Jharkhand

National Deworming Day

Report

Photo Credit: Evidence Action

August 2017

Evidence Action

Deworm the World Initiative

CONTENTS

Acronyms

ANM:	Auxiliary Nurse Midwife
ASHA:	Accredited Social Health Activist
AWC:	*Anganwadi* Centre
AWW:	*Anganwadi* Worker
BMO:	Block Medical Officer
BPM:	Block Program Manager
BRP:	Block Resource Person
CAPI:	Computer Assisted Personal Interview
CHC:	Community Health Centre
CMHO:	Chief Medical and Health Officer
CS:	Civil Surgeon
DC:	District Coordinator
DEO:	District Education Officer
DIO:	District Immunization Officer
DPM:	District Program Manager
DPO:	District Program Officer (WCD)
DWCD:	Department of Women and Child Development
GoI:	Government of India
ICDS:	Integrated Child Development Services
IEC:	Information, Education and Communication
LF; MDA:	Lymphatic Filariasis, Mass Drug Administration
MD:	Mission Director
MDM:	Mid-Day Meal
MCTS:	Mother and Child Tracking System
MoHFW:	Ministry of Health and Family Welfare
M&E:	Monitoring and Evaluation
NHM:	National Health Mission
NDD:	National Deworming Day
PIP:	Program Implementation Plan
PRI:	*Panchayati Raj* Institution
RBSK:	*Rashtriya Bal Swasthya Karyakram*
RC:	Regional Coordinators
STF:	State Task Force
STH:	Soil-Transmitted Helminths
UT:	Union Territories
WHO:	World Health Organization

Executive Summary

The state of Jharkhand implemented round four of National Deworming Day (NDD) on August 10, followed by mop-up day on August 17, 2017. The state reported deworming 1,26,85,000 children aged 1-19 across all 24 districts. This achievement is an outcome of exemplary leadership from the Health, Medical Education and Family Welfare Department in coordination with School Education and Literacy Development Department, and Women, Child Development and Social Security Department. Evidence Action provided technical assistance for program planning, implementation, and monitoring, through funding support received from the Children's Investment Fund Foundation and Dubai Cares.

Table 1: Key Achievements of National Deworming Day August 2017

Indicators		Census Target[1]	Target as per Coverage Report	Coverage*
Number of schools reporting coverage		Not Applicable	40,471	39,481
Number of *anganwadis* reporting coverage		Not Applicable	38,019	37,380
Number of enrolled children (classes 1-12) who were administered albendazole on NDD and mop-up day	Govt. Schools	Not available	54,45,588	51,24,899
	Private Schools	Not available	17,29,280	1,55,199
Number of registered children dewormed (1-5 years) at AWCs on NDD and mop-up day		Not available	28,10,763	26,33,118
Number of unregistered children dewormed (1-5 years) at AWCs on NDD and mop-up day		Not available	4,49,900	4,04,041
Number of out-of-school children dewormed on NDD and mop-up day		Not available	7,95,505	6,53,594
Total number of children dewormed (1-19 years)		1,26,85,000[2]	1,26,85,000[3]	1,03,70,851

* Source: Report submitted by NHM Jharkhand to Government of India on October 20, 2017 **(Annexure A)**

Evidence Action provided technical assistance for the implementation of NDD in August 2017, incorporating learnings from previous rounds to guide program planning. These lessons included aspects such as timely scheduling of block trainings and strengthening private schools engagement. The state's commitment towards the program was reflected in the efforts to scale up private school inclusion and initiatives to further engage stakeholders like the Department of Education, ICDS, and *Panchayati Raj* Institution through a state task force meeting, state training of master trainers, and a targeted state-level meeting with private schools.

1. About National Deworming Day (NDD)

The GoI implemented its first NDD in February 2015 and the program has achieved high coverage at scale since its inception. Based on national-level STH mapping and WHO treatment guidelines, the GoI issued a notification to states recommending the

[1] Category wise target as per the NDD guidelines are not available at the state
[2] This is as per the target finalised by the state in consultation with the districts for greater ownership and minimizing revisions during coverage reporting
[3] State has a pre decided census target of 1,26,85,000 and while reporting coverage via NDD App it deviated to 1,11,85,036. However, State decided to use pre decided aggregate target of 1,26,85,000 while reporting coverage to GoI

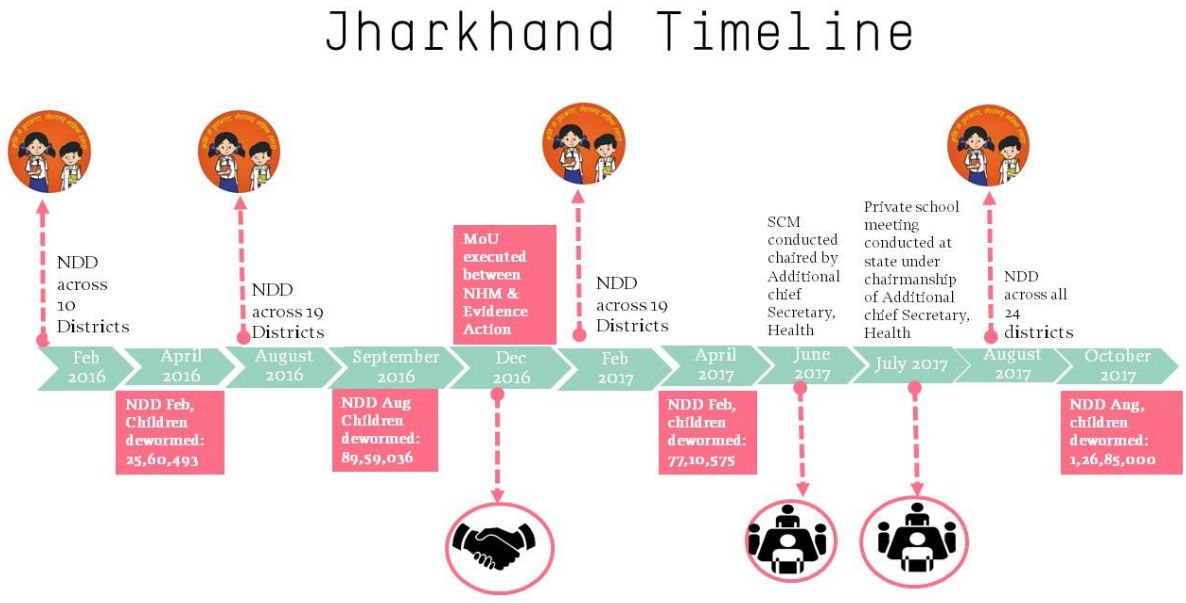
appropriate treatment frequency based on prevalence data. Jharkhand is required to conduct NDD twice a year due to high prevalence of more than 43%[4].

