



Madhya Pradesh Comprehensive UIP Review

A report: September 2018



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ABBREVIATIONS

AAA	ANM, ASHA, AWW
AFP	Acute Flaccid Paralysis
AEFI	Adverse Event Following Immunization
ANM	Auxiliary Nurse Midwife
ASHA	Accredited Social Health Activist
AVD	alternate vaccine delivery
AWW	<i>Anganwadi</i> Worker
BCC	behaviour change communication
BCG	Bacillus Calmette Guerin
BEE	Block Extension Educator
BRIDGE	Boosting Routine Immunization Demand Generation
CBO	Community Based Organization
CCE	Cold Chain Equipment
CCH	Cold Chain Handler
CCP	Cold Chain Point
CCT	Cold Chain Technician
CHAI	Clinton Health Access Initiative
CHC	Community Health Centre
CMHO	Chief Medical and Health Officer
CRF	Case Reporting Form
DEO	Data Entry Operator
DF	deep freezer
DIO	District Immunization Officer
DHS	District Health Society
DMEIO	District Media Extension and Information Officer
DPM	District Programme Manager
DPT	Diphtheria, Pertussis, Tetanus
DQA	Data Quality Assessment
DTFI	District Task Force for Immunization
DVS	district vaccine store
EPI	Expanded Program on Immunization
eVIN	Electronic Vaccine Intelligence Network
FCIF	Final Case Investigation Form
FIC	Full Immunization Coverage
FLW	Front Line Worker
GHS	Global Health Strategies
GSA	<i>Gram Swaraj Abhiyan</i>
HMIS	Health Management Information System
HR	human resource

HRA	High Risk Area
HS	Health Supervisor
IAP	Indian Academy of Pediatrics
ICDS	Integrated Child Development Scheme
iCIP	Immunization Coverage Improvement Plan
IEC	Information, Education and Communication
IERB	Institutional ethical review board
ILR	ice-lined refrigerator
IMA	Indian Medical Association
IMI	Intensified Mission <i>Inradhanush</i>
IPC	inter personal communication
ITSU	Immunization Technical Support Unit
JE	Japanese Encephalitis
JSI	John Snow, Inc
LHV	Lady Health Visitor
MAS	<i>Mahila Arogya Samiti</i>
MCP	Mother and Child Protection
MCV	Measles Containing Vaccine
MEIO	Media Extension and Information Officer
MI	Mission <i>Inradhanush</i>
MO	medical officer
MoHFW	Ministry of Health and Family Welfare
MPR	monthly progress report
NCC	National Cadet Corps
NCCVMRC	National Cold Chain and Vaccine Management Resource Centre
NFHS	National Family Health Survey
NGO	Non-Governmental Organization
NHM	National Health Mission
NHSRC	National Health Systems Resource Centre
NID	National Immunization Day
NIHFW	National Institute of Health and Family Welfare
NPSP	National Public Health Surveillance Project
NSS	National Service Scheme
NUHM	National Urban Health Mission
NYK	<i>Nehru Yuva Kendra</i>
OPV	oral polio vaccine
PCIF	Preliminary Case Investigation Form
PCV	Pneumococcal Conjugate Vaccine
PHC	Primary Health Centre
PIP	Programme Implementation Plan
PR	Public Relations
PRAGATI	Pro-Active Governance and Timely Implementation

PRI	<i>Panchayati Raj</i> Institution
PS	Principal Secretary
PSI	Population Services International
PU	planning unit
RCH	Reproductive and Child Health
RI	routine immunization
RISE	Rapid Immunization Skill Enhancement
RKSK	<i>Rashtriya Kishore Swasthya Karyakram</i>
RMNCH+A	Reproductive, Maternal, New-born, Child and Adolescent Health
RVV	Rotavirus vaccine
SBCC	social and behavioural change communication
SDP	Service Delivery Point
SNID	Sub National Immunization Day
SOP	Standard operating procedure
STFI	State Task Force for Immunization
ToT	Training of trainers
UHND	urban health and nutrition day
UIP	Universal Immunization Programme
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
VC	Video conference
VCCH	vaccine cold chain handler
VHND	village health and nutrition day
VLM	Vaccine and Logistics Manager
VPD	vaccine preventable disease
VVM	Vaccine Vial Monitor
WHO	World Health Organization
WIC	Walk-in Cooler
WIF	Walk-in Freezer

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मातृ शिशु रक्षा कार्ड



मातृ शिशु रक्षा कार्ड

मातृ शिशु रक्षा कार्ड का कार्य विवरण

मातृ का नाम	पति का नाम	पति का पता	मातृ का पता
मातृ का जन्म तिथि	मातृ का शिक्षा स्तर	मातृ का व्यवसाय	मातृ का धर्म
मातृ का रक्त समूह	मातृ का स्वास्थ्य स्थिति	मातृ का शैक्षणिक स्तर	मातृ का परिवार
मातृ का मोबाइल नंबर	मातृ का पता	मातृ का जन्म तिथि	मातृ का शिक्षा स्तर
मातृ का जन्म तिथि	मातृ का शिक्षा स्तर	मातृ का व्यवसाय	मातृ का धर्म
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मातृ शिशु रक्षा कार्ड का उपयोग

मातृ शिशु रक्षा कार्ड का उपयोग करने वाले लोगों को सूचित किया जाता है कि यह कार्ड उनके शिशु की देखभाल करने में मदद करेगा।

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EXECUTIVE SUMMARY

India's Universal Immunization Programme (UIP) is the largest in the world, catering to an annual cohort of 2.6 crore infants and 3 crore pregnant women through around ninety lakh sessions. However, over the past many years, full immunization coverage among children aged 12-23 months in the country has increased at a very slow pace of around 1% each year (from 35% in 1992-93 to 62% in 2015-16).

Under its resolve to achieve 90% FIC by December 2020, the Ministry of Health & Family Welfare (MoHFW) launched a massive catch up campaign "Mission Indradhanush (MI)" in December 2014. First two phases of MI contributed to an increase in FIC by 6.7 percentage points according to the Integrated Child Health & Immunization Survey (INCHIS). Honourable Prime Minister of India has advanced the timeline for reaching the goal of 90% FIC to 2018 and to achieve this, Ministry of Health and Family Welfare (MoHFW) further intensified the Mission *Indradhanush* activities in October 2017.

Rationale of the review

To achieve the ambitious target of 90% FIC by December 2018, it is pertinent for the states to identify bottlenecks and gaps in all program components through comprehensive UIP review, plan interventions and measure progress. While different fragmented assessments and reviews are carried out by different agencies driven by their mandate and with different data collection methods, for example, AFP surveillance cum UIP review, Data Quality Assessment (DQA) and Effective Vaccine Management (EVM) assessment, there is a growing need to integrate different assessments in the form of a comprehensive review of UIP.

Madhya Pradesh contributes to more than 7% (19.4 lakh) of India's annual birth cohort. As per NFHS - 4 (2015-16), the full immunization coverage (FIC) in the state among children aged 12-23 months was 54%, as compared with the national average of 62%. The full immunization

coverage in Madhya Pradesh has improved at a slow pace of ~1% annually during 2005-06 to 2015-16. Additionally, the inequities in immunization coverage in urban vs. rural areas, and across socio-economic groups are relatively wide in the state.

Hence, there was an urgent need to conduct a comprehensive UIP review in the state to identify the gaps and facilitate formulation of strategies to improve immunization coverage.

Aim

The review aimed at a comprehensive assessment of strengths, weaknesses and bottlenecks in immunization program and assist the state to formulate a plan for improving routine immunization coverage with clearly defined roles and responsibilities of government and partners with defined timelines.

Objectives

Supply side

- 🔗 To analyse program planning and implementation for routine immunization at different levels of the health care delivery system
- 🔗 To assess governance, accountability and partnerships for UIP in the state
- 🔗 To assess vaccine and logistics supply chain mechanism in the state
- 🔗 To assess the data recording and reporting system, data quality and the use of data as evidence for action
- 🔗 To assess the knowledge and gaps against reporting and surveillance for Adverse Event Following Immunization (AEFI) and Vaccine Preventable Diseases (VPDs).

Demand side

- 🎯 To assess communication strategies and their implementation, including planning, advocacy, partnerships and social mobilization
- 🎯 To assess community perspective and identify the reasons of low uptake of immunization at the level of beneficiaries

Urban Immunization

- 🔗 To assess additional unique supply side and demand side factors affecting immunization coverage in urban areas

METHODS

Area for review

The state was divided into two zones considering geographic and demographic characteristics. For selection of review districts, they were scored on following 3 key indicators from NFHS-4 data:

1. % full immunization coverage (FIC)
2. % drop out for BCG – DPT3
3. % institutional deliveries

Each indicator was given a value ranging from 1 to 5. The scoring was designed such that a higher score represents poor performance. Total score for each district was calculated by adding the values for each of the three indicators. A good performing and a poor performing district was selected from each of the two zones. In case two or more districts scored the same, one district was randomly selected. From each of the selected districts, one good performing and one poor performing block was selected on the basis of full immunization coverage (HMIS data). Further, two subcentres from each block were chosen randomly. In total, four districts and urban planning unit of the state capital were chosen for review.

Review approach and tools

For ease of classification, the review was divided into the following four components:



Programme implementation



Vaccine logistics and cold chain



Data recording and reporting system



Programme communication

For quantitative data collection, structured questionnaires were administered to the key respondents to assess programme implementation, vaccine logistics and cold chain and data recording and reporting systems. Additionally, an excel tool adapted from WHO methodology was used for Data Quality Assessment (DQA). For qualitative data collection, semi-structured questionnaires were used under programme communication. A detailed methodology for each component is discussed in different sections of this report. The questionnaires were designed into an android based ODK tool for ease of data collection and analysis. The review was conducted from 23rd to 27th July 2018. The data presented in the report pertains to the period between April 2017 and March 2018, unless specified otherwise.

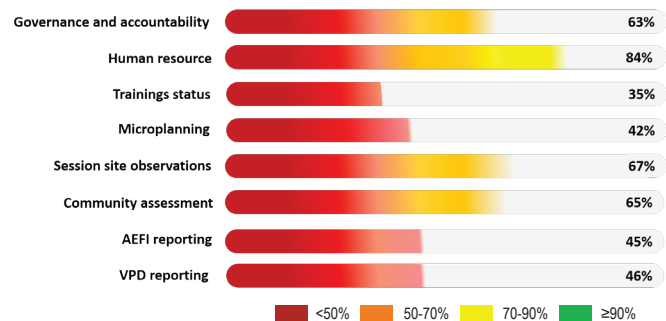
Coordination with technical experts from the government and partners

At each step of shaping the process of review, immunization division and experts from CORE, GHS, JSI, NCCVMRC, NHSRC, NIHFWS, UNDP, UNICEF and WHO were consulted through multiple meetings and communications. Experts from partners also participated in the field review.

SNAPSHOT OF FINDINGS

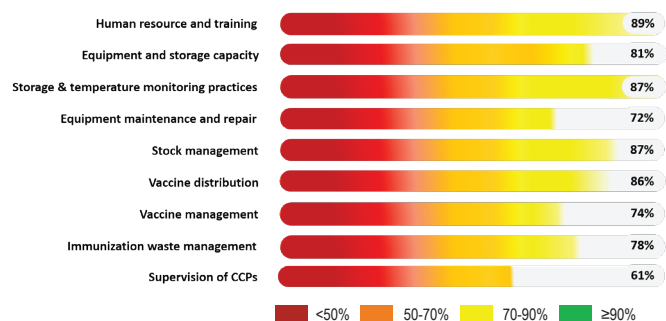
To summarise the findings, snapshots list the core areas under each thematic area and divide performance of state into four categories ($\geq 90\%$ - good; 70–90%-fair, 50-70% - average and $< 50\%$ - poor). Low percentage would indicate lacking performance of the state for that indicator.

Programme implementation



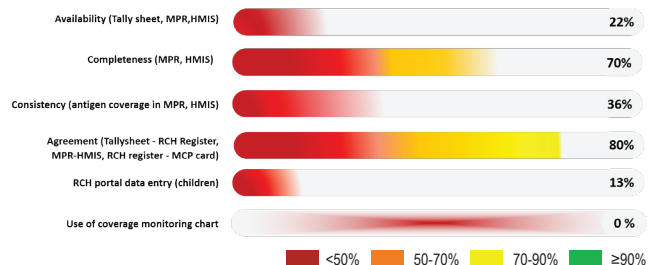
Under the program implementation domain, the governance and accountability mechanisms were found to be suboptimal, while human resource and infrastructure status was found to be fair and the training status of various health cadre was found to be poor. Consequently, AEFI and VPD reporting was poor. In the service delivery domain, microplanning was of poor quality with session site observations and immunization coverage ranked average.

Vaccine, logistics and cold chain



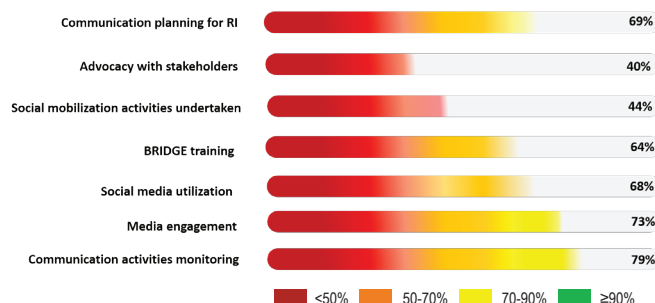
In the vaccine, logistics and cold chain domain, average supervision was noticed while remaining processes were fair.

Data recording and reporting system



Poor availability of filled reporting and recording formats was noticed in the state. While average completeness of formats and consistency of data was noticed, remaining processes were poor.

Programme communication



For programme communication, media management and monitoring of activities was found to be average while advocacy, social mobilization and capacity building were seen to be poor. Communication planning for routine immunization was average.

Way forward

Critical gaps in the immunization processes identified during the review will help the states to formulate an immunization coverage improvement plan in consultation with partners. This iCIP will be broadly guided by the 'Roadmap for achieving 90% full immunization coverage in India by December 2018 and sustaining thereafter' envisaged and formulated at the national level.

A photograph of a woman and a young child. The woman is seated, wearing a light-colored sari with a colorful border and a matching headscarf. She has a bindi on her forehead and is looking directly at the camera. She is holding a young child on her lap. The child is wearing a red and white patterned top and red polka-dot pants. The background consists of a white wooden door with multiple panels. The entire image has a warm, golden-brown tint. The text '1 INTRODUCTION' is overlaid in the center.

1

INTRODUCTION

Background

Immunization is a proven, cost-effective¹ and the most powerful² public health intervention to prevent morbidity and mortality from vaccine preventable diseases.³ According to WHO estimates, immunization averts an estimated 20 lakh to 30 lakh deaths every year from diphtheria, pertussis, tetanus and measles, and an additional 15 lakh deaths can be averted if global vaccination coverage is improved.⁴

India's commitment to improve child health is reflected in its Universal Immunization Program (UIP). It is the largest public health program in the world, catering to an annual cohort of ~2.6 crore infants and 3 crore pregnant women, through 90 lakh sessions every year.⁵ Despite the strenuous efforts to improve child health, Infant Mortality Rate (IMR) of India is 41 and the under-five mortality rate (U5MR) is 50 per 1000 live births.⁶ Performance of immunization programme is a key driving force to meet the Sustainable Development Goal -3.

Over the past many years, immunization coverage among children age 12-23 months in the country has increased at a very slow pace of around 1% each year (from 35% in 1992-93 to 62% in 2015-16).⁷ With the aim to increase FIC to 90% by 2020, Mission Indradhanush was launched in December 2014 to reach out to unvaccinated and partially vaccinated children through focus on hard-to-reach & high-risk areas.

As per the report of Integrated Child Health & Immunization Survey (INCHIS), first two phases of MI contributed to an increase in FIC by 6.7 percentage points. While acknowledging the impact of MI in improving immunization coverage across the districts over the phases, Hon'ble Prime Minister of India, emphasized the need to increase the immunization coverage to 90% by December 2018.⁸ To achieve this, Ministry of Health and Family Welfare (MoHFW) launched Intensified Mission Indradhanush (IMI) in October 2017 in 190 high focus districts/ urban areas of the country. Regular review of this programme is conducted under Pro-Active Governance and Timely Implementation (PRAGATI) by Hon'ble Prime Minister of India.

Rationale

It is pertinent for the states to identify bottlenecks and gaps that are likely to delay achievement of 90% FIC in all program components through comprehensive UIP review and to have an updated state-specific coverage improvement plan which can be guided by measurable indicators to assess progress. Different fragmented assessments and reviews are carried out by different agencies driven by their mandate and with different data collection methods for example, AFP surveillance cum UIP review, DQA and Effective Vaccine Management (EVM) assessment. Hence, there is a growing need to integrate different assessments in the form of comprehensive review for UIP. A comprehensive review will also help in assessing determinants of immunization coverage. Further, to formulate or revise coverage improvement plans, reasons for inequities within the state have to be assessed in detail.

Comprehensive programme assessment promotes consistency across assessments and strengthens advocacy efforts.⁹ Ultimately the coverage improvement plans will guide and strengthen the review mechanism of state and district task forces and assess the progress made.

Madhya Pradesh, contributes to more than 7% (19.4 lakh) of India's annual birth cohort of 2.6 crore children.¹⁰ According to National Family Health Survey-4 (NFHS-4), the state has quite high levels of infant mortality (51 deaths per 1,000 live births) and under-five mortality rates (67 death per 1,000 live births) compared with the country average (41/1000 IMR and 50/1000 U5MR), and lags behind on key indicators of morbidity and mortality.

As per NFHS 4 survey (2015-16), the state's FIC among children aged 12-23 months was 54%, as compared to the national average of 62%.^{11,12} In the past 10 years, FIC in Madhya Pradesh has improved at a slow pace of 1.3 percentage points per year (as per NFHS surveys). In spite of conducting four phases of MI in the state from 2015 to 2017, 14 out of 51 districts of the state were identified for IMI. There is a requirement to identify the problems in the operationalization of the programme,

¹WHO, UNICEF, World Bank. *State of the world's vaccines and immunization, 3rd ed.* Geneva: World Health Organization, 2009.

²World Health Organization-Regional Office of South-East Asia. 2011. *Protecting people from Vaccine Preventable Diseases.* Geneva: WHO-SEARO. Available @: http://www.searo.who.int/immunization/documents/regional_immunization_strategy_2010-2013.pdf?ua=1

³World Health Organization (WHO). 2017. 10 Facts on Immunization. retrieved from: <http://www.who.int/features/factfiles/immunization/en/>

⁴World Health Organization. 2018. Immunization coverage - Key Facts. Available @: <http://www.who.int/mediacentre/factsheets/fs378/en/>

⁵Ministry of Health and Family Welfare, Government of India. 2013. *Comprehensive Multi Year Plan 2013-2017.* New Delhi: MoHFW.

⁶International Institute for Population Sciences (IIPS) and ICF. 2017. *National Family Health Survey (NFHS-4), 2015-16: India.* Mumbai: IIPS.

⁷International Institute for Population Sciences (IIPS) and ICF. 2017. *National Family Health Survey (NFHS-4), 2015-16: India.* Mumbai: IIPS.

⁸Press Information Bureau, Government of India, Ministry of Health and Family Welfare. 2017. retrieved from: <http://pib.nic.in/newsite/printrelease.aspx?relid=171499>

⁹World Health Organization. 2017. *A guide for conducting an Expanded Programme on Immunization (EPI) Review.* Geneva: World Health Organization.

¹⁰Based on estimates received from Immunization Division, MoHFW

¹¹Full Immunization Coverage is defined as receipt of one dose of Bacillus Calmette-Guerin (BCG), three doses of oral polio vaccine (OPV) and three doses of diphtheria, pertussis, tetanus (DPT) or Pentavalent, and one dose of measles containing vaccine

¹²International Institute for Population Sciences (IIPS) and ICF. 2017. *National Family Health Survey (NFHS-4), 2015-16: India.* Mumbai: IIPS.

and to address it on an urgent basis. As the country is approaching the timeline of December 2018 to reach the goal of 90% FIC, a comprehensive gap assessment of this state becomes a priority, followed by formulation and implementation of a coverage improvement plan.

Inter-district disparities in FIC within Madhya Pradesh are huge, ranging from 22.6% in Alirajpur to 79% in Raisen as per NFHS-4. Keeping state level inequalities in mind, the variations within a district are likely to be wide across socio-economic indicators. Also, interventions required may be different for good and poor performing districts.

