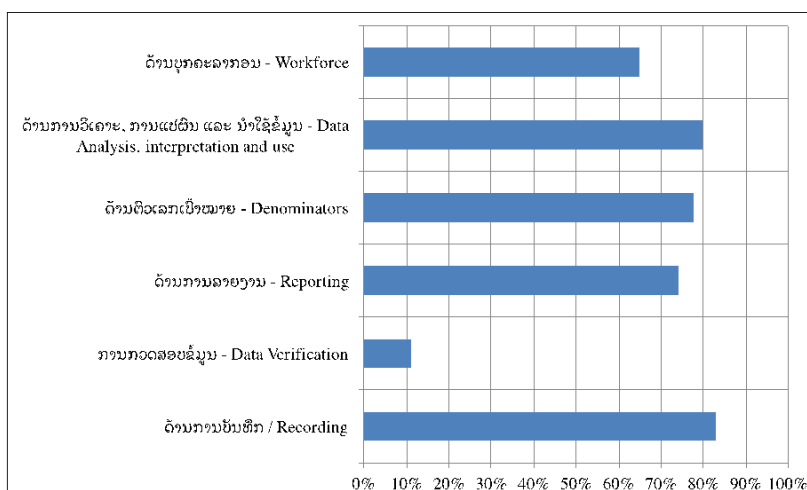
Results per province

	ດ້ານການບັນທຶກ / Recording	ການກວດສອບຂໍ້ມູນ - Data Verification	ດ້ານການລາຍງານ - Reporting	ດ້ານຕົວເລກເປົ້າໝາຍ - Denominators	ດ້ານການວິເຄາະ, ການແປສັນຍະພາບ ແລະ ນຳໃຊ້ຂໍ້ມູນ - Data Analysis, interpretation and use	ດ້ານບຸກຄະລາກອນ - Workforce
ແຂວງ ຫຼວງນໍ້າທາ / Louangnamtha Province	50%	106%	100%	50%	80%	50%
ແຂວງ ໄຊຍະບູລີ / Xayabuly Province	100%	100%	100%	100%	100%	0%
ແຂວງ ສະຫວັນນະເຂດ / Savannakhet Province	75%	0%	83%	100%	60%	50%
ແຂວງ ຊຽງຂວາງ / Xiengkhouang Province	100%	0%	100%	50%	80%	50%
ແຂວງ ອັດຕະປື / Attapeu Province	100%	100%	83%	50%	100%	100%

When unpacked and disaggregated per province. Xayabuly Province has the strongest system, showing weaknesses only in workforce. Savannakhet Province conversely has the weakest system and showed deficits in data verification, data analysis and use and workforce. Xeing Khouang also shows weaknesses in data verification, denominators and workforce.

At district level; the biggest gaps are found in data verification; where just over 10% of assessed districts have shown strength. Recording is the strongest area, most districts have good methods for recording service data on a regular and routine basis. Fig3 below shows a district level aggregate:

Average scores at district level.



Joint Appraisal

	<p>In order to close the identified gaps – particularly for data verification, it is recommended that supportive supervision should be stepped up and documented checks should be conducted on reported data. With regards denominators – population based denominators need to be harmonized across board i.e. wherever possible from facility level all the way up to the lower administrative level.</p>
<p>Major activities planned for upcoming period (mention significant changes / budget reallocations and associated needs for technical assistance)</p>	<p>Based on existing and reallocation planning and new budget, the major activities planned for upcoming period are as following:</p> <ul style="list-style-type: none"> • Further improve cVDPV surveillance and outbreak response • Establish CRS surveillance sentinel sites • Ensure appropriate domestic funding for continued high quality surveillance performance in view of polio (GPEI) ramp down and other transition processes • Establish monthly technical coordination meetings between NIP and NCLE at all levels to share VPD surveillance data and to plan immunization interventions accordingly.

4.3. Performance of Gavi CCEOP support (if country is receiving Gavi CCEOP support)

Gavi CCEOP proposal was written and submitted on 15th October 2018 for IRC review and Gavi approval. Four important documents had to be well-developed and finalized during 2018 in order for CCEOP application and future implementation to be successful :

1. Cold chain rehabilitation and expansion plan as submitted in the CCEOP application proposal;
2. projected coverage and equity improvements;
3. operational deployment plan and
4. equipment selection for different levels: provincial, district and health facility also either use of national grid electricity or solar powered refrigerators.