Figure 1: NDD Program Highlights

2. State Program Background-Jharkhand

The state of Jharkhand is implementing the NDD as per GoI operational guidelines. Key milestones are stated in **Figure 2** below.

Figure 2: Jharkhand NDD Roadmap



[4]Prevalence mapping was conducted by the National Centre for Disease Control (NCDC) and partners

3. State Program Implementation

3.1 Policy and Advocacy

The scale of NDD program mandates stakeholder collaboration at each administrative and implementation level, which relies on participation and close coordination among them for critical activities like planning and coordination committee meetings, trainings, and logistics planning at each level. The key highlights of inter-departmental collaboration are shown in **Figure 3** below.

Figure 3: Efforts towards Stakeholder Collaboration

July 4, State Task Force Meeting, Ranchi

- Conducted with support of Evidence Action under chairmanship of Additional Chief Secretary, Department of Health, attended by department of WCD, Education and PRI
- Reviewed NDD preparations at state
- Set comprehensive targets based on census population to reach every child
- Discussed holding sensitization meeting for private schools to be organised at Ranchi
- Printing of IEC and training materials to complete within a week at districts
- Letters from Health Minister to PRI representatives and ASHAs to be issued for effective community mobilastion
- NDD awareness video to be played in movie theatres for sensitzing public

June 28, State Directives

- Joint directives signed by Principal Secretary - Health, Education and WCD issued to all implementing districts (**Annexure B**)
- Letters to District Commissoners to impement August round based on monitoring findings of NDD during February round
- Letter to District Education Officers for integration of real time coverage reporting of NDD in MDM platform to facilitate correctice actions on mop-up day
- Corrective letters issued on mop-up day based on the findings of NDD

July 19, Private School Meeting

- Conducted under the chairmanship of Additional Chief Secretary, Department of Health
- 43 representatives from private schools of Ranchi attended the meeting
- Decision taken to conduct separate training for private schools of Ranchi
- Evidence Action supported the meeting with awareness kit for participants

July 17, State Video Conference

- Conducted with district Officials to assess drug availability and mitigate program gaps
- Reiterate message on filling up of identified gaps before mop-up day

A key prerequisite for implementing NDD at scale is integrated distribution, which involves timely procurement of drugs, and printing of IEC and training materials to be distributed during block level trainings. As Jharkhand implements LF- MDA in alignment with NDD, timely clarity about the number of LF MDA districts, due to efforts by the Child Health Cell, allowed for effective planning and streamlined use of available resources.

This round witnessed engagement of Department of *Panchayati Raj* Institution as they participated in state-level planning meetings and facilitated dissemination of an appeal letter signed by Minister of Health to their representatives at each administrative unit. The purpose of the letter was to galvanise community mobilisation activities across state.

As per the UDISE – 2015-2016 data, 17% of the school going children in the state study in private schools. In order to reach out to these children for deworming, the state NHM, with support from department of education and Evidence Action, conducted a meeting with representatives of private schools[5] in Ranchi under the chairmanship of Additional Chief Secretary, Department of Health. As this was the first time that such an initiative was being piloted in the state, 75 private schools of Ranchi registered in state UDISE were invited out of which 43 participated. Similar meetings were conducted in 14 districts because of initiatives taken by district administration. In the remaining 10 districts, no separate meetings were held with private school representatives for their participation in NDD but their participation was ensured during District Coordination Committee Meeting (DCCM) and consequently in the district and block level trainings. Evidence Action developed a specific mixed media private school package consisting of WhatsApp infographics, *prabhat pheri* banners, posters and children's activity book for engaging private schools in the state. These efforts yielded encouraging results during August 2017 round, with Jharkhand reporting 15,55,199 children enrolled in private schools being dewormed as compared to 12,11,839 children in the February 2017 round.

The NDD nodal officer participated in national review meeting of NDD on July 31, 2017 organised by the Ministry of Health and Family Welfare and Evidence Action to share updates on program preparedness for August 2017 round.

23 out of 24 districts[6] conducted NDD District Coordination Committee Meetings as per the agreed timelines between July 7 and July 21 under the chairmanship of the respective Deputy Commissioners /Civil Surgeons with key agenda items to finalize the training plan, printing of IEC and training materials and strategy to include private schools.

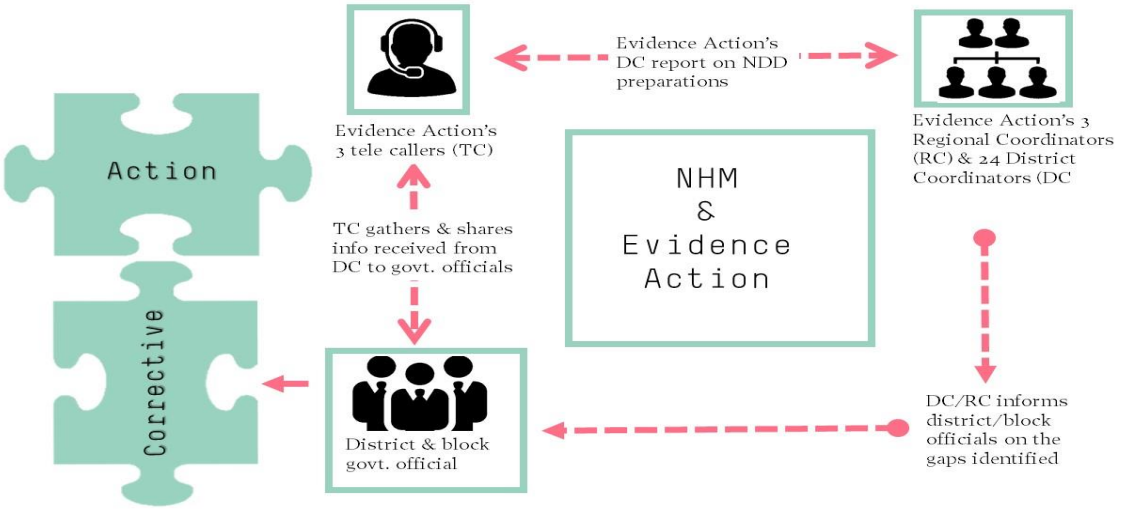
Real time coverage on NDD can be leveraged for corrective actions on mop-up day. Considering the availability of such opportunity in the form of Mid-Day Meal (MDM) reporting platform, Department of Health with support from Evidence Action, reached out to Department of Education to integrate coverage reporting of NDD on the selected indicators in the existing MDM SMS reporting platform. Specific details are provided under coverage reporting section of the report.

