EPI Review Mission
in Afghanistan

From 21 January to 12 February 2017

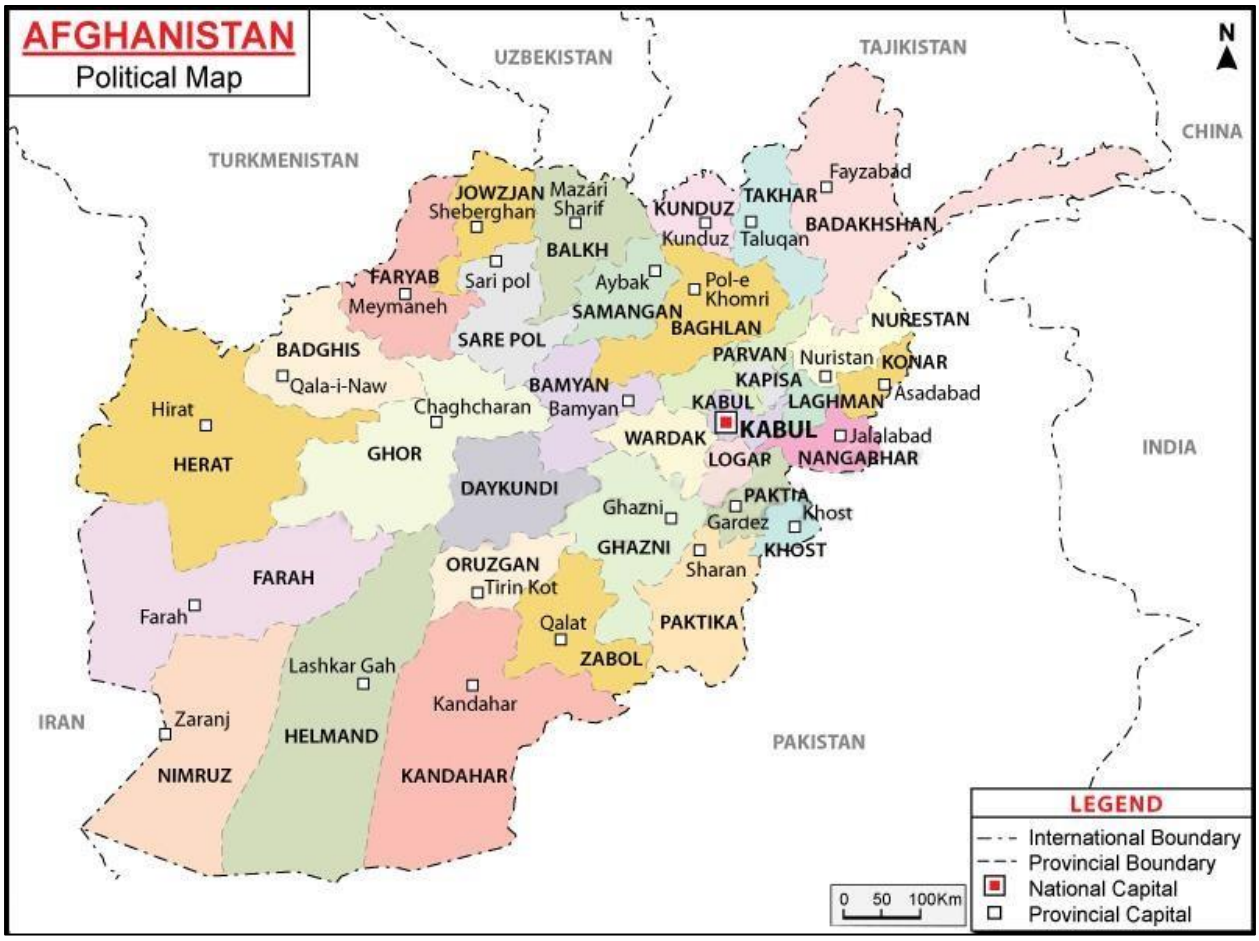


Table of contents

Contents

Acronyms

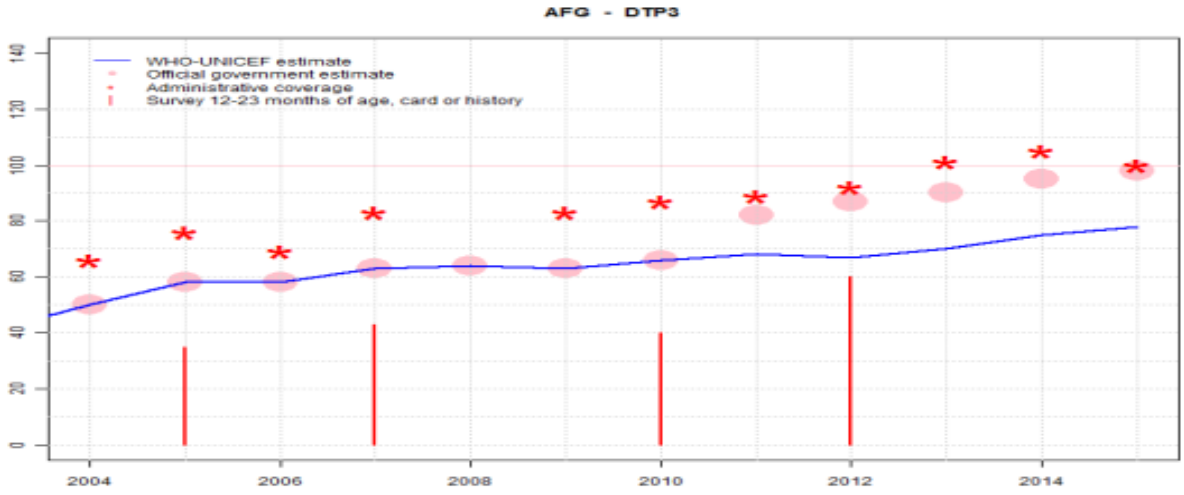
ACSM	Advocacy Communication Social Mobilization
AEFI	Adverse Events Following Immunization
AFP	Acute Flaccid Paralysis
AR	Accuracy Ratio
BCG	Bacillus Calmette-Guérin
BPHS	Basic Package of Health Services
C&SM	Communication and social mobilization.
CCE	Cold Chain Equipment
CCEOP	Cold chain equipment optimization platform.
CHWs	Community Health Workers
cMYP	Comprehensive Multi-Year Plan
CSOs	Civil Society Organizations
CSR	Communicable Disease Surveillance and Response
DQS	Data Quality Self-Assessment
DTwP	Diphtheria Tetanus Whole cell Pertussis
EPHS	Essential Package of Hospital Services
EPI	Expanded Program on Immunization
EVM	Effective Vaccine Management
GAVI	Global Alliance for Vaccines and Immunization (now Gavi the vaccine alliance
GAVI HSS	GAVI Health System Strengthening
GCMU	Grants and contracts management Unit
GOJ	Government of Japan
GVAP	Global Vaccine Action Plan
Hep-B	Hepatitis-B
HF	Health Facility
HIS	Health Information System
HR	Human Resources
IEC	Information Education Communication
ILR	Ice Liner

IPV	Inactivated (Injectable) Polio Vaccine
JDs	Job Descriptions
JICA	Japan International Cooperation Agency
MOPH	Ministry Of Public Health
NGOs	Non-Governmental Organizations
NIP	National Immunization Program
PEI	Polio Eradication Initiative
PEMT	Provincial EPI management Team
PHC	Primary Health Care
PHD	Planning Health Department
PoA	Plan of Action
PPP	Public Private Partnership
REMT	Regional EPI Management Team
RI	Routine Immunization
SOPs	Standard Operating Procedures
UNICEF	United Nations International Children's Emergency Fund
VLMIS	Vaccine Logistic Management Information System
VPDs	Vaccine Preventable Diseases
VSSM	Vaccine Supply Stock Management
WHO	World Health Organization
WUENIC	WHO/UNICEF Estimates of National Immunization Coverage

Executive summary

EPI in Afghanistan though constantly facing challenges is making steady progress. It has been progressively, increasing the immunization coverage, adding new vaccines to the schedule and trying to limit the circulation of wild Polio Virus, with only 2 confirmed cases reported till end Feb 2017.

The reported DPT3 containing vaccine i.e Penta3 coverage has been increased from 82% in 2014 to 90% by the end of 2015[1]. But there are considerable variations in DPT3 reported coverage, WUENIC and coverage evaluation survey (2013). As per WUENIC, DTP3 containing vaccination coverage increased from 71% in 2013 to 78% in 2015. The Data Quality assessment and the subsequent data quality improvement plan addresses this discrepancy between different coverage dataestimates and aim at reducing this difference



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	50	58	58	63	64	63	66	68	67	70	75	78
stimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	50	58	58	63	64	63	66	82	87	90	95	98
dministrative	66	76	69	83	NA	83	87	89	92	101	105	100
Survey	NA	35	NA	43	NA	NA	40	NA	60	NA	NA	NA

Currently Eleven antigens (BCG, DTP-HepB-Hib, HepB birth dose, Measles, OPV, IPV, PCV13, TT for pregnant women and people at risk of tetanus) are being provided by EPI. As part of polio endgame strategy, IPV was introduced in Sep 2015 and switch from tOPV to bOPV took place in April 2016.

The number of Immunization service delivery sites increased from 1,571 in 2015 to 1,767 by the end of 2016. New vaccines (Penta, PCV13, IPV, Hep B including birth dose in selected sites) were introduced into NIP schedule over past years.

Afghanistan is availing Gavi support under various windows and has received so far[2] support worth US$ 245,134,291 against the committed amount of US $ 275,739,761. The current HSS3

[1] The latest available official figures by end Feb 2017.
[2] As of 20 Dec 2017.

approved support is worth US$ $21,133,677, which would be critical to improve health systems with focus on Immunization outcomes.

Country has currently applied for GAVI support for introduction of Rota Virus Vaccine in RI in Q4 2017 and CCEOP for cold chain.

Key finding of the EPI Review

Political Commitment

There is strong political commitments for PEI at all levels but not to the same extent for RI.

Recommendation

It is important that political commitment at all levels for RI is built through effective advocacy.

Policy and Planning

EPI has clear policy directions, based on National Health Policy 2015 and National Health Strategy 2016-2020. There is well developed cMYP for EPI 2015-2019 which had been updated Dec 2016. Though Annual POA for EPI and Microplanning guidelines (2010), which are planned to be updated in 2017, are available at national level they are not available and sub national level in most of the cases. There were no or very sketchy micro plans for RI available at most of the visited HF sites.

Recommendation
It is imperative that due attention is given on ensuring development of micro plans for RI at all levels. It would require assistance not only as training but working together by trained National and Regional, including NGO staff with HF staff for development of micro plans as per WHO/UNICEF guidelines.

Support of PEI

A plan of action for PEI/EPI synergy has been prepared for 5 priority provinces. PEI intending to dedicate 20% of its staff time for RI, noting that responsibility remains with implementing NGOs/NEPI and with agreed accountability frame work.

Recommendation
This support should be factored in while developing/ updating Annual POAs

Advocacy and Communication

At national level there is a focal person and IEC materials are prepared for RI and SIAs. Many of the visited HF staff reported that community /religious groups are involved for RI. However no focal person or C&SM plan at provincial and below level were observed. No local social mobilizations activities are carried over at HF/provincial level mainly because of no funds are available at these levels for this purpose. In most cases there were low social mobilization activities at HF level and almost no use of Polio communication network for RI.