Implementation status: The overall CCE needs are estimated to be installed over a period of 2 years. In 2019 - All urgent needs are estimated to be installed with 3 priorities:

- 1) replacing non-functioning refrigerators as top priority,
- 2) expansion cold chain points at province and district levels
- 3) extension of cold chain points by installing equipment at health centers that do not have a cold chain equipment.

In 2020 - the scale up priority to install and replace old equipment (rehabilitation)

- Contribution of CCEOP to immunization performance:
 - 95% refrigerators functional in the country
 - 10% increase in fixed sites of vaccination
 - 25% reduction of outreach vaccination sites
- Future needs for technical assistance in implementing CCEOP support:
 1. Establish Project management team at national level
 2. Update the cold chain inventory and strengthen the deployment plan to allow installation of right equipment at right place especially at health centers that are being electrified in due course of time. This should be done by first quarter of 2019.
 3. Re adjust quantities of selected equipment needed based on the updated cold chain inventory, if needed for expansion, extension and rehabilitation; within the CCEOP application budget.
 4. Identify alternative source of funds to fully implement the rehabilitation plan especially For all unfunded equipment needs not covered by GAVI and CCEOP due to GAVI ceiling of country overall budget,
 5. NIP to fast track the setup of regional hubs to support CCEOP equipment installation as the hubs are central to CCEOP implementation
 6. NIP to take forward the CCIS implementation as per the description in cold chain maintenance plan and use CCIS for CCEOP implementation tracking

Joint Appraisal

7. NIP/Partners to engage TA for implementation of CCEOP deployment plan
8. NIP to establish the national policies on cold chain maintenance as per stipulated in cold chain maintenance plan.

4.4. Financial management performance

1. Status of the programmes

The following table demonstrates the status of funds as per the last reported period ended 31 December 2016 for table 1 and Table 2 for 2017 based on expenditure reported.

Grant overview for 2016: Table 1.

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		8,215	Closed

Grant overview for 2017: Table 2.

Grant	Disbursed (2016) USD	Expenditure (2016) USD	Balance (2016) USD	Disbursed (2017) USD	Expenditure (2017) USD	Balance (2017) USD	Disbursed (2018) USD	Expenditure (Oct 2018) USD	Balance (2018) USD
HSS3 2016-2020	930,774	852,992	77,852	1,694,298	1,291,484	61,909	1,694,228	1,173,652	520,575

Implementation of this grant in 2017 has been in progress for each cost-line item matched against cost-activities delineated in the HSS3 grant. So far \$1,291,484 has been disbursed. In 2018, \$1,173,652 including \$61,909 carried over from 2017 has been disbursed in the first 10 months of 2018.

Fund flows are still a significant issue with cash transfers from NIP to recipient provinces blocked smoothly financial absorption and utilization at sub-national level due to issues related to:

- provincial banking constraints;
- Significant delays in executing programme activities at sub-national which resulted in delay submission of fund request to NIP;
- Unable to and delay reporting from previous quarter's expenditures.

PBF fund: Lao PDR's National Immunization Program received PBF from 2014 & 2015 in the total amount of \$ 2,289,629. So far \$ 1,958,629 has been disbursed (current balance, Oct 2018: \$ 331,000). Although NIP has issued the instruction letter to recipient provinces on how to manage and use this fund to improve immunization but no detailed budgets were prepared at the sub-national level. This fund once disbursed was reported as expense, which was not reflective of the actual outcome.

Financial management for all grants are questionable. No system was in place to tracking funds/advances disbursed to Provinces and also there was no follow up, to ensure these funds were

Joint Appraisal

utilised as planned, and no system in place to ensure the Provinces provided accountabilities, by reporting on the actual expenditures incurred.

The final PCA report was shared with Lao Ministry of Health and NIP in 2016 and GAVI audit preliminary report 2018, highlighting serious areas that requires improvement, in particular around financial management and reporting detail and quality (detail, refer to PCA and Gavi audit preliminary report 2018).

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.

The NIP is ongoing receiving technical financial assistance from GFA (sub-contract of GAVI) starting from February of 2018 for up to 12 months (end on March 2019) to 1) support the budgeting/planning, reporting and audit management related to Gavi grants and 2) support the timeliness of financial requests and documentation overall. The delivery during past 9 months is sub-optimal that cannot meet the high demand of NIP in an area of financial management and capacity building. GFA is currently deployed a temporary international financial consultant to continue supporting to NIP till a long term replacement is identified.