Madhya Pradesh has 66 cities under National Urban Health Mission. Rapid population growth in urban areas due to migration, along with shortage of infrastructure leads to poor access to and utilization of immunization services. Hence, urban immunization requires special emphasis in terms of identifying unique challenges for urban areas and making a need-based improvement plan.

Aim and objectives

Aim: The review aimed at a comprehensive assessment of strengths, weaknesses and bottlenecks in immunization program and assist the state to formulate a plan for improving routine immunization coverage with clearly defined roles and responsibilities of government and partners with defined timelines

Supply side objectives

- 🔗 To assess and analyze program planning and implementation for routine immunization at different levels of the health care delivery system
- 🔗 To assess governance, accountability and partnerships for UIP in the state
- 🔗 To assess vaccine and logistics supply chain mechanism in the state
- 🔗 To assess the data recording and reporting system, data quality and the use of data as evidence for action
- 🔗 To assess the knowledge and gaps against reporting and surveillance for Adverse Event Following Immunization (AEFI) and Vaccine Preventable Diseases (VPDs)

Demand side objectives

- 🎯 To assess communication strategies and their implementation, including planning, advocacy, partnerships and social mobilization
- 🎯 To assess community perspective and identify the reasons of low uptake of immunization at the level of beneficiaries

Urban Immunization

- 📍 To assess additional unique supply side and demand side factors affecting immunization coverage in urban areas





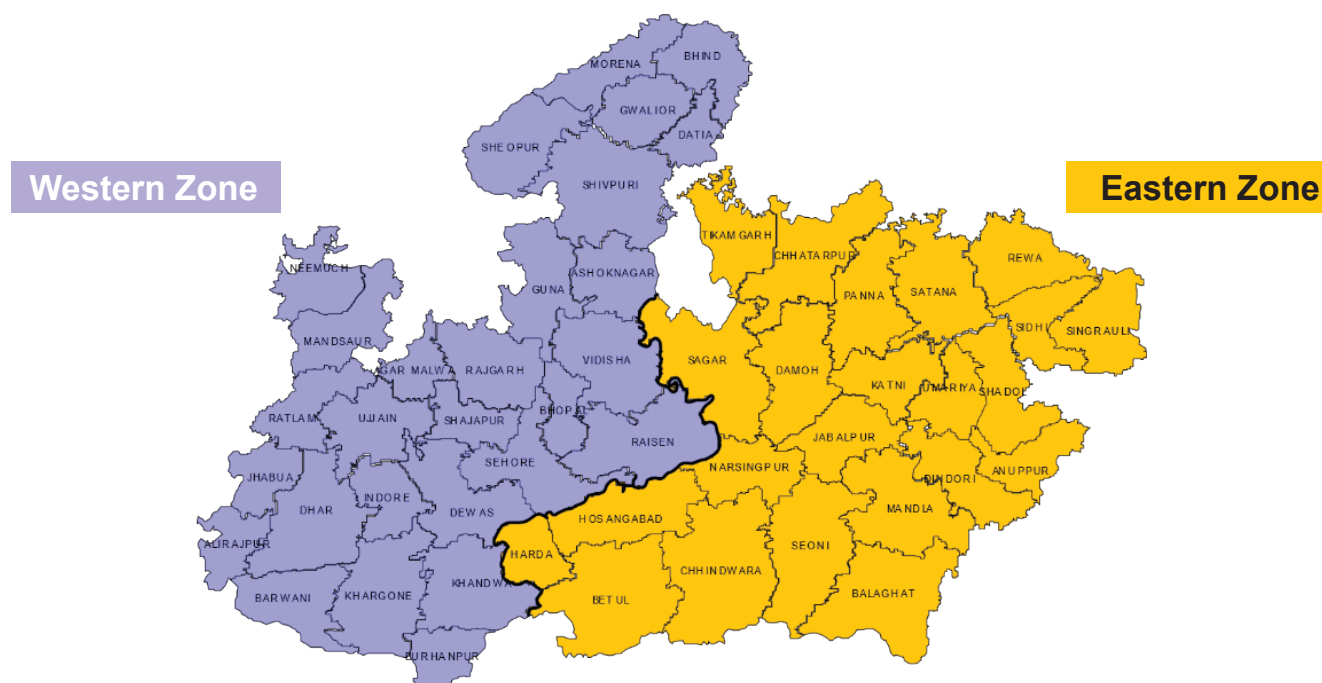
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METHODOLOGY

Review design

A. Selection of area for review

Figure 1: State's division into two zones



The state was divided into two zones based on geographic and demographic characteristics (Fig. 1). The **western zone** consists of 28 districts while **eastern zone** consists of 23 districts. In total, four districts and urban planning units of the state capital were selected for review through a composite scoring system based on three indicators from NFHS-4.

1. % full immunization coverage (FIC)
2. % drop out for BCG – DPT3
3. % institutional deliveries

Districts were allocated a score for each of the three indicators as per Table 1 given below. The evaluation was designed in such a way that a higher score represented poor performance.

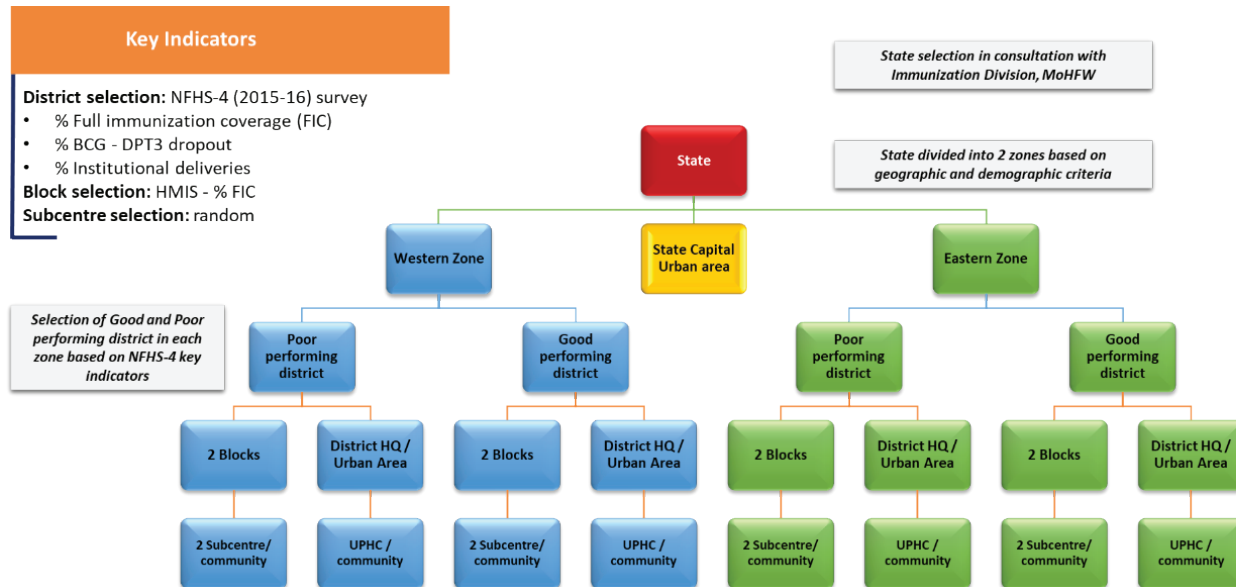
Table 1: Scoring system for districts selection

Indicators			Score allocated
FIC	BCG – DPT 3 drop out	Institutional deliveries	
≥90%	<10%	≥90%	1
75–90%	10-20%	80-90%	2
60–75%	20-30%	70-80%	3
45–60%	30-40%	60-70%	4
<45%	≥40%	<60%	5

The total score was calculated for each district by adding the individual score for each of the three indicators. A **good performing** and a **poor performing** district was selected from each of the two zones based on aggregate scores. If more than one district scored the same, one district was selected randomly. From each of

the selected districts, one good performing and one poor performing block was selected on the basis of FIC (HMIS data). Subcentres in the selected blocks were chosen randomly, and the state capital urban area and urban areas in all district headquarters (HQ) were selected to assess urban immunization. (Fig. 2)

Figure 2: Selection of review area



b. Approach for the review

Both quantitative and qualitative information related to UIP was collected in selected districts on programme implementation, vaccine logistics and cold chain, data recording and reporting system and programme communication. A detailed methodology for each component is discussed in relevant sections of this report. The data reviewed pertains to the period between April 2017 and March 2018, unless specified otherwise.

c. Duration of review

The review was conducted from 23rd to 27th July 2018, followed by a debriefing of the state and respective district officials on key qualitative findings on 27th July 2018.

Tools used for the review

For ease of classification, the review was divided into four components, namely Programme implementation, Data recording and reporting system, Vaccine logistics and cold chain and Programme communication.

a. Review questionnaires:

- 📄 For quantitative data collection, structured questionnaires were administered to the key respondents. Additionally, an excel tool adapted from WHO methodology was used for DQA.
- 📄 For qualitative data collection on “programme communication”, semi-structured questionnaires were used for interviewing key respondents;
- 📄 Additional information and observations, if any, were captured in ‘remarks’ section

b. Data entry and analysis plan

The questionnaires were designed on an android based ODK tool. A set of indicators was finalized for analysis, based on the requirement and scope of the review. An excel based calculation worksheet was prepared for the agreed indicators for analysis, and a comparative analysis across relevant indicators for districts was done.

c. Ethical considerations

An ethical approval was sought from JSI-IERB (Institutional ethical review board) for this review, for which the study protocol, questionnaires, DQA data entry tool and SOPs on DQA were submitted. After a thorough review, IERB decided to exempt this review from full scrutiny. Moreover, to maintain the regular protocols of ethics, an informed consent was obtained from the respondents and there was no attempt to capture the identity of the interviewees.

d. Quality control

The following steps were taken to ensure the quality of review:

- 🔍 Pretesting of questionnaire and data entry tools
- 🔍 Pre-visit to states for understanding of recording and reporting mechanism


- 🔍 Induction training of all investigators on review questionnaires and ODK tool

- 🔍 Establishment of control room to review the daily feedback through conference calls and resolve queries on an immediate basis

- 🔍 Supervisory visits during actual field visits.

e. Coordination with technical experts from the government and partners

At each step of preparation for the review, Immunization division and experts from CORE, GHS, JSI, NCCVMRC, NHSRC, NIHFW, UNDP, UNICEF and WHO were engaged to give inputs through multiple meetings and communications. Experts from partners also participated as reviewers.

A man in a light-colored, vertically striped shirt and dark trousers stands in a rural, grassy area. He is holding the handlebars of a bicycle. Two large, light blue delivery bags are attached to the rear of the bicycle. The background shows some buildings and trees under a clear sky. The entire image has a semi-transparent blue overlay.

3.1

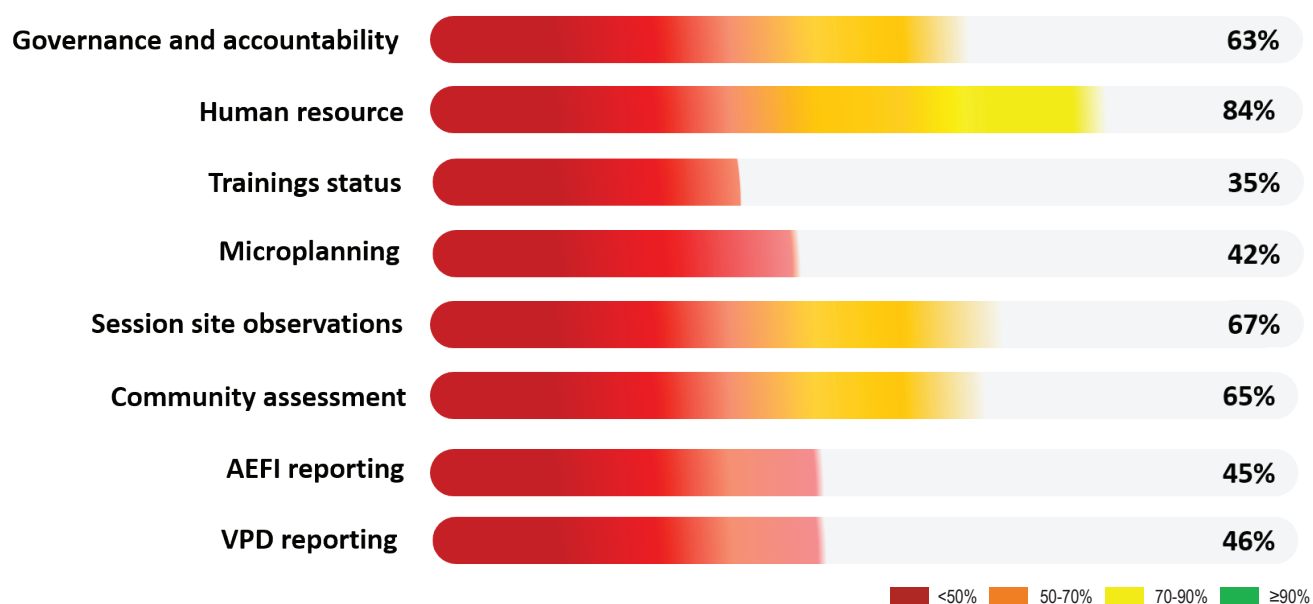
PROGRAMME IMPLEMENTATION

Review approach

The review was conducted at the state level, in four districts and Bhopal city, and the sample includes eight rural, six urban planning units, 43 session sites and 335 children.

The information collected was analysed under different subheads – Programme management, human resource and capacity building, service delivery and AEFI and VPD reporting. A cumulative score across all the levels was calculated for each subhead as illustrated below in Figure 3.

Figure 3: Snapshot of review findings - Programme implementation



Programme management

The findings related to the existing governance and accountability mechanism, including supportive supervision and inter sectoral coordination are summarised below:

i) Governance and accountability

At the state level, immunization programme is managed by State EPI Officer-SEPIO (Directorate of Family Welfare) with support from Deputy Director (RI) and an RI cell (jointly funded by state and partner agencies) consisting of a state RI coordinator, Monitoring and Evaluation officer and a Data/ Computer assistant.

The state has devised various committees, task forces and fora for periodic programme reviews that are detailed in Table 2. Minutes from these meetings have been analysed and details of the last meeting held under each forum is also included in the table.

An analysis of minutes of meetings of seven STFs indicates that discussions were focussed on planning and findings of MI, IMI and Polio NIDs. Communication strategies,

support for social mobilization, supportive supervision and interdepartmental coordination for IMI have been discussed extensively. However, comprehensive review of critical components of routine immunization like human resource status, microplanning, fund utilization, reported coverage data and communication plans was not conducted in these task force meetings.

State had organised two state level and two regional level RI review meetings with District Immunization Officer (DIOs) in 2017-18 but, no minutes were available for these meetings to comment further. Immunization was also reviewed through multiple video conferences (VC). Six out of seven VCs with DIOs were held exclusively for IMI in 2017-18. Only in one VC held for 'half yearly RI/IMI review', issues like special provision for 89 tribal blocks, supplementary PIP, condemnation of cold chain equipment, logistics availability, reported coverage, incorporation of IMI sessions in RI Microplans, birth dose at delivery points, supportive supervision etc. were reviewed.

The state had recently identified 204 blocks where full immunization coverage as per HMIS (in terms of absolute numbers) in 2017-18 had been less as compared to

Table 2: Analysis of state review platforms

State level fora		Observation from the minutes of the last meeting					
No. of meetings held in 2017-18	No. of meeting minutes available	Chair-person of meeting	Members/ Dept. participated	Date of last meeting held	Discussion points (last meeting)	Follow up on previous meeting minutes	Remarks
State Steering Committee (SSC)	1	1	<i>Panchayati Raj</i> & Rural development, AYUSH, Health & Family Welfare, ICDS, Sports & Youth welfare, Forest, Education	18/07/17	ANM vacancy and deputation, head count survey quality, incentive for RI, inter departmental support, ANMOL* tablet distribution status, strategy to mobilize children to session site	NA	For IMI
State Task Force for Immunization (STFI)	7	7	ICDS, AYUSH, <i>Panchayati Raj</i> , Urban administration, Immunization partners**, IAP	24/01/18	Polio NID round preparation, support from other dept. for NID, Support of UNICEF for RI	No	Discussion mainly on Polio NID
State review with DIOs	2	0	No minutes available to comment further				
Video conferences with DIOs	7	7	NHM, immunization partners, Sports & Youth, ICDS, IMA, IAP	23/01/18	Polio NID round preparation status	No	No discussion on RI activity
RI partner coordination meeting	4	4	Director Finance-NHM, State RI cell, State child health division, UNICEF	22/02/18	Joint RI action plan, capacity building of RI cells in districts, assessment of AVD system, workshop planning for reaching FIC>90%	Yes	
State AEFI Committee	2	1	Head of Paediatrics department from. Medical college	24/11/17	Causality assessment, quality and completeness of filled forms, refresher training, pendency of AEFI documents	N	No discussion on silent districts

*ANMOL - ANM Online
 **Immunization partners: WHO-NPSP, UNICEF and UNDP

2016-17. State level 'Officers Incharge' have been nominated for all districts, with a monthly supervision plan but no mechanism of compilation of their feedback exists. While all the assessed districts were visited by a state/divisional level official for review of various health programmes including RI during the last 3 months, trip report was available only in one district.

In order to create a robust system of concurrent monitoring, state has identified and funded 132 state RI monitors (SRIM) through PIP, who conduct session site and house to house monitoring. Data is entered into the 'Supportive Supervision' application, which is collated, compiled and analysed on monthly basis, feedback from which shared through letters or review meetings. State had also made special provision in PIP for hiring of vehicles for organising RI sessions in identified 89 tribal blocks.

At the district level, District task Force for Immunization (DTFI) has been constituted in all districts under the chairmanship of District Magistrate (DM), which is expected to review programme performance once a month. Further, Chief Medical and Health Officers (CMHO) are expected to conduct quarterly reviews for RI with block medical officers.

Figure 4 shows that only 42% of the expected DTFI meetings were held, ranging from 25% to 67% in the reviewed districts. Minutes of DTFIs were available in all assessed districts. While 75% of the districts conducted DTFIs for campaigns like IMI and Polio NIDs, remaining district clubbed DTFI with District Health Society (DHS) meetings; limiting the time and discussion on immunization

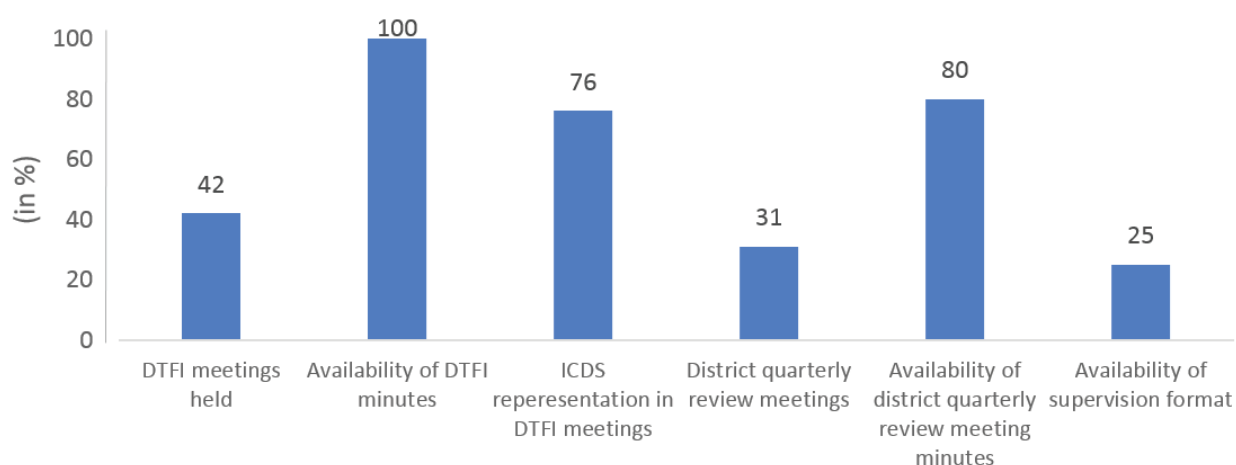
programme. Thus, comprehensive review of critical components of routine immunization like human resource status, microplanning, fund utilization, reported coverage data and communication plans were not conducted in these task force meetings. ICDS participation was seen in 76% of the meetings. Furthermore, the state has no mechanism to check the quality and comprehensiveness of discussions and decisions taken in DTFIs.

Almost all districts suffer from weak mechanism of quarterly review for RI. Only 31% of the expected quarterly review meetings were held, ranging from no meetings held in two districts to all four meetings held in one district. Discussions and participation during these reviews cannot be commented upon due to unavailability of any related documentation except in only one district.