Recommendation

Develop and implement ACSM strategic plan at National and Regional level. Polio communication network support for RI should be used. In order to promote social mobilization activities at HF level, resources should be allocated and consider adding to future NGO contracts some funds for this purpose.

Vaccine Procurement and management

Vaccines are procured through UNICEF and vaccine stock, supplies and temperature management is generally good at all levels. Gavi Co-Financing is on time. MOPH is not paying for traditional vaccines. Donors (GOJ/JICA) who support traditional vaccines has indicated to stop this support by end 2017 which is alarming. MOPH also does not take responsibility of customs clearances of vaccines which is currently being done by UNICEF.

Recommendation

MOPH to develop on top urgent basis a plan for ensuring sustainability of vaccine supply. It should also plan to undertake customs clearance of vaccines in coming years.

Vaccination Service Delivery, Injection safety and waste disposal

Most of vaccination service delivery is through NGOS contracted out by GCMU. There is good cooperation with private sector/non MOPH service provides in large cities. Vaccinators Manual has been updated in 2015. There is more extensive role of NGOs in under SEHAT project in 23 provinces whereby NGOs reach all target children, provide refresher training for EPI staff and provide resources for outreach. Number of fixed vaccination sites is being gradually increased. However there is no proper use of microplanning strategy in man y HFs, leaving out some areas in certain cases and often with no clear strategy for reaching hard to reach. Not all the visited sites had vaccinator's manual for ready reference. Good injection safety practices have been observed.

Recommendation

Proper microplanning for vaccination service delivery under supervision of NEPI and regular monitoring of micro plans implementation is required. Adequate resources for outreach and mobile should be made available. The latest versions of vaccinator manual should be available at all HFs.

Reporting of NEPI per microplanning for vaccination service delivery under supervision of NEPI

There is a standard uniform reporting system at all levels. Well-designed EPI HMIS is used for data management at National level and by PEMT and NGOs. EPI HMIS is linked to MOPH HMIS. There are Focal persons at national and provincial level for data management. A data quality improvement plan has been devolved and earmarked support for its implementation is available. The quality of data needs considerable improvement. Different denominators i.e CSO, UN data and Polio figures are being used by EPI and GCMU for NGOs: The completeness and timeliness of reporting is not optimum. In some provinces there is no proper record keeping. The data AR at provincial level was estimated as 99% and at HF level as 97% i.e slight trend of over reporting.

Recommendations

Data quality improvement plan should be properly implemented. Mechanism need to be developed for timely reporting especially from remote area as planed with support of Polio in 2017. Consensus should be developed at MOP level on use of standard data for EPI. Services of available Polio staff as well as local information with them may be used for local house hold listing for more accurate information on denominators. The EPI CES planned for 2017, should be implemented on priority as it would be helpful to provide more reliable information on coverage considering the current inconsistencies in the data.

Monitoring and Supervision

A comprehensive monitoring and supportive supervision plan at national level is available along with well-designed checklist which is used at provincial and HF level. HF have supervisors visit book often well used for feedback. Regular EPI desk review meetings are held at various levels. Capacity of provincial level to use data for action needs to be build. REMT/PEMT are not fully involved in monitoring of the NGOs service delivery. Supervisory plans at provincial level are partially implemented mainly because of lack of funds

Recommendations

Supervisors should be regularly provided refresher training for monitoring and supervision and the supervisory plan should be implemented. The opportunity of supervision by the national team should be utilized for on job training of REMT/PEMT. After adequate training REMT/PEMT should be empowered for monitoring EPI service delivery by NGOs. GCMU should be invited to EPI meetings related to discussion on service delivery. Adequate budget and resources need to be allocated for supervision

Human Resources

Job description for NEPI and REMT/PEMT are available. Some NGOs provide training to staff. Most HFs has 2 vaccinators as per policy. Though EPI organogram is there but it requires updating Most of the vaccinators have not taken initial training as per policy. Refresher training is not provided systematically. Because of low and variable remuneration high turnover of vaccinators. In some cases salary not received on time.

Recommendations

It is proposed to undertake an in depth HR review and develop a plan for provision of fully trained and qualified staff for EPI services, including those hired by NGOs and with maximum possible female recruitment . In meanwhile NEPI should continue providing initial EPI training as per policy and NEPI/REMT to be involved in assuring the quality of the training

Surveillance

At National level Surveillance is well coordinated through two focal points. Measles surveillance is in place though requires improvement as not fully case based. Overall the surveillance system is fragmented with DEWS, EPI, AFP, HMIS, having separate surveillance mechanisms. The provincial level is not involved in surveillance except to some extents during the outbreaks.

Measles surveillance is supported by well-functioning laboratory. IBVPD/Rota virus lab surveillance is in place. Results are regularly shared with EMR surveillance network. Laboratory key staff has received required trainings. The AEFI guidelines though developed at National level were not available in most of the visited HFs. The AEFI system is in reality not functional.

Recommendations

MOPH should develop Integrated VPDs surveillance considering Integration of diseases and entities. It is proposed to undertake in depth Measles & IBVPD/Rota Surveillance review. Provincial level should be involved in surveillance activities including data sharing for VPD. MOPH/EPI should consider expanding lab IBVPD/Rotavirus lab surveillance as it is important for studying impact of new vaccine introduction. The concerned staff from lab should be involved in related EPI meetings. AEFI system should be made operational.

Post Introduction Evaluation (PIE) of IPV

IPV was introduced nationwide in September 2015 in Routine immunization program, as single dose at 14 weeks of age along with Penta3 and OPV3. Introduction plan was well developed and it was available at provincial and majority of the visited health facilities. All vaccinators (visited sites) received appropriate training. There was official launching at national, provincial and some health facilities. IPV supply was sufficient and on time. No stock out of IPV has been reported and there is enough available cold chain space. Though no AEFI is reported but this needs to be interpreted with caution as AEFI system not well functioning. Overall IPV was well accepted by the community.

Recommended Priority Areas for Action

As with any progressive programme all the EPI components requires improvement and strengthening, however the following are recommended for action on priority basis.

- Ensuring routine vaccine supplies post 2017
- Quality Microplanning
- Improving Reporting & Data Quality
- Improving Monitoring & Supervision
- Strengthening VPD & AEFI Surveillance
- Improving Communication & Social Mobilization

Consideration for the review

While all efforts were made to have as representative sample of visited sites as much as possible, but due to various limitations in context of Afghanistan i.e mainly because of geographical in accessibility due to harsh weather and the security situation, considerable compromise had to be made.

EPI Back ground in Afghanistan

Afghanistan's Expanded Programme on Immunization (EPI) was first initiated in 1978 and the Government of Afghanistan (GOA) through the Ministry of Public Health (MOPH) continues to place high priority on immunization. A national organizational structure, National EPI, for the management and implementation of immunization services was initiated by the Ministry of Public Health with the collaboration of international partners (WHO and UNICEF). EPI become an important part of the Basic Package of Health Services (BPHS) in 2003.

The Government of Afghanistan has recognized the importance of immunization and included it as one of the four health targets in the Government's "Afghanistan Compact 2006" document providing the basis for the Afghan National Development Strategy (ANDS).

Objectives of EPI

Goal of the Afghan Immunization Plan is to decrease VPD associated morbidity and mortality, as per cMYP 2015-2019:

- Measles incidence reduced to less than 5 cases per million population by 2019 with optimally functioning surveillance system
- Polio virus transmission is eradicated by the end of 2017 and sustained till global certification is obtained
- Neonatal death caused by neonatal tetanus reduced to less than 1 case per 1000 live births by 2019

The objective of the Afghan Immunization Plan is to improve performance of the immunization system that is measured in terms of coverage and equity as listed below:

Indicators	Baseline 2013	2015	2016	2017	2018	2019
1. Increase DTP3 coverage	59.7%	70%	75%	80%	85%	90%
2. Increase Measles 1 coverage	58.8%	70%	75%	80%	85%	90%
3. Increase the % of population protected at birth from neonatal tetanus	50%	60%	65%	70%	75%	80%
4. Increase OPV3 coverage	63.5%	70%	75%	80%	85%	90%

5. Increase PCV13	n/a	70%	75%	80%	85%	90%
6. Increase IPV coverage	n/a	30%	75%	80%	85%	90%
7. Increase Rota vaccine coverage	n/a			10%	80%	90%
8. Increase the % of children fully immunized (% of children aged 12-23 months who receive all basic vaccinations)	51%	60%	65%	70%	75%	80%
9. Improve geographical equity - % of districts that have at or above 80% DTP3 coverage	67%	69%	72%	75%	78%	80%
10. Improve socio-economic equity - DTP3 coverage in the lowest wealth quintile is less than % points of the coverage in the highest wealth quintile	22%	20%	18%	15%	12%	10%
11. Decrease dropout rate - % point difference between DTP1 and DTP3 coverage	18.6%%	17%	15%	13%	11%	10%
12. Increased demand - % of children whose mothers intend to vaccinate children	No Data	Increased by 5% from the baseline	Increased by 10% from the baseline	Increased by 15% from the baseline	Increased by 20% from the baseline	Increased by 25% from the baseline

EPI Management

The EPI in Afghanistan has three tier management system. At the national level NEPI along with other programmes is part of the Preventive Medicine & PHC Directorate. The National EPI is responsible for planning, co-ordination, vaccine procurement and supply information collection and sharing, monitoring and evaluation and collaboration with other partners. At the provincial level, EPI service integrated into the public health system are part of the provincial health directorate. At the district level, the District Public Health Officer manages EPI activities.

Immunization service delivery

Immunization is one of the key components of BPHS provided mainly by NGOs through the process of contracting out. Despite the prolonged conflict, through the implementation of the Basic Package of Services, immunization service delivery has expanded from 870 EPI fixed centers in 2004 to more than 1767 fixed centers by the end of 2016. More than 3400 personnel including management staffs are engaged in providing immunization services throughout the country. More than half of the children and women receive vaccines through outreach and mobile strategies:

Reference to WUENIC the reported DPT3 coverage has improved from 41% in 2001 to 78% in 2015. BCG coverage has increased from 38% in 2001 to 86% in 2015. Measles (MCV1) coverage has increased from 35% in 2001 to 68 % in 2015. There is significant

improvement in TT2+ coverage among the pregnant women (75% in 2011). However, coverage measured by survey is substantially lower. (http://www.who.int/immunization_monitoring/data/afg.pdf). A comprehensive vaccine coverage survey is planned in summer 2017 and should help inform key steps forward to strengthen the EPI program.

Immunization Schedule

The following is the current immunization schedule in Afghanistan

	Birth	6 weeks	10 weeks	14 weeks	9 months	18 months
BCG	+					
HepB*	+					
OPV	+	+	+	+	+	
IPV				+		
DTwP-HepB-Hib		+	+	+		
PCV		+	+	+		
MCV1					+	
MCV2						+

*Hep B birth dose is still not introduced nationwide

TT vaccination schedule for CBAW

Dose	Schedule	Dose	Schedule
TT1	At first contact	TT4	After one year
TT2	After one month	TT5	After one year
TT3	After six months		

EPI review process

Objective and expected outcome

The overall objectives of the comprehensive EPI review in Afghanistan were, to systematically review the different components of the Expanded Programme on Immunization (EPI), using WHO EMR EPI review tool at national and sub national level, to determine the status of EPI with regards to strengths, weaknesses and opportunities and to suggest actions for further improvement to enable EPI achieve its national goals.

The specific objectives of the comprehensive EPI review were to assess the following main programmatic areas, within the overall context of health systems:

- Political commitment and legal basis of EPI
- Programme planning and management.
- Programme Operations and vaccination service delivery system
- Cold chain and vaccine supply and logistics
- Monitoring and evaluation, including reporting system and data quality
- Vaccine preventable diseases surveillance.