3.2 Program Management

Evidence Action in discussions with state Nodal Officer - NDD drafted a state specific operational plan to guide program planning and implementation. The plan was further shared by Department of Health with Department of Education and ICDS during state task force meeting. Evidence Action supported and worked closely with the state Nodal Officer -NDD through a four membered state based team, three tele-callers, 24 district coordinators and three regional coordinators to track program implementation progress on a daily basis. The state team assisted with program planning and coordinated with stakeholder departments to share real time updates on program implementation and to facilitate corrective actions from respective departments. The approved ROP for the financial year 2017 – 2018 was received by the state from GoI on July 28. Since their receipt was critical for launch efforts, Evidence Action led advocacy to the release of the tentative financial guidelines on July 21 based on the approved ROP of the previous financial year in order to facilitate program activities at district and block level. This delay in issuing financial guidelines impacted timelines of printing of IEC and training materials at districts. **(Annexure C).**

[5] The meeting was attended by 43 private school representatives
[6] Only Hazaribagh conducted DCCM on August 4

Figure 4: Evidence Action Facilitates Corrective Actions



3.3 Drug Procurement, Storage, and Transportation

a) Drug Procurement: The state required 1,64,69,600 albendazole to cover all children aged 1-19 years based on the census population from all 24 districts. Out of which 1,44,21,000 were procured through local processes and remaining 20,48,600 were left over from February 2017 round donated by WHO. The procurement process was initiated on time; however, delivery of drugs was finally delayed because of Goods and Services Tax (GST)[7] implications from supplier side. The entire consignment arrived at the state warehouse by the third week of July. The drugs were then tested at state-approved lab facilities prior to its distribution during block training.

b) Drug Logistics and Distribution: The Department of Health managed the entire drug logistics and distribution at all levels of the cascade in the state. Evidence Action supported the state in developing a district-wise bundling plan and tracking of leftover drug at districts from the past round. To streamline distribution of drugs, Evidence Action supported the state with a district-wise drug bundling and distribution plan based on the existing stock of albendazole at districts **(Annexure D).** Anticipating delay in drug from supplier because of GST issues, state adopted a strategy of phase-wise drug distribution plan. Distant districts[8] were prioritised and directed to collect leftover drugs of past round from state warehouse from second week of July. Overall delay in procurement and distribution of drug impacted the integrated distribution during block training.

The Department of Health facilitated bundling of the NDD kits[9] at district-level, which included drugs and all program materials, such as training,IEC materials, and reporting forms. The kits were distributed to district health functionaries for onward distribution to Education and ICDS functionaries at the block training. Evidence Action tracked the distribution of NDD kit as per the cascade and provided daily updates on identified gaps to NHM for corrective actions.

c) Adverse Event Management: In line with the last NDD round, the state followed the adverse event management protocol from national guidelines. For both NDD and mop-up

[7] The suppliers of the drug took time to ascertain the tax burden upon imposition of GST as earlier VAT of 5% was applicable and this delayed supply
[8] Godda, Deoghar, Dumka, Jamtara, Pakur, Sahibganj and Simdega
[9] NDD kits includes drugs, IEC materials such as posters and handbills and reporting formats

day, the state set up an adverse event management system engaging *Rashtriya Bal Swasthya Karyakram*[10] teams to effectively respond to any reported adverse event. Emergency helpline numbers such as 104 (Medical Health Service) were put on alert to facilitate appropriate emergency response action by coordinating medical assistance from the nearest primary health centre. To provide guidance on functionary's roles and responsibilities to handle and report adverse events, the training focused on disseminating customised information at all administrative levels. No serious adverse event was reported during implementation of NDD August round.

d) Drug Recall: Evidence Action supported NHM in tracking leftover albendazole tablets from the August round. Information available is presented in the table below:

Table 2: Drug Recall Status in Jharkhand

Drug Recall NDD August 2017	
Total tablets in strips (unused)	37,45,640
Total tablets remaining in used strips (tablets still packed within the strip)	307
Total number of tablets (Usable)	37,45,947

The Department of Health will be directing districts to use the sealed boxes[11] and packed strips in the upcoming February 2018 round as per drug safety recommendation.

3.4 Public Awareness and Community Sensitization

Platform	Timelines	Frequency
TV Spot	August 7 - 8	54 times*
Radio Spot	August 4 - 10	216 times*
Newspaper Advertisement	August 10 and 17	12 times (All English and Hindi leading publications)*
Prabhat Pheri	August 10	8 districts*
Wall Writing	July 28 – August 5	18 districts*
Miking (Public Service Announcement)	August 5 – 10	14 districts*
Social Media	August 1 – 20	42 Posts (on Facebook) 308 Likes

The NDD resource kit developed by Evidence Action was uploaded on the NHM website by MoHFW. Customization and printing of IEC and training materials was delayed by three weeks because of lack of tracking at districts. This was resolved after the State Task Force meeting. However, due to printing cost implications, non-uniform printing pattern was observed in some districts, while some districts[12] could not do timely procurement because of administrative delays, which affected overall integrated distribution in the state.

Further, Evidence Action drafted a media plan in discussions with the state IEC cell that was submitted and approved for roll out via TV, radio, newspaper and social media. Evidence Action also supported the state

[10] Rashtriya Bal Swasthya Karyakram (RBSK) is an important initiative aiming at early identification and early intervention for children from birth to 18 years to cover 4 'D's viz. Defects at birth, Deficiencies, Diseases, Development delays including disability.

[11] Only two districts namely Deoghar and West Singhbhum reported leftover WHO boxes form February round after the August round

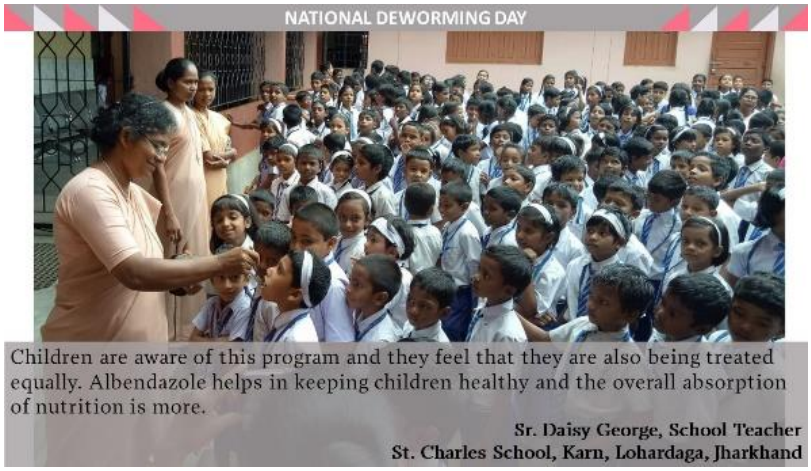
[12] Hazaribagh, Latehar, East Singhbhum, Ranchi, West Singhbhum and Dhanbad could not place printing orders till July 15

in managing social media accounts by posting on Facebook to reach out to online[13] audiences.