While three-fourth of the districts had identified their poor performing blocks, only half of the reviewed districts had assigned district level officers for their supervision. RI checklist for supervision was being filled in only one-fourth of the districts by these officers and none of the districts had any mechanism of collation and compilation of feedback generated by officers. Three-fourth of the districts shared feedback with block officers through review meetings, while remaining had no mechanism of sharing feedback. None of the districts had issued any letters/emails pertaining to RI feedback.

At rural planning unit level, review of immunization programme was generally in the form of monthly meetings with health workers and supervisors. While quarterly review was seldom (only in 12.5%), there was also a planning unit with no RI review mechanism

Figure 4: District level programme activities conducted against expected performance



Source: Analysis of available minutes/attendance records/presentations from reviewed districts

in place. Representation from ICDS department was minimal during such reviews.

Although more than 60% of the rural planning units were visited by any higher official in last three months for supervision of RI activities, no documentation for such visits was available.

Less than one third of supervisors involved in RI had any documentation related to supervision findings from last three months. As also discussed later in the report, the districts had high vacancies of supervisors especially Lady health visitors (LHV). Only 50% of the subcentre microplans had any supervisor assigned, and supervisory visits at session sites were found to be at 44% of sessions under assessment.

ii) Inter-sectoral coordination

Inter-department coordination

Participation from Women and Child development (WCD) department has been strong during STFIs and DTFIs.

However, weak participation is seen at block level for immunization review meetings. State has not issued any directives for coordination meetings between ANM, ASHA and *Anganwadi* workers pertaining to headcount survey, VHND microplanning, dualisting of beneficiaries etc.

Coordination with Forest department and discussions for support from 'forest committees' is well reflected during SSC, STFIs and a few DTFIs meetings.

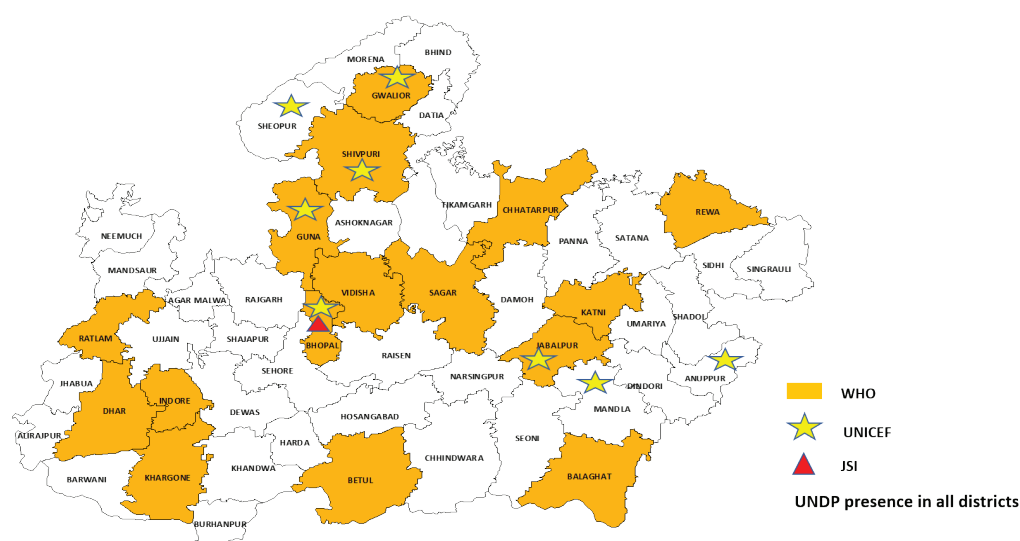
Partner coordination

Development partners work with state government on various areas of immunization programme (Table 3 and Fig. 5). WHO-NPSP, through its presence at the state level and 16 field units, coordinates concurrent monitoring of routine immunization, special campaigns and collation of monitoring findings. It also supports microplanning along with VPD surveillance. However, data sharing by NPSP is irregular at state level. Further, there is no mechanism of 'joint monitoring' by government and partners for routine immunization, although this mechanism existed for IML.

Table 3: Immunization partners' support by thematic areas

Immunization partners	WHO-NPSP	UNICEF	UNDP	JSI
Presence in state	State and 16 field units	State, 3 regions and 5 focus districts	State and all districts	State level
Thematic areas	Microplanning and monitoring of RI and SIAs for polio, Measles elimination and rubella control and VPD surveillance	Social mobilization for polio NIDs /SNIDs and RI, and cold chain	Supply chain management (eVIN)	Rapid Immunization Skill Enhancement (RISE)

Figure 5: Immunization partners' landscape: Madhya Pradesh



UNDP supports Electronic Vaccine Intelligence Network (eVIN) implementation and strengthening supply chain. UNICEF supports RI cell at state as well as social mobilization and communication for behaviour change through its presence at state, 3 regions (Bhopal, Gwalior and Jabalpur) and 5 focus districts. It also provides technical support to the state on cold chain equipment and spare parts. JSI supports 'Rapid Immunization Skill Enhancement (RISE)' project. 'Piramal' group has its presence in 5 aspirational districts (identified by *NITI Aayog*), while personnel from Population Services

International (PSI) and Save the Children supervise UHNDs in a few districts. 'CHAI' supports cold chain strengthening at state.

Human resource and capacity building

While a regular DIO was available in all assessed districts, almost all DIOs were given charge of additional programmes. Vacancy status of all human resource cadres is depicted in Table 4.

Table 4: Human resource vacancy status

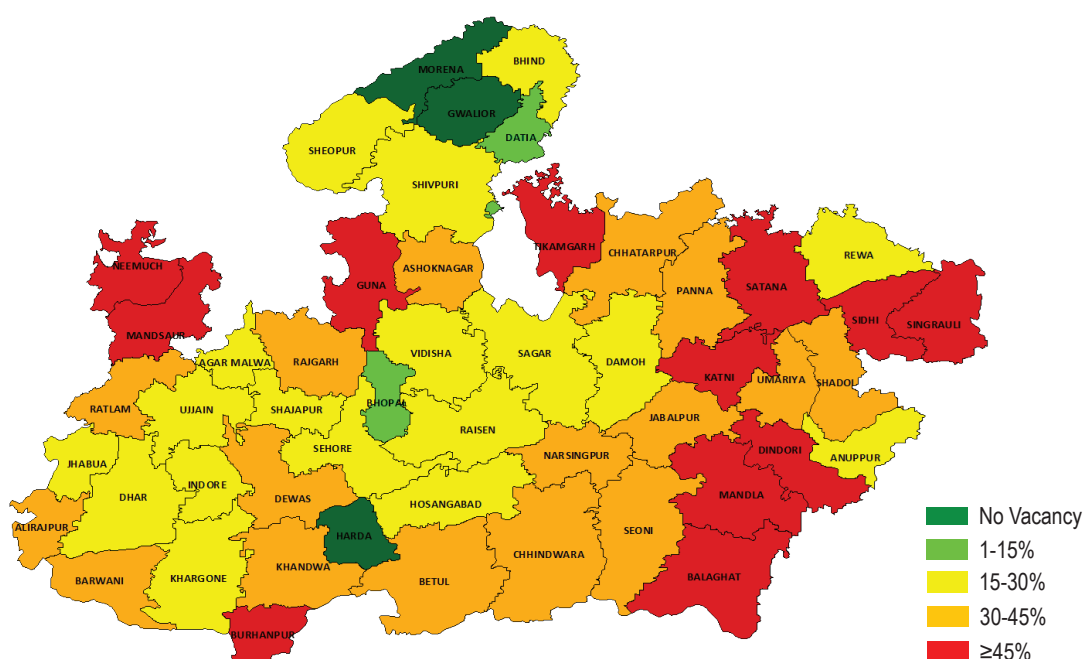
HR Cadre	% Vacancy					
	District A	District B	District C	District D	Average (A, B, C & D)	State (51 districts)
MO - Regular	35	24	38	66	36	34
LHV	35	63	61	67	52	54
HS	32	53	27	67	39	23
ANM-Regular	0	5	3	30	9	6
AWW	1	0	0	4	1	1

Source: Recent available data received from establishment section & State/District Programme Management Units

More than half of the positions of LHVs are vacant in the state. Similarly, more than one-third positions of regular medical officers are vacant, with vacancy being as high as 66% in one of the assessed districts. Although the overall

vacancy of regular ANMs in the state is low, majority of the assessed districts had high vacancy of contractual ANMs. Figure 6 illustrates district wise vacancy of regular MOs.

Figure 6: Vacancy status of regular Medical Officers



Capacity Building

State ToT on Immunization handbook for MOs (2016) has not been conducted in Madhya Pradesh. In 2017-18, DIOs and block medical officers of 14 IMI districts/

urban areas were trained on Immunization handbook at Regional health and family welfare training centre-Jabalpur. Training status of 2-day Health Workers' training on immunization and of cold chain handlers on VCCH module in last two years is given in Table 5.

Table 5: Status of immunization trainings

Immunization training	% Trained
Health workers	55
Cold Chain Handlers (CCH)	46

Source: Data as received from state

Training status of ANMs was also assessed at session sites. Nearly half of the ANMs interviewed had not received two days' training on immunization. Knowledge on AEFI reporting among health workers was found to be poor. As high as two third of the ANMs could not mention even a single type of serious AEFI. Among those who could, hospitalization was the most common response (29%), followed by death (26%). Similarly, nearly 58% of ANMs were not aware of the nearest AEFI management centre. Only 19% ANMs were aware of the reporting of AEFI cases in block/planning unit AEFI registers.

Only 42% ANMs could correctly explain how to identify suspected diphtheria, pertussis, neonatal tetanus, measles and AFP cases, and only 16% ANMs were aware regarding reporting of VPDs in MPR.

The knowledge on age/dose and route of newer vaccines like fIPV, RVV & PCV was found to be generally satisfactory. Nearly 70% ANMs were found to provide four key messages, whereas 86% were aware of the correct sequence of administering multiple antigens during a single visit.

Service delivery

The following components were reviewed to assess

Table 6: Microplan analysis

Indicator	%	
Availability on state specified but old format (n=18 planning units)	61	
Availability of AVD plan (n=18)	83	
Columns for new vaccines	fIPV (n=18)	0
	RVV (n=18)	0
	PCV (n=18)	0
Subcentre-wise plans with enlisting of villages, hamlets and HRGs (n= 307)	54	

immunization service delivery:

- I. Microplanning
- II. Session site observations
- III. Community coverage assessment

Microplanning

A total of 12 rural and six urban microplans were desk-reviewed for quality. Fourteen of these microplans were further analysed for updation, HRA coverage plan, alternate planning for vacant subcentres and incorporation of IMI sessions, while remaining four microplans could not be assessed, as required information on above components was unavailable.

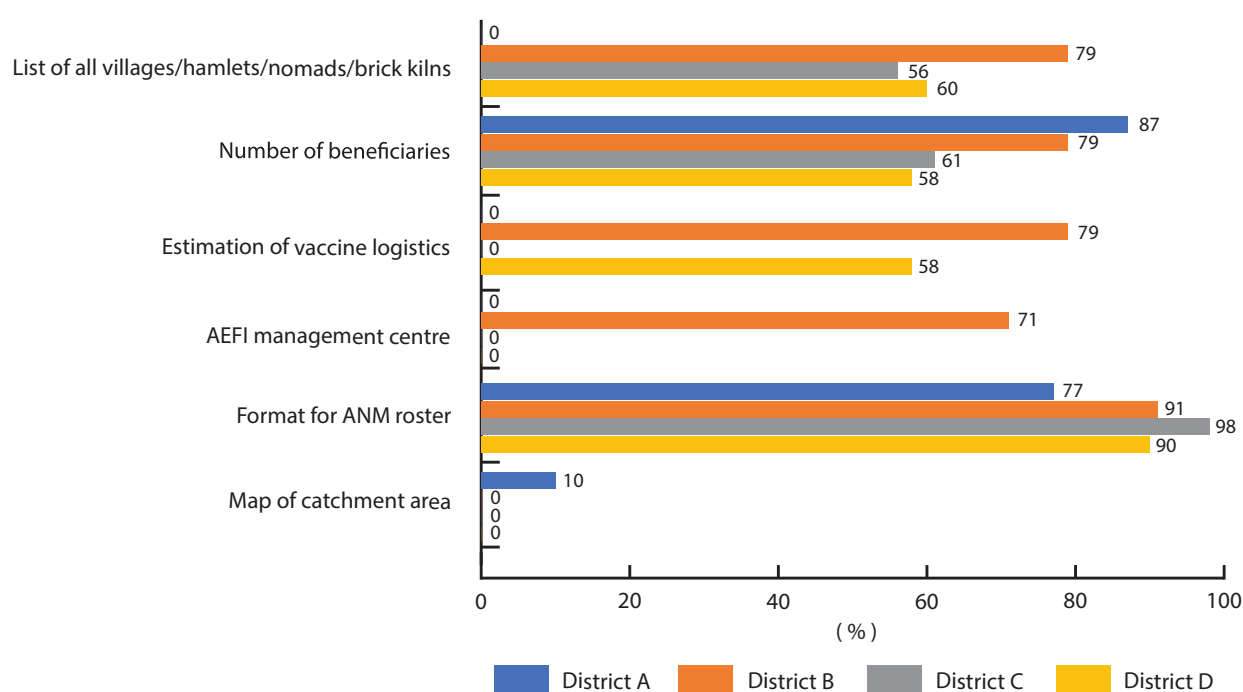
State had provided a routine immunization microplanning tool in 2015; however, this tool is neither aligned with formats in Immunization handbook for MOs nor has space for inclusion of newer vaccines. Even then, only 61% of the total microplans were prepared on state prescribed formats while remaining were available as one pager ANM rosters. None of the microplans had columns on new vaccines (Table 6).

Indicator	%
Subcentre-wise plans with the number of beneficiaries available (n=307)	66
Subcentre-wise plans with the subcentre map available (n=307)	1
Subcentre-wise plans with vaccine and logistic formats available (n=307)	38
Subcentre-wise plans with details of AEFI management centre (n=307)	15
Subcentre-wise plans with ANM roster (n=307)	92
Subcentre-wise plans with supervisor assigned (n=307)	50
Sessions with mobilizers name mentioned in microplan (n= 2412)	79
Supervisors assigned to more than five subcentre areas (n=64)	25
Vacant subcentre plan with fixed ANM accountability (n=6)	17
IMI sessions incorporated in RI microplan (n=42)	0

Of the 307 subcentre plans assessed, major issues were noted regarding poor availability of subcentre maps, vaccine and logistics planning and AEFI management

centre details. Detail of district-wise status of microplans reviewed is seen in Figure 7.

Figure 7: Availability of critical components in microplans (%)



Half of the subcentre plans lacked complete enlisting of villages, hamlets and HRAs, and had no supervisor assigned. Nearly one-fourth of supervisors were assigned more than 5 subcentres for supervision.

Planning for vacant subcentres was assessed in planning units having such subcentres. Alternate arrangement with fixed accountability to cover such subcentres was found only in 17% planning units.

While HRAs for RI were identified, 45% HRAs were covered by independent sessions, 42% had been tagged to existing sessions and nearly 14% were planned during special campaigns only. None of the exclusive IMI sessions were included in RI microplans, indicating poor sustainability of the gains.

Session site observations

A total of 43 sessions were assessed in rural and urban

areas for various critical processes affecting the quality of service delivery. Eighty-eight percent of the observed sessions were conducted at the site as per microplan. Eighty-six percent of the sessions were part of the village/

urban health nutrition day (VHND/UHND). While ASHAs were found to be present at 84% of session sites, AWWs were present at 74% session sites visited. A few key indicators are shown in Table 7.

Table 7: Session site findings on key processes

Indicator	%
Session site as per microplan	88
Session part of VHND/UHND	86
ASHA found as a mobilizer	84
AWW found as a mobilizer	74
Record of updated headcount survey availability	35
Due list availability	93
Updated due list availability	44
Preparation and sharing of the next month session's due list by ANM with ASHA at the end of the current session	30
Supervisory visit	44
ANM received 2-day training on immunization	49
Knowledge about correct sequence of administering multiple antigens	86
ANM awareness about VPD case reporting in MPR	16
ANM awareness about serious AEFI cases	33
ANM awareness about the recording of AEFI cases in register available at planning units	19
ANM awareness about designated AEFI management centre	42
ANM delivering 4 key messages to caregivers (n=38)	71

(a) **Headcount survey, due listing and tracking of left outs/drop outs:** Mobilizers at nearly 44% sessions sites failed to show a record of headcount survey. Updated headcount survey was present at only 35% of session sites. Due list was available at 93% of the session sites; however, an updated due list was available at less than half of the session sites. Nearly 70% of due lists were not available on standard formats.

Active tracking of drop outs and left outs by health workers was assessed by scrutinizing previous due lists and records at the session sites. It was found that health workers at only 47% of the sessions were performing active tracking. Nearly three-fifth ANMs were hesitant to vaccinate children with a minor illness like mild fever/diarrhoea. At the end of the session, only 30% ANMs prepared and shared the due list for the next session with ASHAs for updation.

(b) **Immunization safety:** All of the ANMs were seen to use a separate syringe for reconstitution of each vial of BCG, Measles and JE vaccines. Nearly all ANMs were aware about correct injection site and

route of administration. None of the ANMs were observed to be guiding the needle with their finger while vaccinating a child, and nearly 71% ANMs were providing four key messages to the caregivers.

(c) **Supervision:** Only 44% of the sessions were visited by any supervisor before visits by the review team.

(d) **ASHA incentives:** ASHAs were found to be less aware of the incentives for mobilization component than full immunization and complete immunization component. Almost 72% ASHAs had received RI incentives in the last quarter.

(e) **Knowledge of ANMs:** Information has been dealt with in the 'capacity building' section.

Community coverage assessment

Caregivers of 335 children in the age group 0–23 months were interviewed to assess the vaccination status of their children. MCP card retention was 89%. Almost 73% of the children born at government or private health facilities had been given Hepatitis B birth dose (Table 8).

Table 8: Community assessment findings

Indicator	%
MCP card available with household (n=335)	89
Hepatitis B birth dose given to new born delivered in government or private health facilities (n=314)	73
Major source of information on vaccination to caregivers (n=391 response)	ANM & ASHA – 81 ICDS – 17
Mobilization of beneficiaries to session site by ASHA (n=441 response)	75
Name of partially vaccinated /unvaccinated beneficiaries available in the due list (n=75)	48
Name of children in the headcount survey (n=335)	40

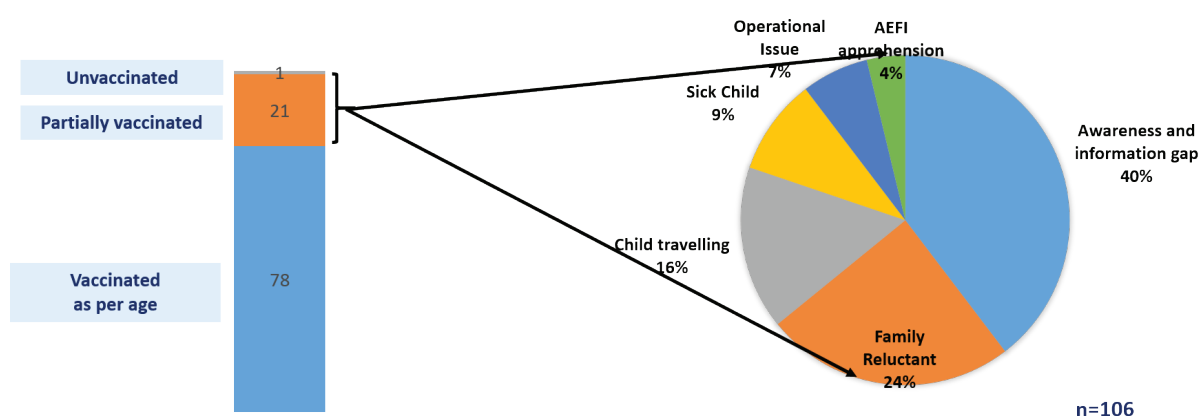
Seventy-eight percent children (0–23 months) were found to be vaccinated appropriately as per age. However, more than half of the names of partially vaccinated or unvaccinated beneficiaries were missing in the due list with ASHAs. ANMs and ASHAs were the major source of information and mobilization of the beneficiaries.

Names of all beneficiaries were also cross-checked for inclusion in headcount survey record in order to assess

the robustness and completeness of the survey. Less than half of the names were present in the headcount survey.

Figure 8 illustrates the reasons for children being partially vaccinated or unvaccinated as per age. ‘Awareness and information gap’ was the most common reason, followed by ‘reluctance by family’.