The information resulting from the review will thus be utilized by the MOPH/EPI Afghanistan for decision making for further strengthening the immunization programme and making it responsive to the current and future country needs. It will also be used for updating the country's comprehensive Multiyear plan (cMYP) for immunization and the corresponding annual plans of action. The information would also be utilized by partners to align their support according to country needs.

EPI review Methodology

The EPI review process included three distinct phases:

Phase I: Preparation and Review of the EPI Methodology

During this phase, the generic WHO EMR EPI review tools were adopted for EPI review in Afghanistan, in consultation with participants from MOPH, NEPI, partners including external and internal reviewers. A workshop for this purpose was held at Kabul from 24 to 26 January 2017. The work shop which was facilitated by the WHO/EMRO VPI staff was participated by team of internal reviewers. The participants provided their extensive inputs to adopt the generic questionnaires to Afghanistan context. Field testing of the questionnaires as undertaken on 28 January at Kabul provincial level and 3 health facilities. The feedback from the field test and fine tuning of tools, printing and preparation of a flash drive with all the tools and other related information was undertaken on 29 January.

Sites selection has been done at this phase, security situation and inaccessibility as per the National EPI team and WHO CO has been considered initially by excluding them for the sampling frame . Selection has been totally based on random sampling, after exclusion of the sites as explained earlier, to ensure representativeness of the region from among the accessible sites.

From each of the seven regions of Afghanistan, two provinces were selected and two health facilities were selected from each province. Further discussion with EPI manager of the regions and based on the change of security situation, three times reselection was done which resulted in changing one province and about 10 health facilities. The final selected sites are listed in Annex I
The final selection included the seven regions, 14 Provinces and 28 health facilities.

Phase II: Field Data collection

At the National level, NEPI , Vaccine cold store, Grants and Contracts Management Unit (GCMU) , selected NGOs and Central public health laboratory (CPHL) were visited and information/data were collected as per the tool.
Data were collected from different provinces and health facilities and care giver. The data was shared with each region team leader for each region and shared centrally either during or after field visit for compilation of the report.

Phase III: Data Analysis and reporting

Data was compiled at this stage, tabulated and an initial analysis has been done. A presentation was offered as initial debriefing to the EPI program and Director of Preventive Health Services and feedback obtained before started drafting the report

Data Quality

Accuracy Ratio (AR) as one key component of Data quality has been assessed during the EPI review. For this review AR was calculated for 3 months reported coverage of Penta3 vaccine at various levels.

Accuracy ratio was calculated through dividing the number of vaccinated children with Penta3 at any administrative level at a specific month by the reported number of vaccinated children with the same antigen at higher level for the same month

At the health facility level, the number of Penta3 vaccinated children with three doses of DTP during three months (July-August and September 2016) as collected from tally sheets and vaccination records was related to the number of vaccinated children during these three months reported at the higher level. It is to be noted that at HF level the recording is based on Afghan Calendar month. Jul-August-Sep 2016 were equated to months in Afghan calendar.

At the provincial level, the number of vaccinated children in the incoming reports of health facilities in this specific province, in the three selected months was related to the number of vaccinated children with the same antigen as reported from the province to the national EPI level in the same three selected months.

EPI review output

National level

Findings

Overall findings of the review at national level, which represents the generally overall situation of EPI in Afghanistan, are displayed in the table below which shows the key strengths, weaknesses and recommendations/action points for each area of work related to routine immunization.

Area assessed	Strengths	Weakness	Recommendations/ Action points
1. Political commitment	• EPI is perceived as a high priority program at MOPH specially after liking it with the PEI strategy. • MOPH is complying with the global strategies in introducing new vaccines to the programme with partial co financing. • EPI is benefited from the CSO working in immunization activities in the very remote areas. • Although there is no Law or Decree to enforce infant immunization but EPI program succeeded with the MOPH to link it to the national ID document. • The EPI program has well-functioning ICC chaired by the deputy minister.	• The extent of the current Polio activities masked the attention of the governors or community leaders to the support of the routine EPI. • Lack of clear strong advocacy plan/strategy to sustain and further raise awareness among decision makers and leaders regarding routine EPI. •	• The continuity of ongoing strong political commitment for PEI needs to include RI as well which is highly essential for sustainability and further strengthening the routine immunization programme in the country • Strong advocacy strategy/ plan needs to be developed and implemented for decision makers and influential at various levels for supporting routine EPI activities. • Further strengthen the role of the CSOs in immunization in remote areas.

	• A well-functioning NITAG supports the EPI decisions. • EPI is involved in the high council meetings which are chaired by representative from the presidential office.		
2. Advocacy, communication and social mobilization	• There is a dedicated person for social mobilization activities • There is a comprehensive communication/social mobilization plan. • There is generally adequate funding for implementation of the social mobilization plans for routine and SIAs • Electronic media (TV radio etc.) and IEC materials are used for routine EPI and SIAs • Coordination with other departments like Education is undertaken. • Successfully implemented immunization week. • The programme had special comprehensive plan for the anti-vaccination groups that last for 3 months last year and solve it.	• Some of the planned activities related to social mobilization (procurement, printing etc.) could not be undertaken because of delay in getting funds through Gov. Procedures. • Although the focal person at the national has been in this position for more than 12 year he didn't take special training in SM. • No dedicated focal person at the PEMT /REMT level to follow on the planned activities specially those for the anti-vaccination or refusals. • No funds are available for local level social mobilization activities at provincial/HF level	• There should be Strategic plan for advocacy/communication and social mobilization for RI activities at each level. • The funds should be timely released for social mobilization at all levels. • There needs to be better utilization of the efforts of the social groups (health Shuras) for promoting routine immunization. • The micro-plans should have clear section on advocacy, communication and social mobilization. • If applicable to assign focal person at the REMT/PEMT and train him to follow on the implementation of the advocacy and SM activities at provincial and HF level to create the demand and advocate for the routine EPI. • Making funds available for local level social mobilization activities.
3. Planning, management and financing	• A strategic plan for MOPH 2015-2019 is available • MOPH is complying with the new vaccines co financing. • A comprehensive planning approach for development	• There are many national annual plans i.e. plan for the Gov. use which is signed by the minister of MOPH and plan for Gavi, plan for WHO and plan for UNICEF. • Only 10% of district develops	• There should be one national annual plan that include all the activities of the programme and funded by all donners and signed by MOPH and distributed to all donners. • Proper district/HF micro plans i.e. as per the new national guidelines and in line with cMYP should be developed. This would require not only

	of cMYP is adopted at national level with inputs from the regions and provinces. • The current cMYP 2015-2019 is in line with the strategic plan for MOPH and has been recently updated in Dec 2016. • An annual action plan for EPI is developed on the base of the cMYP with budget and signed by his Excellency minister of public health. • EPI guidelines are available in English and local language at national level and it is distributed to all levels. • The updated guidelines for development of district level/HF micro plans is available at national level and they distributed it to all provinces to be used for updating the previously developed micro plans and develop new plans for areas not started the process. • Financing is generally adequate for the national level POA.	their micro plans and it was according to the old national guideline for development of micro plans, which consist of a page regarding target population and another for outreach session in most of the health facilities visited. • Generally the micro plan is developed by vaccinator, without involvement of PEMT, PHD, CHW/community etc. • There is no link of the present district "micro plan" with the cMYP Vis à Vis programme objectives, national goals etc. • The financial mechanism for utilization of funds at provincial level is cumbersome, which delays the implementation of the planned activities especially the monitoring and supervision of immunization services by the PEMT. • The country is not paying for routine vaccines, and the traditional donor (GOJ/JICA) has informed to stop this by end 2017	providing appropriate training to the concerned health staff but to work with them as a follow up of training by NEPI/REMT staff . • The development of micro plans should involve PEMT/ PHD/ CHWs/ Community and under supervision of the national. • MOPH and MOF should review the process of financial management at provincial level, so that the funds are made available timely for the activities. • In order to progress towards financial sustainability MOPH should urgently start contributing towards the cost of routine immunization specially that Gov. of Japan conveys to the Minister that they will not pay the traditional vaccines starting 2018.

4. Human resource and training	• EPI structure and job description for national, regional and provincial level are available. • Almost sufficient technical staff at national level. • The national training plan for Health workers usually developed on the base of needs for all level. • There is a national policy that 25% vaccinators should be receiving refresher training each year. • EPI manual for vaccinators has been developed at national level. • EPI essential training curriculum is underdevelopment. • Accountability framework document is under development by the national EPI and to be endorsed and singed by his Excellency Minister of public health to be used by the GMCU for NGOs contract.	• High dependency on donors for staff recruitment and training activities (almost 50% of technical staff at National level is on contract and supported by donors). • BPHS NGOs offer trained vaccinators and health workers other better paying positions within the same NGO creating vacuum for vaccinator workforce . • High turnover of vaccinators with low availability of female vaccinators • Two supervisors in the PEMT, without adequate logistics support cannot undertake supervisory activities in satisfactory way. • BPHS NGOs generally don't follow the minimum educational requirement (12 Years schooling as per NEPI standards) for recruitment of vaccinators. • Refresher training on different EPI aspects is usually provided to the staff, but "basic" EPI training is rarely provided and the planned refresher training for 2016 not done completely because of shortage of fund for the BPHS. • The training plan for EPI staff for 2016 not	• • A plan should be made to have all positions at national level to be regular MOPH positions in coming years to ensure technical sustainability of the programme. • Another position for training focal person needed at national level? • The salaries of the vaccinators and their periderms should be increased to possible extent to minimize leaving of the job because of unattractive salary. • As applicable increase the number of supervisors at PEMT for proper quality supportive supervision (each site/team at least once in two months). • All staff needs to receive structured "basic" training in the relevant areas of EPI, according to their responsibility. • Based on individual needs relieving staff needs to be provided necessary trainings e.g. in case female vaccinator goes on maternity leave. • All the NGOs should be bound to recruit vaccinators fulfilling minimum criteria as laid down by NEPI. • The coordination between the national EPI and the GMCU should strengthen in regards to the contracted NGOs in term of monitoring and evaluations and training of their staff working in immunization.