The state health department organized a press meet on August 8 at Ranchi chaired by the Mission Director, NHM, with the objective of informing media about the upcoming NDD round and to enhance their understanding of the need for deworming children and the harmful effects of worm infestation. 12 media personnel attended the meeting from leading print, electronic, and digital media houses and were provided media kits by Evidence Action. Evidence Action facilitated the state launch, supporting with venue arrangements and participant kits. The launch was organized on August 9, with Health Minister as the chief guest. District-level ownership of program was reflected in launch events held at all 24 districts on either August 9 and 10 to increase coverage and public branding of NDD.

Implementing the decisions taken at State Task Force meeting for strengthening community mobilisation, the State Community Mobilization Cell printed and distributed 39,000 copies of an appeal letter, reiterating the critical role of *Sahiya* in community mobilisation, from the Health Minister to *Sahiyas*. Similarly, an appeal from the Health Minister to approximately 4,000 *Mukhiyas*[14] were sent via email to district and block officials for further circulation by department of *panchayti raj*.

In addition, complementing to state-led efforts, as discussed at the State Task Force meeting, Evidence Action supported awareness generation by broadcasting NDD TV spot in 56 cinema theatres during 3,198 film shows across 16 districts where the services were available from August 8 to 17. This was conducted for the first time in the state to sensitize and reach to urban communities through a popular medium on the need of deworming. The state circulated WhatsApp messages on key program information (designed by Evidence Action) in existing official groups of Departments of Health and Education at all administrative levels.



*TV Spot – Doordarshan Kendra Ranchi, E-TV Jharkhand, Kashish News Jharkhand, Maurya TV Jharkhand, News 11 Jharkhand
*Radio Spot – *Akashvani* Ranchi Regional News, Big 92.7 FM Jamshedpur, Big 92.7 FM Ranchi, Radio Dhamal 106.4 FM Ranchi, Radio Dhoom 104.8 FM Jamshedpur, Radio Dhoom 104.8 FM Ranchi, Radio 91.9 FM Ranchi, Red FM Jamshedpur, Vividh Bharti Patna/Ranchi
*Newspaper Advertisement - Dainik Bhaskar, Prabhat Khabar, Times of India, Dainik Jagran, Hindustan, Prabhat Khabar, Khabar Mantra, Sanmarg, Hindustan Times
*Miking – Pakur, Sahibganj, Lohardaga, Ranchi, Gumla, Saraikela, Khunti, Bokaro, Koderma, Ramgarh, Hazaribagh, Latehar, Palamu, Garhwa
*Wall writing – Pakur, Sahibganj, Lohardaga, Ranchi, Gumla, Saraikela, Khunti, Bokaro, Koderma, Ramgarh, Hazaribagh, Latehar, Palamu, Garhwa, Chatra, Godda, Pakur, Sahibganj
**Prabhat Pheri* – Dhanbad, Dumka, Pakur, Garhwa, Hazaribagh, Ranchi, Khunti, Gumla

[14] Elected representative of a *Gram Panchayat*

3.5 Training Cascade

a) Training and Distribution Cascade: A state-level training of trainers was held on July 5, 2017, where 73 district-level officials were trained for NDD implementation. Evidence Action supported the training with drafting presentations, participant kits and other logistical arrangements. As per the state coverage report, 36,126 teachers from government, government-aided schools, 3,359 from private schools, 34,437 *anganwadi* workers and 35,634 *Sahiyas* were trained on the NDD.

b) Training Resources: Department of Health printed training resources including flipcharts, handouts for teachers and *anganwadi* workers, and training leaflets for *Sahiyas*. Evidence Action supported in drafting the training and IEC material bundling plan to align integrated distribution with block trainings.

c) Training Reinforcement: Evidence Action supported the state in customising training reinforcement messages based on national guidelines and as approved by Department of Health. NHM used its Mother and Child Tracking System platform to send 60,718 SMS to health functionaries such as ANMs, *Sahiyas,* and others. Out of 8,93,197 SMS sent by Evidence Action to functionaries of Department of Education and ICDS 8,79,406 SMS (98%) were delivered which was at 80% in the previous round. The high delivery rate is because of filtered contact database used by Evidence Action to discard incomplete numbers. It is important that like Department of Health, other government stakeholder Departments such as Education and ICDS also explore and leverage their existing platforms for sending SMS for greater program ownership, program impact and sustainability.

Table 3: Details of SMS Training Reinforcement Messages Sent

Sl.no	Activity	Timelines	Sent by	No. of SMS sent	Functionaries	Total SMS sent
1	SMS	July 10 – August 20	Department of Health	60,718	CS., DRCHO, DPM, *Sahiya* & ANM	60,718
2.			Evidence Action	5,68,285	Headmaster & Teacher	5,68,285
3.			Evidence Action	3,24,912	CDPO, LS, AWWs	3,24,912
					Total	**9,53,915**

3.6 Coverage Reporting

GoI provided the state with 221 user IDs and passwords for NDD mobile/web application to all blocks and districts for coverage reporting purposes. All blocks submitted coverage report and all districts approved the data on NDD app, reporting a coverage of 1,03,70,851 children dewormed. The state had a pre-decided target of 1,26,85,000 children in consultation with districts during state training of master trainers, which was revised to 1,03,70,851 at the time of coverage reporting on the app. However, state did not revise its pre decided census target of 1,26,85,000 in final report submission to GoI.

As setting targets is crucial for gauging program performance, the state must ensure covering all children aged 1-19 years, as aligned per the census target and ensure no revisions are made in targets at districts while reporting through NDD app post the round.
The deviation in process of coverage reporting was observed by Evidence Action state team, which was timely communicated to state for corrective actions.

To take corrective actions for gaps identified on NDD, Jharkhand successfully integrated selected coverage reporting indicators on to the MDM platform. This platform reaches approximately 39,803 government schools (classes one to eight) in the state. Integration

of real-time coverage reporting yielded encouraging results: 11,427 and 1,373 schools reported deworming children via MDM platform on NDD and mop-up day respectively.

