

Joint Appraisal report 2018

Country	India
Full JA or JA update	<input checked="" type="checkbox"/> full JA <input type="checkbox"/> JA update
Date and location of Joint Appraisal meeting	19-20 November 2018, New Delhi
Participants / affiliation	See Annexure 8.8
Reporting period	Q4 2017 – Q3 2018
Fiscal period	April – March
Comprehensive Multi Year Plan (cMYP) duration	2018-2022
Gavi transition / co-financing group	Accelerated transition (2017-2021)

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 type="checkbox"/> N/A <input checked="" type="checkbox"/>

Observations on vaccine request (2019)

Population	1,358,103,152	
Birth cohort	25,996,000	
Vaccine	PCV	RVV*
Population in the target age cohort (2019 estimates)	24,947,000	
Target population to be vaccinated (first dose) (2019 estimates)	7,491,500	
Target population to be vaccinated (last dose) (2019 estimates)	6,843,325	
Implied coverage rate at National Level (2019 estimates)	27%	
Last available WUENIC coverage rate	N/A	
Last available admin coverage rate	N/A	
Wastage rate	15%	
Buffer	N/A	
Stock reported	N/A	

PCV renewal request for 2019 was submitted in May. Unlike with other countries, the envelope for new vaccines support to India was pre-defined as per Annex 6 of Partnership Framework Agreement (“India Partnership Strategy for 2016 to 2021”). Gavi subsequently shared a Country Notification Letter in Oct 2018 to indicate adjusted volume for the final year of support in 2019, based on Gavi’s commitment of US\$ 180 million allocated for PCV.

*Rotavirus vaccine does not need to be renewed for 2019, because the new support was already approved for 2018 and 2019 as per the Decision Letter issued on 1 May 2018.

Indicative interest to introduce new vaccines or request Health System strengthening support from Gavi in the future

Indicative interest to introduce new vaccines or request HSS support from Gavi	Programme	Expected application year	Expected introduction year
	HPV introduction ¹	To be decided	To be decided

¹Introduction subject to the outcome of a case in the Supreme Court

2. Country Context

2.1 Recent Changes in Country Context

Health has emerged as a key priority in Hon'ble Prime Minister's agenda for all out development of the nation. Health financing systems are critical for reaching universal health coverage hence; Public health expenditure has increased by 53% from fiscal year 2015-2016 to 2017-2018, to US\$ 30 billion². Further, National Health Policy 2017 articulates the Government of India's commitment to universal health coverage, and envisages increasing the spending from the current 1.3% to 2.5% of GDP by 2025. To provide accessible and affordable healthcare to the common man, the Hon'ble Prime Minister launched two initiatives under a flagship Ayushman Bharat Scheme – one to establish Health and Wellness Centres to provide comprehensive primary health care services, and another, Pradhan Mantri Jan Arogya Yojana (PMJAY), a National Health Protection Scheme, to provide insurance to over 100 million poor and vulnerable families (~500 million beneficiaries).

In order to reach out to poor households, spreading awareness about government welfare schemes and other people centric initiatives, Hon'ble Prime Minister launched Gram Swaraj Abhiyan (GSA) in April 2018. As a special initiative during the GSA, universal coverage under seven welfare programmes including Mission Indradhanush (MI) in 16850 identified villages with large number of underprivileged households across the country were targeted. Highest importance was given to saturate these villages with the benefits of seven welfare programmes. Under GSA, MI was the only scheme which achieved 100% saturation. Under the leadership of Hon'ble Prime Minister, 'Transformation of Aspirational Districts' programme was also initiated to quickly and effectively transform some of the most underdeveloped districts of the country. Contributing to this agenda, GSA was further extended to 117 aspirational districts as extended GSA (EGSA).

In March 2018, the Union Cabinet cleared launch of the National Nutrition Mission (Poshan Abhiyan) as a flagship programme to improve the nutritional outcomes for children, adolescents, pregnant women, and lactating mothers, with Ministry of Women and Child Development (MoWCD) as the nodal agency. Scale up of rotavirus vaccine (RVV) and pneumococcal conjugate vaccine (PCV) has been enumerated as one of the key nutrition strategies, amongst the other nutrition strategies and interventions.

The achievements of the immunisation programme have gained the highest level of political attention. Since 2015, the Prime Minister's office has directly monitored the programme to advance towards a 90% Full Immunisation Coverage (FIC) goal. To accelerate progress, Hon'ble Prime Minister brought forward the target of reaching 90% Full Immunisation Coverage (FIC) from 2020 to 2018, and intensified efforts on Mission Indradhanush to tighten the focus on low-performing districts to drive health equity.

To achieve the goal of achieving 90% full immunization coverage, thereby reducing mortality and morbidity due to vaccine preventable diseases, a Comprehensive Multi Year Plan (cMYP) 2018-22, a vision document for the Universal Immunisation Programme (UIP) is developed by MoHFW. The cMYP 2018-22 aligns the global and regional priorities and provides a framework of nine interlinked objectives covering various aspects of UIP with strategies and activities to achieve them. The cMYP 2018-22 is structured to provide future guidance for UIP with emphasis on essential areas of system strengthening for service delivery, increasing confidence and demand for vaccines in community and sustaining the gains achieved under UIP. A monitoring and accountability tracking framework is also developed with defined indicators. The plan also includes details of financial pattern of the Indian immunization program including baseline and projected expenditure for immunization activities.

In order to complement the efforts from the national level to achieve 90% FIC, MoHFW undertook comprehensive UIP reviews in five larger states of India- Bihar, Madhya Pradesh, Maharashtra, Rajasthan and Uttar Pradesh– which make up over half of the country's birth cohort. A gap assessment was conducted for different thematic areas of UIP namely, programme implementation; logistics and supply

² Source: National health Profile 2018: <https://cdn.downtoearth.org.in/pdf/NHP-2018.pdf>, Pg 172

chain; recording and reporting; and programme communications at state, district, block, sub centre, sessions and community levels. These reviews were comprehensive assessments of the strengths and weaknesses of the program, with an aim to assist the reviewed states to formulate a coverage improvement plan with clearly defined roles and responsibilities of stakeholders with timelines. Immunization coverage improvement plans (iCIP) have been developed for these states with engagement of state officials and other immunization stakeholders. The corrective measures will be undertaken as highlighted under these UIP reviews in order to achieve 90% FIC and sustain thereafter.

Along with the aim of attaining 90% FIC, MoHFW is also focusing on reducing VPD burden. The recent studies depict an epidemiological shift in diphtheria prevalence across the countries with cases being reported in adolescents and young. In order to address the global issue and commitment towards decreasing the burden of VPDs, NTAGI recommended replacing Tetanus Toxoid (TT) with Tetanus and adult diphtheria (Td) vaccine in adolescents and pregnant women.

Gol is committed to take forward the gains of polio eradication, as the transitioning of polio network i.e. WHO-NPSP and SMNet has been initiated. This reflects the commitment of MoHFW to sustain the catalytic support provided by Gavi to India.

2.2 Potential Risks for Next Year

During the 2018 Joint Appraisal, all the immunization stakeholders including MoHFW and Gavi identified potential risks to UIP and the risk mitigation actions currently being undertaken and proposed were discussed (see Table 1).

Table 1: Potential risks and mitigation actions

S. No.	Potential risks	Mitigation actions
1.	Competing priorities impacting management/implementation capacity	<ul style="list-style-type: none"> • Immunization calendar has been developed to map key activities undergoing/ planned • Stakeholder mapping with defined roles of partners regarding new vaccine introduction and HSS • Regular immunization review meeting with implementing partners at the national level to strategize as per the evolving priorities.
2.	Funding support (e.g. WHO: VPD surveillance cascade trainings, UNDP: eVIN training & procurement with additional Cold chain points (CCPs) and cold chain equipments (CCEs), etc.)	<ul style="list-style-type: none"> • Funding support of district ToTs for VPD surveillance are requested through PEF-TCA 2019 by WHO • Funding support for training at sub-district level is usually taken care through National Health Mission funding. • Part of savings from eVIN HR & Temp-logger procurement may cover the funding required for additional CCPs and CCEs.
3.	Admin data quality issues	<ul style="list-style-type: none"> • Data Quality Assessments (DQAs) are undertaken as a part of UIP reviews with development of data quality improvement plan as a part of iCIP. • Use of WHO coverage monitoring charts. • CCEs data from eVIN and NCCMIS are being triangulated and rationalized. • Corrective actions are being undertaken to bring accuracy in reporting of AEFI cases under HMIS and direct reporting from the states. To further strengthen the direct reporting through digitization of the reporting process, MoHFW has

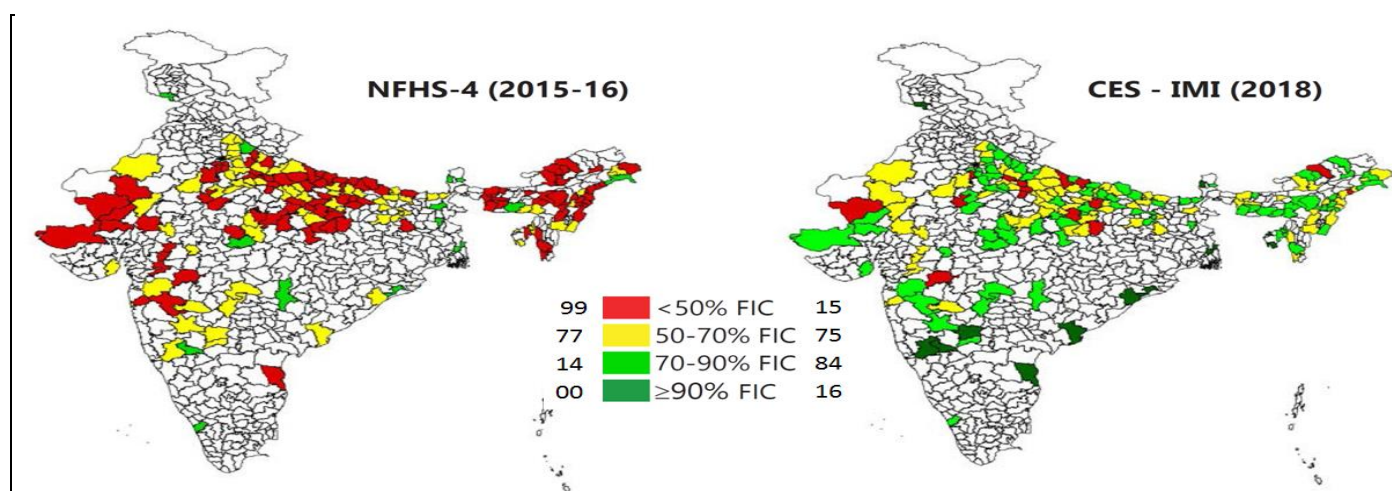
		developed a Vaccine Adverse Event Information Management System (VAEIMS). VAEIMS will speed-up the processes of recording and reporting of cases of AEFI. This will fast track the response time following AEFI, reduce data loss and time while transmitting the AEFI data, and strengthen causality assessment of AEFI cases
4.	Vaccine hesitancies and anti-vaccine lobbies	<ul style="list-style-type: none"> • Evidence based strategies to address pockets of vaccine hesitancy is to be piloted. • Multi-stakeholder partnership by involving CSOs and CBOs. • Risk frame/threat perception based IEC material is being developed. • District-based communication approach • Targeted media intervention based on media behaviour research

3. Performance of the immunisation programme

3.1 Coverage and equity of immunisation

Intensified Mission Indradhanush (IMI) was launched in October 2017 to accelerate progress in identified 190 poor performing districts and urban areas. As per the latest coverage evaluation survey (CES), 2018 on the impact of IMI, there has been a significant increase of 18 percentage points in full immunization coverage (FIC) of these 190 districts as compared to NFHS-4 (2015-16). The number of districts with FIC less than 50% has been reduced from 99 to 15 districts (amongst IMI districts). As per NFHS-4, there was no district with FIC more than 90%, whereas IMI-CES have witnessed 16 districts with FIC more than 90%, after IMI.

Figure 1: Full immunization coverage comparison- NFHS-4 (2015-16) and CES-IMI (2018)



As per the concurrent RI monitoring data of WHO, FIC has increased from 64% in 2013 to 83% in 2018* (Jan-Sep 2018) in targeted areas³. The percentage of partial and no immunization status in 2013 has decreased from 31% and 5% to 15% and 2% respectively in 2018*.

³The low coverage in the state of Kerala and Tamil Nadu is due to very small sample size from identified low performing pockets (Kerala: N = 9, Tamil Nadu: N = 69)

Figure 2: Proportion of full immunization status, WHO Concurrent RI monitoring, 2013 & 2018*