		implemented because they receive the money late and so they delay it to 2017. • The vaccinator's Gov. Employee didn't have refresher training during last year because they were not included in the plan. • The refresher training for vaccinator of NGOs is undertaken without national supervision so the quality of the training is not ensured. • One focal person for training at National level?? is not enough comparing the work load of developing, updating, translating EPI training manuals and guidelines which required a lot of time and efforts.	
5. Vaccines, cold chain and supplies/logistics	• All vaccines are procured by UNICEF are with VVM • EPI office take decision on vaccine presentation • Good practice of bundling (vaccines +Injection supplies) • Vaccine management guidelines exist and followed at National Level • VSSM is used for vaccine management from National to Province Level • No vaccine stock out in last 6 months including IPV • Good Vaccine wastage	• No domestic fund for Vaccine procurement and issue of sustainability • IPV introduction increased the vaccine supply frequency (Quarterly • High BCG wastage of 86% and IPV 28% (aggregate of 34 province) • Temperature monitoring records available since –Feb 2015 • No facility available locally for immunization waste disposal of National store, however immunization waste	• Advocacy for MOPH fund for vaccine procurement. • Keep temperature monitoring records for last 3 years which is reviewed by the Supervisor • MOPH must specify transport standard to the transporter in the contract • Department should have need based Refrigerated vaccine van • VAR need to be part of the VLMIS • A national Cold Chain maintenance plan should be developed and budgeted • Regular Capacity building and review of ISC system need to take place like: •annual ISC review with Province level staffs should be planned

	system documentation exist up to HF level • Continuous Real Time Temperature Monitoring exist for all Cold rooms of National store • AD syringe use is universal • Waste disposal guidelines exit and in the use. • Vaccine transportation plan exit and in the use • National Store has functional auto start generator • CCE Inventory exist and updated every quarter • Cold chain maintenance plan exist • EVMA with IP was developed and reviewed on regular basis. • Country is applying for CCEOP	are transferred to nearby central Medical for appropriate disposal • Lack of refrigerated vaccine van • Transportation for vaccines? is outsourced and do not have information on quality of transportation • XCCEI is not complete and lack many essential field and does not comply to GAVI data standard (cold chain space, electricity duration, spare parts , date of break down and date of repair) • Inventory is not real-time • No National Cold chain maintenance Plan exist • Lack No Handbook of Vaccine and Cold Chain handlers for capacity building of handlers and staffs engaged in ISC • Cold Chain Technicians engaged do not have adequate skills for repair and maintenance of equipment.	•Every staffs must be oriented every 2 years • Identify CCT with Technical background and build their Technical skills with local trainers • Segregate the skills and competencies of the present CCT and build their skills accordingly • Country to have a National Action Plan for ISC system strengthening that should guide direction and provide strategies with budget.
6. Vaccination service Delivery	• 60% of health facilities are providing EPI services and more are being added . • The programme has clear delivery strategies (fixed, outreach and mobile) that applied at all HF. • EPI programme has good collaboration with the	• Service delivery in some areas is affected because of insecurity. • 40% health facilities do not offer immunization services. • The current micro-plans for service delivery do not cover all the population in the province and often lack	• Special strategies for provision of service should be developed for insecure and hard to reach areas. • Plan for expansion of immunization sites which is there should be modified if required considering the realistic situation on ground for each province. This expansion plan should be used to modify the cMYP. • It should be ensured that micro-plans for the

	private and non MOPH immunization providers especially in big cities.	strategies to reach hard to reach population. • Lack of effective coordination between National EPI and BPHS NGOs in immunization service delivery. • Some BPHS NGOs don't cover the whole province, while as per GCMU the contract awarded to BPHS NGO requires that they provide services to the whole province. This may be because of CSO target population being used for GCMU contracts • The coordination between the PHD, PEMT and the BPHs NGOs is not optimal. The PEMT manager does not have any authority for supervision over the local NGOs who implement BPHS in the province. • Monitoring of the EPI services at provincial and Health facilities level is quiet irregular from NEPI and REMT and often without a proper follow up on the previous monitoring visits recommendations.	province do not miss any population. • BPH NGOS micro plans should be developed under supervision of PEMT, RMT and nationals in order not to miss any population in the. • A mechanism for effective coordination of activities between PHD, PEMT and BPHS NGOs should be developed so as to have effective supervision and monitoring by the PEMT.
7. Reporting system and data quality	Great effort was done since last review to improve the data management system: • Standard uniform NEPI	• The responsible person for data management didn't attend any specialized training in data	• One denominator should be agreed and used at all levels for micro planning and coverage calculation. • The focal person for data management needs to have special training in proper data management

	reporting form is used by all PEMT NGOs and HFs. • Well-designed EPI-HMIS system is used for managing the monthly EPI coverage data based on HF, PEMT monthly reports • Comprehensive EPIHMIS system is used by national and PEMT and NGOs to report the monthly data. • The EPI-HMIS is linked to the MOPH HMIS system. • Analysis is done with regular feedback to PMT by heath facility for action. • Completeness and timeliness is improved since last review (now 90% completeness and 73% timeliness). • Data analysis is used to draw conclusion/recommendations for corrective actions and develop the national and PEMT supervision plan. • Data quality improvement plan is available funded by CDC.	management. • Three different sets of denominators are used at various levels i.e. UN data, Projection from census and Polio related data used at the national level to calculate the national coverage, the CSO data used by contracted NGOs and local catchment area data for microplanning at HF level. • The denominator for BCG vaccination used is surviving infants at sub national level rather than the total births. The % coverage of BCG is calculated at national level using total births. • No civil birth registration system in place. • There is no system for cross notifications	to improve his skills in analysis and developing and displaying EPI dashboard for easy decisions. • Effective monitoring and supervision should be ensured for all concerned to solve the data quality issues. • A system for the cross notification between HFs and provinces should be established to reduce the over reporting by HF. • The data quality improvement plan, which has started to be completed nationwide.
8. Monitoring and supportive supervision	There are a lot of improvement in M&E: • NEPI had an annual supervision plan and a comprehensive EPI checklist that is used by national and PEMT	• 75% implementation of the supervision plan for last year because of shortage of fund and security reasons.	• The required financial and logistic resources for monitoring and supervisor activities should be ensured. •The supervisors at the lower level (NGO, REMT and PEMT) should be trained to use immunization data for action and monitor the performance of the programme.

	supervisors. • Sufficient staffing for M&E unit. • Performance monitoring indicators are used at national level for the EPI programme. • Supervisory findings are discussed during the visits at the site level and also discussed during the review meetings. • Regular EPI desk review meetings are conducted quarterly at REMT, bi-annual at PEMT and annual at national level) where they discuss the programme performance using the EPI developed indicators. • National also sometimes attend the review meeting of the NGOs with the HFs to discuss and technically support the NGOs in solving some field problems.		
9. VPDs surveillance and lab capacity	• VPD surveillance is being undertaken and reported at various levels to EPI and DEWs. • Central Public Health Laboratory is well functioning for measles lab. • Both labs had a yearly accreditation certificate. • New vaccine surveillance	• WHO Polio Programme Officers (PPO) mainly responsible for AFP surveillance and WHO/APHI Disease early warning system (DEWS) officer are responsible for VPDs at PEMT and REMT level. • Weak measles surveillance as not fully case based .	• PEMTs should be strengthened through recruitment of nationals VPD surveillance focal person as MoPH/PEMT staff to ensure sustainability of the system. • Key persons in all health facilities need to be trained on VPD surveillance. • A monthly coordination meeting among MOPH, APHI/DEWS, BPHS NGOs and other concerned should be initiated to discuss and take appropriate action related to VPD surveillance findings. May

	(meningitis, pneumonia and diarrhea) are in sentinel sites and well-functioning. • All the required investigation and sample collections forms and kits, lab guidelines and safety SOPs are available. • Surveillance guidelines are included in the EPI field manual.	• No focal person for surveillance data management. • Nonfunctioning AEFI surveillance system	be the opportunity of monthly EPI desk review meetings at provincial level are used for this • Measles surveillance needs to reviewed and strengthened as Afghanistan part of regional target to reach measles elimination by 2020. • There should be focal person to deal with surveillance data at all levels • The AEFI system should be made functional, thorough provision of a necessary training and follow up during monitoring and supervision. A strong AEFI system is particularly required when the country introduces a new vaccine.

Data Analysis

Accuracy of reported data (Accuracy Ratio)

Review of data quality has been integrated in the EPI review through calculation of Accuracy Ratio (AR) of DTP3 vaccinated children in visited provinces and health facilities

AR has bene calculated for DTP3 immunized children under 1 year of age. DTP3 immunization for 12-23 month was not available and/or recorded and reported at different levels, that is why it was not subject to AR estimation

At provincial level, (Table 1) Accuracy ratio was satisfactory for most of the provinces with a mean of 97.95 and ranging from 95.64 to 100 , except for Baghlan province where there was an under reporting (AR 115.09) and severe over reporting in Paktika with AR of 57.2.

Table 1: Accuracy Ratio (AR) for selected provinces

Province	Accuracy Ratio
Badakhshan	100
Baghlan	115.09
Balkh	95.64
Jawzjan	99.92
Kapisa	85.53
Logar	98.62
Herat	100
Badgis	99.92
Kandahar	99.91
Nimroz	98.79
Khost	100
Paktika	57.2
Laghman	NA
Nangarhar	100
TOTAL	**97.95**

Accuracy Ration (AR) for selected health facilities is depicted in table 2. AR was not able to be calculated for three health facilities due to lack of necessary data ; the overall AR for health facilities was 96.84. The lower AR denoting over reporting was for Lakan clinic (AR = 73.28) and the highest ratio was for Borag clinic 107.27. Ten clinics had a perfect AR of 100.

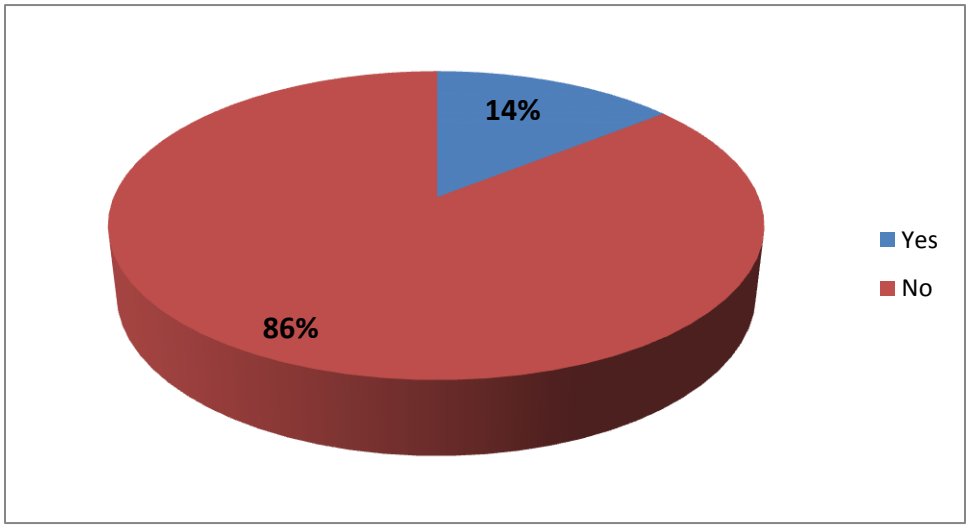
Table 2: Accuracy Ratio (AR) for selected health facilities

Health facility	Accuracy Ratio
Fayzabad hospital	85.47
Shatak clinic	99.51
Baysacal CHC	100
Gudri Clinic	100
Mazar e Sharif Hospital	105.92
Karta Aryana ARCS Clinic	100
Afghan Tepa Clinic	100
Afghan Turk Child health hospital	99.37
Pul-e-Mirwais Clinic	100
Qazaq Clinic	100.65
Mohamed Agha Clinic	NA
Borag Clinic	107.27
Nawabad clinic	99.87
Qala e kwaja clinic	101.13
Badgis ARCS Clinic	100
Qala e naw hospital	93.05
Babur clinic	96.82
Fatema Zahraa clinic	77.40
Kang Clinic	106.29
Deh Kwaja CHC	95.19
Lakan Clinic	73.28
1200 Families Clinic for Refugees	NA
Mohamed Khil SC	100
Sharan Central hospital	100
Noor Alma Shaib clinic	NA
Aliseng Gamba clinic	100
Bahsood Beland Ghar Clinic	87.09
Nangarahar academic hospital	97.32
TOTAL	**96.84**