Evidence Action supported the state with further analysis of data, which shows discrepancy such as typing errors and inflated figures of serious adverse events etc. It is important to note that the steps of reporting could not be integrated into block training due to delay in inclusion of reporting indicators on the platform. These gaps would be a focus for block trainings and improvements targeted for the next rounds.

4. Monitoring and Evaluation

Monitoring, learning, and evaluation is a key component of Evidence Action's technical assistance to the government and enables an understanding of the extent to which schools, *anganwadis,* and the health system are prepared to implement the NDD.

4.1 Process Monitoring

Evidence Action conducts process monitoring through telephone monitoring and cross verification, including physical verification through field visits by its staff and trained independent monitors **(Annexure E).**

Tele-calling and Follow Up Actions: Evidence Action assessed program preparedness prior to NDD through tele-callers who tracked the status of training, delivery and availability of drugs and IEC materials at the District, Block, school and *anganwadi* levels. The tele-callers used pre-designed and standardized tracking sheets to capture the gaps in field implementation through telephonic follow-ups. Evidence Action shared these tracking sheets with the state government on a daily basis to enable them to take rapid corrective actions as necessary, such as issuing Departmental directives, holding a video conference to coordinate with officials, or sending reinforcement messages through SMS. Evidence Action's district and regional coordinators made field visits to facilitate some of these corrective actions at the district and block-level.

Out of 18,183 phone calls, including follow up calls, 10,851 calls (60%) were placed successfully from June to September 2017. The rate of successful calls depreciated to 60% for this round in comparison to 68% for February round due to transfers and reshuffling of functionaries. The existing contact database was also a drawback while following up on NDD implementation, particularly with field functionaries such as teachers and *anganwadi* workers, which resulted in unsuccessful calls. The insights from SMS delivery reports show that more than 98% SMS were delivered because of filtering of contact database prior to sending SMS. The difference in success rate of tele calling and SMS is owed to; as the contact number is valid and operational, it may not still be retained by the functionary themselves thus resulting in high rate of unsuccessful calls during tele calling. Thus, the state needs to ensure regular updates to the contact database to enhance program effectiveness by respective Departments.

Training Quality Assessment: For quality assurance purposes, Evidence Action administered pre and post-tests to participants at state-level master trainers training to measure knowledge retention of key messages. Training monitoring of 23 districts and 103 blocks, was conducted to assess quality of messages imparted at trainings using a standardized training monitoring checklist by regional coordinators and district coordinators. Real time recommendations based on these assessments were shared with stakeholders to improve remaining scheduled district and block trainings. Findings of state pre-post, district and block training is shared as **Annexure F.**

Snapshot of M&E Activities
I. Telephone Monitoring and Cross Verification
• Telecalling conducted across 194 blocks in 24 districts of the state • 10,851 successful calls made during June 2017 - September, 2017 • 3,961 calls to health functionaries including district and block level officals and ANMs • 3,525 calls to education functionaries including district and block level officials and schools • 3,365 calls to ICDS functionaries including district and block level officials and anganwadi workers
II. Training Quality Assesment
• Pre-post test was adminsitered during master trainers training at state-level • A total of 103 block-level training quality assessment was done using standard format
II. Field Monitoring Visits
• Total 498 monitoring visits by Evidence Action staff were made in select schools and *anganwadis* • NDD monitoring checklist given in NDD operational guideline was administered (Annexure E) • Real time findings on key indicators were shared with stakeholders for corrective actions on mop-up day
III. Process Monitoring by Independent Monitors
• Process monitoring was conducted in all 24 districts on NDD and mop-up day • 100 trained independent monitors from the survey agency, visited 200 schools and 200 *anganwadis* • Data was collected electronically using CAPI as per tools developed by Evidence Action • Real time findings on key indicators shared with stakeholders on NDD and mop-up day
IV Coverage Validation by Independent Monitors
• Coverage Validation was conducted in all 24 districts post mop-up day during August 23-27, 2017 • 100 trained independent monitors, hired by Evidence Action, visited 500 schools and 500 *anganwadis*

Monitoring by Independent Agency: Evidence Action, with approvals from the Government of Jharkhand, assessed the processes and performance of the program by hiring an independent survey agency called Centre for Media Studies. 100 trained monitors from the agency observed implementation on NDD and mop-up day, with findings shared in real time with state officials on the day of visits to enable immediate corrective actions.

Monitoring Visits by Evidence Action: In total, 498 visits were made by the Evidence Action team to government and private schools, *anganwadi*s on NDD and mop-up day. State officials from Department of Health also visited all 24 NDD districts to monitor implementation of NDD and mop-up day. The note from visits is shared in **Annexure G.**

4.2 Assessing Treatment Coverage

Evidence Action undertook coverage validation in NDD districts to gauge the accuracy of reported treatment coverage during the August 2017 round in Jharkhand.

Coverage Validation: Coverage validation is an ex-post check of the accuracy of the reporting data and coverage estimates. Coverage validation data was gathered through interviews with *anganwadi* workers, headmasters/teachers, and a sample of three students from three randomly selected classes in each of 500 sampled schools. Additional data was gathered by checking registers and reporting forms in the schools and *anganwadis*. These activities provided a framework to validate coverage reported by schools and *anganwadis* and to estimate the level of accuracy in the data by comparing the recounted numbers (based on the documentation available in schools and *anganwadis*) with numbers in reporting forms **(Annexure H)**

Community Evaluation Survey (CES): The CES is a WHO tool[15], which was implemented in state with approvals from NHM in September 2017. A total of 1800 children were targeted to be interviewed by monitors of independent survey agency, Centre for Media Studies, in 30 villages of 5 Districts. Detailed analysis and findings will be available for sharing by end November 2017.

4.3 Key Findings

Process monitoring findings highlight that 62% schools and 71% *anganwadis* attended training for the recent round of NDD and around 85% of schools and 81% of *anganwadis* conducted deworming either on NDD or mop-up day. Findings from coverage validation show that 87 % schools and 94% *anganwadis* dewormed children during August 2017 round in comparison to 84% schools and 92% *anganwadis* during February 2017 round. Around 59% schools and 64% *anganwadis* received NDD posters and banners. However, integrated distribution of NDD kits[16] was significantly lower for both schools (30%) and *anganwadis* (33%). This shows that approximately one-third of the schools and *anganwadis* who participated in the trainings, received a complete NDD kit with all materials (albendazole, banner/poster and handout/reporting forms) at the trainings, which clearly indicates that integrated distribution did not happen at all trainings. The materials were either distributed individually to remaining schools and *anganwadis*, thus increasing the costs and resources of time while posing a risk on the availability of the materials prior to the round. These can be attributed to the fact that there was limited inter-Departmental coordination on training dates and delay in printing of IEC and training materials at districts and needs continuous improvement. Around 46% of schools visited and 45% *anganwadis* received training reinforcement messages through SMS, indicating lack of an updated database. Awareness on the how can children get worm infection, possible adverse events, and adverse event management practices **(Annexure E-Table 6)** were good among teachers and *anganwadi* workers. Around 20% of teachers and 25% of *anganwadi* workers reported the possibility of any adverse event among children after administration of albendazole tablets.

