Evidence Action

Deworm the World Initiative

Independent Monitoring of National Deworming Day in Uttar Pradesh August 2017

REPORT

November 2017

Process Monitoring and Coverage Validation

During each round of National Deworming Day (NDD), Evidence Action conducts process monitoring on NDD and mop-up day and coverage validation post-NDD through an independent survey agency to assess the planning, implementation, and quality of the program with an objective to identify gaps and suggest recommendations for improvements in future NDD rounds. Process monitoring is conducted to understand government implementers' preparedness for NDD and their adherence to the program's prescribed processes, while coverage validation is an ex-post check of the accuracy of the reporting data and coverage estimates to verify government-reported treatment figures.

Methodology

Using a two-stage probability sampling procedure, a total of 300 schools and 300 *anganwadis* were selected for monitoring visits during process monitoring on NDD and mop-up day, and 750 schools and 750 *anganwadis* in 51 districts were selected for coverage validation. Through a competitive review process, Evidence Action hired an independent survey agency to conduct monitoring activities approved by the government. Evidence Action designed and finalized survey tools with approvals from Uttar Pradesh's Department of Health. One combined tool for process monitoring was used at schools and *anganwadis* on NDD and mop-up day, and one each for schools and *anganwadis* for coverage validation.

Implementation

Prior to the survey, Evidence Action conducted a one-day comprehensive training of master trainers of the agency, who further conducted a two-day training of 280 monitors (including buffer monitors) that included a brief orientation on NDD, the importance of independent monitoring, details of the monitoring formats including CAPI practices, survey protocols, and practical mock sessions. Each monitor was allotted one school and one *anganwadi* for process monitoring on NDD and mop-up day and subsequently, five schools and five *anganwadis* for coverage validation. Monitors were provided with a tablet computer, charger, printed copy of monitoring formats as backup, and albendazole tablets for demonstration during data collection. The details of sample schools were shared with monitors one day before the commencement of fieldwork to ensure that they did not contact schools and *anganwadis* in advance. Appropriate quality assurance measures were taken to ensure data collected was accurate, consistent, and authenticated including that school and *anganwadi* workers (AWWs) were asked to sign a participation form with an official stamp to verify the visit. Further, monitors verified the photographs of schools and *anganwadis* collected during data collection and the CAPI process included authentication of the location of the interview. Evidence Action reviewed all the data sets and shared the feedback to the agency for any inconsistencies observed. All analysis was performed using Stata version 13/14 and Microsoft Excel 2013.

Key Findings

Training

Prior to each NDD round, teachers and *anganwadi* workers are trained on program processes and protocols to ensure effective implementation of NDD, including integrated distribution of drugs and IEC materials. Finding show that 45% of schools and 76% of *anganwadi* workers attended training for the August 2017 NDD round. Although school teachers and *anganwadi* workers are expected to attend training for each round (regardless of training attendance in previous rounds), there was a sharp decline in school teacher and *anganwadi* worker attendance from NDD February 2017. Private school attendance was only 20% (Annex-Table PM7). Among those who did not attend training, 87% of teachers/headmaster (government and private schools) and 65% of *anganwadi* workers reported no information about NDD training date/venue/timing as the main reason for not attending (Annex-Table PM1). Further, 58% of trained teachers provided training to other teachers in their schools (Annex-Table PM1). Approximately 67% of schools and 62% of *anganwadi* workers reported that they did not receive an SMS about NDD (Annex-Table PM1). The lack of an updated contact database may be one of the factors that impacted the overall delivery of SMS to the teachers and *anganwadis* workers.

Integrated Distribution of NDD Kit Including Drugs

Despite the mandate from NDD guidelines and a well-defined distribution plan, integrated distribution of the NDD kit was low for both schools (26%) and *anganwadis* (45%). The number of schools and *anganwadis* that received posters/banners and handouts/reporting forms decreased from the previous round, which could be attributed to the delay in printing materials at the state level and affected integrated distribution and availability of material at schools and *anganwadis.* Around 84% of government schools received albendazole tablets and 90% of them reported to have tablets in sufficient quantity, however, only 32% of private schools received tablets for deworming and 89% of these reported having received sufficient quantities. Twenty-four percent of the private schools covered during process monitoring received posters/banners and handouts/reporting forms for NDD (Annex-Table PM7).