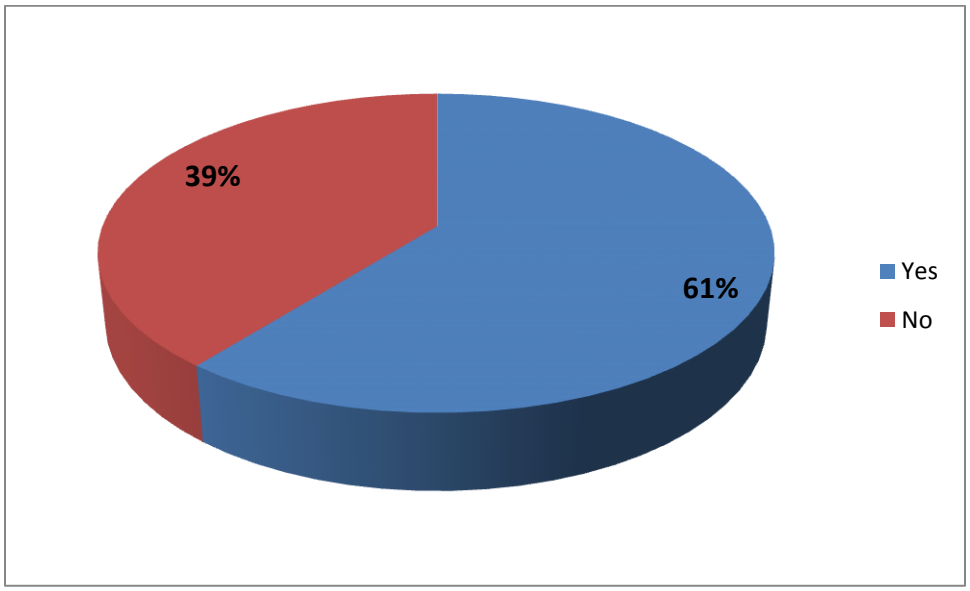
Health facilities data analysis

Twenty eight health facilities were visited and data was collected through interviewing the health facility in charge. Analysis of some collected information depicted the following findings

Fig 1 shows that Microplan has been found in only 14 % of health facilities



Pre service training has been offered to 61% of the PI staff specially vaccinators Fig 2



RI coverage monitoring chart was displayed in the majority if health facilities (Fig 3)

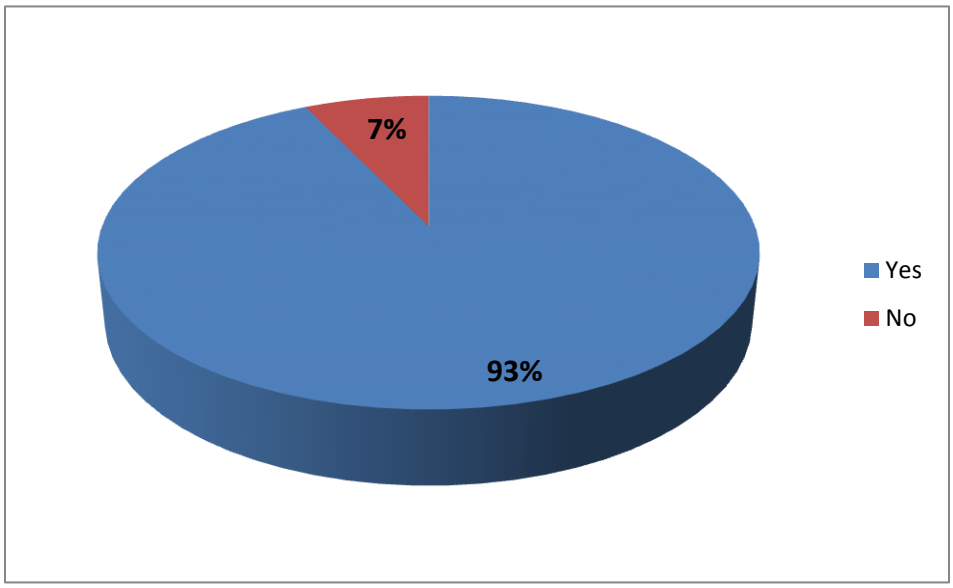
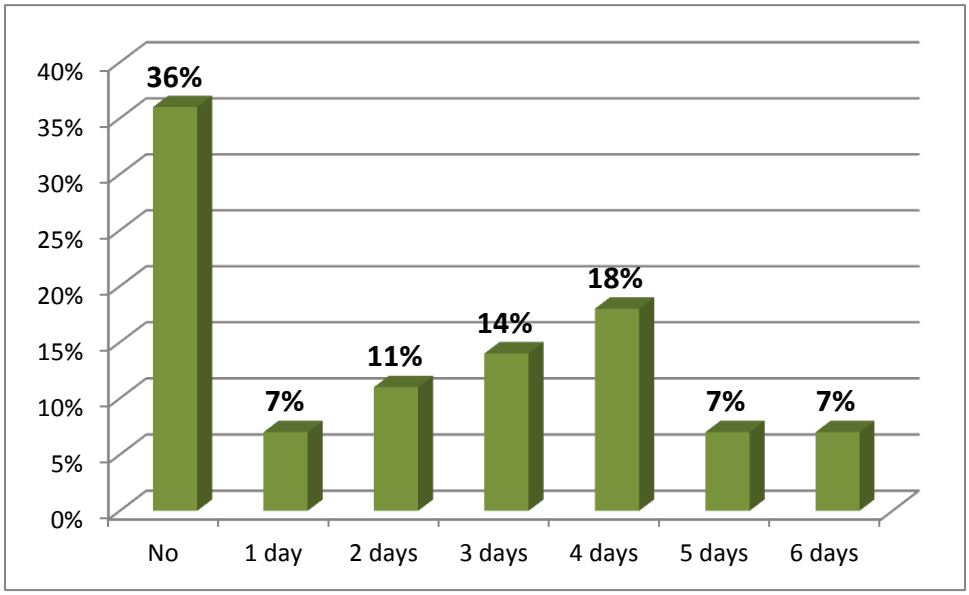


Fig 4 shows that Outreach vaccination session were not offered in 36% of visited health facilities, on the other hand 14% of the health facilities, provide outreach immunization session either 5 or 6 days every week



More than half of the visited health facilities (57%) provide al vaccine in every session Fig 5

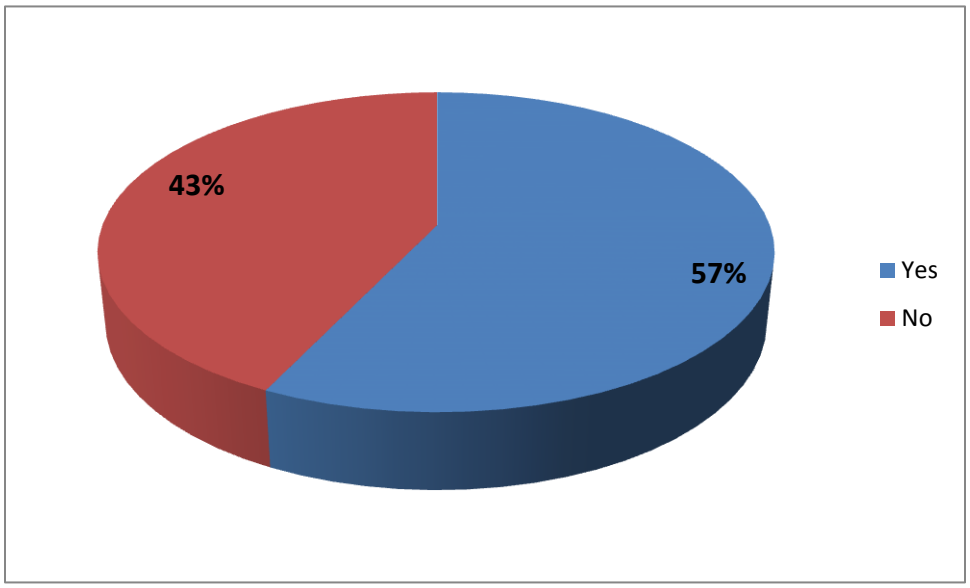


Fig 6 demonstrates that 64% of the health facilities possess and implement a mechanism through which they trace immunization defaulter among their targets

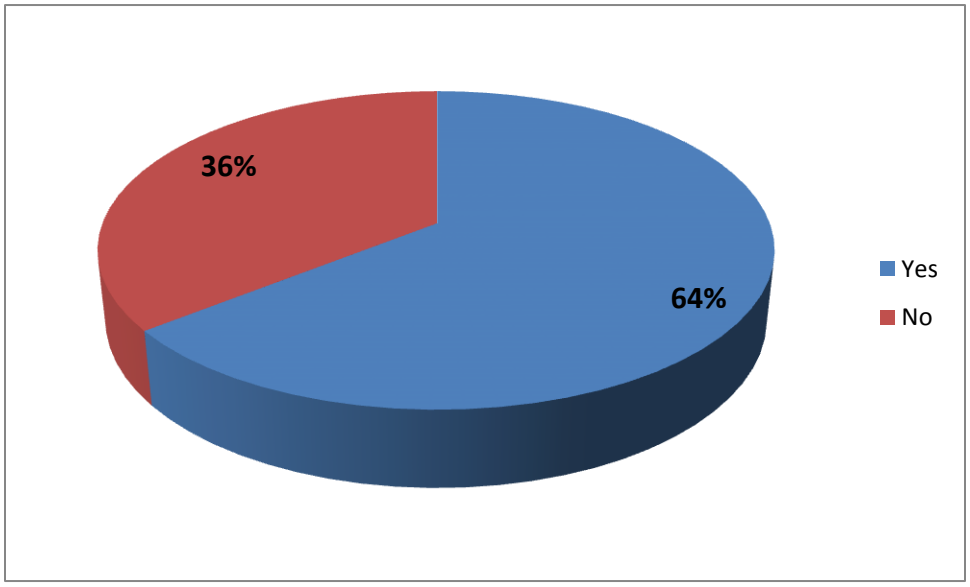
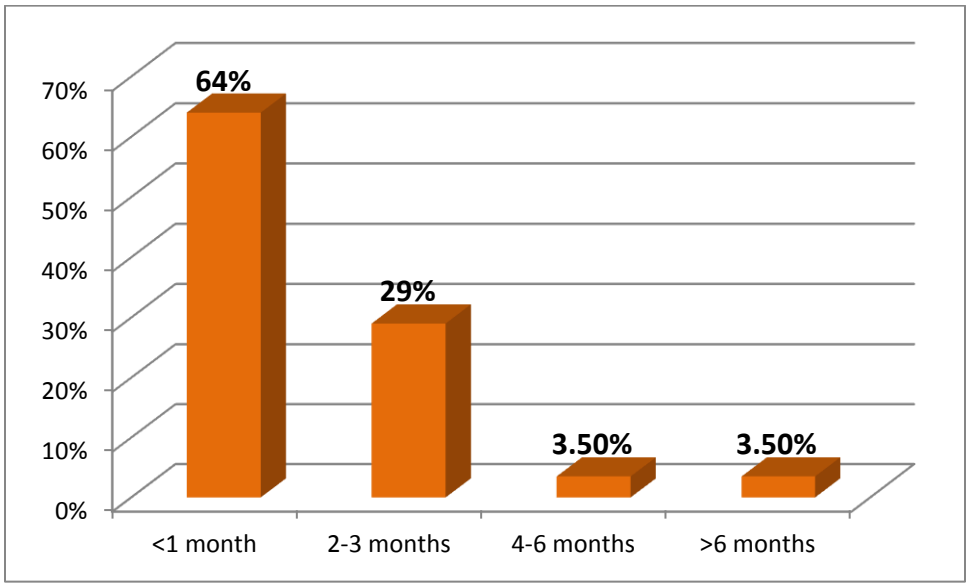


Fig 7 shows that supervisory visit in the last month has been performed in 64% of health facilities. Supervisory visit has been carried out in the last 2-3 month is 29% of visited health facilities and in 7% of health facilities have received the last supervisory visit since 6 months or more



Exit care giver interview analysis

One hundred and ten care givers have been interviewed after they received their immunization services in the 28 visited health facilities.