4.5. Transition planning

To prepare for transition the Government of Lao PDR in collaboration with partners has developed a five year Transition Plan for 2017-2021. The plan was approved in 2017 and takes a two-pronged approach. The first is to ensure higher Government investments into the health sector and immunisation programme. The second aims to strengthen the service delivery system to ensure sustained access to basic health services as Gavi support comes to an end in 2021.

As of October 2018, partners had implemented 80% of the 2018 transition grant amounts as per the consolidated reporting form.

With respect to Government of Lao PDR co-financing for vaccine procurement, there have been significant delays in the transfer of funds from GoL to UNICEF Supply Division. If this amount (\$742,000) is not paid by the end of 31 December 2018, Lao PDR will be considered as in default of Gavi co-financing policy and vaccine supply could be interrupted.

The reason for this delay is related to the flooding events that struck Lao PDR in July and August. The Government of Lao PDR had to use the vaccine procurement funding to respond to the numerous health emergencies around the country during the unusually heavy rainy season.

The transition plan describes the role of NIP and technical support from development partners, MOH will focus on six work-streams, aimed at achieving the objective of financial and programmatic sustainability during and after the accelerated transition period. These include:

- Immunisation financing and legislation and advocacy, which includes the implementation of a new "immunisation law";
- The strengthening of technical advice by building a vibrant NITAG as we have done during the course of 2017;
- Strengthening service delivery through investments in infrastructure and capacity building;
- Improving data quality and surveillance;
- And finally, increasing communication and demand generation to reaching every community

As the immunisation program has been largely dependent on funding from donors, Gavi transition is an immediate challenge which requires significant increases in domestic financing in health and specifically immunization. General government health expenditure (GGHE) as a % of general government expenditure (GGE) for 2017 was 7.2 lower than national target which is 9%. The 2017 percentage was also lower than the 2016 GGHE which was 7.6%.

So as the transition plan begins to implement, Gavi is presently gradually phase-out its support to cover

Joint Appraisal

operational and vaccine procurement costs. The Government has now committed to gradually take over all these costs, so that by 2021 Lao PDR will be fully funding all immunisation programme costs.

The Ministry of Health (MoH), and NIP in particular, have seen a significant increase in the allocated budget during the last five years. Still, Lao PDR is characterised by low levels of government spending on health.

The implementation concerning the transition from Gavi financial support, the understanding of the transition plan and its process is suboptimal at all levels, except among NIP and the partners at the national level. The need for placing the immunization transition plan in a broader health sector context require to be emphasized, especially as there are several fragmented transitions plans (HIV, Malaria, TB, Immunization).

5. TECHNICAL ASSISTANCE (TA)

For NIP

- International TA
 - Financial management (from GFA contracted by Gavi)
 - Establishment of regional cold chain hubs
- Local TA
 - Assistant programme coordinator (1)
 - Financial manager
 - Three (3) financial officers for province
 - Data management
 - Five (5) regional cold chain officers for 5 cold chain hubs in province
 - Three (3) communication officers for province
 - Organizational development consultant (1) - human resource development including recruitment, drafting job description, STC TOR, develop toolkit for EPI on-boarding, manage all in-service training/capacity components
 - Five (5) ISDS mentors and four (4) trainees

For partners - refer to TCA submissions -

<https://docs.google.com/spreadsheets/d/17OU546b0nM2OPdS5294zs2EULfEwEZtfKE8ksTQGNc8/edit#gid=348990623>

UPDATE OF FINDINGS FROM PREVIOUS JOINT APPRAISAL

Prioritised actions from previous Joint Appraisal	Current status
1. Preparation for new vaccine introduction in 2019 (Rota and HPV vaccines) and monitoring of MR2 roll-out; introduction of new presentation of PCV	Done / on track
2. OPV campaign	Done
3. International EPI review (following previous review in 2012)	Done
4. Implement intensification of routine immunization in hard to reach and high risk areas	Ongoing
5. Strengthening the capacity of the provincial and district EPI managers	Ongoing – two rounds already completed
6. Improving cold chain and logistics management at province and district levels	Ongoing – but facing challenges

Joint Appraisal

7. Implement microplan training at district and health center levels	Ongoing
8. Implement supportive supervision	Ongoing – but facing challenges
9. Implement DQIP plan	Ongoing – reviewed progress thoroughly as part of this Joint Appraisal
10. Implement communication immunization activities based on communication plan 2016-2020, including KAP study	Ongoing – but facing challenges
11. Strengthen AEFI reporting and management including re-establishment of AEFI committee	Needs further attention (priority for 2019)
Additional significant IRC / HLRP recommendations (if applicable)	Current status