Source of Information about the Recent Round of NDD

Training was the most reported mode of information in schools (27%) and *anganwadis* (52%) on NDD. Sixteen percent of the schools and 25% of the *anganwadis* reported hearing about NDD from other school teachers/Lady Supervisors (Annex-Table PM1). Thirty-three percent of schools and 38% of *anganwadis* also reported having received information about NDD through SMS. Radio followed by newspapers and banners were the least reported source of information about NDD for this round; only 10% of schools and 8% of *anganwadis* reported hearing about NDD through the radio (Annex-Table PM1).

NDD Implementation

The percentage of schools and *anganwadis* that conducted deworming remained high during the NDD round, however, this percentage declined by nine points from NDD February 2017 round (74%). Coverage validation data shows that around 65% of schools and 95% of *anganwadis* dewormed children during the August 2017 round of NDD or mop-up day (Annex-Table CV1). Out of 148 schools and 208 *anganwadis* that reported implementation of NDD, monitors were able to observe deworming activities in 91% of schools and 87% of *anganwadis,* respectively (Annex-Table PM5).

Adverse Events - Knowledge and Management

A high level of awareness regarding potential adverse events due to deworming was observed among all the headmaster/teacher and AWWs interviewed, however, a knowledge gap was observed on the appropriate protocols to follow in the case of such events. Vomiting was listed as a side effect by 80% of headmasters and 83% of *anganwadis,* followed by mild abdominal pain in 79% of schools and 83% of *anganwadis*. Further, 64% of teachers and 73% of *anganwadi* workers knew to make a child lie down in an open, shaded place in the case of any symptoms of adverse events and around 27% of school teachers and 37% of *anganwadis* workers knew to give ORS/water. Only 12% of school teachers and 15% of *anganwadi* workers knew to observe the child at least for two hours. Further, 64% of schools and 70% of *anganwadis* reported the need to call a PHC doctor if symptoms persisted (Annex-Table: PM6). Findings necessitate an emphasis on adverse event management protocols during training.

Recording Protocol

Coverage validation data revealed that 33% of schools and 44% of *anganwadis* that conducted deworming followed the correct recording protocols. Around 12% of schools and 27% of *anganwadis* followed partial protocols (marking down different symbols or making a list of dewormed children); however, 55% of schools and 29% of *anganwadis* did not follow any protocol to record the information of dewormed children (Annex-Table CV3). As recommended in the NDD guidelines, teachers and *anganwadi* workers were supposed to retain a copy of reporting forms; however, 34% of headmasters and 15% of *anganwadi* workers were not aware of this requirement (Annex-Table PM2). Further, it was observed that reporting forms were available for verification by monitors in only 47% of schools and 52% of *anganwadis* (Annex-Table CV1).

ASHAs were required to prepare a list of the children not attending schools and *anganwadis* and submit it to *anganwadi* workers. However, findings suggest that lists of out-of-school (6-19 years) and unregistered (1-5 years) children were not available at 75% and 81% *anganwadis* respectively (Annex-Table CV1). These figures do not corroborate with information shared by ASHAs, as 51% of 209 ASHAs present at *anganwadis* at the time of visit reported to prepare the list of unregistered and out-of-school children and 90% of the 51% of ASHAs who prepared the list reported to share with the *anganwadi* workers. Moreover, 83% of ASHAs reported to conduct meetings with parents to inform them about NDD, and 78% reported to administer albendazole to children during NDD. Only 20% of ASHAs who were available in

anganwadis at the time of visit reported to receiving incentives for the February round of NDD (Annex-Table CV3).

Coverage Validation

Verification factors are common indicators to measure the accuracy of reported treatment values for Neglected Tropical Disease control programs. These factors also give an idea about record keeping and data management at the service delivery point. The verification factor was estimated based on the availability of a copy of reporting forms at schools and *anganwadis*. The state-level verification factor for enrolled school children was 0.70, indicating that on average, for every 100 dewormed children reported by the school, 70 children were verified through available documents. The overall state-level verification factor for children dewormed at *anganwadis* was 1.09, which depicts underreporting of dewormed children in *anganwadis*. This figure encompasses category-wise verification factors for registered (1-5 years), unregistered (1-5 years), and out-of-school (6-19 years) children of 0.98, 1.94 and 1.11 respectively (Annex-Table CV3). Findings indicate a lack of proper record management at schools and consequent over reporting of dewormed children at the school level. Although the overall *anganwadi* verification factor shows better reporting of all target groups, proper record keeping and reporting is a challenge for unregistered and out-of-school children. Despite challenges in reporting and documentation of NDD coverage data, the majority of the children present at schools on NDD or mop-up day received (98%) and consumed (92%) the albendazole tablet on either on NDD or mop-up day.