Figure 8: Reasons for partially vaccinated and unvaccinated children



These findings are also substantiated with the fact that funds have been suboptimally utilized especially under ‘mobilization of children through ASHA or other mobilizer’ at state. Along with this, the state has also spent inadequately under ‘focus on slums and underserved areas in urban areas/alternate vaccinator for slums’.

AEFI and VPD reporting

All DIOs were trained as per AEFI operational guidelines (2015), followed by cascaded training till health worker

level. Two state AEFI committee meetings were held in 2017-18 as against the expected norm of four meetings. However, minutes of only one meeting were available. As per minutes, causality assessment was the main agenda along with discussion on quality and completeness of forms, pendency status of PCIF & FCIF and streamlining of meetings on monthly basis. No discussion on the performance of districts, especially in terms of frequency of district AEFI committee meetings and on districts silent for case reporting.

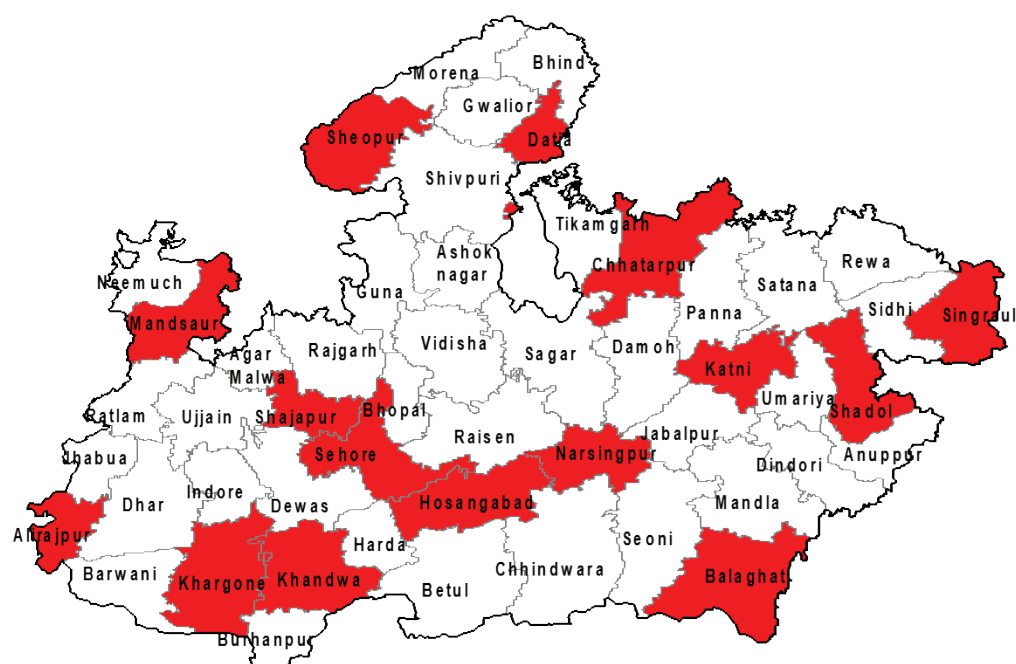
Table 9: Trend of silent districts for AEFI cases over 3 years

Year (Jan-Dec)	Total no. of districts	No. of Silent districts	% of silent districts
2015	51	31	61
2016	51	28	55
2017	51	30	59

Source: AEFI Secretariat

Table 9 shows year-wise number of districts silent for AEFI cases. 15 districts (Alirajpur, Balaghat, Chhatarpur, Datia, Hosangabad, Katni, Khandwa, Khargone, Mandsaur,

Narsingpur, Sehore, Shadol, Shajapur, Sheopur, Singrauli) had not reported any AEFI case for the period of January 2015 to December 2017 (Figure 9).

Figure 9: Silent districts for AEFI cases for the last 3 years

Source: AEFI Secretariat (as of 31st March 2018)

At the state level, updated line list for AEFI cases was available. Out of total 60 AEFI cases reported in 2017 (Jan-Dec), PCIF was not shared for 17 cases; whereas FCIF was not shared for 38 AEFI cases with AEFI secretariat.

Only one of districts assessed had reported an AEFI case in 2017. Line-list along with all related documents

of serious/severe AEFIs case were found to be available with the district.

As per Table 10, district AEFI committee was constituted in all of districts assessed. While all the districts reviewed had updated their AEFI committee members list within one year, only 25% districts had conducted meetings.

Table 10: Status of AEFI committee

Indicator	%
AEFI Committee constituted	100
AEFI Committee member list updated in last year	100
Quarterly AEFI Committee meeting held against expected (for all four districts)	19

A total of 14 planning units (urban and rural) were assessed for critical AEFI surveillance related indicators (Table 11). Guidelines from the national level were sent to all the states including Madhya Pradesh in 2016 for maintenance of block AEFI recording registers to record and report all types of AEFIs seen by health workers, but more than half of the planning units lacked these AEFI registers. In PUs where the AEFI registers were available, these were not being reviewed by the MO/MOIC.

Only 21% of planning unit nodal officers (MOIC/MO) were trained/sensitized on AEFI surveillance within last 1 year. This is also substantiated from the finding that more than half (64%) of the officers were not aware of any type of serious AEFIs. Blank case reporting formats (CRFs)


were not available at most of the PUs. Furthermore, AEFI management kits were unavailable at 57% PUs. Planning units which were also VPD surveillance reporting units were assessed for completeness of AEFI reporting. Only 63% of these PUs had either reported an AEFI case or had shared weekly 'Nil' report.

Vaccine Preventable Disease (VPD) reporting

Three out of four reviewed districts had no mechanism of weekly VPD data sharing between District Surveillance Officer (DSO-IDSP) and DIO office. Number of measles cases reported in IDSP were nearly similar to what reported through DIO office or HMIS.

Table 11: AEFI surveillance status at Planning Unit (PU) level

AEFI indicator	%
Unavailability of AEFI recording register	57
Nodal officers not sensitized/oriented/trained on AEFI (within last 1 year)	79
Nodal officers not aware of serious AEFIs	64
Blank CRF not available	86
Unavailability of AEFI management kit	57



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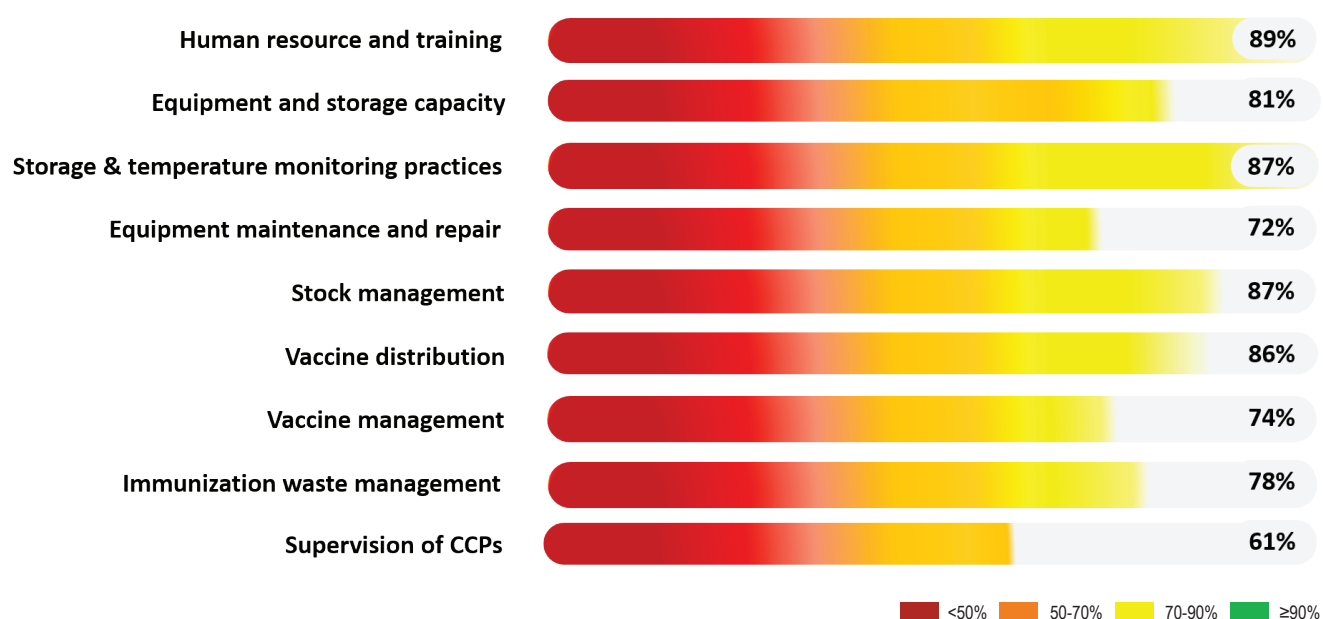
LOGISTICS AND SUPPLY CHAIN

Review approach

Logistics and supply chain data was collected at four levels - Primary Vaccine Store (State/ Regional Vaccine Store), District Vaccine Store (DVS), Service Delivery Points (last cold chain points) and session sites. Primary Vaccine Store was observed at the state capital. DVSs of the districts reviewed were visited. Urban and rural service delivery points in the reviewed districts were observed. Session sites were also visited in rural and urban areas.

The data is analysed under nine thematic areas - human resource and training; equipment status and storage capacity; storage temperature and temperature monitoring practices; maintenance and repair; stock management and vaccines & logistics availability; vaccine distribution; vaccine management practices; immunization waste management; and supervision. The performance of the state is calculated through a cumulative score across all the levels for each thematic area (Fig. 10).

Figure 10: Snapshot of review findings - Logistics and supply chain



Key Observations

A robust cold chain and vaccine logistics management is pertinent in ensuring uninterrupted availability of quality vaccines from manufacturer to service-delivery levels and beneficiaries, so that opportunities to vaccinate are not missed because of unavailability of quality vaccines. The role of the supply chain is to ensure effective vaccine storage, handling and stock management; rigorous temperature control in the cold chain; and maintenance of adequate logistics management information systems.

The key findings for logistics and supply chain can be summarized into following nine thematic areas:

Human resource and training

Adequate and trained human resource are crucial for smooth functioning of immunization supply chain system.

The findings at various levels were:

- » At the primary / state vaccine store, cold chain handler (CCH) has been assigned, whereas the Vaccine Logistics Manager (VLM) position is vacant at SVS. At each of the district vaccine stores (DVS), there is at least one CCH assigned, and cold chain technician (CCT) is in position in 80% of the districts.
- » All districts had conducted training on VCCH module 2016, with all CCHs trained on it. All CCH at all DVSs were trained on eVIN application and implementation as well. Eighty percent of the DIOs were trained on VCCH module 2016. All the CCTs in position have been trained in cold chain equipment maintenance and repair during the last three years.

- » All service delivery points (SDP) observed have at least one CCH assigned, with an alternate CCH assigned at 65% of the SDPs. Amongst these, 81% of CCHs were trained in VCCH module 2016 and 88% were trained on eVIN application.

Equipment status and storage capacity

Equipment status

For ensuring potency of the vaccines, cold chain equipment (CCE) need to be maintained and upgraded periodically. Following are the findings pertaining to the equipment status:

- » Walk-in freezer (WIF), Walk-in cooler (WIC), ice-lined refrigerator (ILR) and deep freezer (DF) were assessed across different levels.
- » Nearly 19% of all CCEs at DVS level and 24% of all CCE at SDP level were found to be working without separate stabilizers.
- » Cold chain sickness rate in the state was found to be 5.4 percent during the review.

Storage capacity

There should be a dedicated space to keep cold chain equipment and logistics to ensure smooth supply chain management.

Primary Vaccine Store had inadequate space for CCE, as functional CCE were kept outside the cold chain room. The dry storage space was found to be adequate at primary store. Eighty percent DVSs had adequate space for CCE, whereas the dry storage space was found to be adequate at all the DVSs reviewed.

The cold chain space for vaccines storage (dependent upon number and type of ILR at SDP) was adequate at all service delivery points.

Storage and temperature monitoring practices

Maintaining appropriate temperature is essential to ensure the efficacy and potency of the vaccines. Along with recording through thermometer, eVIN data loggers are in place to record temperature and raise alarm

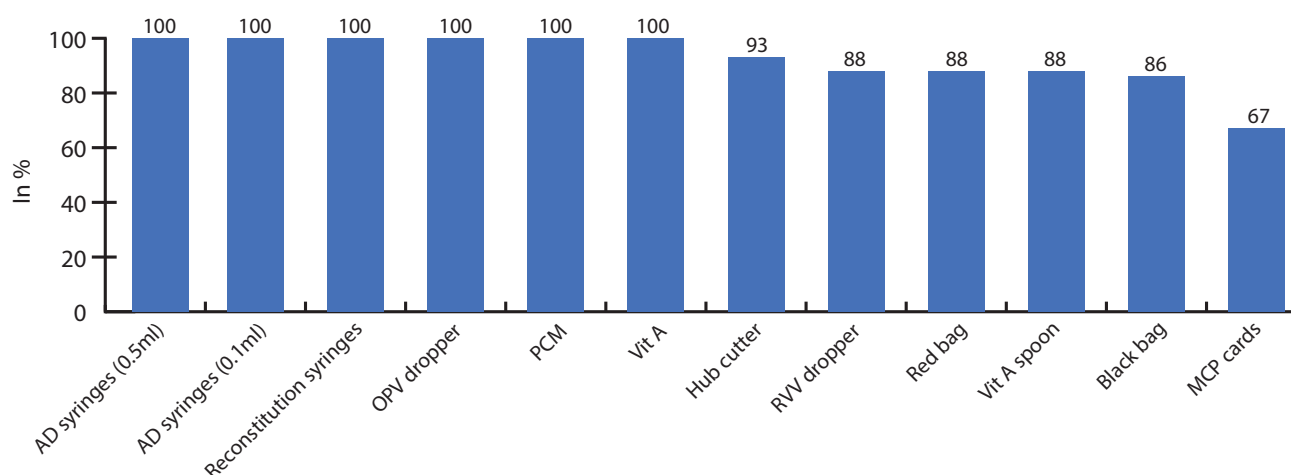
on temperature breach. The temperature monitoring practices were found to be good at all levels. The other findings of the review are:

- » At the primary vaccine store, all the CCE had functional thermometers. The temperature log book was available for 93% of CCEs, but temperature was not recorded twice daily. At the district vaccine store, all in use ILRs and DFs had functional thermometers and a separate temperature log book. The temperature was being recorded twice daily at 80% of DVS.
- » The functional thermometer was available for 84% of ILRs and 74% of DFs at service delivery points. The temperature log book was not available for 18% of CCE. Temperature was recorded on the same day (including holidays) at 88% of SDPs.

Equipment maintenance and repair

For ensuring cold chain sickness rate at minimal level, periodic maintenance and repair of equipment should be carried out. It is important to ensure that an arrangement is in place to carry out prompt repairs and preventive maintenance of equipment.

- » At the primary vaccine store, functional power back up was available for CCE. Similarly, 40% of DVS and 58% of all service delivery points had functional power back up for CCE. Nearly one fourth of SDPs reported instance in the past 1 month when continuous 8 hours of power supply was not available.
- » All cold chain technicians in position at DVS were having complete tool kit, whereas 50% of CCT did not have spare parts for CCE repair.
- » At SDP level, records of defrosting were available for 78% and 68% of ILRs and DFs respectively.
- » State committee has not been constituted for condemnation of CCE, however all the districts have constituted this committee. Two CCEs were found pending for condemnation at SVS since last three years. However, amongst all the districts reviewed, only 20% of the DVS had CCE pending for condemnation since last 3 years.
- » CCTs visited 62% SDPs in the last three months for maintenance and repair.

Figure 11: Logistics' availability at session sites

Stock management

In order to maintain adequate quantity of vaccines, it is essential to keep complete and accurate records of all stocks and their transactions. Electronic Vaccine Intelligence Network (eVIN) is functional across the state, and along with the standardized stock registers, eVIN application is used by CCHs for stock management. Records of vaccines (BCG, OPV, MCV and pentavalent vaccine), diluents (BCG and MCV) and logistics (AD 0.1ml, AD 0.5ml and reconstitution syringes) were assessed; and following observations were noted:

- » At the primary vaccine store, standardized stock registers for vaccines, diluents and logistics were available and updated. There was no stockout observed for the reviewed vaccines, diluents and logistics in last three months, except AD 0.1ml syringes.
- » At all the district vaccine stores assessed, standardized stock registers were maintained for all vaccines, diluents and logistics. The stock registers were updated for BCG and MCV at 80% DVS, and for OPV and pentavalent at all DVS. The diluents and logistics record was updated at 60% and 80% DVS respectively. There was no stock out observed for any vaccine, diluent or logistics in last three months. The maximum stock of BCG and OPV exceeded at 80% and 20% DVS respectively, in the last three months.
- » All service delivery points (SDP) reviewed had availability of standardized stock registers of vaccine and diluents, whereas stock registers for logistics was available at 81% of SDP. Stock

registers were updated for BCG at 92%; for OPV, MCV and pentavalent vaccine at 88% of all reviewed service delivery points. Stock register for diluent for BCG was updated at 85% and for MCV at 81% SDPs. At the SDPs where logistics registers were maintained, the registers were updated at 52% SDPs for AD 0.1ml, 57% SDP for AD 0.5ml syringes and at 52% for reconstitution syringes. Stock out for BCG, OPV, pentavalent vaccine and BCG diluent was observed at 4% SDPs in the last three months, whereas for MCV and MCV diluent at 12% SDPs in the reviewed facilities. Amongst all the service delivery points, excess stock of BCG, MCV, OPV and pentavalent vaccine were observed at 81%, 73%, 77% and 62% SDPs respectively in the last three months.

Stock availability at session sites

- » Of all the sessions observed, Pentavalent, DPT, PCV and TT were available at all the sessions. BCG vaccine and diluent were available at 91% of sessions, MCV vaccine and diluent at 95% sessions, RVV at 88% and IPV was available at 81% of sessions.
- » More than one-fourth of the sessions were not supplied vaccines as per due list.

The availability of logistics at reviewed session sites is depicted in Figure 11.

Vaccine distribution

For an effective immunization programme, timely deliveries of the required quantities of vaccines are

important. The parameters assessed here ensure the effectiveness of the vaccine distribution between each level of the supply chain.

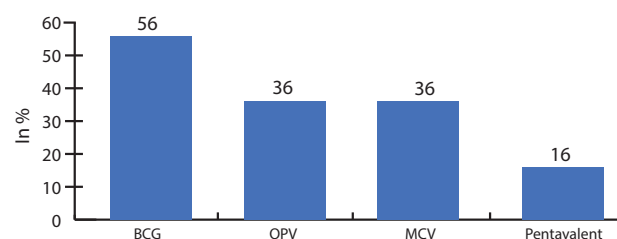
- » The Primary Vaccine Store distributes vaccines to DVS on monthly basis.
- » At all DVS, vaccine distribution is done after the indent is raised. At 60% of DVSs, the vaccines were distributed to SDPs when demand was raised and at 40% of the DVS, vaccines were distributed based on eVIN.
- » All the reviewed DVSs had a functional vaccine van.
- » Out of the sessions observed, 79% received vaccines exclusively through AVD system. The other mechanism found was ANM collecting vaccine from SDP.
- » All vaccines and diluents were received inside the vaccine carrier with four ice packs at all session sites.

Vaccine management practices

This criterion is essentially applied to the service delivery level and session site.

- » At SVS, no vaccine other than UIP vaccine were found in the ILR, whereas at 40% DVSs, non-UIP vaccines were found.
- » Contingency plan and job aids were displayed at the SVS. At 80% DVS and 73% SDPs, contingency plan was available, while job aids were displayed at all SDPs.
- » At all the DVS and SDPs, all the vaccines were stored in ILR and were stacked properly. However, vaccines returned from the sessions were stored ANM wise in boxes and all closed vials were kept at top in the ILR. At 4% SDP, UIP vaccine (OPV) were found to be stored in deep freezer.
- » Open vials were stored in ILR at all SDPs and at 8% SDP, open vials were found beyond 28 days from day of opening.
- » Diluents were present in ILR 24 hours before session at 77% SDPs.

Figure 12: Vaccine wastage rate



- » The average wastage rates for the reviewed vaccines at the service delivery points are given in Figure 12.

The wastage rate of these vaccines are much higher than expected for OPV and MCV.