Private School Engagement: Around 61% of sampled private schools visited (N=12[17]) reported being trained for NDD in comparison to 42% during February round. These schools (91%) had sufficient deworming drugs, in comparison to 72% during February round. However, 56% of them received posters and banners in comparison to only 4%

[15] WHO recommended tool for assessing the performance of the NDD round while measuring coverage in specific populations (sex, rural vs. urban) and identify reasons for non-compliance to drug consumption and gaps in drug administration

[16]Integrated distribution of NDD kits includes albendazole, banner/poster and handout/reporting forms and provided to schools and AWC during the trainings.

17 These indicators are based on small samples, therefore, precautions should be taken while interpreting the results as these are not representative of all private schools in the state

during the February round. 63% of schools received handouts and reporting forms in comparison to 17% during the February round.

This shows that while drugs were made available to the schools, 40% of schools did not attend training, which clearly indicates the reason for lack of integrated distribution in the trainings. The drugs and materials were distributed individually to remaining schools and *anganwadis*, thus increasing the costs incurred on logistics and also posing a risk on the availability of the materials prior to the round. Further, limited availability of contact database of private schools hindered dissemination of important information on program dates and details, training dates and reporting timelines via tele calling and SMS. Thus, efforts need to be made to enhance private schools inclusion through greater engagement of District Magistrates and updating of contact database for providing timely information on program dates, training dates, dosage and reporting timelines. A directive from state to all District Magistrates seeking their active support in the program must be sent to all districts at least two months prior to start of district-level trainings. The state-level initiative of orienting private schools has enhanced their overall engagement all across the state in comparison to the last round. However, above mentioned steps would further yield better result and boast private school engagement in the state.

Table 4: Key Findings from Process Monitoring and Coverage Validation

Indicator	Schools		*Anganwadis*	
	%	N	%	*N*
Received SMS for current NDD round	46	**200**	**45**	***200***
Attended training for NDD	62	200	71	200
Integrated distribution of albendazole tablets and IEC and training materials	30	200	33	200
Schools/*anganwadis* conducting deworming	87	500	94	500
Children consumed tablet[18]	99	1,307	NA	NA
Followed correct recording[19] protocol	2	436	31	412
Copy of reporting form was available for verification	51	436	45	472
State-level verification[20] factor	0.49	4,8193	1.04	16,676
Estimated NDD coverage [21]	71	NA	87	NA

Coverage validation (Annexure G) data reveals that 60% of schools and 34% of *anganwadis* followed partial protocols for recording the number of children dewormed. 38% of schools and 35% of *anganwadis* did not adhere to any recording protocol during August 2017 round in comparison to around 42% of schools and 15% of *anganwadis* for February 2017 round. A substantial proportion of *anganwadi* workers did not have a list of

[18] Based on child interview conducted in schools during coverage validation

[19] Correct recording protocol includes schools where all the classes put single tick (✓) on NDD and double tick (✓✓) on mop-up day to record the information of dewormed children

[20] Ratio of recounted value of the dewormed children to the reported value. This calculation is based on only those schools (n=218) and *anganwadis* (n=200) where deworming was conducted and copy of reporting form was available for verification.

[21] This was estimated on the basis of NDD implementation status, attendance on NDD and mop-up day, whether child received albendazole and its supervised administration. Since no child interview is conducted at *anganwadis*; this has not been estimated for *anganwadis*. This was estimated by implying state-level verification factor on government reported coverage for AWC.

unregistered preschool-age children (69%) and out-of-school children (72%) for February 2017 round, which was improved in comparison to preschool-age children (72%) and out-of-school children (70%) for August 2017 round. Out of total schools and *anganwadis* conducted NDD, only 51% of schools and 45% of *anganwadis* had a copy of their reporting form post submission, though they were instructed to retain a copy as per NDD guidelines, which has dipped marginally by 1 percent points. In addition, the findings indicate high inflation (87%; verification factor of 0.53) for enrolled children against the treatment figures.

Further, interviews of children (N=1,307) at schools indicate that 100% received albendazole tablet and out of all children who received the tablet, 95% reported to consume the tablets under teachers' supervision. This indicates that despite challenges in reporting and documentation of NDD coverage data, majority of the children present on NDD or mop-up day at the schools consumed the albendazole tablet.

Findings from coverage validation revealed that only 31% *Sahiya* responded to prepare the list of unregistered and out-of-school children with *anganwadi* workers, which indicates the scope of further improvement. 70% of *Sahiya* responded to conduct meetings with parents to inform about NDD, efforts should be made to enhance and monitor their mobilisation activities.

The state government reported 93% coverage in schools and 94% for 1-5 years registered children in *anganwadis*. Through coverage validation, attempt was made to understand the maximum number of children that could have been dewormed at schools and *anganwadis*. We estimated NDD treatment coverage in schools considering maximum attendance of children on NDD and mop-up day. Coverage validation data showed that 87% of schools conducted deworming on either NDD or mop-up day, maximum of 86% of children were in attendance, 100% of children received albendazole tablet and 95% of them reported to consume albendazole tablet under supervision. Considering these factors, 71% (0.87*0.86*1.00*0.95) of enrolled children could have been dewormed in the schools. Since no child interview is conducted in *anganwadis* we applied verification factor of 1-5 years registered children from coverage validation data on government reported coverage of 1-5 years. It was estimated that around 87% (0.93*0.94) of registered children in *anganwadis* could have been dewormed. The detailed tables with process monitoring results and coverage validation findings are attached herewith (Annexure E and H).

4.4. Trend of Key Indicators over Rounds

To understand the changes in selected indicators over NDD rounds, selected key indicators are presented in graphical form below. Data comparison shows improvements for NDD August 2017 in comparison of NDD August 2016 round by 9 percentage points for *anganwadis* and by 10 percentage points for schools, where headmaster/teacher and *anganwadis* attended training. Whereas, same indicators have dipped down by 7 percentage points for *anganwadis* and increased by 2 percentage points for schools during August round in comparison to the February round. Program insights show dip in this particular indicator for *anganwadis* and schools could be low participation of teachers and *anganwadi* workers during block training.