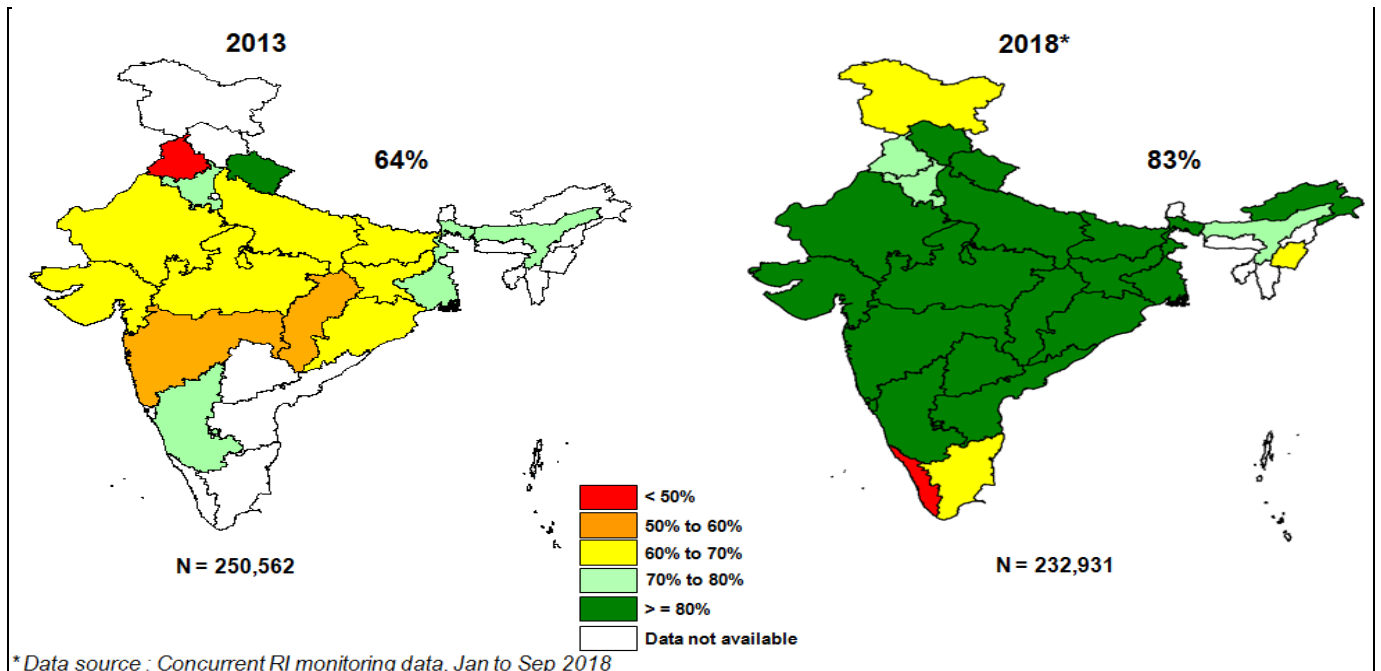
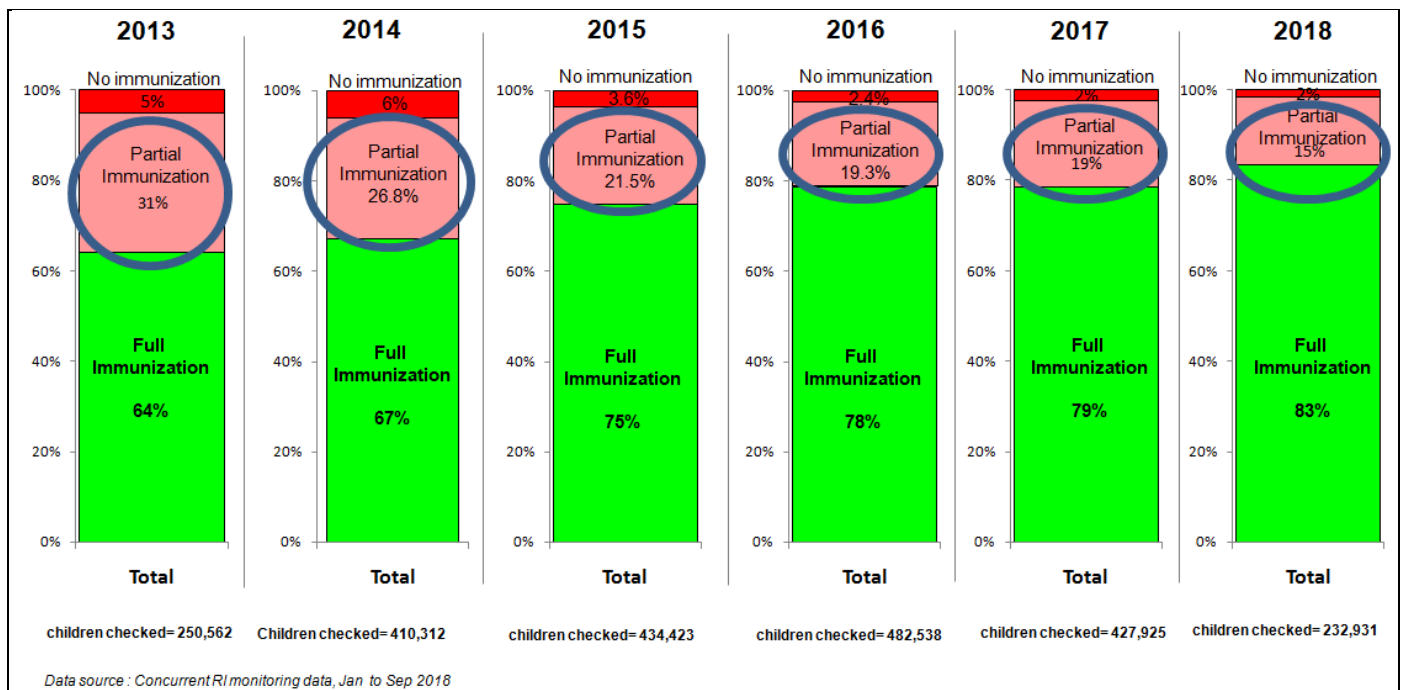
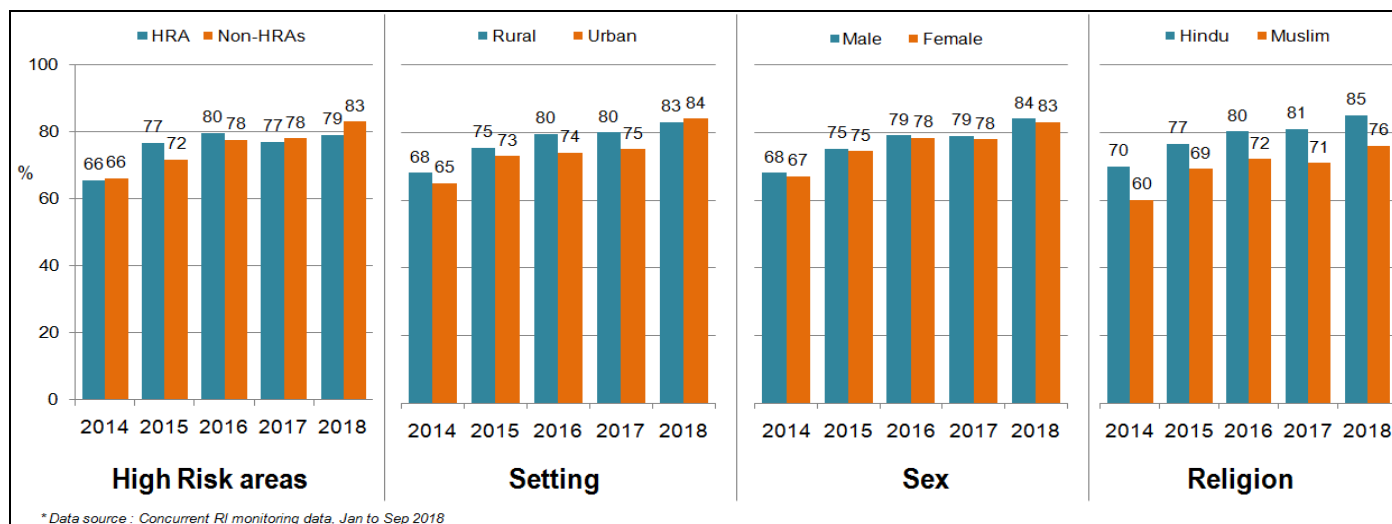


Figure 3: Proportion of full immunization status, 12-23 months, India, 2013-2018*



With respect of equity, WHO concurrent monitoring data shows that the gap between different variables of equity such as high risk areas (HRAs), rural-urban, gender and religion has been reducing over the year for full immunization status in 12-23 months.

Figure 4: Proportion of full immunization status in different settings in 12-23 months, RI monitoring (2014-2018)



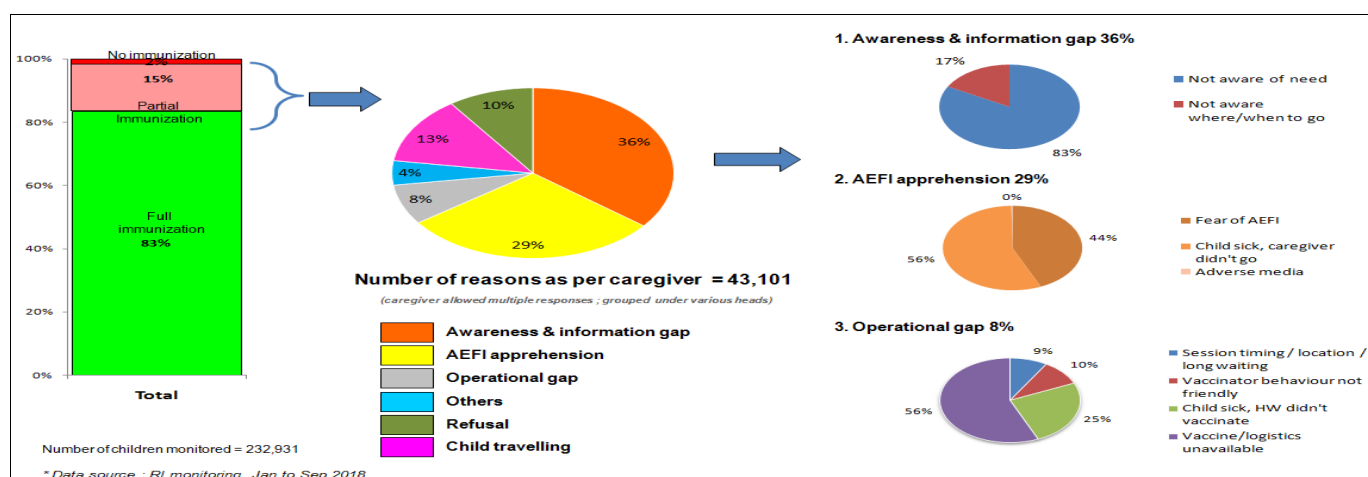
Mission Indradhanush has proven to be instrumental in increasing coverage and equity. Hence, MI was the only scheme chosen from MoHFW under *Gram Swaraj Abhiyan* (GSA) and extended GSA for reaching out to poor households, spreading awareness about government welfare schemes and other people centric initiatives. Mission Indradhanush Phase 6 has been launched in Oct 2018 in three rounds to boost the coverage in identified 75 districts with FIC less than 50 percent. MI coverage report is annexed (Annexure 8.2)

3.2 Key drivers of sustainable coverage and equity

WHO concurrent monitoring data is collected in over 31 states, covering over 8.2 million children and 1.5 million routine immunization sessions from 2014-2017. After analysis, the data provides trends in immunization coverage and the reasons for partial or no immunization.

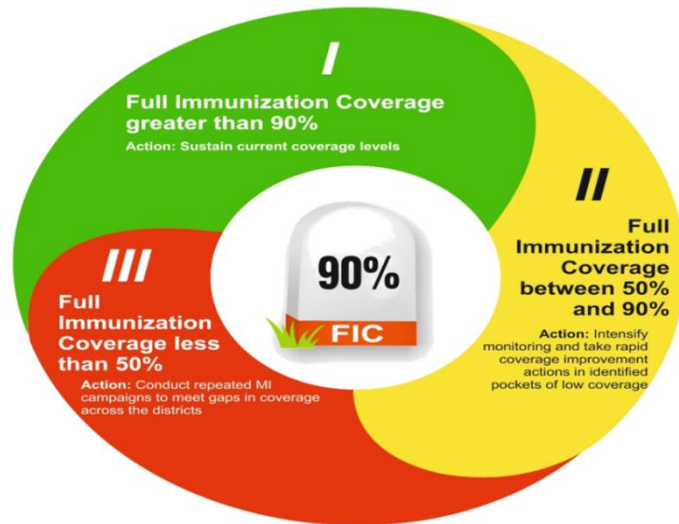
As per the data, awareness and information gap (36%), AEFI apprehension (29%) and refusal (10%) are the prime reasons for low immunization coverage (Figure 5). Unavailability of vaccines and other logistics at the immunization sites are the key contributors to the 8% operational gap cited for partial and no immunization.

Figure 5: Reasons for partial/ no immunization



To address the issues of partial/ no immunization, MoHFW is putting concerted efforts to have sustainable coverage with equity across different settings. The cMYP 2018-22 provides strategies to enhance the coverage and equity whilst improving the service delivery. Mission Indradhanush is enhancing the coverage and simultaneously narrowing the gaps across different settings. MoHFW have categorized districts into three categories based FIC as per IMI survey (in 190 districts) and NFHS 4 in remaining districts. Based on these categories, specific strategies have been designed for each category of districts which are as below:

- a. **Category I:** FIC $\geq 90\%$ (54 districts)
 - a. Sustaining gains
 - b. Incorporating MI gains in RI microplans
 - c. Monitoring and reviews
 - d. Improving HMIS data quality
- b. **Category II:** FIC between 50 to 90% (555 districts)
 - a. Prioritizing and focusing on pockets of poor performance
 - b. Improving RI
 - c. Gap assessment and iCIP based on 3D (data-decision- delivery) approach
 - d. Demand generation- addressing vaccine hesitancy and mitigating AEFI
 - e. Health system strengthening
 - f. Monitoring for action
- c. **Category III:** FIC $< 50\%$ (91 districts)
 - a. Mission Indradhanush
 - b. Gap assessment and iCIP
 - c. Building vaccine confidence and community engagement
 - d. Health system strengthening
 - e. Monitoring for action



The Gavi HSS grant was also designed to address system bottlenecks, in the areas of demand generation, service delivery and human resources, cold chain and vaccine logistics management, and data management. In order to reach urban slum population and tribal communities, the Immunization Division of MoHFW is developing customised strategies for the target population by involving the Urban Health division of MoHFW, Ministry of Tribal Affairs and development partners. UNICEF has identified 14 tribal districts and WHO has identified 10 cities under HSS-2 and 4 other cities under PEF TCA for the implementation of new identified strategies.

MoHFW has also been active in developing communication strategies to increase the coverage. Under a new approach MoHFW is developing a risk/threat based communication framework, which will project the risks of not vaccinating children, and in turn will help to increase the coverage.

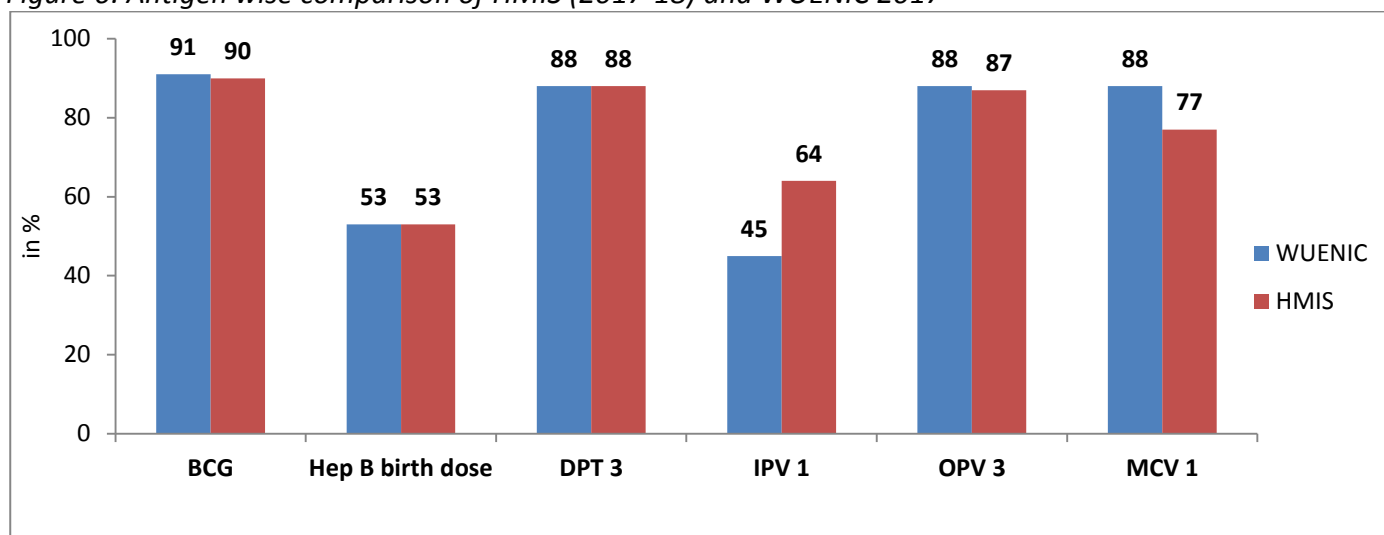
Comprehensive UIP reviews in five states (Uttar Pradesh, Rajasthan, Madhya Pradesh, Maharashtra and Bihar) were undertaken to assess the strengths, weaknesses and bottlenecks in program. Dissemination of review findings has been completed in all 5 states with the development of immunization coverage improvement plan (iCIP).