Vaccine management at session sites

- » At 84% of sessions, opened vials of vaccines were issued and no vaccine was found to be used beyond 28 days of opening.
- » At 70% of reviewed session sites, date and time of opening was mentioned on all open vials, while neither date nor time was written on vaccine vials at the remaining sessions.
- » At 13% of the sessions, open vials of BCG and MCV were found which were not discarded after four hours of opening.
- » Vaccines were found with VVM beyond discard point at 7% sessions and non-readable labels at 14% sessions.
- » At 30% of the sessions reviewed, vaccines were not appropriately placed on/near the ice packs.
- » Vaccines were placed in zipper bag at 26% sessions, and at only 5% sessions multiple zipper bags were used to return the vaccines to SDP.
- » At 5% of the sessions, vaccines were found beyond the expiry date.
- » All the vaccines reviewed had wastage rates beyond the recommended level.

Immunization waste management

The waste management practices at the service delivery points need more attention.

- » Immunization waste was returned from 72% of the session sites.
- » Less than half of the SDPs had safety pit constructed.
- » Regarding the waste disposal practices, at 38% of SDPs, immunization waste was disposed in the safety pits; at 31% of the SDPs it was outsourced; 23% of the SDPs did not follow any waste management practices as it was thrown with other waste; and at 8% SDP the immunization waste was sent to CHC for disposal.
- » At 85% SDPs, CCH had knowledge about use of red and black bags for waste disposal, and at 73% SDP, CCH had knowledge about disposal of immunization sharps. At 46% of SDPs, the CCH did not have knowledge about shake test.

- » Hub cutter is used to cut both AD and reconstitution syringes at all sessions where hub cutter is present (93% session sites). In these, the cut syringes were found to be segregated in red bag at 94% of session sites.

Supervision

- » At the primary vaccine store, only one supervisory visit has been made by the state officials in the last three months. The preventive maintenance plan was available with the CCT.
- » At 80% of District Vaccine Stores, an average of 4 supervisory visits were made by DIO in all the DVSSs reviewed. The preventive maintenance plan was available at all the districts.
- » There were no supervisory visits by the MOs at 26% of the SDPs.



3.3

DATA RECORDING AND REPORTING SYSTEM

Review approach

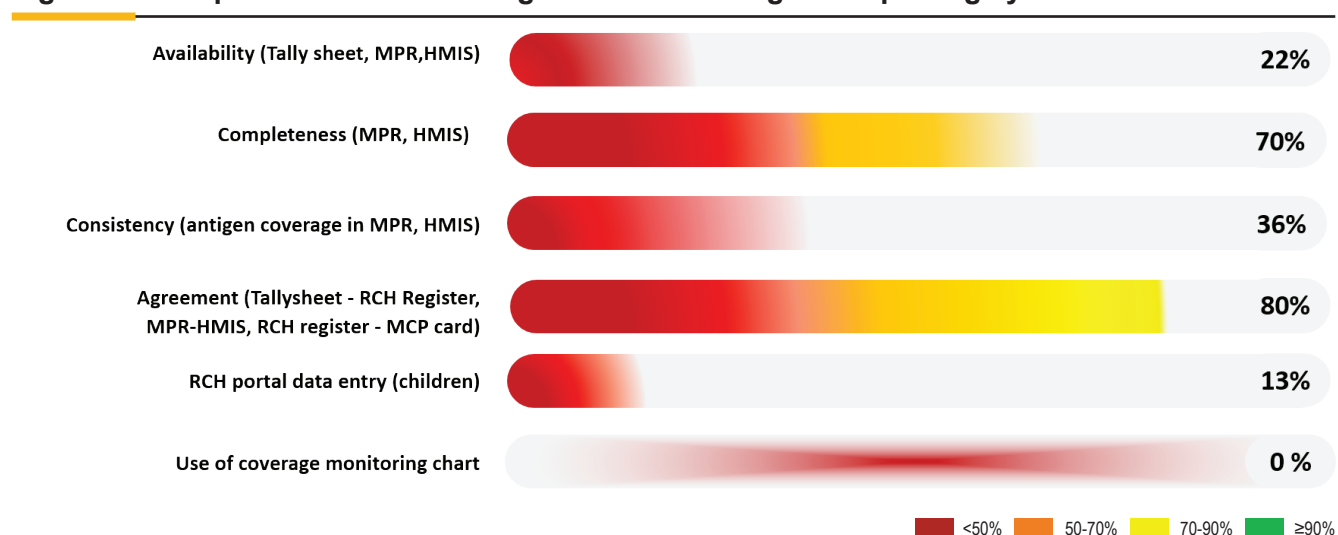
Immunization data is recorded in the RCH registers and tally sheets by the ANMs and consolidated in the form of a monthly report which is submitted to the planning units. Data entry operator uploads the data from the Monthly Progress Report (paper copy) into the HMIS portal. It is of paramount importance that data is of the highest quality, so that it can be used to guide programme actions.

The objective was to assess the data recording and reporting system, data quality and the use of data for

action. The assessment was done in two parts; system of data recording & reporting and Data Quality Assessment (DQA). Structured questionnaires were used to assess the system of reporting and an excel tool adapted from WHO methodology was used for DQA. Pre-visit to the state was done to ensure that the DQA tool was consistent with the data reporting mechanism of the state.

The performance of the state was calculated through a cumulative score across all the levels for each thematic area (Fig. 13).

Figure 13: Snapshot of review findings - Data recording and reporting system



Data Quality Assessment

Six months data from December 2017 to May 2018 was used for DQA in eight rural and one urban planning unit. The assessment followed definitions as illustrated in

Table 12. For the DQA, eight antigen doses (BCG, OPV 1, OPV 2, OPV 3, Pentavalent 1, Pentavalent 2, Pentavalent 3 and MCV 1) were opted for analysis. An overview of the key findings of DQA is illustrated in Table 13.

Table 12: Description of key indicators of DQA

Indicator	Description
Availability	Physical availability of records and reports at the assessment site
Completeness	All the specified immunization related data fields filled up
Consistency	Data follows the logic that is expected from immunization system, for example OPV 1 ≥ OPV 3.
Agreement	Two documents that are supposed to have the same data are actually identical or not, for example recordings in the tally sheet with reporting in MPR

Table 13: Overview of DQA

Indicator	Record / Report	Assessment findings (%)					
		District A	District B	District C	District D	State capital urban area	Average of districts reviewed
Availability	Tally sheet / due list cum tally sheet	65.1	19.6	0.8	9.9	2.1	12.3
	MPR	100.0	100.0	100.0	79.2	100.0	95.4
	HMIS	100.0	100.0	100.0	95.8	33.3	91.7
Completeness	MPR	91.7	66.7	54.2	31.6	33.3	59.2
	HMIS report	100.0	41.7	100.0	95.7	0.0	80.8
Consistency	OPV 1 ≥ OPV 3						
	MPR	0.0	100.0	0.0	50.0	0.0	33.3
	HMIS	0.0	100.0	0.0	50.0	50.0	38.9
	*Penta 1 ≥ Penta 3						
	MPR	0.0	100.0	0.0	50.0	0.0	33.3
	HMIS	0.0	100.0	0.0	50.0	50.0	38.9
Agreement	RCH register - MCP cards	79.6	71.8	84.9	58.5	68.4	73.7
	Tally Sheet - RCH Register	72.0	97.8	68.7	90.0	99.3	90.8
	MPR - HMIS	91.7	69.8	85.9	92.8	8.3	75.7

*Penta – Pentavalent

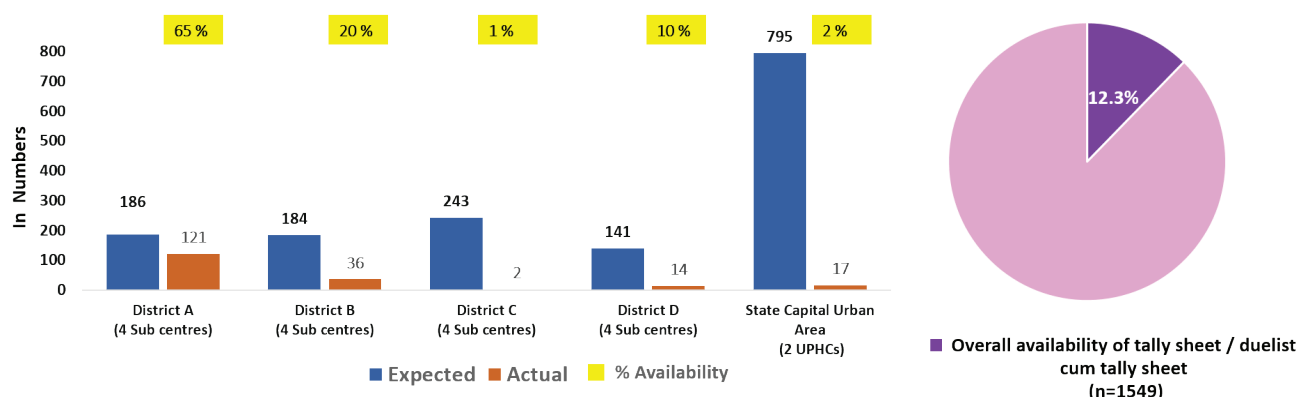
i) Availability:

Figures 14, 15 and 16 give an overview of availability of tally sheets, MPR and HMIS data respectively. Physical availability of records and reports were assessed out of the total expected records/reports. The availability was assessed for tally sheets at sub centre/UPHC, for MPR

at PHC/CHC and for HMIS report (e-copy) for specified six months.

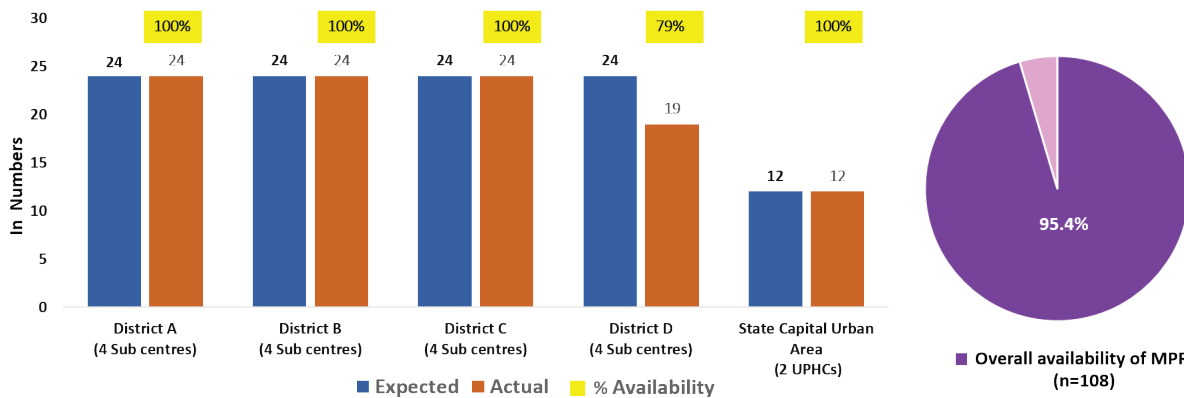
- » **Tally sheets:** Only 12% of the expected tally sheets/duelist cum tally sheets were available at the reviewed districts, ranging from 1% to 65% among the reviewed districts (Fig. 14).

Figure 14: Availability of tally sheets/due list cum tally sheet



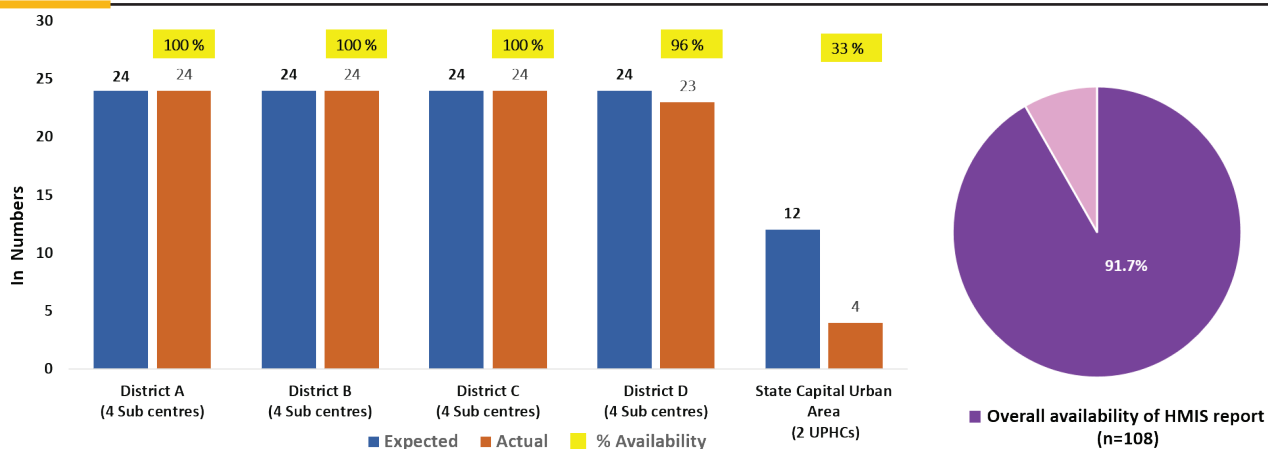
- » **Monthly Progress Report (MPR):** Nearly 95% of expected MPRs were found available for the reviewed subcentres / UPHCs (Fig. 15).

Figure 15: Availability of MPR



- » **HMIS data:** The availability of coverage report of subcenters / UPHCs in HMIS portal was found to be 92% (Fig. 16).

Figure 16: Availability of coverage reports in HMIS Portal

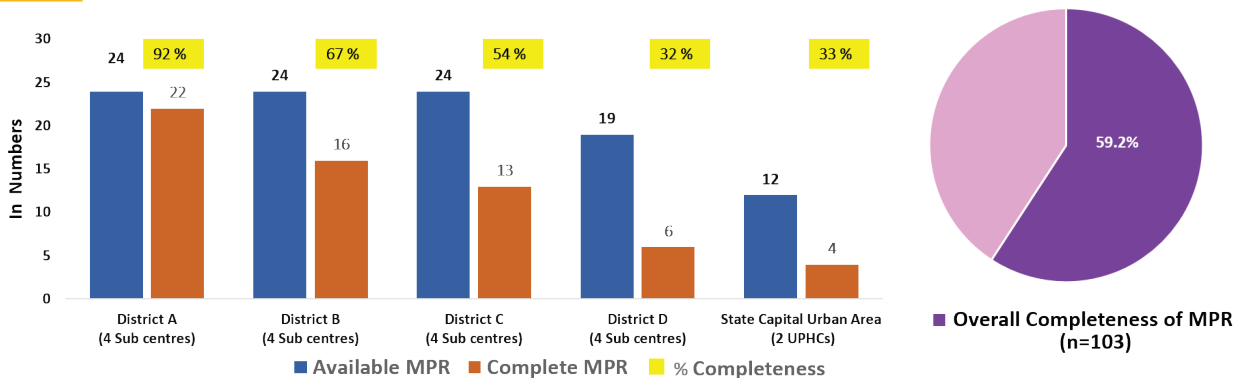


ii) Completeness:

Completeness implies that all immunization related data fields were filled up.

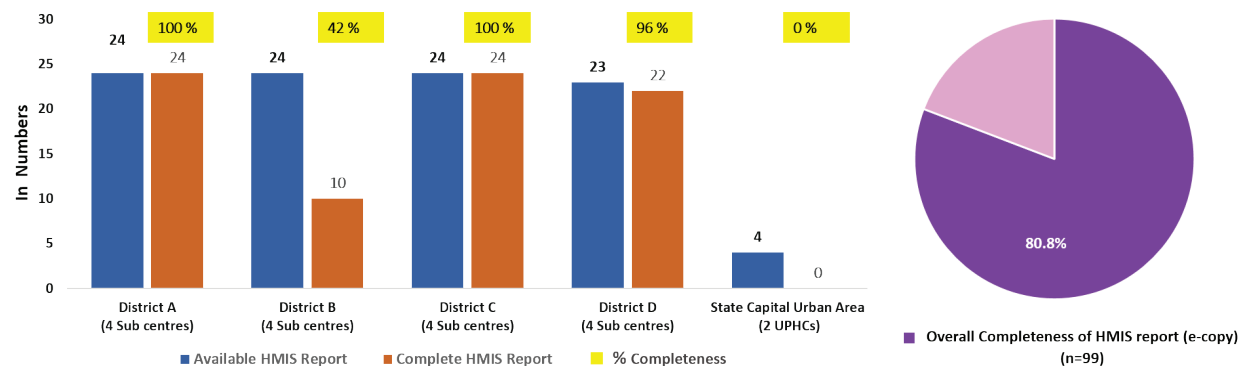
- » **Monthly Progress Report (MPR):** During the review, it was found that only 59% of MPRs were complete, with a range of 32% to 92% among the reviewed districts. (Fig. 17).

Figure 17: Completeness of MPR



- » **HMIS report:** During the review, it was found that 81% of HMIS portal reports were complete, with a range of 0% to 100% among the reviewed districts. (Fig. 18).

Figure 18: Completeness of HMIS report



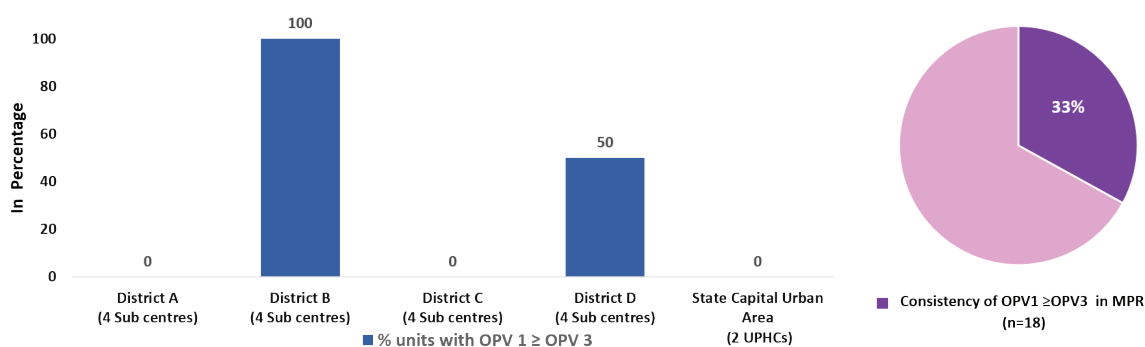
iii) Consistency:

Consistency measures if the reported data follows the logic that is expected from an immunization system. For example, coverage of OPV 1 should be either equal or more than the coverage of OPV 3 in a subcentre/UPHC.

Consistency was assessed in MPR and HMIS reports between:

- » OPV1 and OPV3
- » Pentavalent 1 and Pentavalent 3
- » **Consistency in MPR:** During the review, it was observed that only 33% of the reviewed subcentres/ UPHCs had consistency in MPRs for OPV1 & OPV3 with a range from 0% to 100% (Fig. 19). Consistency between Penta 1 & Penta 3 was also found to be the same.

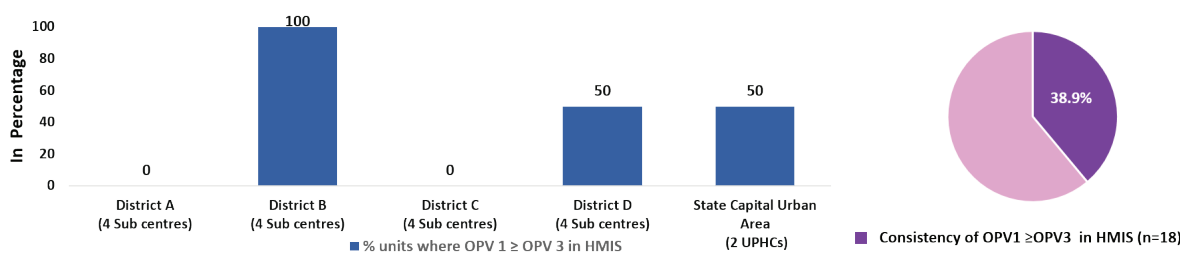
Figure 19: Consistency between OPV 1 & OPV 3 in MPR



- » **Consistency in HMIS:** In the HMIS reports, it was found that only 39% of the reviewed subcentres/ UPHCs followed a consistent

pattern for OPV 1 and OPV 3 (Fig. 20) and also for Pentavalent 1 & Pentavalent 3.