Analysis of the completed questionnaire depicted the followings:

Fig 8: shows Three quarters of the respondents care giver are the mothers while fathers constituted 7%

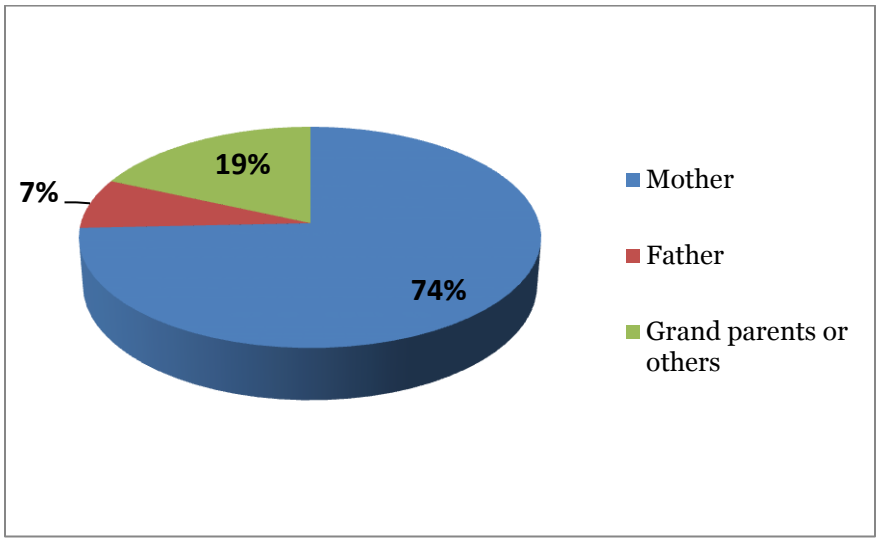
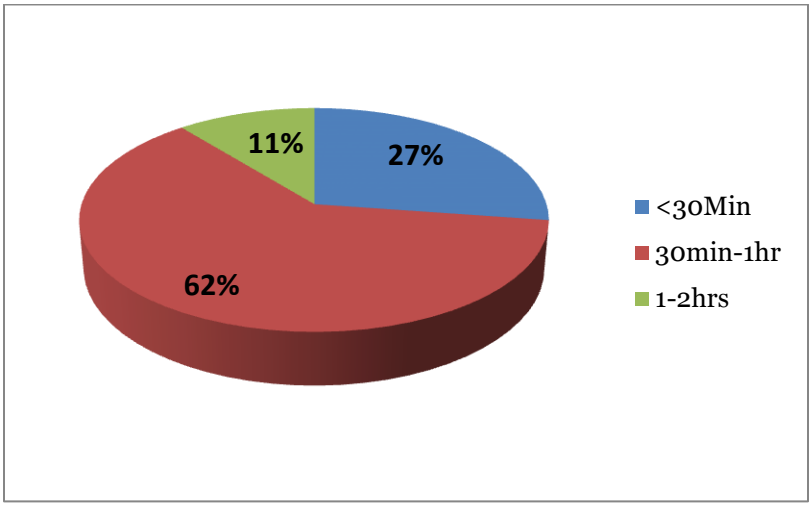


Fig 9 shows that the majority of care givers (62%) have to wait 30min to 1hr before they receive the immunization services, while only 11% have waited for 1-2 hrs.



Full satisfaction from the service received at health facility including immunization service was the opinion of the majority of responders (84%), only 2% have expressed dissatisfaction (Fig 10)

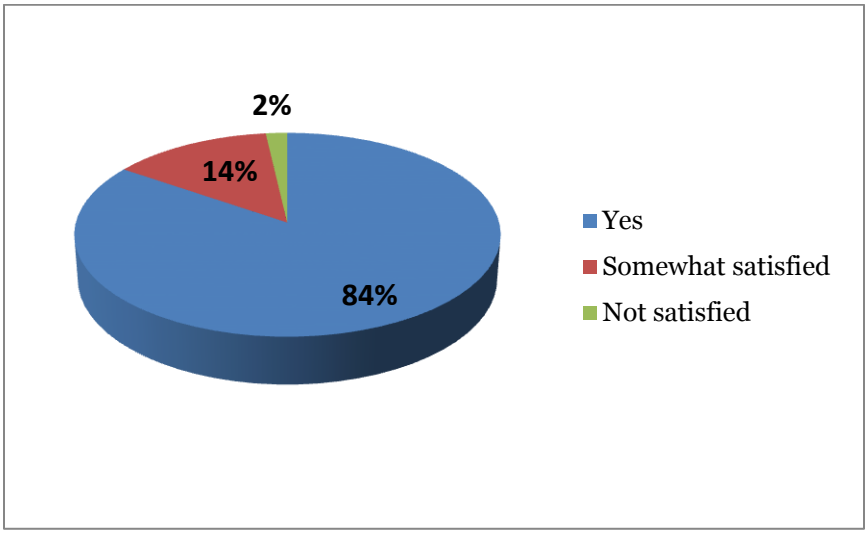
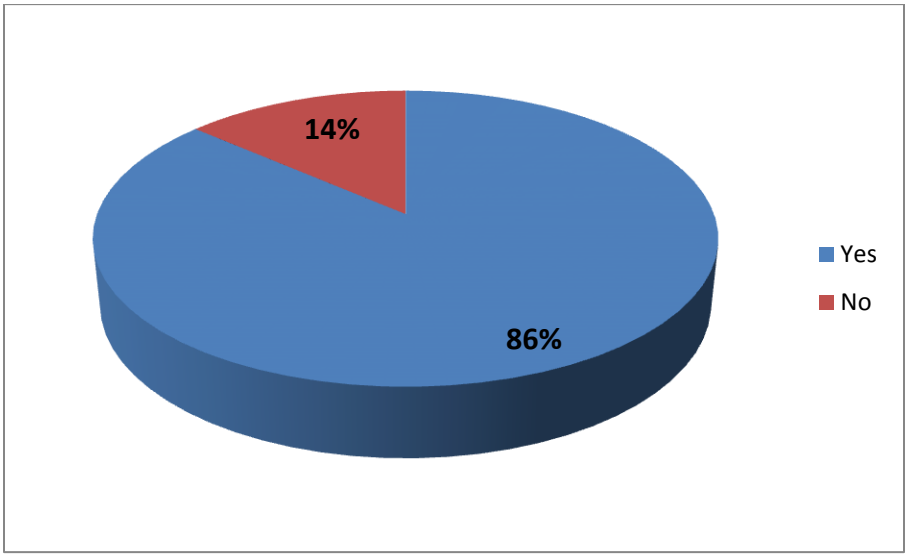
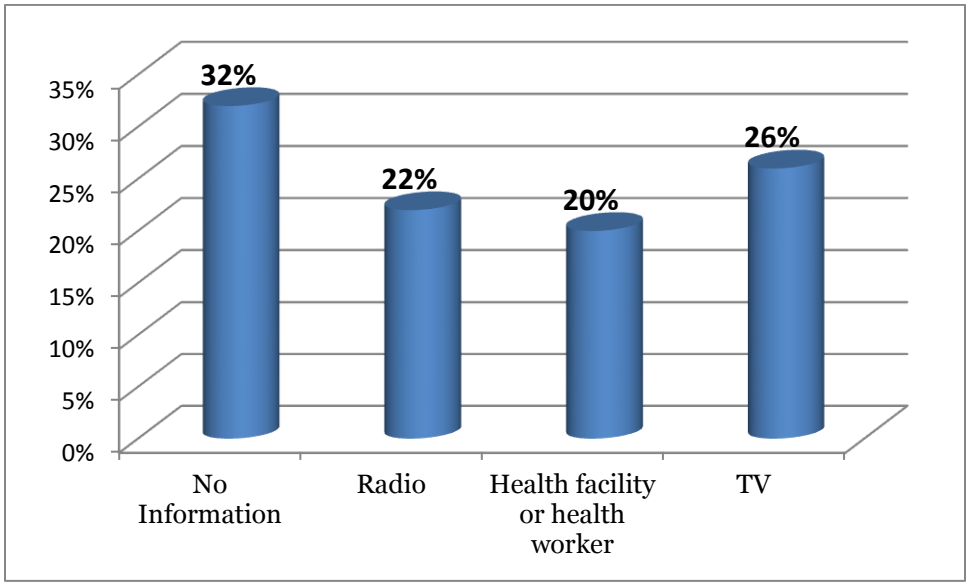


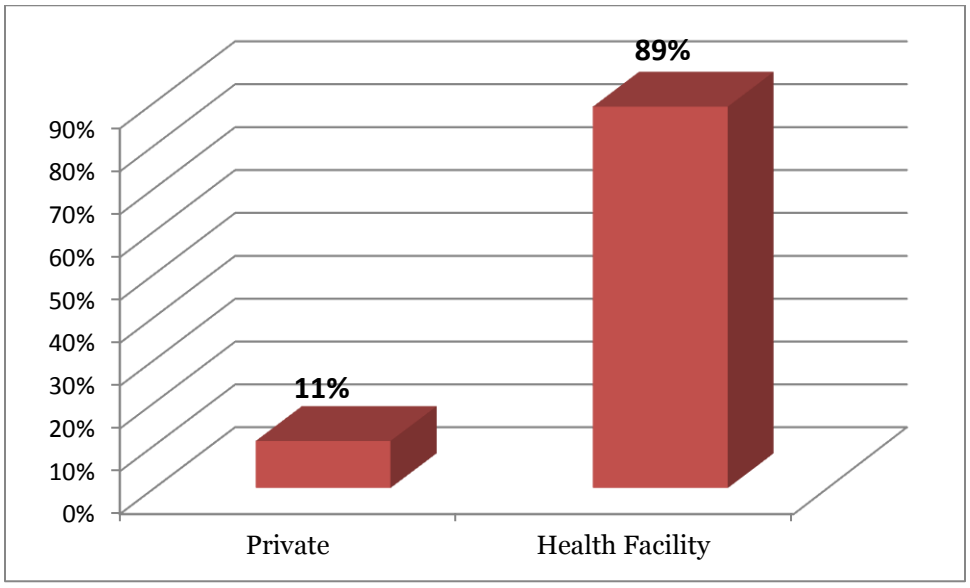
Fig 11 demonstrates that 86% of the care givers had immunization cads in their possession which denote that non card retention was only among 14% of respondents



Seeking the source of information about Immunization among care givers has shown that 32% of respondents didn't identify any source of information, 20% mentioned that they got their information from health worker and or health facility , and about half (48%) got their information about immunization from the media (Radio or TV) (Fig 12)



Almost all the care givers (89%) seek immunization service from public health facility in comparison to only 11% Fig 13



Post Introduction Evaluation (PIE) of IPV Vaccine

Background

In May 2012 the World health Assembly has endorsed the Polio end game Strategic plan 2013-2018. The second objective of the plan has three main activities, strengthening routine Immunization, withdrawal of OPV and introduction of at least one dose of IPV in the Routine immunization.