Participation of teachers and *anganwadi* workers at trainings should be encouraged with lack of information about NDD training dates continued to be cited to be the main reason among teachers/*anganwadi* workers for not attending NDD trainings (Figure:5). This indicator is continuously increasing for the *anganwadi* workers over the rounds. It is

crucial that all block-level trainings are completed as per the schedule and minimum a week in advance to the NDD date (if delayed from training schedule) leaving sufficient time for the teachers to train other teachers in the schools and also for *anganwadi* workers to mobilise community and spread awareness on the program. It is recommended for high participation of functionaries, that block training dates once fixed should not be changed without timely intimation to participants. Training reinforcement SMS were sent to functionaries for alerting training dates for district and block-level trainings. However, contact database continues to be a challenge affecting the overall delivery of the SMS to the teachers (46%), *anganwadis* (45%) for August 2017 round. However, the SMS delivery rate has improved drastically during August 2017 round by 27 and 21 percentage points for schools and *anganwadi* respectively in comparison to August 2016 round. It could be because of availability of updated database but indicators are still low and have dipped by 3 and 6 percentage points for School and *anganwadi* during the August 2017 round in comparison to Feb 2017 round. The trend suggests database of both teachers and *anganwadi* workers requires periodic upgradation.

Fig 5: Comparison of Training Indicators for School/*Anganwadi* over Rounds

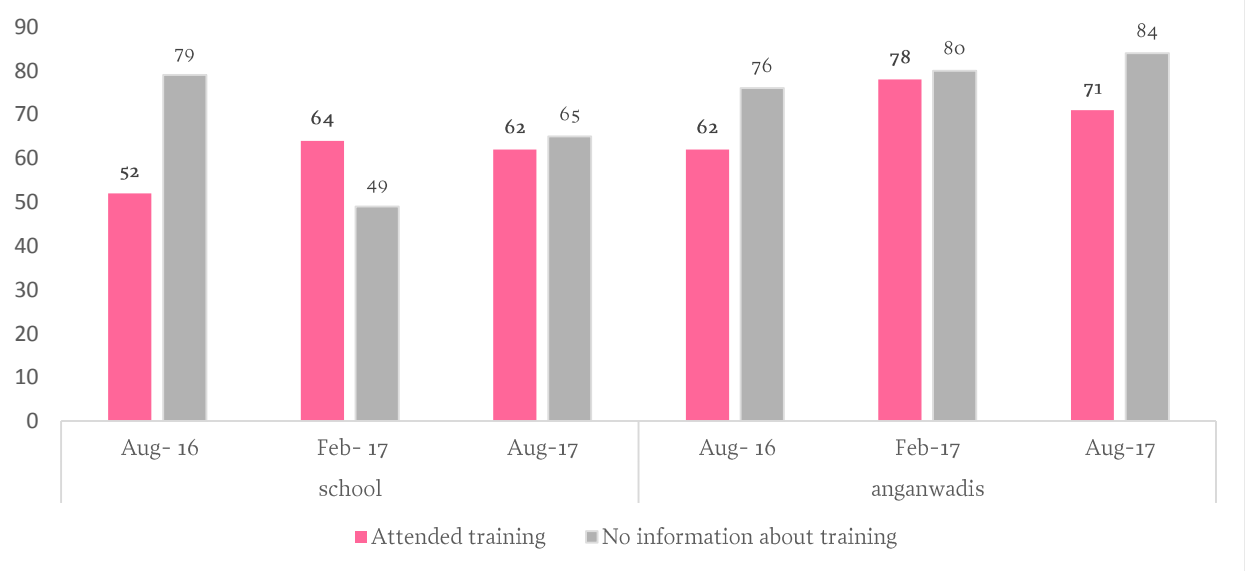


Fig 6: Comparison of Key Indicators in Schools over Rounds

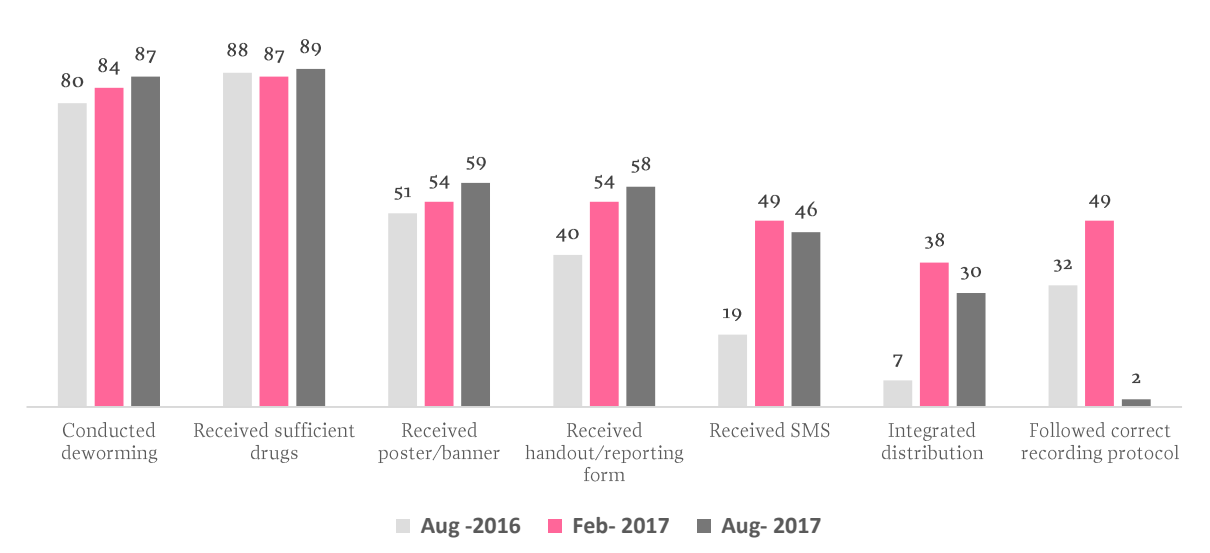
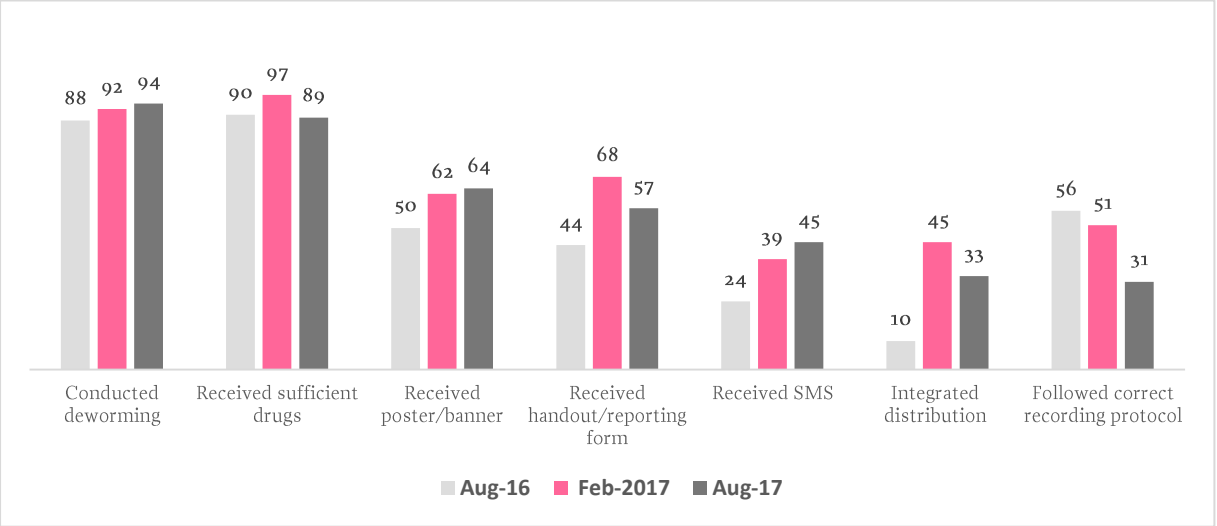