Figure 20: Consistency between OPV 1 & OPV 3 in HMIS

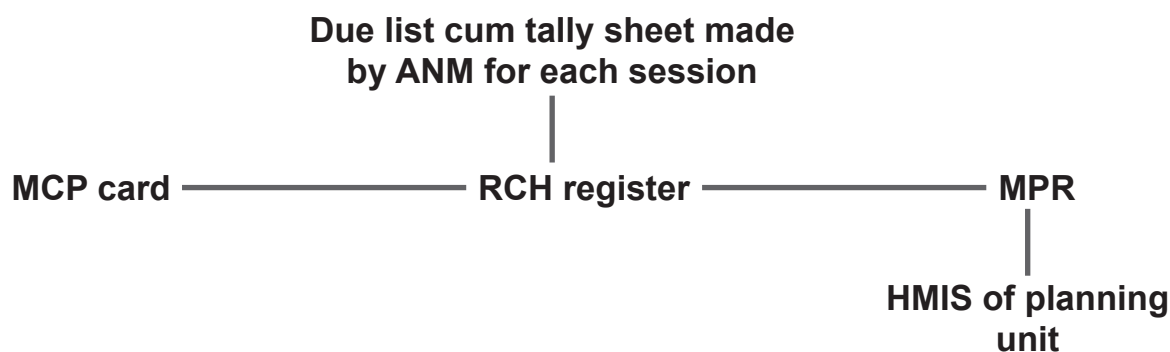


iv) Agreement:

As data flows from peripheral health centre to the next higher level, different records and reports at each level must

agree with each other to ensure data accuracy. The flow of data from the session site has been illustrated in Figure 21.

Figure 21: Data flow from session site to planning unit



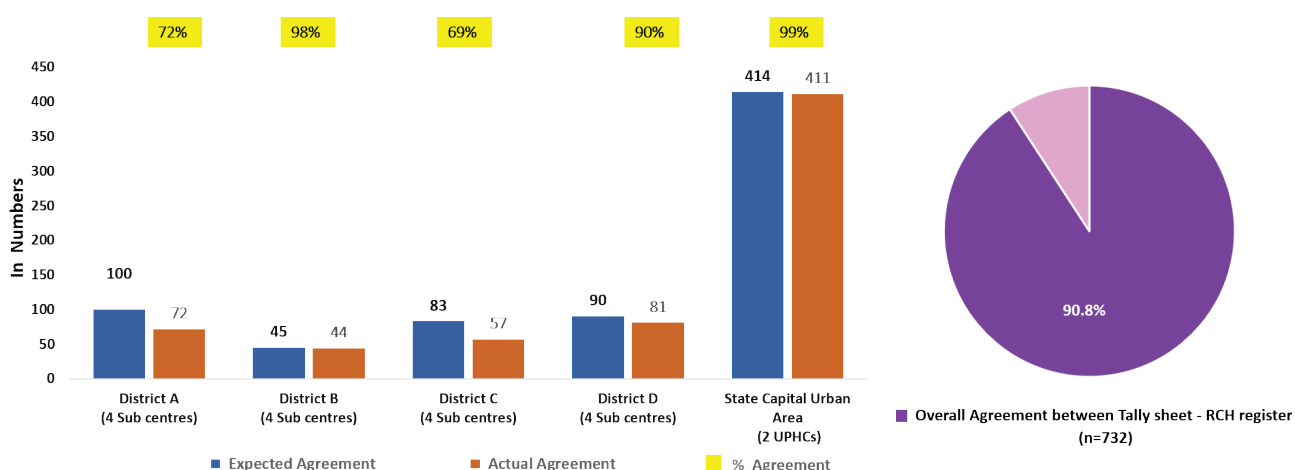
As a part of DQA, the following agreement analyses were performed for eight selected antigens:

1. Between tally sheet / due list cum tally sheet and RCH register
2. Between MPR (paper copies) and HMIS reports (e-copies)
3. Between MPR (paper copies) and HMIS reports (e-copies), antigen wise
4. Between RCH register and MCP card for a selected month

5. Between RCH register and MCP card, antigen wise

- » **Agreement between tally sheet / due list cum tally sheet and RCH register:** Agreement between available tally sheet/ due list cum tally sheet and RCH register was assessed by matching the name and antigen given to child with the same recorded in RCH register for a selected month and for eight selected antigens. Overall agreement between the two records/reports was 91%, with a range from 69% to 99% (Fig. 22).

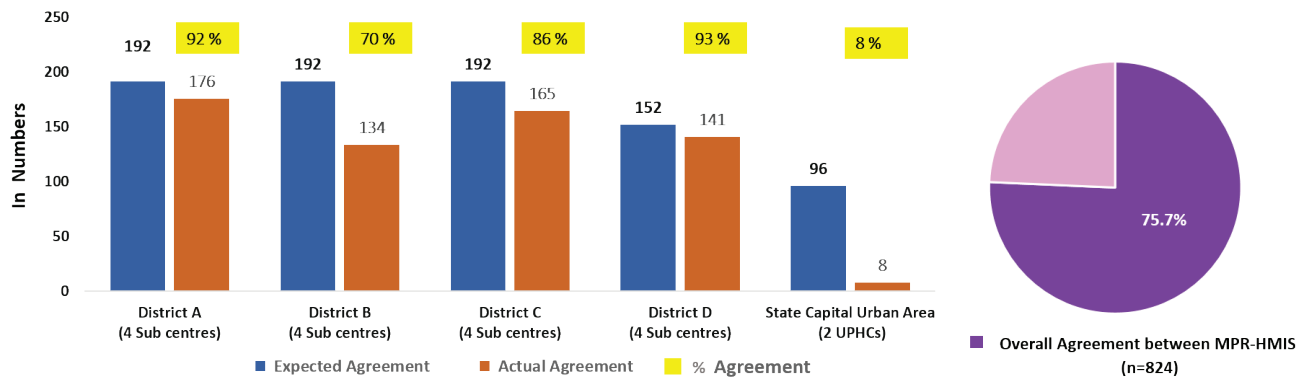
Figure 22: Agreement between tally sheet / due list cum tally sheet and RCH register



- » **Agreement analysis between MPR and HMIS:** Agreement between the available MPRs and HMIS reports was assessed for the

eight selected antigens.76% of the entries done in MPRs were matching with the entries done in HMIS portal with a range from 8% to 93% (Fig. 23).

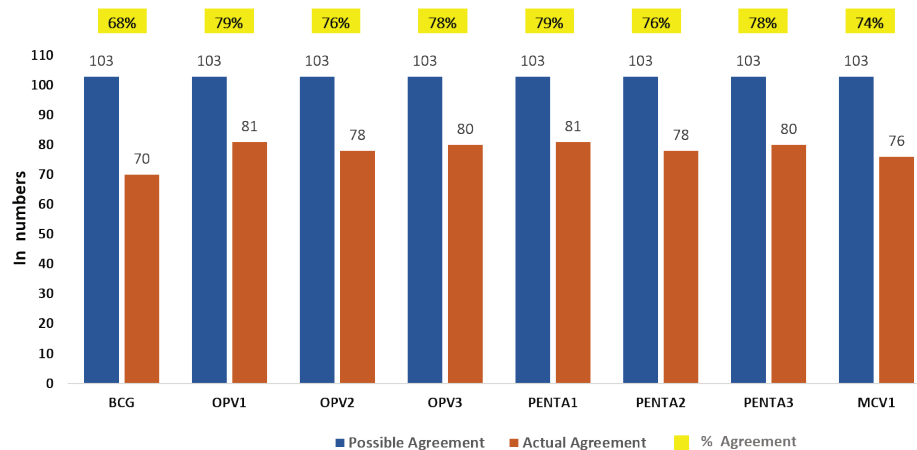
Figure 23: Agreement between MPR and HMIS



- » **Antigen wise agreement analysis between MPR (paper copies) and HMIS reports (e-copies):** The agreement between available MPR and HMIS reports was assessed for each of the eight selected antigens.

In this analysis, separate agreement for every antigen between both the sources was analysed. Lowest agreement was observed for BCG (68%) and the highest agreement was observed for OPV 1 and Pentavalent 1 (79%) (Fig. 24).

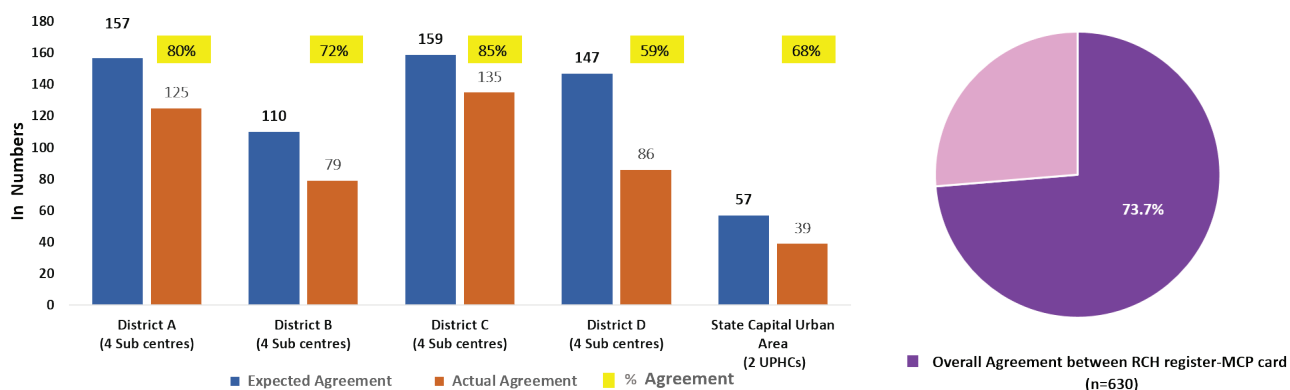
Figure 24: Antigen wise agreement between MPR and HMIS



- » **Agreement analysis between RCH register and MCP card:** Agreement was assessed for eight selected antigen doses by matching the date of administration recorded in RCH register (available with ANM) for the month

of May 2018 and MCP cards (through community assessment). Overall, 74% of the entries in RCH register matched with MCP cards, with a range from 59% to 85%. (Fig.25)

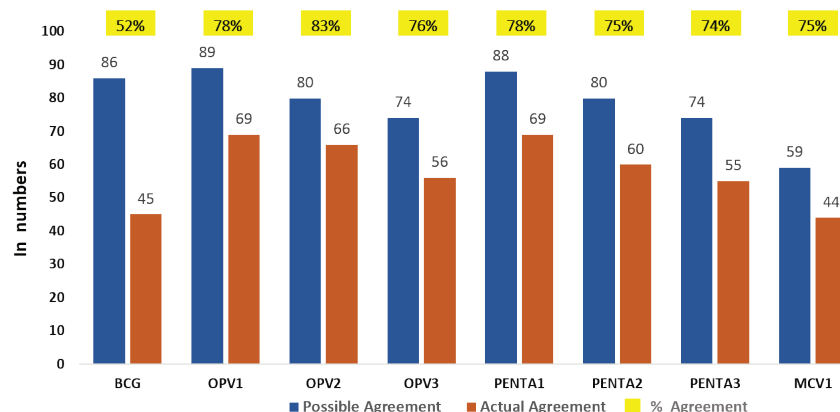
Figure 25: Agreement between RCH register & MCP cards



» **Antigen wise agreement analysis between RCH register & MCP card:** Agreement between available data of 4-5 children from RCH register was verified from

MCP card in the community for every antigen. The lowest agreement was found for BCG (52%), while highest agreement was found for OPV2 (83%) (Fig. 26).

Figure 26: Antigen wise Agreement between RCH Register & MCP Cards



Infrastructure and resources

All the reviewed planning units were equipped with working computers and had electricity back up for running computers.

Human resources

The SEPIO conducts regular review and analysis of immunization related data at state level, with support from a state RI M&E consultant supported by partner agency, data assistant (contractual) and data operator while the post of a data assistant is vacant. DIOs are being supported by district data manger (RI M&E) and data analyst (contractual) in all the assessed districts for review and validation of HMIS data, compilation

of new vaccine and/or campaign reports. Almost 88% PUs are supported by contractual data entry operators. Nearly 17% and 11% of the ANMs were unaware about full immunization coverage and complete immunization coverage reporting in MPR respectively.

New vaccines/campaign coverage

HMIS does not have provision for reporting of campaign coverage data, hence necessitates manual reporting. Reports of new vaccines/campaigns viz., PCV coverage and MI were assessed for availability and completeness at planning unit, district and state levels and agreement was matched with reports submitted to the next higher level.

At the state level, all the district wise coverage reports of PCV and last phase of IMI campaign were available. PCV as well as IMI campaign coverage reports matched accurately with reports available at national level. Block wise PCV coverage reports were not available in 50% of the assessed districts, and also mismatch with the national reports was found in the same districts. Similarly, subcentre wise PCV coverage reports since its introduction of the vaccine were not available in 63% of reviewed planning units.

AEFI and VPD reporting

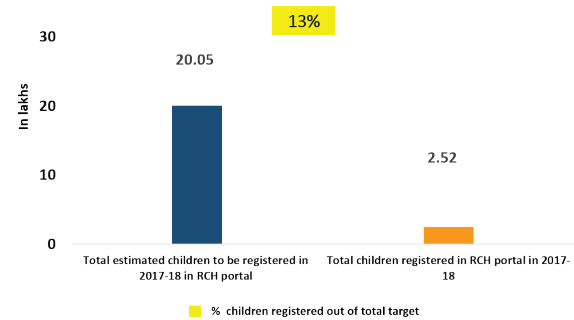
In 38% PUs, none of the weekly reports (VPD-H002) were available, whereas in remaining PUs, only partial reports were available.

HMIS/RCH portal

HMIS reporting cycle followed in the state is from 26th to 25th day of each month. All districts use RCH portal for

name-based tracking of beneficiaries. Only 13% of target children were registered on the RCH portal in the state.

Figure 27: Status of name based registration of children in RCH portal



Coverage monitoring chart

None of the reviewed districts were using coverage monitoring chart to visualize immunization coverages.





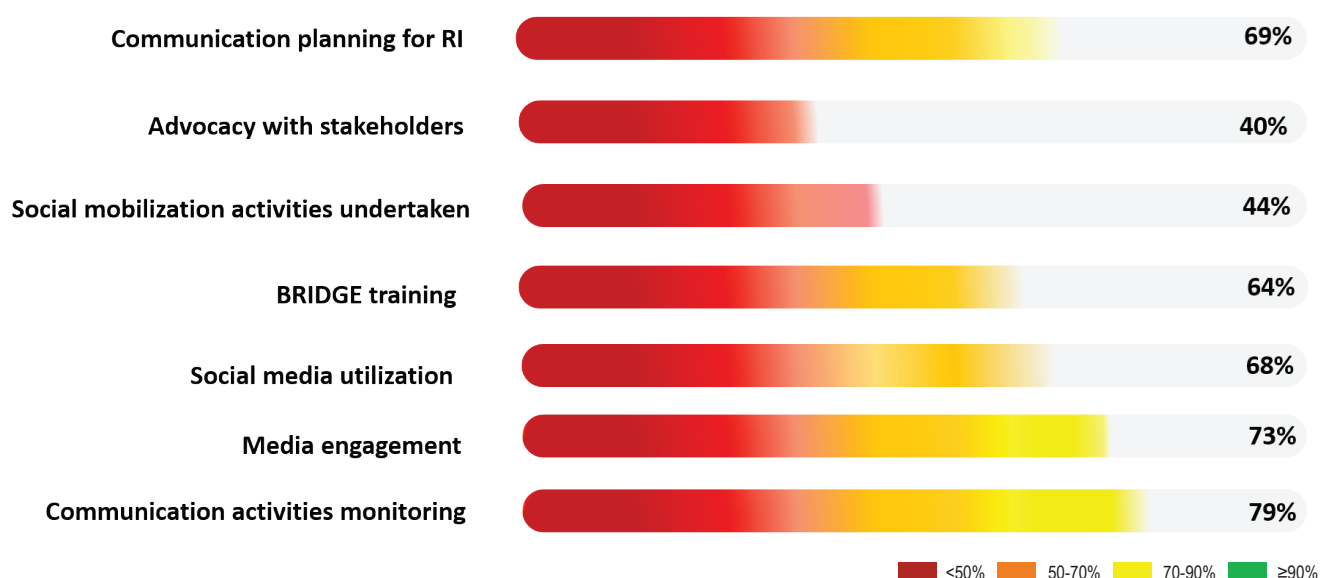
3.4
PROGRAMME
COMMUNICATION

Review approach

The programmatic aspect of programme communication was assessed at four different levels – State, district, planning unit and session site. The information collected was analysed under different subheads – Communication planning, advocacy, social mobilization, capacity building, monitoring and media engagement. In order to assess the knowledge, awareness level and attitude of the

community towards immunization, barriers and drivers to immunization and hesitancy from the community’s perspective, semi structured questionnaires were used to interview 25 mothers, 27 ASHAs, 23 ANMs, 18 AWWs, 6 community leaders and 3 members of 3 MAS (*Mahila Arogya Samitis*) groups. A cumulative score across all the levels was calculated for each subhead as illustrated below in Figure 28.

Figure 28: Snapshot of review findings - Programme communication



Communication manpower and training

The State’s IEC Bureau, set up in 1989 under the Directorate, is led by a regular officer deputed from the state and supported by a team of consultants. The Bureau is responsible for IEC activities for all health programmes of the state, including planning, implementation, monitoring and development/ design of IEC materials. The Bureau actively engages in IEC activities and includes the following team of regular and contractual staff:

Complementing the Bureau are two units - the Madhya Pradesh *Madhyam*, a government agency created in 1982 for designing and production of IEC materials and the department of Public Relations. A Public Relations Officer is present in each district of the state.

At the district level, District Media Extension and Information Officers (DMEIOs) are responsible for IEC activities, whereas at the block level the Block Extension Educators (BEE) are the nodal persons for IEC activities. Besides the regular cadre of MEIOs and DMEIOs,

Table 14: Human resources for IEC at state level

Position	Number	Current status
Director	1	Filled
Deputy Director	1	Filled
Media officer / Mass Education and Information Officer (MEIO)	2	Filled
Deputy MEIO	2	Filled
Block Extension Educator	2	Filled
SBCC Consultant	1	Filled (supported by UNICEF)
Capacity Building consultant	1	Filled (supported by UNICEF)

districts also have provision of an IEC consultant from NHM. Currently there are 20 MEIOs, 55 Deputy MEIOs, 15 IEC Consultants and 177 BEEs across the state.

Training

The state IEC Bureau has rolled out and completed the BRIDGE IPC training for the 14 MI districts (13 districts and one urban area –Indore), with support from UNICEF. Under this training, 39363 FLWs (ANMs, ASHAs and AWWs) were trained in 1135 batches. The trainings were monitored by the IEC Bureau's team.

Besides BRIDGE training, state has taken initiative to carry out an IPC training for ASHA Supervisors/ *Sahayoginis* using 10 SBCC based capsules.

To extend the BRIDGE training to the remaining districts, the Bureau team plans to train 48000 FLWS in 15 batches by December 2018. A clear plan for the training in 38 districts, to be rolled out in a cascade mode through 532 master trainers is in place. State has taken care to choose good quality BRIDGE trainers, selecting not just MEIOs/DMEIOs, but also staff from other programmes such as Block Community Process Managers, RKSK Coordinators and Block Extension Educators (BEE) who have strong communication skills and interest.

The state has further planned two trainings, one for facility level officials on behavioural areas and one on evidence-

based planning using an automated tool for district IEC staff.

Communication Planning

State level

The state had developed a comprehensive integrated multimedia communication strategy for RMNCH+A in 2014 through a consultative process with state officials, the IEC Bureau and development partners called '*Sneh, Suraksha* and *Samman*' which had the endorsement of the state's MPs, MLAs and the Chief Minister. The strategy was approved in the *Vidhan Sabha*. The strategy identified 12 key behaviors for change and each month is allocated for each of these behaviors. The communication strategy has a distinct branding and all materials/ technical documents developed under it carries this image (Fig .29). The IEC Bureau is the lead agency for communication planning, training, review and tracking of communication activities. The Bureau also plans and implements capacity building activities on SBCC for various health programmes.

The state has also developed a communication plan for IMI, outlining advocacy, social mobilization, capacity building activities and building visibility in print and digital media. The state has plans to develop the RI communication plans as per guideline and templates provided by the MoHFW.

Figure 29: Branding of the communication strategy



Figure 30: IEC materials designed by State IEC Bureau



Innovations all the way

The state takes an avid interest in communication–planning awareness generation and knowledge building activities and also encourages the district teams to come up with innovative ideas for communication. Some of these innovations such as BBBC (balloon, ball, biscuit and chocolate to be given to all children attending the sessions) to be implemented in 8 districts, over 300 villages in the aspirational districts under NITI Aayog have become very popular. Invitation card to parents with names of their children is another step towards mobilizing community. The night meeting or ‘*Raat Chaupal*’ is another innovative step towards getting the men’s attention to issues. *Bulawa toli, nara lekhan* (wall writing), cold chain prayer and pasting of four key messages on vaccine carriers are other well-known innovations by the districts. Recently, the Commissioner - Public Relations has started a series called *Kahani Sach hai*, to document success stories from districts.