3.3 Data

Immunization coverage data

Health Management Information System (HMIS) is a platform for reporting administrative data. The coverage data from HMIS is available at the sub centre level. The full immunization coverage as reported from HMIS 2017-18 is 85.8 percent.

Figure 6: Antigen wise comparison of HMIS (2017-18) and WUENIC 2017



Although there is minimal mismatch in the HMIS and WUENIC data, there have been data quality issues like significant difference between survey and administrative data, timely availability of data, issues with data completeness and lack of data review for programmatic actions.

In order to address data quality issues, Data Quality Assessments (DQA) have been done as part of the comprehensive UIP reviews in five bigger states. This exercise focused on identifying strengths and weaknesses of the data management and reporting system, assessing the quality of data captured in the immunization records and reports; leading to development of data quality improvement plans.

Immunization dashboard is a common platform to analyze administrative (HMIS, MCTS/RCH), evaluated and concurrent monitoring data to provide state specific feedback for initiating corrective measures. The dashboards have become a ready reckoner for central and state governments for all data related to routine immunization.

Under PEF TCA 2018, Supportive Supervision for Immunization (S4I) dashboard has also been developed which contains data from various sources including monitoring data from Mission Indradhanush as well as RI and is being shared with the States for programmatic actions.

Under PEF TCA 2019, WHO plans to support data quality improvement and use of data to guide programmatic actions in the state of Karnataka. Lessons learnt will be used in other states.

MYP 2018-22 has prioritized to improve data quality under objective 3, 4 and 5 which focus upon improving data management, strengthening AEFI system and VPD surveillance.

Immunization supply chain data

The National Cold Chain Management Information System (NCCMIS), is fully functional in all 36 states and UTs, with the system hosted on the government's server. Cold chain sickness rate is a key indicator which demonstrates the efficiency of the immunization supply chain. As per NCCMIS (November 2018), 18 states/UTs have a cold chain sickness rate of less than 2%, which is the threshold set by the Government of India.

The electronic Vaccine Intelligence Network (eVIN) is currently operational across 100% of 14 states and 2 union territories (Assam, Bihar, Chhattisgarh, Gujarat, Himachal Pradesh, Jharkhand, Madhya Pradesh, Manipur, Nagaland, Odisha, Rajasthan, Uttar Pradesh and four newer states/UTs Goa, Uttarakhand, Dadra Nagar Haveli and Daman & Diu). In states of Andhra Pradesh, Karnataka, Maharashtra, Telangana and Tripura, eVIN rollout is currently underway.

eVIN has enabled digitization of the cold chain temperatures, vaccine stocks and flows, and have ensured real-time data availability at nearly 11,400 cold chain points, across 389 districts. eVIN built capacity of 19,000 Vaccine Store Keepers through 600 batches of training. More than 14,000 data loggers have been

installed for real time remote temperature monitoring of cold chain equipment. Over 2 million transactions are being made on eVIN every month capturing vaccine issues, receipts, discards and transfers.

As on September 2018, eVIN dashboard reflects that-

- nearly 97% cold chain points in eVIN states have vaccine availability index of more than 90% (% of cold chain points which have vaccine availability for more than 27 days in a month)
- average stock out duration at CCP is 4 days (1.3 to 7.3 days)
- average replenishment response time (time between reaching the re-order point and replenishment) is 12 days
- more than 84% of cold chain equipment (where data loggers are installed) remain in working status for 90% of time or more in a month

Vaccine preventable disease surveillance data

The cMYP 2018-22 highlights the existing different surveillance systems in India. The plan document highlights various strategies to increase the robustness of VPD system in India such as assessing VPD burden, enhancing the coordination between different sources, involvement of private sector and strengthening the sentinel surveillance for new antigens.

Using the platform of polio and measles surveillance systems, WHO NPSP in concurrence with the GoI designed laboratory-supported surveillance for diphtheria, pertussis and neonatal tetanus. The NPSP provided technical support for establishing a functional laboratory supported surveillance system for VPDs. Their primary functions have been capacity building of health care providers/surveillance staff, monitoring and evaluation of the key components of surveillance, data analysis and providing feedback so that the information generated is used locally to guide the control measures and strengthen the evolving system.

A VPD laboratory network, comprising of seven laboratories across the country with Christian Medical College (CMC) Vellore as the reference laboratory, has been established by providing support for system strengthening, capacity building and logistics. Hands-on trainings of personnel from these laboratories in diagnosis of diphtheria and pertussis were conducted with support from Public Health England and Centers for Disease Control Atlanta, respectively. Cascaded capacity-building workshops using the VPD surveillance field guide conducted for health care providers from both public and private sector for effective implementation of VPD surveillance.

Laboratory-supported VPD surveillance for diphtheria, pertussis and neonatal tetanus is currently functional in seven states—Bihar, Haryana, Himachal Pradesh, Kerala, Madhya Pradesh, Punjab and Uttar Pradesh.

During 2016-2018, 4016 diphtheria cases, 3808 pertussis cases and 150 neonatal tetanus cases have been reported. The data being captured is representative of only a few states that have initiated the surveillance system.

Areas reporting VPDs are being targeted for special immunization drives under Mission Indradhanush. The data has helped district and state to take targeted actions both in terms of case management and public health intervention in response to case identification.

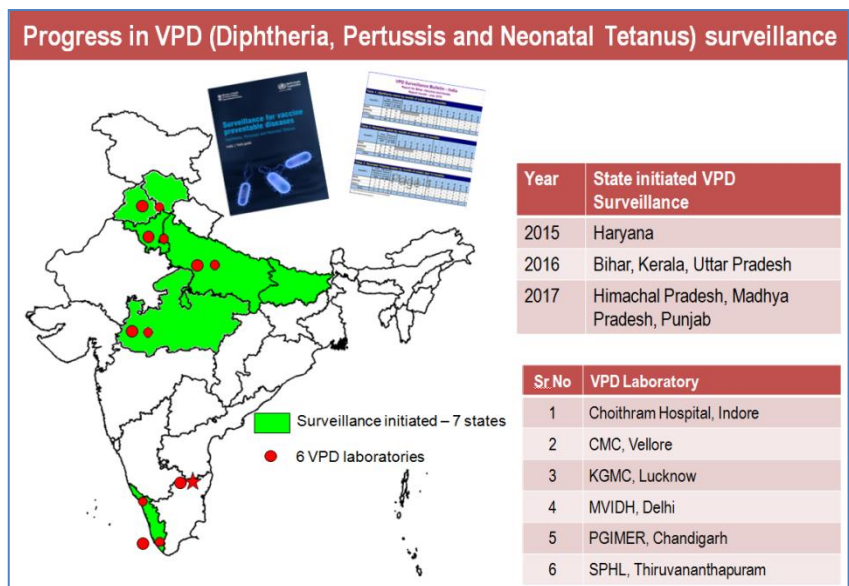


Table 2: State wise reported cases of DP & NT 2016-2018.

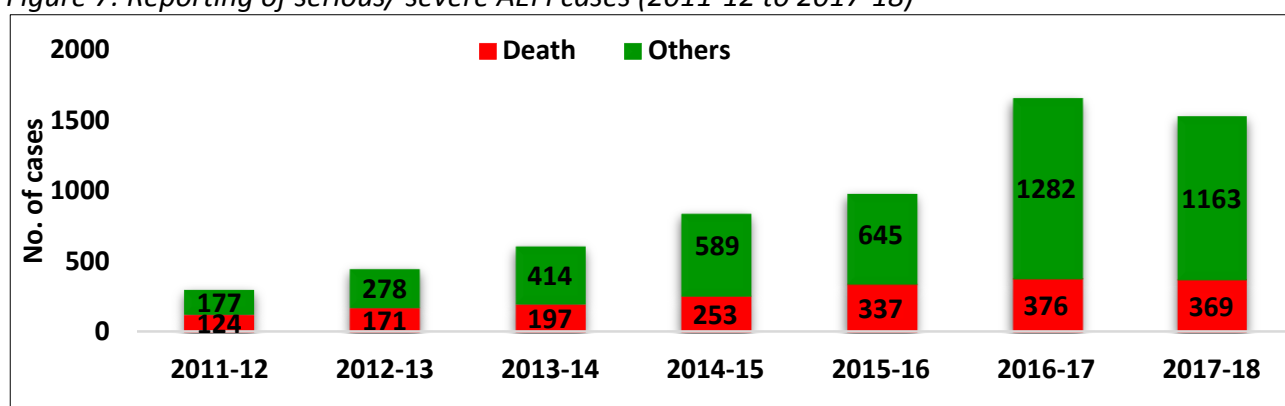
State	Year								
	2016			2017			2018 (as of 6 October 2018)		
	Diphtheria	Pertussis	Tetanus	Diphtheria	Pertussis	Tetanus	Diphtheria	Pertussis	Tetanus
Bihar	45	38	15	55	110	13	46	99	7
Haryana	69	76	3	46	66	2	13	72	0
Himachal Pradesh	-	-	-	-	-	-	0	4	0
Kerala	560	84	0	602	87	0	217	145	0
Madhya Pradesh	-	-	-	66	38	14	53	170	11
Punjab	-	-	-	-	-	-	3	47	0
Uttar Pradesh	727	101	34	847	1376	30	667	1295	21
7 states	1401	299	52	1616	1677	59	999	1832	39

Vaccine safety data

The AEFI Secretariat manages the AEFI surveillance programme and coordinates with various stakeholders in vaccine safety. The AEFI Secretariat is quality certified as per National Quality Assurance Standards for national level AEFI surveillance processes. 2017 WHO’s National Regulatory Authority assessment has given to India, the highest maturity level of 4. Annexure 8.3 shows the key achievements under AEFI surveillance.

Vaccine Adverse Events Information Management System (VAEIMS) is a web-based tool developed to digitize data related to reporting and investigation of serious / severe AEFI cases. There is a plan to integrate VAEIMS with RCH portal of MoHFW for minor AEFIs after the complete operationalization of VAEIMS in all states/UTs. The software, piloted in Madhya Pradesh and West Bengal in 2016, was upgraded in 2017 before two national level trainings were conducted in 2018. In 23 states/UTs, district officials have been trained on VAEIMS. Remaining states / UTs will be trained by end of 2018.

Figure 7: Reporting of serious/ severe AEFI cases (2011-12 to 2017-18)

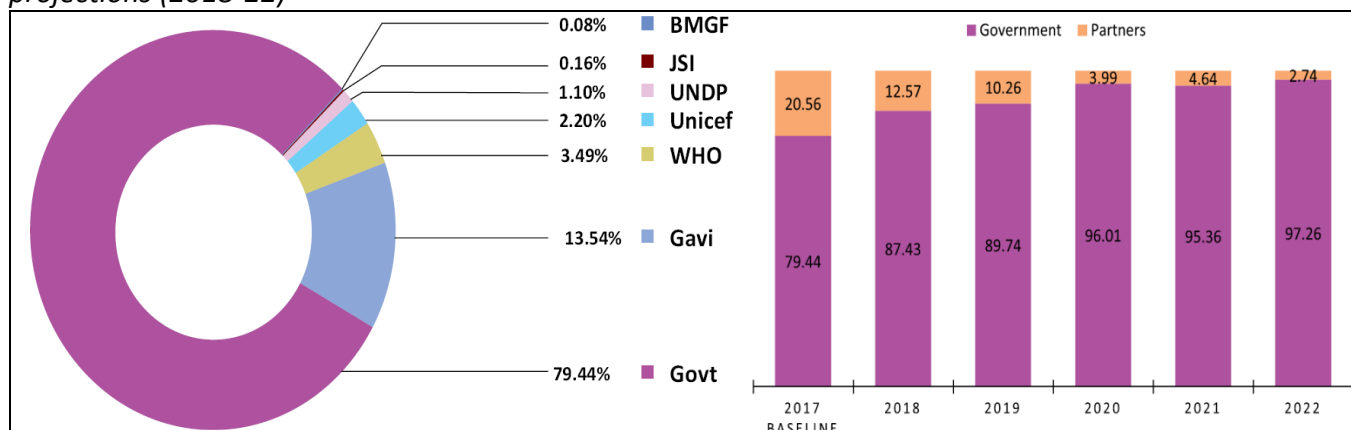


3.4 Immunisation financing

The immunisation expenditure in 2017-2018 (including shared personnel costs) is estimated to be over US\$ 1 billion, to which GoI funded 79% (cMYP 2018-22). GoI contribution will increase as Gavi support

scales down. As projected under cMYP 2018-22, the share of Gol contribution will increase from 79% in 2017 to 97% in 2022.

Figure 8: Contribution of Gol and partners in total expenditure (%): Baseline expenditure (2017) and projections (2018-22)



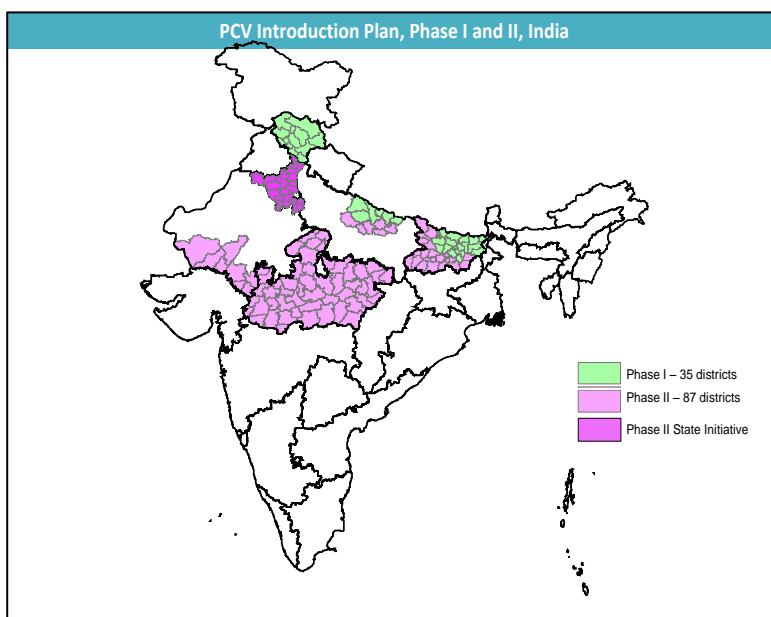
* The contribution of 13.5% from Gavi includes vaccines only. The contribution of WHO, UNICEF, UNDP and JSI include their respective portions of the Gavi HSS grant.