Against the state government reported 85% coverage in schools and 86% for 1-5 years registered children in *anganwadis*, attempts were made to understand the maximum number of children that could have been dewormed in schools and *anganwadis* through coverage validation data. The NDD treatment coverage in schools was estimated considering the maximum attendance of children on NDD dates. Coverage validation data showed that 65% of schools conducted deworming on either NDD or mop-up day, a maximum of 84% of children were in attendance, 98% of children received an albendazole tablet, and 92% of children reported to consume the tablet under supervision. Taking these factors into account, 49% (0.65*0.84*0.98*0.92) of enrolled children could have been dewormed in the schools (Annex-Table CV3). Since interviews of children are not conducted in *anganwadis*, the verification factor of registered children 1-5 years is applied to government reported data. It was estimated that around 84% (0.98*0.86) of registered children in *anganwadis* could have been dewormed. The calculation of verification factors is based on only those schools and *anganwadis* where a copy of the reporting form was available for verification. Therefore, adjusted coverage in schools and *anganwadis* based on verification factors needs to be interpreted with caution.

Recommendations

The following are the key recommendations for program improvements that emerged from the process monitoring and coverage validation exercise.

1. Training is a crucial component of NDD, impacting the distribution of drugs, IEC and training materials in the NDD kit and their subsequent availability at schools and *anganwadis*, as well as being a key source of NDD information. Teachers and *anganwadi* workers should be encouraged to participate in training. Pre-planning of sessions and timely communication of training dates and venues to schools and *anganwadis* are crucial steps in this direction. School teachers and headmasters who attend training must be mandated to impart adequate training to other teachers in their schools. Further, efforts should be made to ensure that block level trainings are completed at least 10 days prior to NDD, leaving sufficient time for intensive community mobilization activities. The state is recommended to make stringent review and follow up of districts for ensuring the same.

2. As a substantial proportion of schools and *anganwadis* did not receive SMS for this round, efforts should be made to have an updated contact database across all stakeholder departments, including frontline workers, to ensure timely sharing of the training reinforcement SMS and information pertaining to NDD to all functionaries.

3. Low rates of integrated distribution requires efforts to strengthen and align the distribution cascade and whereby teachers/headmasters and *anganwadi* workers receive NDD kits at the time of training. As timely drug procurement has remained a challenge in the state, timely facilitation of procurement orders and the availability of drugs must be ensured to strengthen integrated distribution during training of school teachers and *anganwadi* workers.

4. There is scope for greater involvement of ASHAs in mobilizing out-of-school children and spreading awareness on deworming benefits. Efforts are required to increase ASHA participation and engage them to prepare lists of 1-5 years unregistered and out-of-school children in their communities and take part in community mobilization. ASHA participation could be further strengthened by highlighting the role of ASHA's in the joint directive, encouraging their participation in training sessions, and sending reminder SMSs to them with information on incentives.

5. As findings revealed low participation and performance of private schools on monitoring indicators, efforts should made for the increased participation of private schools in training, facilitating drug logistics, sharing IEC materials, and managing adverse events.

6. A low adherence to correct recording protocols highlights the need for greater emphasis on recording protocols during training, which can improve the quality of coverage data in the next round. Training and reinforcement messages shared through SMS need to have more focus on the importance of following correct reporting protocols and maintaining correct and complete documentation. Practical sessions on recording protocols for teachers and *anganwadi* workers can be organized during sector level trainings.

7. The average attendance rate observed in schools visited on NDD was consistent from the February 2017 NDD round (81%) to the August 2017 NDD round (84%). Further emphasis on increasing attendance in schools and at *anganwadis* through community mobilization will be helpful for the state to meet universal coverage.

8. Coverage validation findings revealed the unavailability of a copy of reporting forms at a large number of schools and *anganwadis*, which affects the verification of reported coverage data. Along with providing two copies of reporting forms during training sessions, trainers should ensure that teachers/headmasters and *anganwadi* workers understand how reporting forms need to be maintained at their level.