District level

District Communication plans were available for three out of the four reviewed districts. These were prepared based on templates circulated by the IEC Bureau team. However, there was no mechanism for bottom up planning or collection of communication plans from blocks/ planning units. Only one fourth of the reviewed districts had planned IEC activities for high risk areas (HRA).

Planning unit (PU) level

Block level communication plans for IMI were prepared by five of the nine planning units under review. Monthly

meetings are organised at the block level, where FLWs are oriented about communication.

Advocacy

For advocacy, the districts undertake a range of activities including meetings with PRI leaders, Government departments, IMA/IAP members, religious leaders, NYK, NSS and NCC. Meetings with religious leaders were organised by three out of four districts. Out of the four districts reviewed, three districts organised coordination meetings other government departments. Engagement with district level IAP/IMA is lacking in all the four districts.

Table 15: Advocacy with stakeholders

	District A	District B	District C	District D	State HQ
Religious Leaders	N	Y	Y	Y	Y
Elected Leaders (<i>Panchayat</i> leaders, Ward Members)	N	Y	N	Y	Y
Other Govt. Dept.	Y	N	Y	Y	Y
IAP/IMA /Private Practitioners	N	N	N	N	Y
NYK/NSS/NCC	N	Y	N	Y	N
Rotary/Lions/Red Cross	N	N	N	N	N
NGO/CBOs	N	N	N	N	N

Media engagement (News media and social media)

The state understands the importance of engaging with media, and has established a good rapport with them, and keeps them informed about the health activities. Press conferences are organized every month to inform the media about the health activities planned and undertaken. Regular articles on immunization are published in the leading dailies of the state – *Dainik Bhaskar*, Times of India and *Nayi Duniya*. News on immunization are tracked regularly through a special WhatsApp group called ‘District Press release’ group in which DMEIOs/MEIOs upload daily audio, video clips, news items and success stories on health and immunization. The SEPIO organizes field visits of journalists to the immunization sessions and related places which gives the media an opportunity to experience immunization activities on the ground and report on it. Such initiatives have improved the visibility of the immunization programme and built its positive image in the media.

The State team is active on Twitter and Facebook, posting updates regularly on the Twitter handle of MP IEC Bureau and MP IEC Facebook page. These are operated by the two consultants based in the Bureau. The state has urged all districts to start using Twitter and Facebook.

The state uses WhatsApp strategically, creating groups for specific purposes. Besides the regular groups of DIOs, MOs, ANMs, the state has created a group: *khabar.health* which has 137 members -journalists from electronic, print and digital media. The Divisional BMOs

groups comprising seven BMOs is useful for information updates from the divisions.

Social mobilization

State

For mobilization in urban areas, social mobilizers were deployed in urban areas (slums) since 2012-13 to support the ASHAs and AWWs in mobilization activities. The social mobilizers guided the ASHAs, helping them plan their activities.

For connecting with the community, a phone-in-program has been started on immunization on Tuesdays and Fridays is broadcast at the same time as the monthly mothers’ meetings. This helps the mothers to phone in to the program with their queries and seek solutions immediately.

District

For social mobilization, rallies are the most popular activity, reportedly held in all four reviewed districts. Two of the districts had also done street plays and set up kiosks during fairs and festivals. Other districts have undertaken activities like wall paintings, slogan writings, cycle rallies and use of TV scrolls for mobilization.

Slogan writing (*nara lekhan*) has been taken up in the districts and is proving to be a successful initiative. Five sets of slogans for five messages are written on walls of Anganwadi centres, *Gram panchayat bhawans*,

Table 16: Social mobilization activities in districts

	District A	District B	District C	District D
Rallies	Y	Y	Y	Y
Skits/street plays in neighbourhoods	Y	N	N	N
Video shows	N	N	Y	N
Kiosks during fairs and festivals	Y	Y	N	N
Banners and Posters	Y	Y	Y	Y
Others*	Y	N	N	Y

* wall painting, slogan writing

schools, ration shops and temples by ANMs and ASHAs. These messages are approved by the ANMs and Block Community Mobilizers. This is a low-cost mobilization strategy and has replaced wall paintings.

Districts are also urged to use their ideas to promote local efforts for mobilization for which funds are available with the Chief Medical Officer (based on recommendation by DPM/DIO). Further, folk media is used for celebration of special days and events along with puppet shows and magic shows. Every district has *Prapatra samitis* with 20-25 members who perform *bhajans* and *kirtans* for mobilizing communities.

Monitoring and review

For monitoring of IEC activities, Officers in Charge of each district, from a group of 51 such officers undertake

monthly district visits along with officers from partner agencies. The state is focused on monitoring of the state’s awareness generation initiatives such as the *Dastak Abhiyan* and *Mahila Swashtya Divas* and other central government campaigns such as Iodine deficiency control fortnight (IDCF) where focus is on IEC activities. Quarterly reviews of MEIOs and Deputy MEIOs are undertaken regularly to assess progress on IEC activities. The state also uses WhatsApp as a medium to monitor district level IEC activities. Regular updates from the districts on MI/IMI/GSA activities are to be reported to the state through WhatsApp groups.

Session site

During the review, session sites were visited on the RI day to assess the community’s response, providers’ and community’s behaviour towards immunization. Very few



Photo: Dedicated Green Commandos – Nara lekhan - writing immunization messages on the wall in a Subcentre

IEC materials were seen at the session site – 60% sites did not have any IEC materials displayed. ANMs were observed to be giving four key messages to caregivers only partially. Maximum ANMs informed caregivers about side effects following immunization and when to come for the next visit, but were not informing the caregivers about the vaccine/s and the disease/s prevented. This correlates with the findings from mothers' interviews

which show that only 20% mothers received information from ANMs on the name of the vaccine/s given and the disease/s prevented through these vaccine/s. This also explains the poor knowledge of mothers on the vaccines given and the diseases they prevented; 60% of the mothers interviewed could not name the vaccine that was given or the diseases that it prevents.

Figure 31: Session sites in urban areas



Visibility of IEC materials

There was limited presence of IEC materials on immunization in the health facilities and session sites visited. No IEC material was seen at transit points. Hoardings are not put up (in urban areas) since they are expensive (one costs 50,000 to 1 lakh - Nagar Nigam rates are very high). Overall visibility of IEC materials was better in the state capital compared to the districts. IEC materials on MI and new vaccines were seen in the state Immunization office.

Community awareness, knowledge, perception and practices

To understand and assess awareness and knowledge levels along with attitude and behaviour of community regarding immunization, in depth interviews were held with community leaders and caregivers. Key findings from the interviews are outlined in the sections below:

Community leaders

Interview with six community leaders revealed

that community leaders are aware and involved in immunization activities. All community leaders were aware of the location of the immunization session site in their areas and five out of six community leaders had visited sessions during the last one year. However, only two out of six community leaders had heard about MI. Two community leaders mentioned that there were vaccine hesitant families in their areas. One of the community leaders interviewed was enthusiastically involved in mobilization of hesitant families, while another supported mobilization by facilitating announcement from the local mosque, especially when there were rumours about vaccines. While a few community leaders had heard of AEFI related news in the area, they were not aware of the response expected from them.

Overall, awareness about RI is high among community leaders, along with confidence in vaccines but recall value of vaccines and VPDs is low.

Mothers

In order to get insights into the awareness, knowledge levels, perceptions and behaviour of the mothers regarding immunization, 25 mothers/caregivers from the four selected districts and urban areas in the state capital were interviewed (mothers' interviews were conducted in session sites as well as in their homes). Insights obtained from these interviews are summarized below:

- » Mothers interviewed have a positive perception about immunization. Of the mothers interviewed, 96% felt that vaccines provide protection from diseases and are also safe. All mothers were aware of the place of vaccination.
- » Knowledge of the mothers on the vaccines received, their correct schedule and timeline was limited, and only 40% of the mothers could mention the name of the last vaccine received by their child and the disease/s it prevented.
- » Most mothers had received a visit/call from ASHAs, reminding them to attend the session. Only 20% mothers had attended a mothers' meeting in the last one year.
- » Post immunization follow up by ASHAs is sub optimal; only 24% mothers had received a follow up visit from ASHAs after vaccination of their children.

- » MCP card retention was 88%, and all of them carry the same with them during session visits.
- » Most mothers had no apprehension about getting multiple vaccines administered to their children; 96% of the mothers interviewed were open to getting more than one vaccine on a single day.
- » Some mothers recall seeing street plays and puppet shows on immunization.

Frontline workers

In order to understand and assess the providers perspectives, frontline workers (27 ASHAs, 23 ANMs, 18 AWWs) were interviewed. Findings from the interviews are outlined below:

ANM

- » ANMs of the state are a dedicated lot and work sincerely for the cause of immunization. There have been examples of ANMs travelling to hard to reach areas, braving all odds with the support of the ASHAs to reach unimmunized and partially immunized children.
- » Of the ANMs interviewed, 96% knew about the four key messages. However, observations from the session sites show that delivery of the four key messages were done incompletely and most ANMs informed mothers about side effects and timing of the next visit.
- » Capacity building of the ANMs on communication is a weak area; 76% ANMs mentioned not receiving any training on communication during the past one year. BRIDGE training is yet to be started in the non-IMI districts.
- » ANMs have received some IEC materials prior to RI/MI rounds; 42% ANMs mentioned receiving posters while 30% had received banners. Availability of IPC materials was low, with only 16% ANMs mentioned receiving leaflets while 2% had received flip books.
- » Out of the ANMs interviewed, 91% were confident and comfortable in giving multiple vaccines (through injections) on the same day. However, most ANMs also mentioned that generally mothers tend to refuse multiple

injections/vaccines on the same day, fearing side effects and baby's discomfort. Most ANMs made efforts to counsel the mothers and allay their fears citing examples of other mothers who

had vaccinated their child, examples of well-known people from the mother's own community who had vaccinated their child.

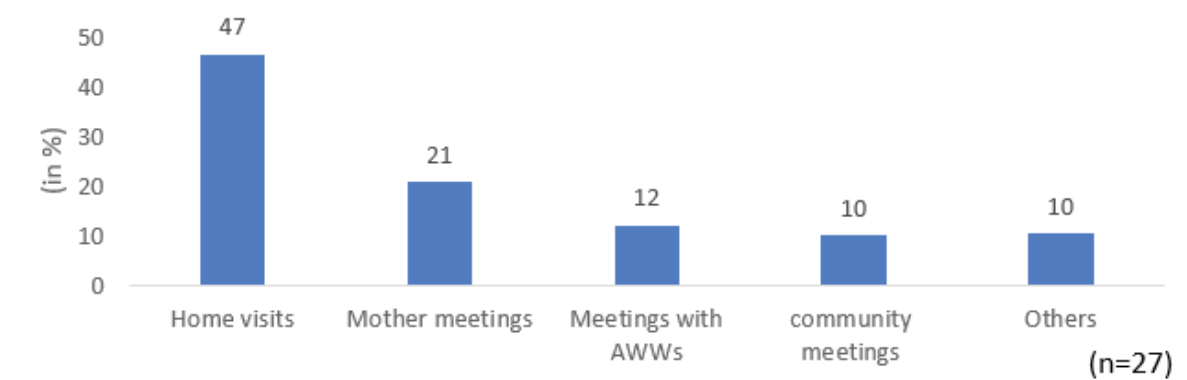


Photo: Dedicated Green Commandos – ANM and ASHA holding MI session in the open area for the scattered habitats of hard to reach areas; dedicated Green Commandos – ANM and ASHA crossing the rivulet to reach session site

ASHA

- » In depth interviews with ASHAs show that they are supporting the ANMs in immunization; 93% of the ASHAs interviewed mentioned that they prepare due lists prior to the sessions and submit to the ANMs.
- » In order to mobilize beneficiaries, home visits are undertaken by 47% of ASHAs interviewed. Mothers' meetings are conducted by 21% ASHAs at the *Anganwadi* centres (Fig. 32). ASHAs also conduct *Saas-bahu* meetings, organize rallies and undertake wall writings. Interviews with ASHAs show that announcements from mosques and mega miking are popular modes of mobilization. Of late, mothers' meeting has become much systematic and regular as a result of the push from the MAA (Mothers' Absolute Affection) programme, under which mothers meeting need to be held regularly. ASHAs are eligible for an incentive of Rs.100 per quarter for carrying out mother meetings.
- » At least 59% ASHAs informed that there are vaccine hesitant families in their areas. The ASHAs counsel these families with the help of ANMs, ASHA *Sahyoginis* and *Sarpanch* of the village.
- » Lack of IEC materials and IPC tools for home visits are a limitation for the ASHAs in undertaking IPC activities. Only 30% of the ASHAs mentioned that they have received IEC materials on immunization. However, none of the ASHAs were seen using these materials.
- » ASHAs appear to be aware of the vaccines and the diseases they prevent; 93% of the ASHAs interviewed could mention the names of at least two vaccines and the diseases they are for. However, the knowledge of the diseases part was found to be somewhat weak.
- » The state has several hard to reach districts, with forests and hilly areas having scattered population where mobilization is a challenge. ASHAs make every effort to visit such difficult areas. Poor transport facilities and weak connectivity/networks in such areas with scattered population adds to this problem. The state has initiated mega miking (*chonga*) in such areas.

Figure 32: Activities undertaken by ASHAs for social mobilization



AWW

In depth interviews were conducted with 18 *Anganwadi* workers to assess their role in mobilizing children for immunization, participation in immunization activities and coordination with ANMs and ASHAs.

- » 72% of the AWWs interviewed mentioned that mothers' meeting are held in the Anganwadi centers and could also recall the date of the last mothers' meeting in their centre.
- » Immunization is discussed as one of the topics

during the VHNDs with 61% AWWs giving key messages on immunization to the mothers. Messages emphasize need for vaccination, diseases prevented, types of vaccines and safety of vaccines.

- » Only 28% AWWs attended meeting on immunization with ANMs and ASHAs.
- » *Anganwadi* workers in the urban areas of the state headquarters were proactive in mobilizing beneficiaries through home visits. AWWs, ASHAs and ANMs were found to be working well together, complementing each other's work.



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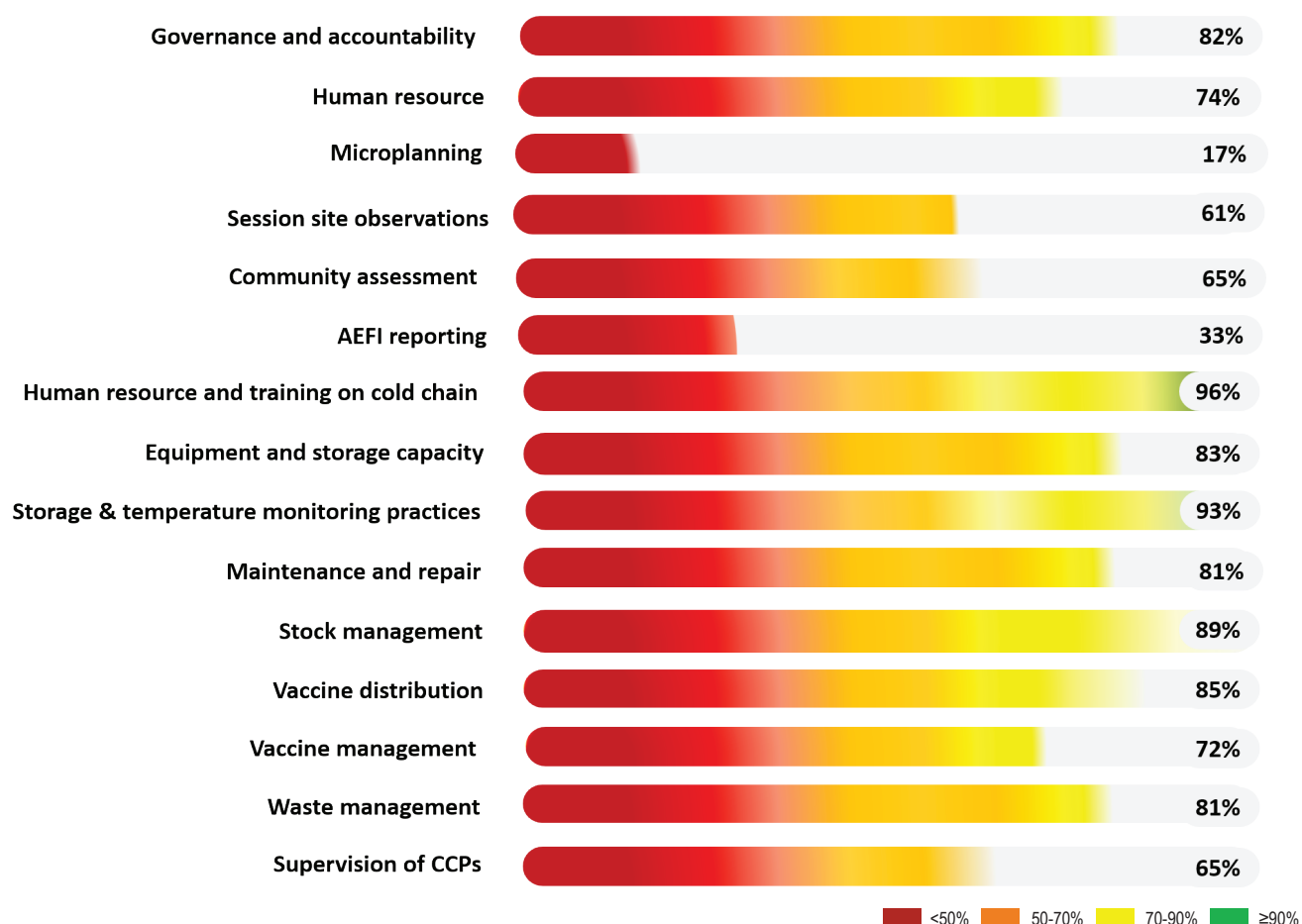
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URBAN IMMUNIZATION

Madhya Pradesh has 66 cities under National Urban Health Mission (NUHM). Activities under NUHM are coordinated by NHM cell in the state, City Programme Management Unit in larger cities and District Programme Management Units through a network of 136 U-PHCs and

5 U-CHCs. Urban immunization was assessed in district headquarters of four reviewed districts and planning units in the state capital. A cumulative score across all the levels was calculated for each subhead as illustrated below in Figure 33.

Figure 33: Snapshot of review findings - Urban areas*



*For urban areas, the training status and fund utilization was not assessed as it is managed directly by districts. For VPD surveillance, the urban planning units were not reporting units. Activities under programme communication and recording and reporting have not been illustrated in snapshot due to insufficient sample size.

Programme implementation

Review mechanism for UIP in urban areas

The City/District Task Force for Urban immunization (CTFI/DTFUI) was constituted in 80% of the reviewed districts. Exclusive CTFI/DTFUI meetings were found to be held in half of the districts.

At the urban planning unit level, a weak mechanism of review of immunization programme was observed, with poor documentation to comment further. With an absence of medical officer and supervisory staff in almost half of the assessed UPHCs, governance of the programme under these UPHCs lies either with DIO or with the block medical officer. RI was being reviewed through

monthly meetings in half of the planning units. Supportive supervision was almost non-existent in all reviewed urban planning units. 67% of urban planning units were visited by some state/divisional/district level officer but documented feedback was available in only 25% of such urban planning units. None of the reviewed urban planning units had any mechanism of ANM, ASHA and *Anganwadi* worker coordination meeting for improvement of RI.

HR and infrastructure

Infrastructure and HR shortfall was evident in the state capital as per NUHM norms (Table 17). With 8 UPHCs and 23 civil dispensaries in place catering to entire

Table 17: Status of infrastructure and HR in state capital

Infrastructure/ HR	NUHM norms	Requirement	Approved	In position
UPHC	1 @ 50,000 population	38	8	8 UPHCs and 23 Civil Dispensaries
MO	1 Full Time and 1 Part Time /UPHC	16	8	5
ANMs	3-5 ANMs /UPHC	24-40	16	0
Public health manager	1/UPHC	1/UPHC	0	0
MAS	1@ 500 slum population	1350	600	346

Estimates have been made as per Census (2011) population and current slum population

population, there is a shortfall of 7 facilities as per NUHM norms. MOs at UPHCs provide OPD services only. Immunization is conducted by 85 ANMs pooled from 16 different facilities, which include civil hospitals and city dispensaries.