4. Performance of Gavi support

4.1 Performance of vaccine support

a. PCV

On 13 May 2017, the Gol introduced PCV through a phased rollout, with the catalytic support from Gavi. PCV vaccine introduced in routine immunization in entire Bihar, Himachal Pradesh, Madhya Pradesh, 12 districts of Uttar Pradesh and 9 districts of Rajasthan. Since introduction, nearly 6.8 million doses have been administered in above mentioned districts till October, 2018. Haryana has launched PCV vaccine as a state initiative. In 2019, PCV will be further expanded to cover 9 districts in Rajasthan and 7 districts in Uttar Pradesh.



Based on the analysis of PCV reported data, first and second dose of PCV coverage is within 10% range of corresponding pentavalent dose. Phase 1 PCV 1 and PCV2 coverage have been reported as 86% and 68% in Bihar, 96% and 94% in Himachal Pradesh, and 79% and 64% in Uttar Pradesh, respectively. PCV booster doses reporting have started from states covered under phase 1.

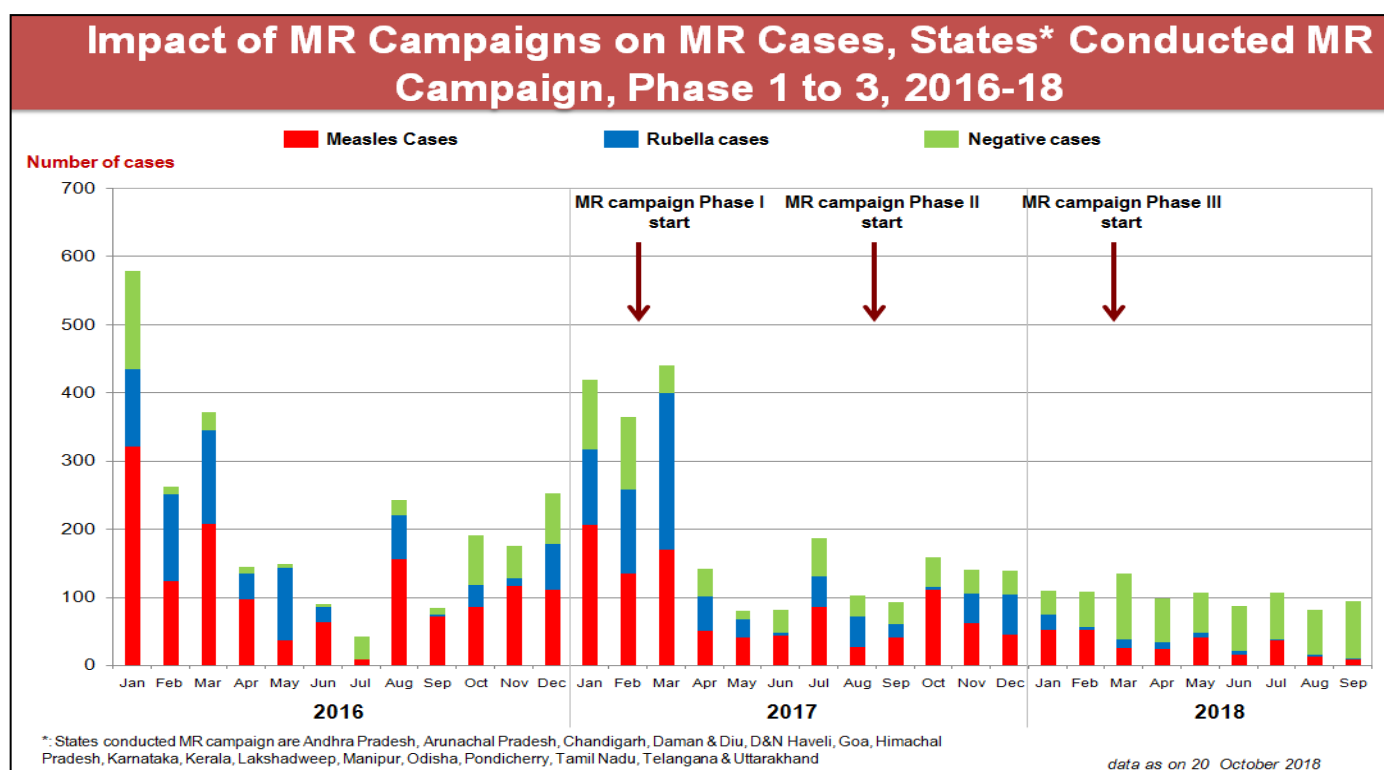
b. Rotavirus vaccine

Under Gavi support for RVV, Uttar Pradesh has introduced RVV under UIP in September 2018. As of October 2018, 0.7 million doses have been administered in Uttar Pradesh. RVV has been introduced in 10 states (Andhra Pradesh, Haryana, Himachal Pradesh, Jharkhand, Odisha, Assam, Tripura, Rajasthan, Tamil Nadu, and Madhya Pradesh) in phased manner through domestic budget. Nationwide rollout of RVV is expected in 2019.

c. Measles Rubella

India started the world’s largest MR campaign in February 2017, targeting over 400 million children. As of 28th December 2018, MR campaign has been completed in 23 state/UTs and is ongoing in 7 states, where 207 million children have been vaccinated. Annexure8.4 shows that state-wise coverage of the MR campaign. 19 out of 23 state/UTs that have completed the MR campaign to date have administrative coverage of ≥95% coverage.

Challenges were experienced in the first phase of the campaign, with rumours and mis-information circulating on social media, and sub-optimal stakeholder engagement. The GoI sought, and Gavi approved, a reallocation of funding from the rotavirus vaccine envelope – where savings were expected – to provide technical assistance on MR to ensure high quality implementation in the remaining phases of the campaign. Lessons learnt from the phase I & II measles-rubella campaigns have been strongly enforced through operational and communication task forces with robust four-month pre-campaign preparedness period; accountability mechanisms strengthening; steering preparedness review through national, state and district task force mechanism; active engagement of schools; convergence with local professional



bodies; capacity-building, micro-planning, HR surge with deployment of additional WHO and UNICEF workforce as well as government staff (rapid response team members); robust communication & media strategy spanning social media network and other networking resources.

An impact assessment of MR campaign on routine immunization and overall health system strengthening in the phase 1 states/union territories indicate a significant reduction in the number of measles and rubella cases. Subsequent to the conduct of phase 1 MR campaign in five states there has been a significant decline in the number of measles and rubella cases as seen in the attached graph. The number of measles cases reduced from 35 in Jan-2017 to 5 in Oct-2018 whereas the rubella cases reduced from 39 in Jan-2017 to 2 in Oct-2018.

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

Under HSS 1 (2014-17), no-cost extension period was over in June 2018 for UNDP and the technical and financial reports from WHO, UNICEF and UNDP were shared with Gavi for grant closure.

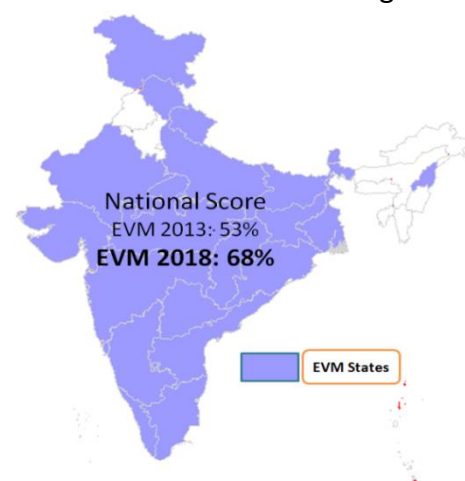
The HSS 2 (2017-21) support started in Q4 of 2017, after the grant approval in July 2017 followed by MoU development and disbursements. Table 2 below shows selected results from the HSS 2 support. Annexure 8.6 shows the details of the Intermediate results/tailored output indicators by objective area.

Table 3: Targets and Achievements of selected core and tailored Grant Performance Indicators

PF Indicator Number	Indicator	Annual Target 2017	Cumulative Achievements in 2017 (with respect to targets)	Annual Target 2018	Cumulative Achievements till Q3 2018
OI-T 1	Full immunization coverage (%)	NA (baseline 65.3% in 2013-14)		NA	NA
OI-T 2	No. of states/UTs with Sickness rate maintained within 2%	24	18 ⁴	28	20 ³
OI-T 3	Percent districts in a state reporting VPD data	50	5 states (98.7%)	60	7 states (98.4%)
OI-T 4	% of CCP with vaccine availability index more than 90% (aggregated by States)	NA	97.5%	50%	96.5%
OI-T 5	Reduction in temperature breach of CCEs (aggregated by States)	NA	48% ⁵	20%	43% ⁴
IR-C 3.0	Effective Vaccine Management Score (composite score)	NA (baseline 54% in 2013)	NA	65%	68%
IR-C 4.1	Percentage point difference between Penta 3 national administrative coverage and survey point estimate	NA (baseline 14.8 in 2013-14)	NA	NA	NA

In 2018, two major assessments were carried out in the areas of cold chain and vaccine logistics management, to which a majority of HSS1 and HSS2 support contributed.

The first is the world’s largest Effective Vaccine Management (EVM) assessment covering 145 sites across 23 states through 40 teams comprising of 74 assessors. This was the 2nd EVM assessment done under nine global criteria. India witnessed a significant increase in national EVM score from 53% in 2013 to 68% in 2018. The improvements in individual categories are shown in Figure 6. It is evident that the many interventions supported by HSS 1 and 2 since 2014, including HR capacity building, supportive supervision, institutional strengthening and eVIN are contributing to positive

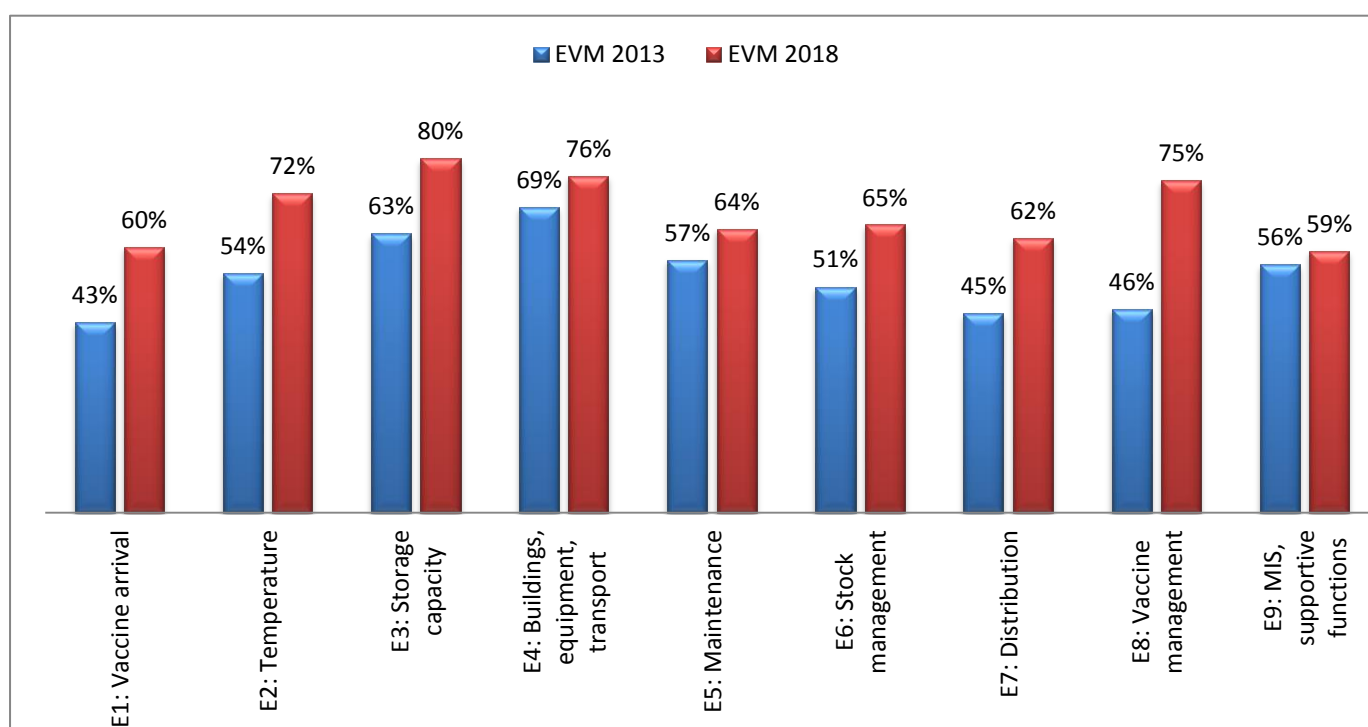


⁴ The probable reasons for sickness rate more than 2% in the State/UTs are NCCMIS not updated due to lack of HR; lack of training for new HR /refresher training and; the equipment which are to be condemned are reflected under repair and maintenance, thus contributing to high sickness rate as observed in the regular follow up by the NCCVMRC team

⁵ Considering temperature breach of more than 3 hours; and reduction is being considered from the baseline values of July 2016

outcomes.

Figure 9: Comparison of EVM criteria scores - 2013 vs 2018



The second is a techno-economic assessment of the Gavi-supported eVIN, as recommended by the IRC. The study was designed to evaluate the programmatic impact of eVIN implementation, assess the economic impact of eVIN implementation, and document the programme benefits of eVIN implementation, in contributing to system effectiveness and efficiencies.

The study shows significant achievements and presents motivating data showing the effectiveness of eVIN:

- The vaccine utilization data of Immunization Division, MoHFW reflects that the utilization has reduced from 305 million doses in pre eVIN period to 215 million doses in post eVIN period across 12 eVIN states, resulting into savings of approximately 90 million doses of vaccines.
- eVIN has effectively improved visibility of stock till last cold chain point and has led to better vaccine management practices like reduction in over-stocking. Across 12 eVIN states, percentage of facilities witnessing stock-out of any antigen has reduced from 37.8% in pre eVIN period to 26.3% in post eVIN, leading to a 30% reduction in stock-outs.
- The use of standardized stock registers by CCHs has increased from 56% in pre eVIN to 97% in post eVIN.
- With regard to the equipment status eVIN states have reported sickness rate of 1.9% which is within the GoI permissible range of upto 2%, whereas the sickness rate in non eVIN states was 3.4 percent.

The economic assessment shows that the highest cost saving from vaccines in the post eVIN period was in Uttar Pradesh (INR 32.76 crore) followed by Bihar (INR 30.23 crore). Both these states showed a positive return on investment i.e. in Uttar Pradesh one rupee investment in eVIN yield INR 1.27 return while in Bihar one rupee investment yield INR 1.83 return. Considering all eleven HSS 1-supported eVIN states together, including start-up costs, and if the new vaccines such as IPV, RVV, PCV and MR were added in the calculation, the return of investment was estimated to be INR 1.41 for each rupee invested. The return of investment was estimated increase to INR 2.91 in the future if only recurrent expenses are included.

The first year of implementation of the HSS 2 support is progressing well, with delays in some activities due to competing priorities in the immunisation programme. Table 3 shows a summary of the programmatic and financial performance by objective area. Detailed progress by activity has been shared in the quarterly reports to Gavi.

