Since 2009, MI has been working in Bihar and Chhattisgarh through public health projects to promote Zinc and ORS for childhood diarrhoea management. In Bihar, MI started the program in 15 demonstration districts, and later as evidence of impact grew, the state government scaled-up the operations to all districts. In the 15 MI demonstration districts, nearly 2 million cases of childhood diarrhoea have been reported treated between August 2011 and February 2015; of which 70 percent have been treated using both Zinc and ORS. Apart from improved coverage of Zinc and ORS, MI’s project in Bihar has delivered encouraging results on sustained levels of knowledge of frontline health workers, improved and detailed reporting on childhood diarrhoea cases by health workers, project and HMIS (Health Management Information System) reporting, streamlining of Zinc and ORS supply chains, and generating awareness among key stakeholders. As this project funded by the Children’s Investment Fund Foundation (CIFF), culminates in Bihar and steadily become sustainable, MI draws upon the key lessons and forges new ties with the Chhattisgarh government with the support of CIFF. Starting April 2015, MI in Chhattisgarh, has initiated a project to support in strengthening the state’s program on childhood diarrhoea management, while promoting continued feeding during and after illness. Some of the other key components of the project are; training of frontline health workers at the state and district levels on Childhood Diarrhoea Management using Zinc and ORS, and improved reporting and treatment of diarrhoea cases.

The Under-Five Mortality Rate of children in Chhattisgarh is 55, which is higher than the national average of 52 (Per 1000 live births). Of all under-five deaths in India, 11 percent can be attributed to diarrhoea. Public sector care-seeking for diarrhoea is 31.7% in Chhattisgarh among children (0-2 years age group), and the rate of ORS usage among children in this age group is fairly high at 61.5%. There is thus significant potential for larger number of children to be treated with the recommended combined therapy of Zinc and ORS, provided supplies are smooth and the health system has the capacity to deliver.

MI has achieved much impact in Chhattisgarh, through previous child health interventions supporting the Government. High-level discussions with government

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2 WHO 2012 estimates.
counterparts and representatives of the State Health Systems Resource Centre have resulted in MI now working to scale-up the use of Zinc and ORS in Chhattisgarh. Some headway has already been made in this direction by the state government, with programmatic and technical support provided by MI. In the first quarter of 2015, the Government of Chhattisgarh has procured 9.8 million Zinc tablets (700,000 courses) through state funds, believed adequate for about six months. For the year 2015-16 too, MI has contributed its technical expertise to the state government for making budget allocations for Zinc and ORS procurement, which is reflected in the state’s Program Implementation Plan, under the National Health Mission.

Despite efforts by the Bihar government to improve procurement in the public health sector, stock-outs of essential medicines like Zinc and ORS are not uncommon. Other supply-side challenges for Zinc and ORS, are the procurement tenders lacking detailed product specifications, procurement of low-price but sub-optimal formulations, and the sporadic availability of Zinc and ORS with frontline health workers at the village-level.

To tackle this gap situation, and in response to the follow-up efforts of MI, RMNCH+A partners and Government of India, the Bihar state government tracked stocks of 10.3 million Zinc tablets (deemed sufficient for at least 735,714 cases of childhood diarrhoea), available with the Bihar Medical Services & Infrastructure Corporation Limited (BMSICL) and alongwith 1.47 million packets of ORS, drew up a plan in January 2015, for a swift dispatch. In February, all districts of Bihar had reportedly received Zinc and ORS supplies, with stocks soon reaching all PHCs and sub-centers.

To ensure supplies in forthcoming months as well, MI has supported the state government to issue a new tender for the procurement of Zinc, by providing details on product specifications to BMSICL (Health Department, Government of Bihar) and advocating for its e-tendering.

There is a gradual but certain improvement in the availability of Zinc and ORS in Bihar. This is reflected in the number of childhood diarrhoea cases being reported treated in the public health sector, using Zinc and ORS. So far, between August 2011 and February 2015, in the 15 demonstration districts of MI, in the public health sector 2 million cases have been treated with both Zinc and ORS.

More than 2 million cases of childhood diarrhoea have been reported and treated at the public health sector in the 15 demonstration districts of MI, of which 70 % have been treated with both Zinc and ORS

Ensuring access to Zinc and ORS is key for managing childhood diarrhoea.
Innovative Links in the Supply Chain Pilot - Enhancing Access to Zinc & ORS

The Government Of India guidelines mandate frontline health workers like ASHAs, to manage childhood diarrhoea cases using ORS and Zinc at community level. Yet irregular supplies continue to impact access to this life-saving therapy. In Bihar too, sporadic supplies in recent times, have impacted the number of childhood diarrhoea cases being treated in the public health facilities using Zinc and ORS.