Fig 7: Trend of Key Indicators in *Anganwadis* over Rounds



Trend in figure 6 shows improvements for some of the indicators during the August 2017 round in comparison to August 2016 round. Significant increment is visible during August 2017 round for indicators like received poster, banners and handouts (by 8 percentage points), received handouts reporting forms (by 18 percentage points), received SMS (by 27 percentage points) and integrated distribution (by 23 percentage points) in comparison to August 2016 round. Indicators like followed correct reporting protocol and integrated distribution has declined sharply by 47 and 8 percentage points respectively during August 2017 in comparison to February 2017 round. A significant decline in integrated distribution and followed correct reporting call during Aug round is alarming, possibly because of less emphasis on reporting protocol during block trainings and delayed printing of IEC and training materials impacted the distribution at blocks.

Trends in figure 7 shows improvement for most of the indicators during August 2017 in comparison to August 2016 round. Significant increment is visible for indicators like received poster, banners and handouts (by 14 percentage points), received handouts reporting forms (by 13 percentage points), received SMS (by 21 percentage points) and integrated distribution (by 23 percentage points). Indicators like; received handout and reporting form, integrated distribution and followed correct reporting protocol has declined sharply by 11, 22 and 20 percentage points respectively during August 2017. Critical indicators like percentage of following correct reporting protocol substantially declined probably because of limited reinforcement at block trainings. Fall in the integrated distribution can be attributed to delay in printing of IEC and training materials. Process monitoring findings demonstrate that focus of frontline workers is more on albendazole administration rather than recording the numbers as per recommended guideline.

The possible reason for increase in most indicators over the rounds is the continued efforts of collaborating departments in facilitating timely communication to districts with assistance from Evidence Action, which has extensive experience of assistance from other states over the years.

5. Recommendations:

It is critical to conduct high coverage program consistently every six months in all districts of the state to bring down prevalence and to slow reinfection rates. Therefore,

continued efforts need to be made towards high quality program twice a year. Below are few recommendations to be implemented in forthcoming rounds:

1. Department of Health should continue its initiatives for stakeholder convergence at state. Dialogue with stakeholder departments like *Panchayati Raj* Institution, Drinking Water and Sanitation and Private schools engagement should continue for all the forthcoming rounds as it will increase the program coverage.
2. Findings from coverage validation indicates substantial dip in the indicator of following correct reporting protocol as per the NDD guidelines from 49% of schools and 51% of *anganwadis* for February 2017 round to an alarming level of 2% for schools and 31% for *anganwadis* respectively for August 2017 round. Functionaries should be orientated on criticality of the reporting protocols during block trainings and availability of reporting forms should be ensured at schools and *anganwadis*.
3. Training attendance dipped down from 64% for school and 78% for *anganwadi* during February 2017 round to 62% and 71% during August 2017 round. Timely communication on training dates to frontline functionaries and an updated contact database of functionaries will complement in effective dissemination of any such information through SMS.
4. Timely communication among stakeholder departments at blocks on training dates will contribute in improving training attendance for upcoming rounds. An updated contact database will complement the efforts of information exchange and training reinforcement messages at blocks.
5. Effectively monitored training sessions at blocks would ensure knowledge transformation of critical awareness messages among functionaries and ensure informed participation from them in overall program implementation.
6. Initiatives at state should be taken to identify nodal in each stakeholder departments like Education and ICDS for better coordination and planning. In addition to this, nodal officers for NDD should also be designated at districts and blocks preferably. These steps will facilitate smooth coordination and planning at districts and blocks. The identified nodal officers from districts must be invited to state-level training for NDD.
7. Findings of process monitoring shows integrated distribution have dipped down to 30% for schools and 33% for *anganwadis* during the August 2017 round in comparison to 38% for schools and 45% for *anganwadi* during February 2017 round respectively. Improvement in integrated distribution of drugs, IEC, and reporting forms through the training cascade should be strengthen for coming rounds. For that, state needs to adopt strategy of centralised printing and ensure coordination at lower administrative levels for smooth logistical movement. State should sensitize district officials through video conferences on criticality of NDD kit detailing its cost efficiency if it is distributed during block training.
8. Availability of list of unregistered preschool-age children and out-of-school children at *anganwadis* substantially declined to 72% and 70% during August 2017 round in comparison to 69% and 72% during February 2017 round. Thus, regular orientation of *Sahiya* on their specific roles in community mobilisation for NDD program through existing platforms such as monthly meetings at cluster and blocks should be capitalised in future rounds. Districts should closely monitor and track the efforts of *Sahiya.*
9. Integration of steps on MDM reporting in training content of the state on existing platform like U-DISE annual training and NDD program training can improve the accuracy of reported figures by schools, which can overall ensure corrective actions on mop-up day to successfully implement the NDD

6. List of Annexures

Annexure A	Coverage report submitted by National Health Mission (NHM) Jharkhand to Government of India
Annexure B	Joint Directives
Annexure C	Financial Guidelines
Annexure D	Drug bundling plan for block wise requirement of albendazole
Annexure E	Process Monitoring Findings
Annexure F	Training Quality Assessment at State, Districts and Blocks
Annexure G	Monitoring Visit Report
Annexure H	Coverage Validation Findings

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