Table 4: Objective wise summary performance of Gavi HSS 2 till Q3 2018 (cumulative for year 1 and 2)

Objective 1	
Objective of the HSS grant	To strengthen and maintain robust data systems to improve evidence based decision making
Priority geographies/population groups or constraints to C&E addressed by the objective	Refer to annexure 8.5
% budget utilisation	72%
Major activities implemented & Review of implementation progress	<ul style="list-style-type: none"> • 3 HSS review meetings conducted • Quantum of WHO NPSP concurrent monitoring, Jan-Sep 2018: 663,000 children and 93,000 sessions monitored • State-wide VPD surveillance started in seven states until Q3 2018 • About 59% measles outbreaks investigated in the period of Jan-Sep 2018 • Approximately 95% VPD cases investigated by DIOs/Govt. officers until Q3 2018 • 8 states where ToTs conducted for VPD surveillance • ANMOL tablet specifications and consignee received from MoHFW; and agency in place for assessment. Assessment results interpretation workshop planned for January 2019. • Immunization data for Coverage Evaluation Survey to be available by Dec 2018
Major activities planned for upcoming period and needs for technical assistance	Refer annexure 8.7 on 2019 workplan; no change in activities planned
Objective 2:	
Objective of the HSS grant	To improve service delivery through improved capacity of human resources
Priority geographies / population groups or constraints to C&E addressed by the objective	Refer to annexure 8.5
% budget utilisation	71%
Major activities implemented & Review of implementation progress	<ul style="list-style-type: none"> • Letter to be issued from MoHFW to all state governments to proceed with conducting MO Handbook trainings • WHO NPSP facilitated 59 district workshops for MI microplanning during the October round of this special immunization drive • State level workshops conducted in 7 states for MO Handbook training • State ToT on RI microplanning conducted in 2 states and for MI microplanning in 7 states • RISE package under development after framework approved by MoHFW • Capacity Building Needs Assessment (CBNA) had been conducted in all 5 states. It got delayed by a month more as the state of Tamilnadu

	<p>requested to change the initially selected district. The report had been shared with MoHFW and a dissemination workshop of CBNA findings was held in August 2018, under the chairmanship of JS (RCH)</p> <ul style="list-style-type: none"> • Subsequently the RISE package development got delayed and was started in Q4 of 2018 instead of Q3 of 2018. • A Core Committee for Tribal Immunization has been formed involving Ministry of Tribal Affairs, to develop and roll out the strategies for improving the immunization in tribal area; and draft ToR and framework for need assessment study have been prepared. The activity got delayed as Core committee meeting could take place in October 2018. Need assessment study planned in first quarter of 2019. • 14 cities have been identified for urban immunization strengthening. Letter from Joint Secretary (NUHM) with detailed ToR communicated to all states and corporations to constitute task forces
Major activities planned for upcoming period and needs for technical assistance	Refer annexure 8.7 on 2019 workplan; no change in activities planned
Objective 3:	
Objective of the HSS grant (as per the HSS proposals or PSR)	To strengthen cold chain and Vaccine logistics systems
Priority geographies / population groups or constraints to C&E addressed by the objective	Refer to annexure 8.5
% budget utilisation	49%
Major activities implemented & Review of implementation progress	<ul style="list-style-type: none"> • 68% of training batches of cold chain, vaccine handlers, technicians and vaccine logistic managers have been completed. Some adjustments were made by the States due to ongoing priority of Mission Indradhanush and Measles Rubella campaign • NCCMIS is being augmented with addition of new features including Supportive Supervision for Immunization (S4I), Immunization Training Management System (iT MIS), spare parts module , updated VCCH data including training, information on CCT and updated entries of newly supplied CCEs • EVM was withheld in some states due to non-availability of new global EVM tool. Ministry has decided not to wait any further and to continue the use of existing tool. Accordingly, one state has conducted EVM assessment in Nov 2018 and other states are planning in 2019. • 2nd National EVM assessment undertaken and workshop for development of improvement plan done • All positions at NCCVMRC and NCCRC supported under Gavi are in place • All the 12 eVIN implementing states of HSS-I, have included cost of eVIN in their respective National Health Mission (NHM) Project Implementation Plans (PIPs) for financial year 2018-19 • eVIN is currently operational across 100% of 16 states/UTs. eVIN built capacity of 19,000 Vaccine Store Keepers through 600 batches of training • Completion of eVIN trainings at district level were delayed as the

	overall implementation, including staff recruitment could only commence once respective state government had given their approval. Trainings in Maharashtra and Karnatka were also delayed due to the MR campaign and IMI which precluded cold chain handlers' availability for eVIN training.
Major activities planned for upcoming period and needs for technical assistance	Refer annexure 8.7 on 2019 workplan; no change in activities planned
Objective 4:	
Objective of the HSS grant	To improve demand generation for immunization services to improve coverage and address inequities
Priority geographies / population groups or constraints to C&E addressed by the objective	Refer to annexure 8.5
% budget utilisation	34%
Major activities implemented & Review of implementation progress	<p>Under BRIDGE training total No of FLWs trained: 411700/2700000 (17 states, all have done partial trainings till 30 Nov)</p> <ul style="list-style-type: none"> • Lack of funding availability in state PIPs or delayed funding approval. • A National BRIDGE Progress Review workshop planned in January, which is envisaged to expedite the BRIDGE completion process • All major GAVI states (12 in number) have State RI Action Plans ready. (ANM+ASHA+AWW). BRIDGE IPC skill training for 3As was introduced first under IMI districts in 2017, to build capacity in IPC skills for effective mobilization of families and communities to improve health seeking behaviour • Proposal for multi-stakeholder partnership with AIH and VHAI developed and submitted to MoHFW for approval • 55,326 mother meetings and 765,618 IPC sessions on RI were conducted till September 2018 in UP and Bihar • Over 6,800 members of SMNet were trained on PCV introduction • Over 213,404 ANM, ASHA and AWW were trained on RI and IPC till September 2018 in UP • Communication monitoring undertaken in MR campaign, IMI and GSA-MI through use of ODK tool • Sound-bytes provided to TV news channels and print media, emphasizing on the importance of immunization in bringing down U5MR of children in India • Sound-bytes, opinion editorials, workshops undertaken in Gujarat, Jharkhand, Tripura to balance negative media pertaining to MR vaccine. • Workshops on AEFI organized in Ahmedabad, Srinagar, Jammu and Guwahati. • A Critical Appraisal Skills (CAS) workshop on immunization and public health issues was organized in Maulana Azad National Urdu University (MANUU), Hyderabad. CAS course was also formally launched for journalists and students at MANUU. The two-day programme focused on underscoring the need for equipping journalists with skills to make their reporting more evidence-based.
Major activities planned for	Refer annexure 8.7 on 2019 workplan; no change in activities planned

upcoming period and needs for technical assistance	
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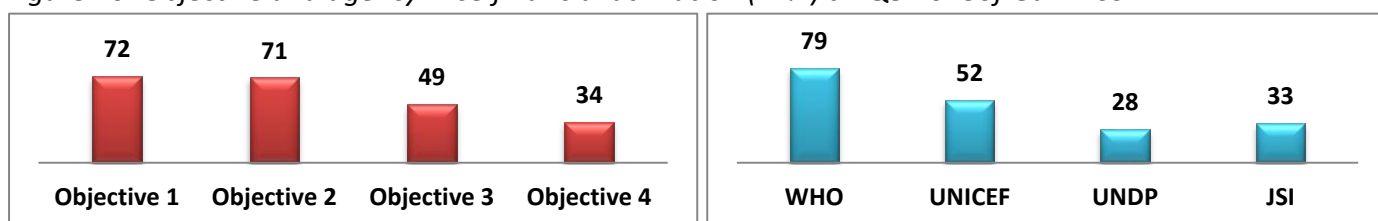
4.3 Performance of Gavi CCEOP support (if country is receiving Gavi CCEOP support)

Not applicable

4.4 Financial management performance

USD 29.38 million (~55%) has been spent out of total USD 53.97 million approved for 2017 and 2018. The implementation of HSS 2 activities started in Q4 of 2017 due to late approval and disbursement of funds to the respective implementing partners. The funding for Gavi HSS-2 is given to implementation partners (WHO, UNICEF, UNDP and JSI). The cash utilisation is reported in the quarterly reports.

Figure 10: Objective and agency wise financial utilization (in %) till Q3 2018 of Gavi HSS 2



Note: Objective wise utilization does not include programme support cost (PSC), whereas agency wise utilization includes PSC.

The major activity of RISE package development with engagement of two agencies for creative content development and IT platform development respectively, could only started in Q4 of 2018 instead of Q3 due to prolonged CBNA activity as mentioned above in table 3 . This is one major cost component as per budget provisions. Once this expenditure is reflected in Q4 of 2018 and Q1 in 2019, the expenditure proportion will increased grossly

UNDP had only received \$9,466,305, allocated for the year one. As the expenditure at the end of quarter 3 of 2018 is \$8,212,376. Therefore the actual % Utilisation is 87%.

4.5 Transition planning (if applicable, e.g. country is in accelerated transition phase)

Gol takes significant ownership of its immunisation programme. Since 2016, Gol has transitioned (or started to transition) support for pentavalent, IPV, rotavirus and MR vaccines, as well as selected HSS-supported interventions including the polio network and eVIN (see below for further information). Domestic financing of these Gavi-supported vaccines and HSS interventions has more than tripled from \$90 million in 2016/17 to 270 million in 2018/19. Many HSS activities are also designed in a cost-sharing modality with Gol to ensure sustainable programming after Gavi support ends.

WHO – NPSP Transition

WHO NPSP is presently assisting MoHFW in strengthening routine immunization including urban immunization strengthening, measles and vaccine preventable diseases (VPD) surveillance, introduction of new and under-utilized vaccines (PCV, RVV, MR and Td vaccine and state initiatives of HPV and Typhoid vaccine), elimination of measles and neglected tropical diseases (NTD).

In the face of the fast-approaching closure of the Global Polio Eradication Initiative (GPEI) funding at the end of 2019, Gol spearheaded the polio programme transition planning in India to sustain the National Polio Surveillance Project network to 2021 and beyond to support the broader public health needs. MoHFW formally constituted a core committee with membership of stakeholders and donors to guide the transition process for NPSP. India’s overall strategy for the transition of polio-essential functions is to build government capacity through 2021 while scaling down operations to eventually transfer the functions to government.

WHO has developed a draft Joint Transition Planning Framework of NPSP in the background of needs articulated by the government (both at the centre and states), and partners and donors for NPSP to be involved in immunization strengthening initiatives such as Mission Indradhanush, Intensified Mission Indradhanush, Gram Swaraj Abhiyan and now Extended Gram Swaraj Abhiyan, and support multiple disease elimination and control programmes, including measles elimination and rubella control, and initiatives focused on the elimination of NTDs such as Kala Azar, Leprosy, Lymphatic filariasis and Malaria, as well as other health emergencies. Joint Transition Planning Framework (Polio to Public Health, 2017-2026) has been approved by GoI. Till date, GoI has released ~USD 1.8 million for transition support, besides ongoing support of USD 3 million for labs during FY 2017-18.

SMNet

As part of the polio legacy, the SMNet is now focusing on boosting routine immunization via working with the government to strengthen communication planning, capacity development, social mobilization, media sensitization, monitoring, supportive supervision and evidence-based, real-time planning for routine immunization activities.

SMNet has also played a critical role in MR campaign in 18 states with commendations from State government in overcoming major bottlenecks. SMNet network has helped to conduct 55,326 number of mother meetings and 765,618 number of IPC sessions on RI from January to September 2018 in Bihar and Uttar Pradesh. Over 6,800 members of SMNet were trained on PCV introduction and provided refreshers training on IPC using the BRIDGE module.

Under Gavi HSS2, funds were allocated to support SMNet for 5 quarters. With the government ownership, nearly 60-70% funds are being allocated through government funding, hence balance amount is available under HSS2. Current SMNet support is till 31st March 2019. Govt. has been supporting SMNet, with regular increase in funding every year. Further, the matter is under discussion, formal decision will be communicated in due course of time.

Electronic Vaccine Intelligence Network (eVIN)

The 12 eVIN states which were funded through HSS 1 grant have projected eVIN in their state NHM PIPs, to ensure sustainability. Under HSS phase 2, UNDP aims to implement eVIN in the remaining 24 States/UTs in India by 2020. The BOT (Build-Operate-Transfer) approach has been followed and implementation processes have been updated based on lessons learned from HSS phase 1 to aid in a smooth transition of the project into government management and ensure sustainability. These include the following:

State Engagement:

- Pre roll out, a meeting is conducted with the State National Health Mission (NHM) and the State Health & Family Welfare (SHFW) department and to orient the state on eVIN roll out and required human resource.
- The number of human resources, their designated districts and their remuneration is decided as per state norms.
 - States with large Municipal Corporations like Maharashtra have opted for an additional VCCM for these corporation areas.
 - States like Telangana who have fewer CCP/district have given 1 VCCM the charge of multiple districts.
 - Tripura being a smaller state has opted to forgo the option of divisional staff.
- All vacancies for the project staffs are advertised (in newspapers and web portals) after consultation and agreement with the State.

- The interview panel for recruitment of these resources consists of representatives from State Immunization Cell, State NHM and UNDP in all states and are scheduled as per state representative’s availability. All recruitments are supported by an interview report which is formalized by the state.
- All decisions made by the state in regards to eVIN implementation are documented and approved by the state.

Baseline data collection:

- The baseline data collection is conducted by eVIN project staff and not by an external agency. This does result in an increased timeline, but ensures that the project staff knows their districts and vaccine storage points thoroughly and have an in-depth understanding of the vaccine supply and cold chain in their domain. The data is cleaned and re-checked, followed by sharing with the district and state government officials for validation and then is it uploaded on the software.

Trainings:

- The eVIN training calendar of State, Regional and District Vaccine Store Managers and for sub district Cold Chain Handlers are finalized after consultation with the States.
- All Trainings have State immunization cell representatives in the Trainings.
- The states are also encouraged to include SHFW, State NHM staff and other state trainers who can be trained as Master Trainers of eVIN.

4.6 Technical Assistance (TA)

In 2018, Partners’ Engagement Framework Targeted Country Assistance (PEF TCA) was provided by five partners, to advance the coverage and equity agenda and support new vaccine introductions. The following table summarises the list of activities provided by each partner. The activities are mostly proceeding as planned. Some are experiencing delays because of competing priorities and shifted MR SIA schedules in country, and a few activities were re-programmed to fit the evolving needs of Gol.