Afghanistan, as one of Gavi eligible countries, has applied for introduction of IPV in the routine immunization on March 1, 2014, Gavi letter of decision with approval was received by the MOPH in July 2014 and the vaccine was planned to be introduced in June 2015 but due to some supply factors, it has been practically introduced in the routine immunization on September 30, 2015. In June 2015 a revised letter of decision was resent due to the application of the Multi Dose Vial Policy with reduction of wastage rate from 50% to 20% for the 10 dose vial allocated to Afghanistan, which resulted in decrease of allocated doses

Gavi has supported Afghanistan in providing the vaccine free of charge for 1 year as one dose at 14 weeks of age jointly with a Vaccine Introduction Grant (VIG) of $823,000 as requested by the EPI program, As MoH didn't have an MoU with Gavi , the grant was channeled through WHO. The grant was used in different categories of activities specially microplanning, training, social mobilization, transportation and cold chain maintenance. Cold chain capacity was satisfactory to accommodate the new vaccine, so no cold chain upgrade was needed at that time. Afghanistan received since IPV was introduced for one year until September 2016, 1.73 Million doses

As per the IPV introduction plan, Training manual, in English and local language, has been prepared. A comprehensive nationwide training has been offered in a cascade manner to all immunization health workers all central and peripheral levels.

Prior to introduction in routine immunization, IPV has been introduced in campaign mode as a part of Polio eradication activities, in 11 low performing districts in 3 provinces in mid-October 2014

Following on the recommendation of the Immunization Advisory Practice Committee (IOPC) recommendation on October 14-15 2015 that Post Introduction Evaluation (PIE) will be no more a standalone activity but integrated in other assessment tool, especially the EPI Review which is the standard assessment tool for NIP. It was decided to implement the IPV introduction evaluation (PIE) as a part of EPI review Afghanistan in 2016. The methodology for PIE for IPV introduction has followed the methodology of the EPI review, addressing a number of IPV pertinent questions during assessment of the different components of EPI review at all levels

Findings

A number of questions addressing different components of introduction of IPV within the EPI review form at different levels: National, Provincial and health facility levels. The reviewed elements included Planning, advocacy, vaccine management and service delivery.

Evaluation findings have been aggregated and interpreted, at different regional levels, in the form of strengths, weaknesses and recommended actions as per the table below

Region	Strengths	Weakness	Recommendations /Action points
NORTH	• Full Provincial plan and time line at provincial level • There was smooth introduction of the IPV with an official launch at provincial level • Wastage rate didn't exceed 2%	• There was not IEC material for IPV distributed to health facilities	• IEC material need to be printed and supplied before formal introduction • Refresher training for vaccinator on new vaccine as well as new vaccinators
NORTH EAST	• IPV introduction was very smooth process accepted from all people. • They conduct official launch ceremony at all levels for IPV introduction, social mobilization through media, SM materials distributed. • Introduction plan developed at all levels with guideline. • *Stock of IPV never run out in the past year, And wastage rat was about 11% • All registers updated to include IPV. • Cascade training for doctors and vaccinators done before the introduction	• There are anti polio vaccination groups at the border with Pakistan. • Not all vaccinators trained. • No complete Monitoring chart. • Multiple injections in one session not accepted from clients.	• National plan for dealing with anti-polio groups. • Regular training for all staff involved in IPV vaccination. • Complete monitoring chart. • Re arrange vaccination schedule to overcome multiple injection.
EAST	• Provincial inauguration ceremony held and attended by government and partners officials • IPV introduction was a smooth process • No problem was observed by PEMT either from health staff or community • No change occurred in vaccine delivery and cold chain system • Reporting and recording material was available on time	• No IPV introduction plan was prepared in both Negharhar and Laghman provinces. • Handouts were given to trainees during IPV training • IPV wastage rate is not calculated • No manual or printed material about IPV was observed (Nangarhar academic hospital) as well as in Beland Ghar HFs in Nengarhar province.	• Introduction plan should be prepared before any vaccine introduction • Proper manual for new vaccines should be used during trainings • Regular supportive supervision to be ensured • Printed material for new vaccines should be available

	• Trainings were completed before IPV introduction • No stock out of IPV has occurred • No AEFI of IPV is reported since its introduction • *Staff is comfortable with use of IPV • No major complain or problem notified • No AEFI due to IPV is notified • No stock out reported for IPV • IPV is used both at static center and outreach • Vaccinator knows about the importance of use of IPV • All recording and reporting tools had accommodated IPV • Cold chain has accommodated the IPV very well • Vaccinators were trained on IPV		
WEST	• IPV Introduced successfully. • Immunization schedule was changed when IPV Introduce, included IPV information in all reporting and recording tools. • All Concerned staffs at Provincial level and vaccinations staffs at Health facility level were trained for IPV. • Launching ceremony for IPV introduction held at Provincial level and all stakeholders including media focal points were invited • IPV vaccine accepted smoothly. • No impact on deliveries • Change with introduction of the	• IPV introduced without the set of timeline or plan. • Non-availability of IPV guideline and other materials at provincial and Health facility level. • During introduction IPV, Doctors and other staffs were not trained. • Launching ceremony for IPV introduction was not held at Health facility level.	• Develop the Guidelines for all EPI vaccines. • Provide the Guideline for new vaccines in advance. • Doctors and other related staffs should be trained during introduction of new vaccines. • Before introduction a Special Message should be disseminated through local Media for introduction of new vaccines. • Seminars should also be arranged before, during and after introduction of new vaccine. • Distribute the IEC Materials to caregivers before and during vaccination of new vaccines. • Cold chain inventory should be carried out before the introduction of new vaccines

	IPV. • No AEFI were reported after the introduction of IPV		
CENTRAL	• IPV Introduced successfully. • Immunization schedule was changed when IPV Introduce, included IPV information in all reporting and recording tools. • All Concerned staffs at Provincial level and vaccinations staffs at Health facility level were trained for IPV. • Vaccination staffs know the importance of IPV. • launching ceremony for IPV at Provincial level and HFs level as in HF named Pule Mirwais • Introduction held at Provincial level and all stakeholders including media focal points were invited. • IPV vaccine well accepted by health staffs. • IPV vaccines also being used in outreach sessions In all visited HFs. • No impact on deliveries Change with introduction of the IPV. • No AEFI were reported after the introduction of IPV.	• IPV introduced without the set of timeline or plan. • Non-availability of IPV guideline and other materials at provincial and Health facility level. • During introduction IPV, Doctors and other staffs were not trained. • Launching ceremony for IPV introduction was not held at Health facility level. • Stock register for IPV found not updated in HF named M Agha.	• IPV Guidelines should be given to all concerned staffs . • Provide the Guideline for new vaccines in advance. • Doctors and other related staffs should be trained during introduction of new vaccines. • Cold chain inventory should be carried out before the introduction of new vaccines
SOUTH	• IPV introduction plan was present at PEMT • *IPV inauguration ceremony attended by government and partners officials with media coverage • IPV introduction was a smooth process • No problem was observed by PEMT	• *No IPV introduction plan was prepared at Kandahar • *No proper training manual was used during trainings • Stock register was not complete for IPV (Al Khidmat)) • No manual or printed material about IPV was observed (Al khidmat) • Staff did not get any specific	• Introduction plan should be prepared before any vaccine introduction • Proper manual for new vaccines should be used during trainings • Capacity building of staff in required • Regular supportive supervision to be ensured

	either from health staff or community • No change occurred in vaccine delivery and cold chain system accommodated the new vaccine • Reporting and recording material was available on time • Trainings were completed one month before IPV introduction • No stock out of IPV has occurred • Wastage rate was about 10% in Kandahar during 2016 • No AEFI of IPV is reported since its introduction • Staff is comfortable with use of IPV • No major complain or problem notified • No stock out reported for IPV • IPV is used both at static center and outreach • Vaccinator knows about the importance of use of IPV	training regarding IPV in Al Khidmat because it became functional in 2016	
SOUTH EAST	• IPV was introduced and community showed interest in IPV.		

Health workforce and EPI services in Afghanistan

Staffing at service delivery, provincial and national levels

Afghanistan is one of the countries in the region with critical health workforce shortages. The shortages affect the delivery of services including the expanded immunization services. The shortage of health workers in EPI services has been compensated with the creation of a cadre called vaccinators.

The immunization services are provided at the Basic Health Centers and the facilities above and each health facility where immunization services are provided is to be staffed with at least 2 vaccinators reporting to the head of the facility. The vaccinators are expected to be people with 12 year basic education, complemented with a 3 month theoretical and one month practical training on vaccination. However, it is known that most vaccinators do not fulfill these criteria as the pool of potential candidates with 12 year basic education and most of them are with much less basic education and 1-2 week training. One reason of the reasons is the pool of 12 year graduates is limited, so that the authorities are ending up recruiting staff with a few years training. The national EPI manager estimates that only 10% of the vaccinators fulfill the required criteria. Thus even though the adequate numbers of the vaccinators are available, there are concerns about the quality. The shortage of female health workers and vaccinators augments the problem.

The vaccinators are supposed to have monthly outreach plans which are not available in most cases. One of the concerns raised was that they are not provided transport and allowances regularly for outreach services. The linkages and collaboration with CHWs in planning outreach services are almost nonexistent. The involvement of other health professionals in immunization services is very limited.

In some provinces, mobile health units, staffed mostly with a nurse and pharmacist, also provide vaccination and they are provided with a vaccine carrier.

At the provincial level, the EPI team comprise of provincial EPI manager, supervisors, cold chain technicians and driver. They are government employee and trained health professionals (i.e. physicians, nurses, pharmacists, etc.). However, the quality varies while the problems are faced in some provinces in recruiting trained professionals and individuals with 12 year basic training are recruited with brief orientation training in some provinces. There are no female supervisors at the provincial level. The supervisors are expected to visit each facility once a month, which does not happen due to logistics and security reasons. However, these supervisors are delinked from the service level in many instances. It was also expressed that the capacities for planning, data analysis and monitoring are limited at the provincial level.

There is a managerial disconnect between national and provincial EPI teams. Regional level has limited responsibility in EPI services where they mainly deal with logistics and supply.

There is a defined structure and job descriptions for EPI management team at national level with adequate staffing level. However, significant proportion (more than 50%) of the staff at the national level are recruited and paid by different donors. They are on the contracts with concerns on benefits and continuity of their contracts.

The service delivery at district level is contracted out to NGOs and NGOs are responsible for recruiting, employing and supervising the health workers. The vaccinators and other staff are recruited directly by NGOs. A disconnect between field staff, NGO supervisors and provincial EPI programme management team is reported. It was expressed that the NGOs prioritize curative services over preventive services such as Immunization. Though the EPI services are included in contracts with NGOs, there is a problem faced with the target numbers (denominators). The contracts take the population statistics from National Statistics office,

which are different from the real population (mostly less than the real population). Adverse event reporting by NGOs is quite weak in assessing the quality of services provided. NGOs also recruit their own supervisors, but concerns have been raised in the coordination between provincial programme supervisors and the NGO supervisors

Training

There are challenges faced in the basic training of the staff involved in immunization services as outlined above. The contracts in general do not provide social security benefits.

National policy also requires that 50% of vaccinators should receive refresher training every year. Findings of the review showed that most regions have not provided regular refreshing trainings. Similarly the training of supervisors and other involved health personnel is not regularly provided. For example the implementation of training plan delayed in 2016 due to late availability of funding.

There is only one training coordinator at national level which is not sufficient to cope with the workload.

Payment and benefits

There is a high dependency on donor funding for staffing. The staff at national and provincial level are financed by the donor funding and recruited on contract basis.

The vaccinators receive 120 USD /month. It is expressed that NGOs have delays in paying salaries of health workers, even though the NGOs receive their payments in time in some provinces. This results in high turnover of the staff, especially among vaccinators, who do not have job security either.