MI’s Childhood Diarrhoea Management Program implemented with the support of Children’s Investment Fund Foundation (CIFF), is providing technical and programmatic support to the state government. As part of its project activities, MI is helping the government streamline supplies of Zinc and ORS. MI is also providing technical support through training of health workers, demand forecasting, planning distribution, storage, monitoring and reporting on stock status. This has brought out the crucial role that Frontline Health Workers (FLWs) play in timely provision of Zinc and ORS to the community.

In block Dumrikatsari of Sheohar, one of the districts lagging behind in child health indicators, MI is currently implementing an innovative supply chain pilot project, to ensure timely supplies of Zinc and ORS to frontline health workers. The innovation hinges on leveraging the existing network of government healthcare personnel in the vaccine delivery system. To ensure that Zinc and ORS reaches last mile beneficiaries, MI is utilising the network of Courier Service Men (CSM)* and Cold Chain Handlers **working in the government’s Vaccine Delivery System in Bihar.

As part of the pilot, CSMs are entrusted with carrying a 'Supply Chain Replenishment Kit' along with vaccines, during their visit to the sub-center on the Village Health and Nutrition Day. This kit contains adequate quantities of Zinc and ORS for distributing to each frontline health worker as per need. Upon reaching the VHND site, the CSM records the Zinc and ORS stocks available with the frontline health worker, assesses how much is needed, and accordingly replenishes her stock with the supplies he is carrying. At the day’s end when CSMs return to the PHC, they hand over a report on the Zinc and ORS stock status of FLWs to the Cold Chain Handler. The Cold Chain Handler then sends forth a compiled report, received from all CSMs, to the Medical-Officer-In-Charge for his attention.

The innovation lies in assessing Zinc and ORS utilization rates and immediate replenishment of stocks with frontline health workers in real-time. Otherwise, in the public health system, frontline health workers receive only one-time supplies of Zinc and ORS in the year from their respective PHCs, and there is no mechanism of regular replenishment or stock-taking once their stocks finish, leading to possible gaps in treatment of childhood diarrhoea. Going a step further now, with MI’s support, the CSMs have been trained to send a coded SMS on the real-time stock status of Zinc and ORS with the FLW. Data from these SMSs gets entered onto the online data entry package. Some of the challenges this innovation seeks to overcome, stem from the semi-literate status of CSMs, giving rise to difficulty in data capturing, and other challenges pertaining to mobile network availability.

* Timely treatment with Zinc and ORS can save millions from childhood diarrhoea, empowering the generations to come.

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* - Courier Service Men transport vaccines to the sites on a pre-decided Village Health and Nutrition Day.
** - Cold Chain Handlers are health personnel i.e pharmacists, multi-purpose health workers etc who are tasked with proper storage and handling of vaccines, daily upkeep of refrigerators and temperature charting.
A key component of the support provided by MI to the Bihar government under the Childhood Diarrhoea Management Programme, has been Supportive Supervision of Frontline Health Workers in 10 districts. Herein Block Community Mobilizers (BCMs) working under the State Health Society (Govt. of Bihar) were trained by MI to provide on-the-job training and hand-holding support to frontline health functionaries (ANMs, ASHAs, AWWs) during their visits on Village Health and Nutrition Days. This helped the frontline health workers tackle field-level challenges while dealing with childhood diarrhoea-related cases. During the BCMs visits, an ANM, atleast one ASHA and one AWW under the purview of a BCM were supervised. Further the BCM visited two caregivers serviced by this ANM and one caregiver each serviced by the ASHA and AWW. A BCM from block Salkhua, who had earlier attended a state-level training on Supportive Supervision facilitated by MI says, “Now I can better empathize with ASHAs and ANMs and the challenges they face in the field. It has helped me connect with them more effectively”. In the three years of supportive supervision, nearly 22,000 frontline functionaries have been visited by BCMs, to fill capacity gaps and address service delivery issues in childhood diarrhoea management using Zinc and ORS. As a result, the data on supportive supervision reflects that knowledge levels of frontline health workers on childhood diarrhoea management, have remained consistent.

As MI’s Childhood Diarrhoea Management Program in Bihar steadily becomes sustainable, a systematic process evaluation of the Supportive Supervision component has revealed that Supportive Supervision has indeed contributed to improving frontline healthcare worker’s motivation levels, especially in context of their knowledge on Zinc and ORS for managing childhood diarrhoea, their counselling skills, helping them meet job expectations and gain social recognition as skilled medical service providers. “Our efficiency at work improves as we are provided with a lot of information and good advice by the BCMs. This helps us improve at our work”, says an ASHA in district Madhepura.

Now that the project is gradually becoming sustainable, MI is working with the Bihar government to ensure that supportive supervision of frontline health workers continues as a part of the BCMs routine supportive supervision and community visit tasks.

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