Table5: Progress under PEF TCA 2018

Programmatic Area	Activity	Partner	Status (as of 30 Nov)
Program Implementation/ Coverage & Equity	Strengthening immunization in 4 urban cities identified under Intensified Mission Indradhanush (IMI) but not included in HSS-2 proposal.	WHO	On track
Leadership Management and Coordination	Deployment of one technical officer and one technical assistant to support immunization strengthening activities	WHO	Completed
Data	District workshops for VPD surveillance	WHO	On track
Data	Data quality workshops for state program managers	WHO	Minor delays
Program Implementation/ Coverage & Equity	Support the implementation and national monitoring of Mission Indradhanush, with a focus on 5 high priority states	UNICEF	On track
Demand Promotion	Support the implementation of a high quality MR SIA, with a focus on social mobilization and real time monitoring	UNICEF	On track
Supply Chain	Support planning, cold chain assessment, media orientation and roll out of Pneumococcal and Rotavirus vaccine in identified states	UNICEF	On track

Demand Promotion	Applying lessons learned from polio and measles campaigns on communication and community engagement to improve RI intentions and uptake in high risk districts of India.	CDC	Re-programmed
Demand Promotion	Building capacity to detect and respond rapidly and effectively to AEFI, rumours or misinformation arising on media, social media, and other public platforms in India.	CDC	Re-programmed
Data	Support the government of India for assessing and documenting facilitators and barriers of successful implementation of ANMOL in 2 selected states.	CDC	On track
Program Implementation/ Coverage & Equity	MR: CDC Staff to provide TA for 30 days each to ensure high quality preparation, implementation and monitoring for MR Catch Up SIAs	CDC	Minor delays
Program Implementation/ Coverage & Equity	Provide technical assistance to state-specific HPV vaccine implementation planning	CDC	On track
Data	Conduct desk review of existing data on laboratory-confirmed cholera cases to identify 2 sites for prospective surveillance for cholera; conduct a pilot project to adapt the existing polio infrastructure of health facility and community-based polio surveillance to conduct surveillance for cholera.	CDC	Re-programmed
Data	(reprogrammed from the above activity) Provide technical expertise and conduct monitoring and evaluation activities related to the first public sector introduction of typhoid conjugate vaccine (TCV) in Navi Mumbai, India – Gavi funding specifically applied towards economic evaluation, communications support and crisis communications planning.	CDC	On track
Vaccine-specific support	<p>HPV: 1. Conduct a costing exercise and impact estimates of introducing and scaling up HPV vaccine on adolescent and women's health.</p> <p>2. Develop a program-learning toolkit of global and national best practices.</p> <p>3. Coordinate with all the relevant stakeholders, including the Expanded Program on Immunization (“EPI”) partners at the national level through a plan for prevention of cervical cancer through screening and HPV Vaccine program in India.</p> <p>4. Engage with community stakeholders to understand and document their perspective on HPV vaccines and prevention of cervical cancer</p>	JHPIEG O	Completed

Data	<p>Conduct a technoeconomic study on eVIN to:</p> <ol style="list-style-type: none"> 1. To evaluate the programmatic impact of eVIN implementation, including inventory holding times, inventory holding costs, on-time and in-full deliveries, vaccine wastage, vaccine availability, level of effort for completing reporting requirements, timeliness of reporting, data accuracy, and data visibility for decision-making management. 2. To assess the economic impact of eVIN implementation, including cost savings on vaccine and cold chain logistics management and also an economic-feasibility assessment modelling the return on investment of eVIN implementation. 3. To document the programme benefits of eVIN implementation, in contributing to system effectiveness and efficiencies. 	JSI	Completed
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5. Update of findings from previous Joint Appraisal

Prioritised actions from previous Joint Appraisal	Current status
1. PCV scale-up	PCV vaccine introduced in routine immunization in entire Bihar, Himachal Pradesh, Madhya Pradesh, 12 districts of Uttar Pradesh and 9 districts of Rajasthan. Since introduction, nearly 6.8 million doses have been administered in above mentioned districts till October, 2018.
2. Rotavirus vaccine scale-up	RVV scale up under Gavi support was planned for Uttar Pradesh, which was done in September 2018.
3. MR scale-up	As on 28 th December 2018, MR campaign has been completed in 23 state/UTs and is ongoing in 7 states, where 207.8 million children have been vaccinated and with coverage being 82.44 %.
Additional significant IRC / HLRP recommendations (if applicable)	Current status
N/A	

6. Action Plan: Summary of findings, actions and resource/support needs identified and agreed during the Joint Appraisal

Key finding / Action 1	PCV scale up
Current response	PCV introduction in UIP through catalytic support by Gavi
Agreed country actions	In 2019, PCV will be further expanded to cover 9 districts in Rajasthan and 7 districts in Uttar Pradesh
Expected outputs / results	Scale up of PCV
Associated timeline	Variable depending upon the Union elections in India
Required resources / support	Vaccine procurement
Key finding / Action 2	RVV Scale up
Current response	RVV introduced in UIP through domestic funding in 10 states and with Gavi support in the state of Uttar Pradesh. Nationwide rollout of RVV is

	expected in 2019.
Agreed country actions	In 2019, Gavi support will be continued for RVV in Uttar Pradesh.
Expected outputs / results	Scale up of RVV
Associated timeline	Variable depending upon the Union elections in India
Required resources / support	Vaccine for Uttar Pradesh
Key finding / Action 3	MR scale up
Current response	MR campaign currently done in 22 states/UTs and ongoing in 8 states/UTs
Agreed country actions	MR campaign in Bihar, Madhya Pradesh, Rajasthan, Sikkim, Delhi and West Bengal to be held in 2019
Expected outputs / results	Scale up of MR vaccine
Associated timeline	Variable depending upon the Union elections in India
Required resources / support	Vaccine procurement and TCA support
Key finding / Action 4	IPV
Current response	IPV procured through domestic budget but after price hike of 80% since last tender, support sought from and approved by Gavi
Agreed country actions	
Expected outputs / results	Continuation of IPV under UIP of India as per the global polio endgame strategy
Associated timeline	
Required resources / support	Support from Gavi for 50% of annual requirement over 3 years
Key finding / Action 5	90% FIC achievement and sustainment
Current response	Specific strategies have been designed for each category of districts (<50%, 50-90%, and ≥ 90% FIC)
Agreed country actions	HSS and TCA in support of system strengthening and targeted strategies implementation
Expected outputs / results	
Associated timeline	
Required resources / support	2019 TCA support for relevant activities

HSS implementation is progressing as planned. The joint appraisal discussion also identified additional areas of untapped opportunities, to be explored further in the areas of addressing vaccine hesitations, urban immunisation, and cold chain and vaccine logistics.

7. Joint Appraisal Process, Endorsement by the National Coordination Forum (Immunization Action Group)

IAG Meeting held on 20th November, 2018 under the chairpersonship of Mrs. Vandana Gurnani, Joint Secretary (RCH) at Nirman Bhawan, New Delhi. The minutes of the meeting are included in Annexure 8.8.

8. Annexures

8.1 Compliance with Gavi reporting requirements

	Yes	No	Not applicable
Grant Performance Framework (GPF) reporting against all due indicators			
Financial Reports			
Periodic financial reports			
Annual financial statement			
Annual financial audit report			
End of year stock level report (which is normally provided by 15 May as part of the vaccine renewal request)			capped funding for vaccines
Campaign reports			
Supplementary Immunisation Activity technical report			
Campaign coverage survey report			6
Immunisation financing and expenditure information			
Data quality and survey reporting			Not yet released
Annual data quality desk review			
Data improvement plan (DIP)			
Progress report on data improvement plan implementation			
In-depth data assessment (conducted in the last five years)			
Nationally representative coverage survey (conducted in the last five years)	7		
Annual progress update on the Effective Vaccine Management (EVM) improvement plan	8		
CCEOP: updated CCE inventory			
Post Introduction Evaluation (PIE)			
Measles & Rubella situation analysis and 5 year plan			
Operational plan for the immunisation programme			
HSS end of grant evaluation report			
HPV specific reports			
Reporting by partners on TCA and PEF functions			

⁶ MR Campaign coverage survey not undertaken whereas RCM has been undertaken by WHO#

⁷ Coverage Evaluation Survey is under review by MoHFW; will be shared with Gavi once they are finalised.

⁸ EVM assessment report is under review by MoHFW; will be shared with Gavi once they are finalised.

Intensive concurrent monitoring including real-time rapid convenience monitoring (RCM) during campaigns, sero-surveys conducted to assess the reach of the MR campaign in the identified high-risk and underserved populations. Approximately 65,487 MR vaccination session sites were monitored and 604,967 children verified through RCM in the communities. The RCM findings from 20 states that have completed the campaign show about 91% children vaccinated with MR in the areas checked through RCM.

The RCM is extremely helpful to identify missed communities, left out pockets and missed children in socially segregated groups, nomadic populations, street children, working children in small enterprises or markets, high risk and hard to reach areas etc. The process specifies visiting 20 target age (9 months to < 15 years) children in 20 households (1 child per household). If a household has more than one eligible child, validate the oldest child in the eligible age group who is physically present at the time of visit. If 1 to 3 children out of 20 monitored is/are found un-vaccinated with MR campaign dose, inform the Medical Officer to motivate and mobilize all missed children to visit nearest outreach or health facility session site for the MR vaccination. If 4 or more children out of 20 are found un-vaccinated with MR campaign dose, then PHC medical officers to repeat the outreach-session site activity and plan for intensified social mobilization in the whole community/urban ward/village in the last week in order to cover the missed children (sweeping repeat activity).

8.2 Mission Indradhanush coverage report

(As on 13thDecember2018)

S. No	Indicator	Ph-1	Ph-2	Ph-3	Ph-4	IMI	MI-GSA*	MI-EGSA*	Ph-6^	Total
1	No. of districts	201	352	216	254	190	550	117	75	1955
1	No. of sessions held	9.61	11.55	7.44	6.3	6.04	-	-	0.68	41.62
2	No. of antigen administered	190.09	172.84	151.56	118.46	158.45	-	-	9.69	801.09
3	No. of pregnant women immunized	20.95	16.83	17.83	13.18	11.86	1.13	4.29	0.80	86.87
4	No. of pregnant women completely immunized	11.13	8.94	9.56	7.13	6.66	-	-	0.44	43.86
5	No. of children immunized	75.75	70.3	62.08	46.65	59.49	5.02	15.26	3.65	338.20
6	No. of children fully immunized	19.81	18.17	16.34	12.25	14.01	-	-	1.08	81.66
7	No. of children vaccinated for the first time	NA	9.31	12.06	6.84	8.55	-	-	0.48	37.24
8	No. of Vit A doses administered	19.85	20.53	17.98	15.13	18.46	-	-	1.28	93.23
9	No. of ORS packets distributed	16.93	13.62	21.38	16.64	11.17	-	-	0.80	80.54
10	No. of zinc tablets distributed	57.03	44.85	80.7	52.1	39.18	-	-	0.65	274.51

*Data taken from GSA/EGSA Portal

^ Data is provisional

8.3 Key achievements under AEFI surveillance

Component	Status				
	2013-14	2014-15	2015-16	2016-17*	2017-18*
National AEFI system is active with a designated national committee	Yes	Yes	Yes	Yes	Yes
Number of reported serious/severe AEFI cases reported during the financial year	611	842	982	1,658	1532
% of serious/severe AEFI cases notified in a timely manner*	27%	24%	24%	25%	27%
% of serious/severe AEFI cases investigated (PIR/PCIF received at national level) in a timely manner as per national guidelines*	31%	35%	30%	14%	14%
% of serious/severe AEFI cases classified within time as per national guidelines*	3.1%	12.1%	1.9%	6.1%	2.4%
NRA AEFI Program assessment held				Yes	
Spokesperson training on AEFI			15 states		7 states
<p>Source: AEFI Secretariat</p> <p>Notes: Data as on 10 November 2018; Cases are serious / severe AEFI reported during financial year based on date of vaccination. *From FY 2016-17, timeliness of cases investigated and classified has been calculated as per definitions in National AEFI Operational Guidelines of 2015. Denominators are total number of reported serious / severe AEFI cases with date of vaccination in a financial year. Cases with missing date of notification, date of receipt of FIR/PIR/DIR at national level are excluded from the numerator.</p>					

8.4 State wise cumulative coverage of MR campaign

State-wise cumulative coverage- MR campaign					
		(fig. in lakhs)			
S.No.	States	Target	Achievement	%	Remarks
1	Karnataka	160.33	158.45	98.83	Completed
2	Tamil Nadu	176.05	169.53	96.30	
3	Goa	3.20	3.12	97.30	
4	Puducherry	3.04	2.66	87.46	
5	Lakshadweep	0.16	0.12	76.25	
6	Andhra Pradesh	118.54	114.58	96.67	
7	Chandigarh	3.10	3.01	97.01	
8	Daman & Diu	0.58	0.62	107.40	
9	Dadra & Nagar Haveli	1.14	1.15	101.39	
10	Telangana	90.01	91.48	101.63	
11	Himachal Pradesh	17.74	18.08	101.88	
12	Kerala	76.55	64.88	84.76	
13	Uttarakhand	28.36	28.76	101.43	
14	Odisha	112.25	110.37	98.33	
15	Arunachal Pradesh	4.38	4.43	101.14	
16	Mizoram	3.24	3.24	100.00	
17	Manipur	8.18	7.93	96.94	
18	Andaman & Nicobar	0.83	0.78	93.53	
19	Punjab	69.64	66.84	95.98	
20	Haryana	74.38	73.64	99.01	
21	Gujarat	151.57	145.60	96.06	
22	Nagaland	4.49	4.39	97.80	
23	Jammu & Kashmir	37.73	37.43	99.21	
24	Jharkhand	106.02	101.98	96.19	Ongoing
25	Assam	94.56	89.35	94.50	
26	Tripura	9.59	9.01	93.97	
27	Meghalaya	13.03	10.65	81.69	
28	Chhattisgarh	77.78	75.75	97.39	
29	Uttar Pradesh	764.03	459.53	60.15	
30	Maharashtra	310.82	221.23	71.18	
	Total	2,521.30	2,078.60	82.44	

8.5 Geographical scope for HSS 2 support

Activity	Geographical scope		Criteria for selection
	No. of States	Names of States	
Objective 1: To strengthen and maintain robust data systems to improve evidence based decision making.			
Routine immunization monitoring	20 states	Andhra Pradesh, Assam, Bihar, Chhattisgarh, Delhi, Gujarat, Haryana, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Tamil Nadu, Telangana, Uttar Pradesh, Uttarakhand & West Bengal	Routine immunization monitoring being undertaken in these states by WHO NPSP
VPD surveillance	15 states	Andhra Pradesh, Assam, Chandigarh, Chhattisgarh, Delhi, Gujarat, Himachal Pradesh, Karnataka, Maharashtra, Odisha, Rajasthan, Tamil Nadu, Telangana, Tripura, West Bengal	Based on VPD risk prioritization & availability of lab support
ANMOL	19 States (Selected districts)	Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Haryana, Jammu & Kashmir, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Punjab, Sikkim, Tripura, Uttar Pradesh and Uttarakhand	As per list shared by MoHFW for procurement of ANMOL tablets.
Objective 2: To improve capacity of human resources for service delivery and program management for equitable and efficient immunization services.			
Urban RI	14 select cities (10 under HSS-2 & 4 under PEF TCA)	Assam (Guwahati/Kamrup Metropolitan); Bihar (Gaya, Muzaffarpur, Patna); Karnataka (Bangalore Urban, Bangalore Metropolitan); Madhya Pradesh (Bhopal, Indore); Uttar Pradesh (Allahabad, Agra, Ghaziabad, Kanpur Nagar, Lucknow, Varanasi)	Based on low immunization coverage in urban pockets and in consultation with Ministry of Health & Family Welfare
Tribal strategy	7 States	Gujarat, Chhattisgarh, Jharkhand, Maharashtra, Madhya Pradesh, Rajasthan,	Based on the overall tribal population in the states, districts with large tribal population, immunization coverages,