ACTION PLAN: SUMMARY OF FINDINGS, ACTIONS AND RESOURCE/SUPPORT NEEDS IDENTIFIED AND AGREED DURING THE JOINT APPRAISAL

Overview of key activities planned for the next year

1. Strengthen the programme management capacity (including financial management) at all levels - national, provincial and district
2. Preparation for new vaccine introduction in 2019 (HPV RI and MAC)
3. Monitor introduction of new presentations (2018 PCV switch and 2019 MR switch)
4. MR-OPV campaign - Q4
5. Implement intensification of routine immunization in hard to reach and high risk areas
6. Improving cold chain and logistics management at province, district, and facility levels
7. Continue to implement microplan training at district and health center levels, monitor quality of and adherence to microplan
8. Implement supportive supervision using improved tools
9. Implementation of measles-rubella elimination plan of action
10. Continue to implement DQIP plan, with priority placed on:
 - a. LMIS - expansion of mSupply to include vaccines
 - b. CCE management, maintenance, and efficient/timely deployment
 - c. Feasibility study related to electronic immunization/health registry
 - d. Strengthen AEFI reporting and management including re-establishment of AEFI committee
11. Implement communication immunization activities based on communication plan 2016-2020, including KAP study
12. Development and sign-off of strategic communication plan

Once the Gavi audit findings are finalized, additional priority activities not listed above will be added.

Key finding/Action 1	Immunization Supply chain (including cold chain and vaccine management)
Current response	In 2018, the CCE inventory was updated to reflect current functional status On vaccine management, CHAI is beginning to expand the implementation of mSupply to include vaccine and immunization products
Agreed country actions	a. vaccine management LMIS - in 2019, projections of \$ 9m to be spent on vaccines alone including HPV (routine and MAC)

Joint Appraisal

	<p>b. CCE management:</p> <ul style="list-style-type: none"> ● development of the operational deployment plan for CCEOP implementation ● Improvement of the VEMA IP: cold chain inventory
Expected outputs / results	<ul style="list-style-type: none"> ● Completion of CCEOP operational deployment plan ● Successful roll out the CCEOP ● Updated cold chain inventory
Associated timeline	Throughout the year
Required resources / support	Yes
Key finding/Action 2	Immunization service delivery
Current response	<p>NIP used domestic and HSS funds to support 2 rounds of outreach () as well as routine supervision visits</p> <p>Two cohorts of EPI managers have been trained (approximately 55 people) in thailand.</p> <p>WHO has supported the development of an MCH/EPI backpack to facilitate outreach services including the development of a job aide to support preparation before outreach sessions.</p> <p>NIP is working with WHO and UNICEF to implement quarterly community meetings (QCM) to strengthen the linkages between the health system and community leaders.</p>
Agreed country actions	<ol style="list-style-type: none"> Strengthening HCW capacity Building linkages between health system and communities IEC/IPC material development Strengthening community health systems to increase use of fixed posts Roll-out of specific ethnics targeted strategy (communication and delivery)
Expected outputs / results	<ul style="list-style-type: none"> ● Regular quarterly meetings between health centre staff and the communities established with the aim at boosting coverage ● IEC/IPC materials developed and implemented ● Strategy to improve/increase use of fixed posts developed and implemented
Associated timeline	Throughout the year
Required resources / support	Yes
Key finding/Action 3	DATA - DQIP implementation and monitoring
Current response	<p>This is currently implemented through STOP/ISDS</p> <ul style="list-style-type: none"> ● Availability and use of standardized immunization and surveillance recording and reporting tools improved. ● Recording and reporting of EPI and surveillance data improved ● Knowledge on calculations of immunization and surveillance indicators (dropout-rate, coverage, non-polio AFP (NPAFP) rate improved. ● Improved data analysis and use culture – most provinces and districts now regularly analyze, chart and monitor their immunization coverage and dropout rates. ● Improvements in immunization data archiving and provision of feedback to health facilities on monthly reports.