Workload

- Most facilities have 2-3 vaccinators as planned. In general, two vaccinators per facility is adequate for facilities, however, review at provincial level showed that some large facilities may need to revise their staffing to increase the number of vaccinators.
- The workload of supervisors, is quite high in general, for example in one region, it was found that 2 supervisors were responsible for 90 facilities and it is not possible for them to visit each facility once a month as required in the programme.

Supervision

- Even though most provincial level EPI management teams are staffed according to the organogram, the two supervisors are not sufficient to cover all facilities regularly. Security concerns also affect the frequency of the supervisory visits.
- Disconnect between the supervisors at provincial level and supervisors of NGOs also pose a challenge.
- The staff at the field can benefit from a regular supportive supervision.

Implications of planned expansion of health services

Currently there are 1707 facilities that provide EPI services, there are plans that 400 sub centers will be upgraded to Basic Health Centers and this will require additional workforce and training of new vaccinators as well as supervisors.

Recommendations

- Review the staffing levels for supervisors at provincial level and vaccinators at large facilities.
- Review the requirements for vaccinators in accordance with the realities of Afghanistan and then ensure that all newly recruited vaccinators fulfill the criteria.
- Improve supervisory capacity at provincial levels both in terms of quantity as needed and the capacity to provide supportive supervision.

- Improve coordination between provincial EPI teams and NGOs in terms of
    - supervision
    - training, and
    - ensuring of recruitment of staff fulfilling the required criteria
- Improve the logistics support to provincial teams for supervision and vaccinators for outreach services
- Build relations and coordination between vaccinators and CHWs so that they can plan the outreach services more effectively to improve vaccination coverage.
- Plan for additional recruitment to be prepared for the needs of planned upgrading of sub centers.

The Ministry establishes a Competency based recruitment system, but it is has recently been stopped.

National Health Strategy (2016-2020) and health workforce

National Health Strategy (2016-2020) was adopted. Strategic area 5 emphasizes that 'competent and motivated health workforce effectively developed, deployed and retrained in line with current and future requirements in an efficient and cost-effective manner'.

The General Directorate for Human Resources (GDHR) has developed an operational plan for the implementation of the National Health Strategy. The director general is working with partners to ensure the implementation. USAID funded Health Systems Resilience project is one of the major partners supporting health workforce development in Afghanistan.

It was also expressed that the GDHR is overloaded with daily administrative work. Under the MOPH, there are approximately 18000 staff (of which 14000 are civil servants, while the rest are contracted staff). The capacity for health workforce governance and management is limited both at the national and provincial levels.

Proposed time frame for implementation of the recommendation

The summary of the salient recommendation are prioritized as short , medium and long term recommendation as per the different components of the EPI review, are portrayed in the following table:

EPI component	Short Term Recommendations (6 Month-1 Year)	Medium Term Recommendations (1-2 years)	Long Term Recommendations (>2 years)
• Political commitment	• Advocacy for PEI to include RI as well		
• Policy and planning	• Develop provincial plan of action • Training all EPI staff on microplan • Disseminate microplan guidelines at all levels		
• Advocacy, Communication and Social Mobilization	• Develop and implement an ACSM plan at national level	• Nomination of focal person at provincial level • Develop and implement a proper evidence based ACSM plan for provincial and below level • Avail Polio communication network for RI	• Plan to have resources (Partners/ GAVI support) and consider in future NGO contracts
• Vaccine management	MOPH to develop plan for sustainability of vaccine supply	• Customs clearance of vaccines to be taken over by MOPH	
• Vaccine service delivery	• Proper microplanning for vaccination service delivery under supervision of NEPI • Ensure availability of latest version of vaccinators manual	• MOPH to allocate adequate resources for EPI service delivery including out reach • Continue monitoring and supervising the injection safety disposal	• Increase fixed sites as per plan • More emphasis required on community involvement
• Reporting	• Mechanism to be strengthen timely reporting especially from remote area (planned to with support of Polio to implement in 2017) • Using polio assets for local household listing	• Regional training opportunities to be availed judiciously	

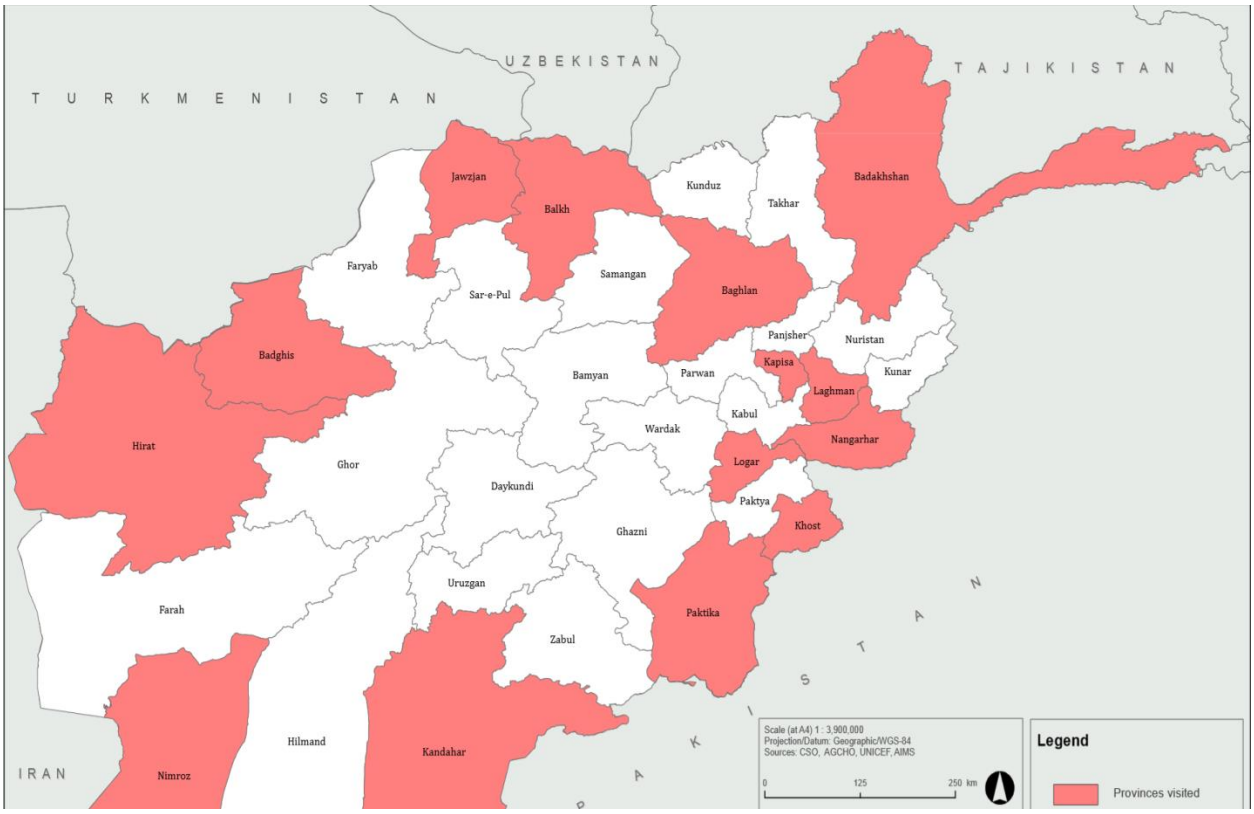
	• Well designed and properly implemented CES to be undertaken to estimate accurate coverage • Implementation of data quality improvement plan		
• Monitoring and supervision	• Training of the supervisors on implementation of the plan of action • Use opportunity of national supervision for on job training of REMT/PEMT	• Involvement of GCMU in EPI meetings • Empower REMT /PEMT for monitoring EPI service delivery	• Ensure allocation of adequate budget and resources for supervision
• Human Resources	• Ensure initial training of EPI staff as per policy • NEPI/REMT to be involved in assuring the quality of the training.	• In depth HR review	
• Surveillance	• In depth Measles & IBVPD/Rota Surveillance review • Involve lab concerned staff in EPI meetings • Ensure availability of AEFI guidelines at all level	• Develop Integrated VPDs surveillance, (Integration of diseases and entities) • Provincial level to be involved in data sharing for VPDs	• More involvement of EPI in surveillance network. • studying impact of new vaccine introduction

Annex I

Selected Sites

REGION	PROVINCE	DISTRICT	HEALTH FACILITY
North East	Badakhshan	Fayzabad	Fayzabad hospital
		Argo	Shatak clinic
	Baghlan	Baghlan e jadid	Baysacal CHC
		Kwaja Hejran	Gudri Clinic
North	Balkh	Mazar e sharif	Mazar e Sharif Hospital
		Mazar e sharif	Karta Aryana ARCS Clinic
	Jawzjan	Shebergaan	Afghan Tepa Clinic
		Shebergaan	Afghan Turk Child health hospital
Central	Kapisa	His-e-Dwoom-e-Kohestan	Pul-e-Mirwais Clinic
		His-e-Dwoom-e-Kohestan	Qazaq Clinic
	Logar	Mohamad Agha	Mohamed Agha Clinic
		Mohamad Agha	Borag Clinic
West	Herat	Herat	Nawabad clinic
		Enjeel	Qala e kwaja clinic
	Badghis	Qala-e-naw	Badgis ARCS Clinic
		Qala-e-naw	Qala e naw hospital
South	Kandahar	Argandap	Babur clinic
		Kandahar	Fatema Zahraa clinic
	Nimroz	Kang	Kang Clinic
		Zaranj	Deh Kwaja CHC
South East	Khost	Khost Matoon	Lakan Clinic
		Khost Matoon	1200 Families Clinic for New Refugees
	Paktika	Sharan	Mohamed Khil SC
		Sharan	Sharan Central hospital
East	Laghman	Alengar	Noor Alma Shaib clinic
		Alisengh	Aliseng Gamba clinic
	Nangarhar	Behsood	Bahsood Beland Ghar Clinic
		Jalal abad	Nangarahar academic hospital

Map of selected sites



Annex II

Schedule of Activities

Date	Day	Activity
20 Jan	Fri	• Arrival of reviewers
21 Jan	Sat	• Meeting of external/international reviewers and familiarization with the review instruments. • Meeting of EMRO/ VPI team and WHO CO team with NPM and team to agree on the methodology and logistic arrangements of the review including finalization of list of internal reviewers
22 Jan	Sun	• Adjustments of the review instruments • Participation of VPI and WHO CO team in the WHO staff meeting to be chaired by DCD
23 Jan	Mon	• Briefing meeting with MOPH/Director Prev Med • Adjustment of the review instrument • Arrival of (VPI/ External reviewers) –Internal Reviewers
24-26 Jan	Tue-Thu	• Joint review of instruments by the review team i.e external reviewers and internal reviewers and adopting according to Afghanistan context.
27 Jan	Fri	
28 Jan	Sat	• Field test
29 Jan	Sun	• Finalization of instruments and Printing of finalized version
30 Jan	Mon	• Travel to the field
31 Jan-2 Feb	Tue-Thu	• Field data collection (2 teams for each province consisting of 1-3 reviewers. • Sample : 1 Provincial office, 2 Health Facilities to be visited by each team)
3 Feb	Fri	• Travel back to Kabul (for those requiring road travel)
4 Feb	Sat	• Travel back to Kabul (for those requiring UN flights)
5 -10 Feb	Sun-Fri	• Data analysis and report writing by team
11 Feb	Sat	• Debriefing on initial findings of the Comprehensive EPI review to MOPH
12 Feb	Sun	• Travel back of external/international reviewers

Annex III

List of figures