Activity	Geographical scope		Criteria for selection
	No. of States	Names of States	
		Odisha	geographical feasibility etc.
WHO TOTs — immunization handbook, health worker module and microplanning	12 states	Bihar, Chhattisgarh, Haryana, Jharkhand, Madhya Pradesh, Rajasthan, Uttar Pradesh & West Bengal + 2 select NE states+ 2 low performing states	In continuation with Gavi-HSS1 states, select NE states and low RI performing states.
RISE	5 states	Himachal Pradesh, Tamil Nadu Madhya Pradesh Maharashtra Odisha	One state each from north, east, west, central and south zones; including one high priority state; and ensuring a mix of good, medium and poor performing states
Objective 3: To strengthen vaccine logistics and cold chain management through improved data systems, infrastructure strengthening and human resource capacity.			
eVIN	Remaining 24 states/UTs	Remaining 24 states/UTs (Maharashtra, Karnataka, Goa, Andhra Pradesh, Tamil Nadu, Telangana, Uttarakhand, Puducherry, Lakshadweep, Dadra Nagar Haveli, Daman & Diu, Andaman & Nicobar, Kerala, Punjab, Haryana, Chandigarh, Delhi, Tripura, Mizoram, Meghalaya, Sikkim, Arunachal Pradesh, West Bengal, Jammu & Kashmir)	To provide real time information of vaccines stocks at the various level of the Routine Immunization Programme as well as have real time information on the temperature at the various levels of storage in the remaining states of the country through an integrated and innovative approach
TOTs for CCH and training of CCTs	All states	All states	To ensure that all cold chain handlers are well equipped with updated information and guidelines to ensure vaccine safety and management. Additionally, all Cold chain technicians are provided hands-on training on all types of equipment available under immunization programme (new and old technology).
EVM	23(16 large states+ 7 North Eastern States)	16 states (UP, MP, Bihar, Rajasthan, Odisha, Jharkhand, Chhattisgarh, Gujarat, WB, AP, Telangana, Karnataka, Maharashtra, TN, Kerala, Assam)	Majority of vaccines are stored in these large states as they are catering to the biggest share of target population. All NE states have hard to reach and remote areas and it is essential to ensure robust cold chain

Activity	Geographical scope		Criteria for selection
	No. of States	Names of States	
		7 NE States- Manipur, Meghalaya, Arunachal Pradesh, Mizoram, Nagaland, Tripura, Sikkim	and supply system.
Objective 4: To strengthen vaccine logistics and cold chain management through improved data systems, infrastructure strengthening and human resource capacity.			
SMNet	2	UP and Bihar	Over 6500 mobilizers in the renowned Social Mobilization Network(SMNet) support GOI in the two traditional polio reservoir states of Uttar Pradesh and Bihar with robust evidence-based communication strategies for Polio and Routine Immunization in Gavi HSS Application Form 92 underserved and high risk communities.
Communication plans and linkages to micro-plans through SBCC cells	16 states	16 states (UP, MP, Bihar, Rajasthan, Maharashtra, Gujarat Odisha, Jharkhand, Chhattisgarh, WB, AP, Telangana, Nagaland, Manipur, Arunachal Pradesh, Assam)	Previous Gavi states and addition of four more states as Gavi states to enable interventions in specific geographical areas such as tribal, urban, hard to reach and remote characteristics.
CSO partnerships	6 states	UP, Bihar, Odisha, Jharkhand, MP, Rajasthan	UP, Bihar, Odisha, Jharkhand, MP, Rajasthan. Since these states have lowest immunization rates in the country and also strong presence of CSOs.
BRIDGE Training	All states	All states except	Modules developed, phase 1 in IMI districts completed, phase 2 initiated with Aspirational districts.
Media Advocacy	(9+2states)	9-Bihar, Rajasthan, UP, MP, Assam, Chhattisgarh, Jharkhand, Gujarat, Assam 2 Additional- Andhra Pradesh and Telangana	After extensive mapping, UNICEF has chosen 9 priority states – Bihar, Rajasthan, UP, MP, Assam, Chhattisgarh, Jharkhand, and Gujarat which have the lowest rates of RI in the country. In addition to these 9 priority states Andhra Pradesh and Telangana have been added to reach out to Urdu Media. This indicates a pressing need for sustained interventions and addressing the challenges faced in ensuring universal coverage of

Activity	Geographical scope		Criteria for selection
	No. of States	Names of States	
			<p>immunization which is of paramount importance. These 9 high priority states have also been selected bearing in mind the tribal districts in the area which need to be targeted for concentrated awareness created. Additionally, Assam has been selected particularly Gavi HSS Application Form 93 with a focus on targeting the north east states for immunization communication.</p>

8.6 Grant Performance Framework: Intermediate results/Tailored output indicators

Objective	Activity description	Indicator n° (GPF)	Activity / Indicator description (GPF)	Annual Target 2018	Cumulative Achievements till Q3 2018 (with respect to targets)
Cross-cutting		IR-T 1.1	IR-T 1.1 No. of high level meetings/IAG conducted in a year	3	3
1	1.1 Routine immunization monitoring to improve coverage and address equity issues	IR-T 1.1.1	1.1 IR-T 1.1.1 Proportion of national immunization review meetings that discussed concurrent monitoring feedback provided	75%	100%
1	1.1 Routine immunization monitoring to improve coverage and address equity issues	IR-T 1.1.2	1.1 IR-T 1.1.2 Proportion of STFI that discussed concurrent monitoring feedback provided	75%	93%
1	1.1 Routine immunization monitoring to improve coverage and address equity issues	IR-T 1.1.3	1.1 IR-T 1.1.3 Proportion of DTFI that discussed concurrent monitoring feedback provided	75%	86%
1	1.1 Routine immunization monitoring to improve coverage and address equity issues	IR-T 1.1.4	1.1 IR-T 1.1.4 Proportion of STFI that discussed Communication updates	50%	93%
1	1.1 Routine immunization monitoring to improve coverage and address equity issues	IR-T 1.1.5	1.1 IR-T 1.1.5 Proportion of DTFI that discussed Communication updates	50%	78%
1	1.2 Expansion of VPD Surveillance	IR-T 1.2.1	1.2 IR-T 1.2.1 No. of states where VPD surveillance started	10	7
1	1.2 Expansion of VPD Surveillance	IR-T 1.2.3	1.2 IR-T 1.2.3 Proportion of measles outbreaks investigated as per guidelines	70%	59%

Objective	Activity description	Indicator n° (GPF)	Activity / Indicator description (GPF)	Annual Target 2018	Cumulative Achievements till Q3
1	1.2 Expansion of VPD Surveillance	IR-T 1.2.4	1.2 IR-T 1.2.4 Percent VPD cases investigated by DIOs/ Govt officer	50%	95%
1	1.3 Introduction of ANMOL to improve data collection and management e.g. availability of real time data, automated due lists for immunization	IR-T 1.3.1	1.3 IR-T 1.3.1 Percentage registration of infants in RCH portal (intervention states)	Tbd	NA
1	1.3 Introduction of ANMOL to improve data collection and management e.g. availability of real time data, automated due lists for immunization	IR-T 1.3.2	1.3 IR-T 1.3.2 Percent of ANMs reporting data via ANMOL	30%	0
1	1.5 Establish an effective platform for various stakeholders to work together in the area of research and immunization	IR-T 1.5.1	1.5 IR-T 1.5.1 Proportion of laboratory confirmed cases of CRS	20%	Expected reporting from Jan 2019
1	1.5 Establish an effective platform for various stakeholders to work together in the area of research and immunization	IR-T 1.5.2	1.5 IR-T 1.5.2 Proportion of laboratory confirmed cases of pneumococcal disease	20%	Expected reporting from Jan 2019
1	1.6 GAVI Secretariat - Project Management Cell (PMC)	IR-T 1.1	1.6 IR-T 1.1 No. of high level meetings/IAG conducted in a year	3	3
1	1.7 Cost of engaging WHO human resources at national levels for proposed activities under GAVI HSS2	n/a	1.7 Cost of engaging WHO human resources at national levels for proposed activities under GAVI HSS2	n/a	100%
2	2.1 Capacity building of master trainers for microplanning and RI strengthening	IR-T 2.1.1	2.1 IR-T 2.1.1 Percent of districts conducted district level trainings after state ToT on MO immunization handbook/ health	60%	83%

Objective	Activity description	Indicator n° (GPF)	Activity / Indicator description (GPF)	Annual Target 2018	Cumulative Achievements till Q3
			worker		
2	2.1 Capacity building of master trainers for microplanning and RI strengthening	IR-T 2.1.2	2.1 IR-T 2.1.2 Percent of districts conducted district level trainings after state ToT on RI microplanning package	60%	62%
2	2.2 Capacity building of master trainers for microplanning and RI strengthening	IR-T 2.2.1	2.2 IR-T 2.2.1 % of HR (ANM, MOs, Supervisor etc.) trained in using the developed package for knowledge building and self-learning in the pilot states/districts	70%	NA
2	2.3 Development of a tribal strategy for immunization programme	IR-T 2.3.1	2.3 IR-T 2.3.1 Developed strategies for immunization program in tribal areas	n/a	NA
2	2.4 Enhancing routine immunization quality and coverage, and addressing inequities in urban areas	IR-T 2.4.1	2.4 IR-T 2.4.1 No. of cities with RI microplans developed	5	4
2	2.4 Enhancing routine immunization quality and coverage, and addressing inequities in urban areas	IR-T 2.4.2	2.4 IR-T 2.4.2 Percent of sessions held as per developed urban RI microplans	60%	91%
3	3.1 Capacity development of cold chain and vaccine handlers, technicians and vaccine logistics managers	IR-T 3.1.1	3.1 IR-T 3.1.1 Percentage of trainees with positive increase in cold chain knowledge score (pre and post assessment)	80%	100%
3	3.1 Capacity development of cold chain and vaccine handlers, technicians and vaccine logistics managers	IR-T 3.1.2	3.1 IR-T 3.1.2 Assessment of technical skills by CCTs for CC Management (Performance assessment study, one time activity)	n/a	NA

Objective	Activity description	Indicator n° (GPF)	Activity / Indicator description (GPF)	Annual Target 2018	Cumulative Achievements till Q3
3	3.2 NCCMIS augmentation and Immunization Supply Chain-Cold Chain data harmonization	IR-T 3.2.1	3.2 IR-T 3.2.1 Percentage of UNICEF supported HPDs using NCCMIS atleast once a month	60%	74%
3	3.3 Support Govt. in review and implementation of EVM Improvement Plans	IR-T 3.3.1	3.3 IR-T 3.3.1 Percent of States with an Improvement Plan after EVM assessment	100%	0
3	3.4 Strengthening of Institutions, cold chain infrastructure and equipment	IR-T 3.4.1	3.4 IR-T 3.4.1 Percent of national review meetings conducted by NCCVMRC discussing immunization supply chain dashboard	50%	1
3	3.5 Establish eVIN system infrastructure in the additional new States/UT	IR-T 3.5.1	3.5 IR-T 3.5.1 No. of states and UTs with eVIN reflected in state PIP	12 (33%)	100% (12/12)
3	3.5 Establish eVIN system infrastructure in the additional new States/UT	IR-T 3.5.2	3.5 IR-T 3.5.2 No. of states maintaining eVIN adherence rate > 90%	75%	Expected reporting from Jan 2019
4	4.1 Capacity development of FLWs /providers on SBCC and IPC through training of master trainers	IR-T 4.1.1	4.1 IR-T 4.1.1 Percent of ANMs and ASHAs trained on RI by Master trainers (focusing on IPC skills in intervention states/districts)	35%	17%
4	4.2 Communication planning linked with micro planning to reach high-risk/underserved through SBCC cells	IR-T 4.2.1	4.2 IR-T 4.2.1 Percent of districts with communication plan	30%	47%
4	4.4 Effective use of Polio Network (SMNet) for routine immunization health systems strengthening	IR-T 4.4.1	4.4 IR-T 4.4.1 % caregivers told that they received RI session information through Community mobilization coordinators in Underserved areas	80%	89%

Objective	Activity description	Indicator n° (GPF)	Activity / Indicator description (GPF)	Annual Target 2018	Cumulative Achievements till Q3
4	4.6 Creating enabling environment for immunization through Policy, Media and Advocacy at the national and state level	IR-T 4.6.1	4.6 IR-T 4.6.1 Percent of positive media information on RI in English and Hindi print, TV and Radio	35%	60%

8.7 Key activities timeline for 2019

	Activity description	Agency	Quarter 1	Quarter 2	Quarter 3	Quarter 4
	New vaccine introduction					
	MR campaign	MoHFW	x	x	x	x
	PCV scale up	MoHFW	x			
	Rota Scale up	MoHFW	x			
	HSS2					
	Objective 1. To strengthen and maintain robust data systems to improve evidence based decision making					
1.1	Routine immunization monitoring to improve coverage and address equity issues	WHO	x	x	x	x
1.2	Expansion of VPD Surveillance	WHO	x	x	x	x
1.3	Introduction of ANMOL to improve data collection and management – improves availability of real time data, helps create automated due lists for immunization	UNICEF	x	x	x	x
1.4	Coverage Evaluation Survey	UNICEF	x			
1.5	To establish an effective platform for various stakeholders to work together in the area of research and immunization	UNDP	x	x	x	x
	Objective 2. To improve service delivery through improved capacity of human resources					
2.1	Capacity building of master trainers for microplanning and RI strengthening	WHO	x	x	x	x
2.2	Developing a framework for implementation of training activity and implementation of RISE package	JSI	x	x	x	x
2.3	Development of a tribal strategy for immunization programme	UNICEF	x	x	x	x
2.4	Enhancing routine immunization quality and coverage, and addressing inequities in urban areas	WHO	x	x	x	x
	Objective 3. To strengthen cold chain and Vaccine logistics systems					
3.1	Capacity development of cold chain and vaccine handlers, technicians and vaccine logistics managers	UNICEF	x	x	x	x
3.2	NCCMIS augmentation and Immunization Supply Chain-Cold Chain data harmonization	UNICEF	x	x	x	x

	Activity description	Agency	Quarter 1	Quarter 2	Quarter 3	Quarter 4
3.3	Support Govt. in review and implementation of EVM Improvement Plans	UNICEF	x	x	x	x
3.4	Strengthening of Institutions, cold chain infrastructure and equipment	UNICEF	x	x	x	x
3.5	Establish eVIN system infrastructure in the additional new States/UT	UNDP	x	x	x	x
Objective 4. To improve demand generation for immunization services to improve coverage and address inequities						
4.1	Capacity development of FLWs /providers on SBCC and IPC through training of master trainers	UNICEF	x	x	x	x
4.2	Communication planning linked with micro planning to reach high-risk/underserved through SBCC cells	UNICEF	x	x	x	x
4.3	Strengthening community based multi-stakeholder partnerships	UNICEF	x	x	x	x
4.4	Effective use of Polio Network (SMNet) for routine immunization health systems strengthening	UNICEF	x	x	x	x
4.5	Communication monitoring and supportive supervision through use of standardized formats, dashboard analysis	UNICEF	x	x	x	x
4.6	Creating enabling environment for immunization through Policy, Media and Advocacy at the national and state level	UNICEF	x	x	x	x

**8.8 Immunization Action Group (IAG) minutes of meetings
Government of India
Ministry of Health & Family Welfare
Immunization Division**

Minutes of Gavi-India Joint Appraisal and Immunization Action Group (IAG) meeting to review Gavi supported activities.