Mahila Aarogya Samiti (MAS) is a community group involved in creating awareness, interpersonal communication, and community-based monitoring and

linkages with the services and referral. Nearly half of the sanctioned MAS are yet to be constituted in the state capital.

While Urban Nodal Officers for RI were in place in all districts, more than half of the positions of MOs at UPHCs were vacant in assessed urban areas. More than one-fifth of urban ANM positions are vacant in the state, which ranges from nil to 100% vacancies in areas under review (Table 18).

Table 18: Human resource vacancy status

HR Cadre	% Vacancy						
	Urban A	Urban B	Urban C	Urban D	State capital area	Urban Avg.	State (51 districts)
MO	56	100	100	100	38	57	56
Urban Health Coordinator	0	100	100	0	0	50	36
Urban ANM	13	0	100	100	100	48	22
Urban ASHA	1	26	3	10	0	2	9
MAS	1	22	3	10	0	2	18

Source: Recent available data received from NUHM Cell of State and reviewed district

Service delivery

Immunization service delivery in urban areas needs special emphasis due to the stagnant pace of infrastructural growth to cope with rapid population growth. Following components have been assessed:

1. Microplanning
2. Session site observation
3. Community assessment

Microplanning

Microplan of one UPHC from each of the four districts and two UPHCs from the state capital area, were desk reviewed under various indicators. Findings are indicated

in Table 19. All urban area RI microplans were available on single page only. AVD information was available in two third of the microplans whereas, inclusion of columns of new vaccines (fIPV, RVV, PCV) was not available in any of the microplans.

Since urban areas do not have subcentres, ANM wise microplans of 43 ANMs were assessed for inclusion of critical components. While ANM roster was available for 81% of ANM areas, information on enlisting of wards, colonies and RI HRAs (if existing), number of beneficiaries, vaccine logistics, ANM area wise map, AEFI management centres and supervisor's name were missing in all of the ANM plans. Mobilizers were assigned to only 28% of the sessions.

Table 19: Microplan analysis - urban area

Indicator	%	
Availability on prescribed formats (n=6 planning units)	0	
AVD information (n=6)	67	
Columns for new vaccines	fIPV (n=6)	0
	RVV (n=6)	0
	PCV (n=6)	0
ANM areas with enlisting of wards/mohalla/colonies and HRGs (n=43)	0	
ANM areas with number of beneficiaries mentioned (n=43)	0	
ANM areas wise map available (n=43)	0	
ANM areas with vaccine and logistic formats available (n=43)	0	
ANM areas with details of AEFI management centre (n=43)	0	
ANM areas with ANM roster (n=43)	81	
ANM areas with supervisor assigned (n=43)	0	
Sessions with mobilizers name mentioned in microplan (n= 322)	28	
Exclusive IMI sessions incorporated RI microplan (n=6)	0	

None of the exclusive IMI sessions had been included in RI microplan, indicating poor sustainability of gains achieved by MI.

Session site observations

A total of 21 urban session sites were assessed for various critical processes affecting quality of service delivery as shown in Table 20.

a) **Adherence to microplan:** Eighty-six percent of the sessions observed were conducted as per the microplan. While ASHA and/or AWW were found to be present at 90% session sites, 5% sessions had

no mobilizer assigned.

b) **Headcount survey, due listing and tracking of left outs/drop outs:** Only 24% of the mobilizers at session sites had an updated headcount survey. While due list was available at 90% of the session sites, updated due list was available at 48% session sites.

c) **Supervisory visits:** Nearly two third of sessions were not visited by any supervisor before visit by review team.

d) **Payment of ASHA incentives:** All interviewed ASHAs were aware of incentives for full and complete immunization, whereas awareness regarding

Table 20: Session site findings in urban area

Indicator	%
Session site as per microplan	86
ASHA found as a mobilizer	71
AWW found as a mobilizer	71
Record of updated head count survey available	24
Due list available	90
Updated due list available	48
Supervisory visit	33
ANM received 2-day training on immunization	43
ANM awareness about recording of VPD cases in MPR	5
ANM awareness about designated AEFI management centre	33

incentives for mobilization of beneficiaries at session site was 80%. Nearly 87% ASHAs had received RI incentives in the last quarter.

e) **Knowledge of ANMs:** Nearly 43% of the interviewed ANMs had received two days training on immunization. Nearly one fourth of ANMs were not providing four key messages. The knowledge on age/dose and route of newer vaccines like fIPV, RVV & PCV was found to be generally satisfactory. 86% ANMs were aware of the correct sequence of administering multiple antigens during a single visit. Only 5% ANMs were aware of reporting VPDs in MPR.

Community assessment:

Caregivers of 168 children in the age group of 0 to 23 months were interviewed to assess the vaccination status of their children. MCP card retention was high at 89%. Almost two third children born at government and private

facilities had been given Hepatitis B birth dose (Table 21).

Eighty-two percent children (0–23months) were found to be vaccinated as per age. However, only 37% of the names of partially vaccinated or unvaccinated beneficiaries were found in the due list. Health workers, especially ASHAs were the major source of information and mobilization of beneficiaries for session sites.

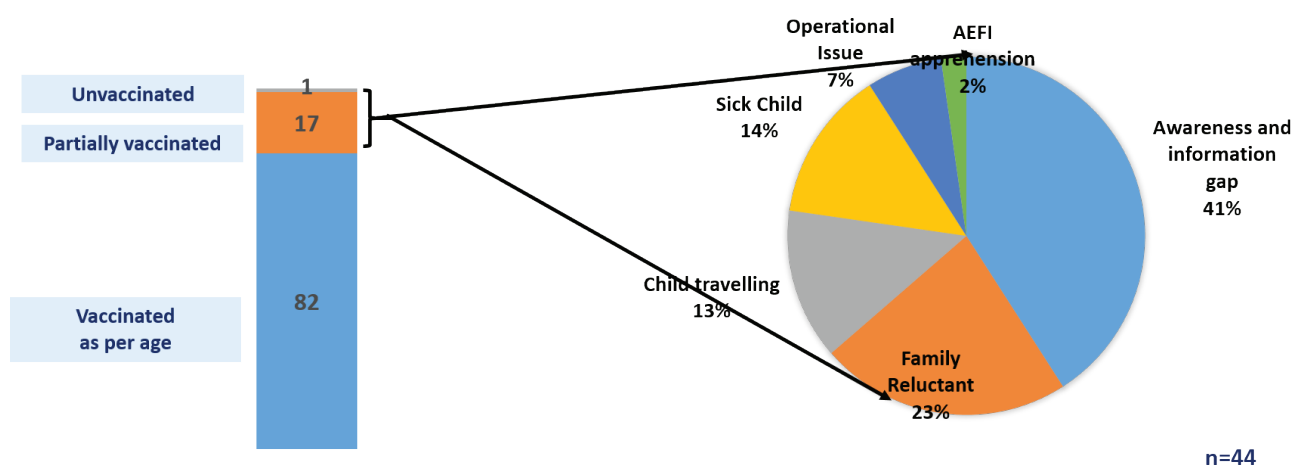
Names of all beneficiaries were also cross checked for inclusion in headcount survey record to assess the robustness and completeness of survey. Only half of the beneficiary names were included in headcount survey. For remaining, either the name was not included or there was no headcount survey available with the mobilizer.

Figure 34 illustrates the reasons for children for being partially vaccinated or unvaccinated as per age. 'Awareness and information gap' was the most common reason, followed by 'reluctance by family'.

Table 21: Community assessment findings

Indicator	%
MCP card available with household (n=168)	89
Hepatitis B birth dose given to children born in government or private health facilities (n=161)	68
Major source of information on vaccination to caregivers (n=202)	Health worker (ANM/ASHA) – 76 ICDS worker – 22
Mobilization of beneficiaries to session site by ASHA (n=216)	ASHA -68
Name of partially vaccinated/unvaccinated children in due list (n=30)	37
Name of children in headcount survey (n=168)	50

Figure 34: Reason analysis for partially vaccinated and unvaccinated children



AEFI reporting

Since many UPHCs were under the charge of either DIO or block medical officer due to absence of MOs, the respective officer in charge was interviewed for AEFI surveillance.

Half of the nodal medical officers had not undergone any formal AEFI training and nearly one-third could not articulate any of the serious AEFIs which are to be reported. Blank CRFs were not available at any of the urban PUs. AEFI recording registers were not available at 83% of urban planning units. Furthermore, AEFI management kits were available at one third of planning units and only half of them were updated. At the session sites, more than three fourth of ANMs interviewed were not able to mention any type of serious AEFIs which are to be reported. Nearly two third of ANMs were not aware about of designated AEFI management centre.

Logistics and supply chain

The key findings for logistics and supply chain in the urban area can be summarized into following nine thematic areas:

Human resource and training

Each of the SDPs reviewed had at least one CCH assigned, and 75% SDP had alternate CCH assigned. Seventy nine percent of CCH were trained on VCCH module 2016 and 89% for eVIN system.

Equipment status and storage capacity

Amongst all CCEs, 14% did not have a separate stabilizer. The cold chain sickness rate in urban area was found to be 3.1 percent during review period. The cold chain space was found to be adequate at all urban SDPs.

Storage & temperature monitoring practices

A functional thermometer was available for all ILRs and for 83% DFs. All CCE with functional thermometer had temperature within the recommended range. The temperature log book was available for 86% of CCE, and at 88% of SDPs, the temperature was recorded twice daily.

Maintenance and repair

Functional power back up was available at 50% of the SDPs. At 12% SDP, there were instances when continuous 8 hours of power supply was not available in the past one month. The defrosting records were available for all

ILRs and for 92% DFs at the reviewed urban SDPs. CCT visited 75% of SDP in last three months for maintenance and repair.

Stock management

Standardized stock registers for all vaccines and diluents were available at all SDPs, whereas stock registers for logistics (AD 0.1ml, AD 0.5ml and reconstitution syringes) were available at three-fourth SDPs. The stock registers were updated for BCG vaccine and diluent at 88% of the facilities; and at all SDPs for OPV, pentavalent, MCV and diluent for MCV.

The stock registers for logistics were updated at 67% of SDPs, where they were maintained. Stock out of BCG vaccine and diluent and measles vaccine and diluent was observed at 12% of the facilities. No stock out of any of the syringes was observed. Maximum stock exceeded beyond 3 months for BCG at 88% of the facilities, for OPV at 63% and for measles and pentavalent vaccine at 50% of SDPs.

At the session sites in urban areas, 100% availability of vaccines and syringes was observed except for BCG vaccine and diluent (90%), measles diluent (95%), RVV (95%) and IPV (76%). Blank MCP card was available at 71% of the session, Vitamin A solution was available at all sessions, black bags and red bags at 71% sessions, hub cutters at 95% and Vitamin A spoon at 90% sessions respectively. Vaccines and diluents as per due list were available at 76% session sites.

Vaccine distribution

All vaccine carriers were available with four ice packs at all session sites. At 80% of session sites, vaccines were received and returned exclusively through AVD mechanism. The other mechanism found was ANM collecting vaccine from SDP, which accounts for remaining 20 percent.

Vaccine management practices

All the vaccines were stored in ILR at all service delivery point and no other drug/ medicine/ vaccine was found in ILR except UIP vaccines. Open vials were stored in ILR at all urban SDPs and none was found beyond 28 days from day of opening. Job aids and contingency plan were available at 100% and 50% SDPs respectively.

The vaccine wastage rate was found to be 56% for BCG, 32% for OPV, 23% for MCV, and 13% for pentavalent vaccine.

Vaccines were found with usable VVM and readable

labels at 95% of session sites. At 67% of sessions, the vaccines were found to be within the expiry date.

Vaccines were found to be appropriately placed on/near ice packs at 67% session sites. At 5% of the session sites, open vials (RVV) were found, which were not discarded beyond 4 hours of opening.

Immunization waste management

Immunization waste was returned from 76% of the session sites to SDP. Waste disposal practices are mainly outsourced, with 64% SDPs following this practice. At 36% of the SDPs, there was no waste management practice followed, as the immunization waste was thrown with other waste.

At 50% SDPs, CCH had knowledge about shake test. At three-fourth of SDPs, CCH had knowledge about immunization sharp disposal; and at 88% of SDPs, CCH has knowledge about use of red and black bags for waste disposal.

Hub cutter was available at all session site and was used to cut both AD syringes and reconstitution syringes at all sites. The cut syringes were segregated in red bags at 87% session sites.

Supervision

There were no supervisory visits by medical officer in last one month at one fourth of SDPs.

Data recording and reporting systems

All ANMs interviewed were trained within last three years on use of latest recording and reporting formats. Insufficient quantity of MCP cards, tally sheets, due lists, SDR registers and MPRs were found at all reviewed urban PHCs. In half of the urban PHCs, ANMs are maintaining hand written immunization registers. Standard RCH registers were not found. No reporting of AEFI case was seen for the last six months.

It was found that only 2% of the expected tally sheets/duelist cum tally sheets were available at the reviewed urban areas. The availability of coverage report of UPHCs in HMIS portal was found to be 33%. It was found that only 33% of MPRs were complete. Only 8% of the entries done in MPRs were matching with the entries done in HMIS portal.

Programme communication

- » There are no ASHA supervisors in the urban areas to mentor or monitor the ASHAs.
- » Interviews with MAS members show that they attend these meetings. However, MAS members have not been provided any orientation on immunization, mobilization, inter personal communication and they do not have notion of their duties and responsibilities related to mobilization of communities for immunization.
- » For urban areas, six social mobilizers were put in place to support the FLWs in mobilization. These facilitated the ASHAs in mobilization and also monitored the session sites. Their presence was a strong support in mobilization in the urban slums.
- » Mothers meeting in urban areas are reportedly held on 'Mangal days'. This is a good practice of celebration of *mangal* or 'auspicious' days on four important occasions using the life cycle approach: *godbharayi* (celebration of pregnancy ceremony), *janamdin* (birthday of children), *annprashan* (first rice eating ceremony of children), *kishori balika divas* (adolescent girls days) are celebrated in the Anganwadi centres where the importance of vaccines and immunization is highlighted through talks on immunization during these occasions.
- » Inadequate space and infrastructure in AWCs is a challenge in attracting communities for immunization. Due to lack of dedicated space and constraints in urban slums, sessions need to be held in open field or water logged areas.
- » Vaccinators appointed by the state in the urban areas are committed, but have inadequate technical and communication skills.
- » Lack of visibility of Immunization IEC materials in urban session sites is an issue. Space constraint in the AWCs leaves no scope for display of immunization materials.
- » Observations of session sites in urban areas show that delivery of four key messages by ANMs to the caregivers is done partially. Most ANMs informed caregivers about side effects following immunization and when to come for the next visit but were not informing the caregivers about the vaccine/s and the disease/s prevented



4

ISSUES AND CHALLENGES

This section summarises the key issues identified and discussed in detail in the preceding chapters. While a number of issues were identified, only a few cardinal issues have been mentioned below.

Governance and accountability

- » Task force meetings at state and districts focus only on campaigns like MI/IMI and Polio NIDs
- » Limited or no discussion on critical components like human resource, cold chain, fund utilization, communication strategies etc. during task force meetings. Only one VC conducted to review routine immunization.
- » Weak mechanism and documentation of district quarterly RI reviews.
- » No uniform supportive supervision checklist and its compilation mechanism; limited supervision from districts to blocks for RI activities

Human resource and infrastructure

- » Acute shortage of Medical officers and supervisory cadre (LHV)
- » Limited availability of power back up for CCE

Training

- » MO training on Immunization Handbook 2016 not rolled out for all DIOs and MOs; conducted only for IMI districts
- » Poor attendance of HWs training on immunization module.
- » Stock registers for logistics not maintained at more than half SDPs. Owing to limited capacity building of CCHs, the waste management practices are below average (waste disposed with other municipal waste).

Microplanning issues

- » State microplanning tool differs from tool provided in Immunization handbook for MOs (2016).
- » Enlisting of all areas and documentation of target beneficiaries is incomplete; plans lack information on vaccines & logistics, AEFI management centres, subcentre wise maps,

AVD plan and columns on new vaccines.

- » Tagging of HRGs in RI plans is incomplete.
- » Weak planning for vacant subcentres coverage
- » None of the exclusive IMI sessions were included in RI microplans, indicating poor sustainability of the gains of MI.

Session site observation and community assessment

- » Non-availability of printed tally sheets and duelists
- » Poor availability of updated headcount surveys and updated duelists at session sites
- » Poor availability of blank MCP cards at session sites
- » Nearly one-fourth session sites do not receive vaccines exclusively through AVDS
- » Limited availability of red and black bags for waste disposal
- » Weak vaccine management and waste management at sessions observed (date and time not mentioned on open vials, inappropriately kept vaccines on/near ice packs, limited use of zipper bag, open vials of BCG and MCV were found which were not discarded after four hours of opening)
- » Knowledge gap among ANMs regarding AEFI recording and reporting and details of AEFI management centre
- » Poor social mobilization is the major reason for partially vaccinated/unvaccinated children.
- » Poor mechanism of supportive supervision
- » Photocopies of MCP cards found with families due to limited supply of printed cards by state
- » More than half of the names of beneficiaries checked in community missing from available headcount surveys

AEFI and VPD reporting system

- » Regular state and district AEFI committee

meetings not being held

- » Nearly one-third of the districts have not reported any AEFI case since 2015
- » Poor availability of AEFI recording registers and AEFI management kits at planning units
- » Weekly VPD data is not being shared between IDSP and DIO office

Vaccine and logistics

- » Insufficient supply of stabilizers, thermometers and temperature log books for cold chain equipment (CCE)
- » Poor availability of red and black bags for waste disposal
- » Non-availability of spare parts with CCTs prevents repair of CCE
- » Inadequate visits by CCTs for maintenance and repair
- » Contingency plan unavailable at more than one-fourth service delivery points

Data quality

- » Wide variation in data availability, completeness, agreement and consistency was found in DQA
- » Inadequate availability of tally sheets / due list cum tally sheet and blank MCP cards
- » Completeness of MPR is found to be suboptimal
- » Poor consistency between MPR and HMIS
- » Poor agreement between MPR and HMIS reports; and RCH register & MCP cards
- » Backlog of data entry in RCH Portal
- » Coverage monitoring charts not being used for programme review

Programme communication

- » Lack of strategies for mobilizing vulnerable population residing in hard to reach areas and high-risk areas
- » Sub optimal knowledge and skills of ASHAs in social mobilisation and inter personal

communication

- » Delivery of four key messages by ANMs at the session site is of variable quality and often incomplete
- » Implementation of social mobilization activities is inconsistent across the districts – strong in a few districts while poor in others
- » Community leaders have interest in immunization but lack knowledge on immunization

Urban immunization

- » Exclusive CTFI/DTFUI meetings were found to be held in only half of the districts
- » Infrastructure and HR shortfall in the state capital city as per NUHM norms
- » High vacancy of MOs, urban health coordinators and NUHM ANMs
- » Microplans were in form of one pager with critical information missing. AVD plan, vaccine & logistics plan and AEFI management centre details found in none of the microplans. Poor availability of supervisors' plan in microplan
- » Supportive supervision visits not being done to session sites
- » Absence of AEFI recording registers at UPHCs, poor knowledge among ANM regarding AEFI management centre. AEFI management kit absent at majority planning units
- » Limited knowledge and skills of ASHAs on mobilization
- » *Mahila Arogya Samitis* are unable to mobilize beneficiaries for immunization due to lack of orientation on immunization and IPC skills
- » Lack of visibility of immunization IEC materials in urban session sites
- » Weak knowledge among ANMs for reporting VPDs in MPR
- » Insufficient quantity of MCP cards, tally sheets, due lists and MPRs were found at all reviewed urban PHCs

- » In half of the urban PHCs, ANMs are maintaining hand written immunization registers
- » Standard RCH registers were not found

Inter-sectoral coordination

- » State has not issued any directives of AAA convergence
- » Weak participation of ICDS at block level for immunization review

A woman in a blue and white sari is holding a young child in a yellow top. She is also holding a health card with Hindi text. The background is a wall with some graffiti. The entire image has a green overlay.

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WAY FORWARD

This report is being submitted to the Government of Madhya Pradesh for discussion with reference to the “Roadmap for achieving 90% full immunization coverage in India by December 2018 and sustaining thereafter” to revise the state coverage improvement plan, along with timelines and roles and responsibilities of all stakeholders, including partner agencies.

Further, district reviews will need to be conducted by the state in all districts with <90% FIC to prepare district wise coverage improvement plans.

The Government of India will support the state government to devise a district review checklist and orient key state level officials for conducting the district reviews.



Data analysed and report compiled by ITSU