Joint Appraisal

	<ul style="list-style-type: none"> Improved congruence between different EPI data sources.
Agreed country actions	<ol style="list-style-type: none"> Roll-out of data management SOP including develop of job aid Strengthen DHIS2 roll-out and use, especially at sub-national levels Feasibility study for electronic health/immunization registry Finalize AEFI committee TOR; strengthen subnational capacity to report and manage (including appropriated investigation and communication back to community and family)
Expected outputs / results	<ul style="list-style-type: none"> SOP for data management including job aid developed and implemented DHIS2 roll out at sub-national levels AEFI committee including TOR finalized and implemented
Associated timeline	<ul style="list-style-type: none"> Q1 of 2019: SOP for data management including job aid developed Q3 of 2019: AEFI committee including TOR finalized and implemented Throughout the year: DHIS2 roll out at sub-national levels
Required resources / support	Yes
Key finding/Action 4	LMC, governance
Current response	The NIP convened regular internal meetings to improve management and coordination. Meetings and planning sessions were also conducted with partners to set priorities and plan for specific activities including the OPV SIA, EPI review, and cMYP development
Agreed country actions	<ol style="list-style-type: none"> Appoint new NIP Manager Propose establishment of technical working groups (logistics, data, transition) to support ICC
Expected outputs / results	<ul style="list-style-type: none"> New EPI manager appointed At least one (1) technical working group established including TOR especially logistics WG covering vaccine and cold chain management
Associated timeline	Q3 of 2019
Required resources / support	Yes
Key finding/Action 5	Immunization financing sustainability and financial management
Current response	<p>Immunization financing sustainability</p> <ul style="list-style-type: none"> Transition plan approved by MoH and is being implemented; GoL co-financing for Gavi-supported vaccines paid in Q4 2018 <p>Financial management</p> <ul style="list-style-type: none"> GFA technical assistance provided to NIP since Feb 2017
Agreed country actions	<p>Immunization financing sustainability</p> <ol style="list-style-type: none"> Improve ICC engagement, including DoF, DPC, and MOF Consider establishment of Transition TWG to monitor progress on domestic resource mobilization With WHO, Engage in current development of Health Financing Strategy for 2021-2025 <p>financial management</p> <ol style="list-style-type: none"> Strengthen management and oversight of Gavi HSS grant implementation, Capacity building on financial management Establish internal control mechanism and financial procedures Implement recommendations from external audits and Gavi assessments;
Expected outputs / results	<p>Immunization financing sustainability</p> <ul style="list-style-type: none"> Ensure sufficient domestic resources exists for smooth transition as co-

Joint Appraisal

	<p>financing support for vaccines decreases in 2019</p> <ul style="list-style-type: none"> • In 2019, include expanded budget for 2020 and beyond as Gavi HSS support decreases <p>Financial management</p> <ul style="list-style-type: none"> • Financial Management team is fully functioning and works in compliance with MoH and MoF policies and procedures, GAVI guidelines and international practice • Internal control mechanism and financial procedures are established and are implemented and minimize the risk of fraud and misuse of GAVI funds • Audit recommendations are implemented and followed up
Associated timeline	Throughout the year
Required resources / support	Yes, from GFA

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

The joint appraisal was conducted during November 19-23 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.

The JA report was drafted by NIP with input from partners. The Director of the MCH Center presented the JA findings and recommendations to the ICC on November 23 for in-principle endorsement along with the presentation of the ongoing Gavi transition support to Lao PDR and beyond transition, MR elimination action plan and cMYP.

Joint Appraisal

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 in the case that key reporting requirements (marked with *) are not complied with, Gavi support will not be reviewed for renewal.**

	Yes	No	Not applicable
Grant Performance Framework (GPF) * reporting against all due indicators	X		
Financial Reports *			
Periodic financial reports	X		
Annual financial statement	X		
Annual financial audit report	X		
End of year stock level report (which is normally provided by 15 May as part of the vaccine renewal request) *	X		
Campaign reports *			
Supplementary Immunisation Activity technical report	X		
Campaign coverage survey report	X		
Immunisation financing and expenditure information	X		
Data quality and survey reporting			
Annual data quality desk review	X		
Data improvement plan (DIP)	X		
Progress report on data improvement plan implementation	X		
In-depth data assessment (conducted in the last five years)	X		
Nationally representative coverage survey (conducted in the last five years)	X		
Annual progress update on the Effective Vaccine Management (EVM) improvement plan	X		
CCEOP: updated CCE inventory	X		
Post Introduction Evaluation (PIE)			X
Measles & rubella situation analysis and 5 year plan	X		
Operational plan for the immunisation programme	X		
HSS end of grant evaluation report			X
HPV specific reports			X
Reporting by partners on TCA and PEF functions	X		