Day 1: Gavi-India Joint Appraisal on 19th Nov'2018 (Hotel Claridges)

- A multi-stakeholder Joint Appraisal (JA) of the implementation progress and performance of Gavi support to India under the Chairpersonship of Mrs. Vandana Gurnani, Joint Secretary (RCH) was undertaken on 19th Nov'18. The list of participants is annexed.
- The JA meeting started with a welcome address by the Joint Secretary (RCH). At the outset, Chair set the objectives and terms for the JA meeting and communicated to the implementing partners, the expected Gavi's Portal submission timelines for JA report along with revised HSS budget (15th Dec'18) and for PEF TCA 2019 plan (21st Dec'18). Hence, it was advised to all partners to submit the draft JA report (including revised budget) and draft PEF TCA 2019 plan by 3rd Dec'18 for the Ministry's approval.
- The JS (RCH) briefed the participants of JA on the achievements made under India's Universal Immunization Programme since last Gavi JA meeting that was held in November 2017.
- The Chair apprised the JA participants on the physical and financial progress made till Q3 of 2018 under HSS-2 and on the new vaccines expansion. She also informed on the status of prerequisites under Gavi HSS-2 viz. cMYP 2018-22, ANMOL Evaluation, Coverage Evaluation Survey, HSS Baseline Assessment and eVIN Assessment.
- JS (RCH) requested all the partners to make recommendations that will feed into next year's HSS renewal process as per the changing priorities of the country which in turn will help in further strengthening the health system.
- Ms. Carol Szeto from Gavi presented global updates based on Gavi's 2020 Mission Indicators including alliance top risks ranked against likelihood and impact. She also shared programme renewal & PEF TCA timelines.
- A comprehensive presentation was done by AC (Imm) to give the participants an overview on universal immunization programme (UIP) which included UIP scope and scale; coverage trends; Mission Indradhanush & Road map; new vaccine introduction; EVM; eVIN; AEFI surveillance.
- All the four implementing partners presented on HSS-2 and TCA progress covering challenges faced during 2018. They also shared the draft planning for TCA 2019.

- Broadly, Dr Danish Ahmed from WHO presented on physical & financial progress made with respect to objectives under Gavi HSS-2. He also updated the participants on activities under PEF – TCA which are urban immunization strengthening, data quality and VPD surveillance.
- Dr Bhriгу Kapuria from UNICEF made presentation on the progress under ANMOL, BRIDGE IPC Training, Tribal Strategy, EVM assessment and S4I dashboard. It was informed that Ministry of Tribal Affairs is on board through a core group for tribal immunization activity and UNICEF is in process of developing tribal strategies under the guidance of core group.
- On ANMOL, JS (RCH) directed that the agency which is in place for the development and maintenance of ANMOL should continue as country is scaling up the ANMOL and hence, the contract of the agency shall be extended for the whole period of the HSS-2.
- Dr Shachi Adyanthaya & Mr. Abhimanyu Saxena from UNDP presented the status on eVIN expansion, eVIN transition status for HSS-1 states, HSS-2 challenges and eVIN scale-up plan. UNDP introduced the delegates to the new features incorporated in eVIN, Order management pilot in Lucknow (UP), barcode reader and VALUE pilot in 6 PCV districts of Uttar Pradesh.
- UNDP also updated that official communications for the rolling out of eVIN from MoHFW to the MDs of Kerala, Tamil Nadu, Puducherry, Lakshadweep, Punjab, Haryana and Chandigarh have been issued and UNDP will be undertaking meetings with the states/UT for the early implementation of eVIN in the said states/UT.
- Dr Sumendra Bagchi from JSI presented on RISE project and shared the activities carried out till date. JSI also shared the hard copies of Capacity Building Needs Assessment findings with the participants.
- Post lunch, breakout sessions were held on the three thematic areas viz. Cold Chain Management, Urban Immunization and Vaccine Hesitancy. Each group had approximately 10 members representing each agency. Brainstorming session took place wherein the group members discussed and deliberated on following common points:
 1. *Context setting: What is being planned in HSS, TCA, or in activities funded by other sources (Gol, other donors)?*
 2. *Given UIP's 2019 priorities, are there new activities that could be considered for untapped opportunities, should additional funding become available?*
 3. *What are the implications on 2019 HSS workplan – any changes identified?*
 4. *What are the implications on priority areas for TCA 2019?*
- The breakout session was followed by the reporting out through presentations on the deliberations that took place under the chairpersonship of DC (UIP).
- Ms. Carol undertook an activity to identify high risks to HSS implementation. It was based on the voting of the participants present in the meeting. The pressing high risks identified were:
 1. *Competing priorities affecting management and implementation capacity*
 2. *Data quality issues*
 3. *Funding Support*
 4. *Vaccine Hesitancy including anti-vaccine lobbies.*

Joint Appraisal 2018

- In the end, DC (UIP) concluded the JA meeting by requesting the participants to join IAG meeting on 20th Nov'18. He also suggested having a discussion on JA report writing with participants from each implementing partners along with Gavi. He reiterated that partners to submit the draft JA report along with revised budget & PEF TCA 2019 plan to MoHFW by 3rd December 2018 so that MoHFW can share the same with Gavi by 15th Dec'18.

Day 2: Immunization Action Group (IAG) meeting on 20th Nov'2018 (Nirman Bhawan)

- An Immunization Action Group meeting was held on 20th November, 2018 under the Chairpersonship of Mrs. Vandana Gurnani, Joint Secretary (RCH) at Nirman Bhawan, New Delhi. The list of participants is annexed.
- At the outset, the Chair welcomed the participants in the Immunization Action Group (IAG) meeting. The main agenda of the meeting was to apprise the IAG on the group discussions held during JA breakout session on 19th November, 2018.
- One representative from each group of the breakout session presented the key activities which are currently being undertaken for each priority area; the activities proposed for next year and the impact of proposed activities on HSS-2.
- **Group 1: Cold Chain Management**
 - It was suggested by the group to further support activities like expansion of eVIN by incorporating order management, use of bar codes and comprehensive temperature control during vaccine transportation. DC (Imm) I/C informed that bar coding can only be undertaken by the manufacturers under the guidance of Central Drug Standards Control Organization (CDSCO). The Chair was briefed on the VALUE device and its pilot in 6 districts of Uttar Pradesh where PCV has been introduced. The Chair advised that the current learning of VALUE pilot may be integrated with ANMOL platform.
 - On immunization waste management, JS (RCH) instructed to implement the intervention to fill the existing and known gaps in immunization waste management rather than conducting a study to identify the gaps again. DC (Imm.) I/C suggested implementing the existing revised guidelines for biomedical waste management by Central Pollution Control Board (CPCB).
 - The group also proposed to develop regional level wings of NCCVMRC and NCCRC. The Chair suggested strengthening the state institutes like SIHFW for filling the gap of having regional centres like NCCVMRC and NCCRC. DC (UIP) also informed that proposal to convert NCCVMRC, as a Centre of Excellence is under process at NIHFW. It was also informed that NCCRC has applied for NABL accreditation.
 - Group did not recommend any significant change in current HSS-2 workplan related to thematic area of cold chain management.
- **Group 2: Urban Immunization**

- The group presented on the urban challenges and issues under urban immunization and proposed certain interventions such as GIS mapping of ward boundaries & session tagging; mapping pockets of VPD outbreaks and development of urban specific communication material and better planning for immunization through budget under NUHM.
 - JS (RCH) advised WHO to map urban area for RI activities in close coordination with NUHM division by developing a plan to improve urban immunization and also involve CBOs under National Livelihood Mission & Poverty Alleviation Programme. DC (Imm) I/c suggested developing microplans for wards of urban areas by utilizing the learning of Polio programme. He also reiterated that first step for any planning under urban immunization is to carry out the mapping exercise.
 - The Chair also instructed WHO to regularly share VPD surveillance data with MoHFW and the same shall go to MDs (NHM) from national level for corrective actions.
 - Delay in HR requirement for urban areas under HSS and PEF TCA was discussed and JS (RCH) directed WHO to expedite the recruitment process as the same is impeding the implementation of immunization strategies in urban areas.
- **Group 3: Vaccine Hesitancy**
 - The group presented ongoing activities under HSS-2 such as district-based communication approach; multi-stakeholder partnership (engaging CBOs & CSOs) and media intervention based on media behaviour research.
 - The proposed activities are to address the issues pertaining to vaccine hesitancy included evidence based targeted interventions; urban and tribal specific communication strategies.
 - JS (RCH) directed partners to formulate strategies to deal with vaccine hesitancy, instead of undertaking study to identify reasons for vaccine hesitancy. On this ITSU informed that a pilot on similar lines has been proposed where pilot interventions may be undertaken to tackle the issues of vaccine hesitancy and results may help in scale up of the interventions in areas which requires the same.
 - Post group presentations, Gavi presented the following key implementation risks for HSS-2:
 - Competing priorities impacting management/implementation capacity
 - Funding support (e.g. cascade trainings, eVIN procurement with additional CCEs, etc.)
 - Admin data quality issues
 - Vaccine hesitancies and anti-vaccine lobbies
 - Political risks (elections)
 - Immunization waste management
 - Polio network transition
 - Health worker vacancies
 - Lack of evidence to inform relative effectiveness of interventions
 - Sustaining momentum post MI
 - Lack of clear approach to CSO engagement (accountability, institutionalization)
 - Governance and budgeting for behavioural change communication

- Increasing vaccine price
 - Unforeseen events (weather, strikes, etc.)
- The Chair reiterated that the agency which is in place for the development and maintenance of ANMOL shall continue and hence, the contract of the agency shall be extended for the whole period of the HSS-2.
 - JS (RCH) informed Gavi that MoHFW is keen on PCV expansion but requires answer to the question of interchangeability of PCV manufactured by exogenous manufacturer vis a vis future indigenous manufacturer. In this regard, the Chair requested Gavi to have a dialogue with manufacturers for interchangeability studies. DC (Imm) I/c also requested Gavi to provide technical information on new vaccines beyond the SAGE recommendations and WHO position papers.

The meeting concluded with a vote of thanks to the Chair.

List of Participants: Day 1: 19th Nov'18

S.No	Name	Agency
1.	Dr Pradeep Halder, DC (Imm I/c)	MoHFW
2.	Dr M. K. Agarwal, DC (UIP)	MoHFW
3.	Dr Veena Dhawan, AC (Imm)	MoHFW
4.	Dr Kapil Singh	MoHFW
5.	Ms Carol Szeto	Gavi
6.	Mr Raveesha Mugali	Gavi
7.	Ms Chung-won Lee	CDC
8.	Prof. Sanjay Gupta	NCCVMRC
9.	Dr Snehil Singh	NCCVMRC
10.	Dr Pauline Harvey	WHO
11.	Dr Pankaj Bhatnagar	WHO
12.	Dr Danish Ahmed	WHO
13.	Dr Lokesh Alahari	WHO
14.	Ms Ramandeep Kaur	WHO
15.	Dr Rija Andriamihantanirina	UNICEF
16.	Dr Bhrigu Kapuria	UNICEF
17.	Mr Bhawani S Tripathy	UNICEF
18.	Dr Sheenu Bhadana	UNICEF
19.	Dr Shachi Adyanthaya	UNDP
20.	Er. Abhimanyu Saxena	UNDP
21.	Mr Sanjeev Mishra	UNDP
22.	Dr Sanjay Kapoor	JSI
23.	Dr Saumendra Bagchi	JSI
24.	Dr Parthasarathi Ganguly	JSI
25.	Dr Arup Debroy	JSI
26.	Dr Raj Shankar Ghosh	BMGF
27.	Dr Arindam Ray	BMGF
28.	Dr Roma Solomon	CORE
29.	Dr Priya John	AiH
30.	Dr Sachin Gupta	USAID

31.	Dr Pritu Dhalaria	ITSU
32.	Dr Prem Singh	ITSU
33.	Dr Deepak Polpakara	ITSU
34.	Dr Mayank Shersiya	ITSU
35.	Mr Varun Pratap Singh	ITSU
36.	Dr G K Soni	ITSU

List of Participants: Day 2: 20th Nov'18

S.No	Name	Agency
1.	Dr Pradeep Halder, DC (Imm I/c)	MoHFW
2.	Dr M. K. Agarwal, DC (UIP)	MoHFW
3.	Dr Veena Dhawan, AC (Imm)	MoHFW
4.	Dr Ranjana Garg, AC (UH)	MoHFW
5.	Dr Kapil Singh	MoHFW
6.	Ms Carol Szeto	Gavi
7.	Mr Raveesha Mugali	Gavi
8.	Ms Chung-won Lee	CDC
9.	Prof. Sanjay Gupta	NCCVMRC
10.	Dr Snehil Singh	NCCVMRC
11.	Dr Pauline Harvey	WHO
12.	Dr Pankaj Bhatnagar	WHO
13.	Dr Danish Ahmed	WHO
14.	Dr Lokesh Alahari	WHO
15.	Dr Rija Andriamihantanirina	UNICEF
16.	Dr Bhrigu Kapuria	UNICEF
17.	Mr Bhawani S Tripathy	UNICEF
18.	Dr Sheenu Bhadana	UNICEF
19.	Dr Shachi Adyanthaya	UNDP
20.	Er. Abhimanyu Saxena	UNDP
21.	Dr Saumendra Bagchi	JSI
22.	Dr Parthasarathi Ganguly	JSI
23.	Dr Raj Shankar Ghosh	BMGF
24.	Dr Bhupendra Tripathi	BMGF
25.	Dr Roma Solomon	CORE
26.	Dr Sachin Gupta	USAID
27.	Dr Pritu Dhalaria	ITSU
28.	Dr Prem Singh	ITSU
29.	Dr Mayank Shersiya	ITSU
30.	Mr. Varun Pratap Singh	ITSU
31.	Dr G K Soni	ITSU