



CASE STUDY

Scaling up quality improvement to reduce maternal and child mortality in Lohardaga District, Jharkhand, India

Summary

Lohardaga District in Jharkhand State has high rates of infant mortality, and State authorities recognized that the district needed additional support to reduce mortality. The USAID ASSIST Project initially started supporting four facilities to improve routine care of mothers and new-born babies. The facilities' success in ensuring that nearly all mothers and newborns were receiving quality routine care prompted the district health authorities to scale up quality improvement initiatives to five other health centres and 29 sub-centres. The project supported district health authorities to develop a strategy to scale up quality improvement work in these sites through the government system, using government resources. Quality of care has also improved in the five scale-up facilities, and district officials have taken steps to scale up their quality improvement strategy to the rest of Lohardaga's facilities.

Lohardaga District is located in the south western part of Jharkhand State in the tribal belt of Chotanagpur plateau. It was identified by the State government as requiring additional support to reduce maternal and child mortality. Lohardaga has an infant mortality rate of 53, which is the worst of all districts in Jharkhand and well above the state-wide rate of 36 deaths per 1000 live births.

The USAID ASSIST Project started work in Lohardaga in January 2014 and initially supported four facilities to establish quality improvement teams. The facilities were chosen based on delivery load and account for 42.3 percent of institutional deliveries in the district. ASSIST staff first trained the teams in the basics of quality improvement in a classroom and helped them plan their first improvement projects. The teams decided to work on improving routine care of mothers and new-borns and focused on improving: 1) the administration of oxytocin within one minute of delivery to prevent post-partum bleeding, 2) that babies get all elements of essential new-born care, and 3) the identification of post-partum complications by checking vital signs and clinical status.

To achieve these aims, the facility staff started to use what they had learned about quality improvement after they returned to their facilities. Many of their efforts involved cleaning and organizing their respective facilities so that it was easy to provide routine care to mothers and babies and improving their data systems so that they could track their progress and make decisions about what to do next. ASSIST staff visited these facilities each month to provide additional support on quality improvement. By April 2014, all four facilities in the district were performing better, and almost 100 percent of mothers and new-borns were receiving quality routine care.

During a monitoring visit, the District Reproductive & Child Health Officer (DRCHO) and Additional Chief Medical Officer visited some of the ASSIST-supported sites and saw that they were visibly different from other facilities in the district. In particular, they were impressed by: 1) the organization and

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cleanliness of the labour room, 2) the strong infection control practices in place, 3) the data about quality of care issues, and 4) the evidence showing improvements in quality of care.

Supporting government systems to incorporate quality improvement in their existing systems

Based on what he saw on the ground, the DRCHO requested ASSIST support to scale up their activities to strengthen intrapartum care in other facilities in the district. ASSIST staff replied that they would not be able to move to new facilities but that ASSIST would help the district health authorities develop a strategy to scale up quality improvement work to new facilities through the government system, using government resources.

The plan had three main elements:

1. *Build the quality improvement skills of frontline workers:* ASSIST supported the district to provide initial classroom training on quality improvement methods and to pick the first improvement projects for a facility.
2. *Set up a management system to support quality improvement work in the facilities:* No one completely learns quality improvement in a classroom. It requires on-site mentoring as people learn these new skills by real work. District systems currently do not have a specific system to provide that mentoring but they do have many staff who have supportive roles on paper but who are often underutilized. The district felt that the management system should be formed by training lady health visitors to act as improvement coaches at the sub-centre level and block medical officers and block program managers to act as coaches at the facility level. These coaches have three roles: 1) to provide on-site support to people learning quality improvement, 2) to communicate up the chain of command when a problem was identified that cannot be solved at the local level, and 3) to share learning between different improvement teams. ASSIST staff provided classroom training to these coaches and is also accompanying them on coaching visits to build their skills providing quality improvement coaching. As these coaches build their skills, they will take over from ASSIST staff as quality improvement trainers and resource staff for the district.
3. *Increase the ability of leaders to engage in quality improvement activities:* For quality improvement initiatives to be sustained and to spread further, high-level leaders need to be involved. To ensure that district leaders are involved in using quality improvement to address their priority problems, the district decided to use the monthly review meeting platform to review and share the progress of the quality improvement work of the facilities.

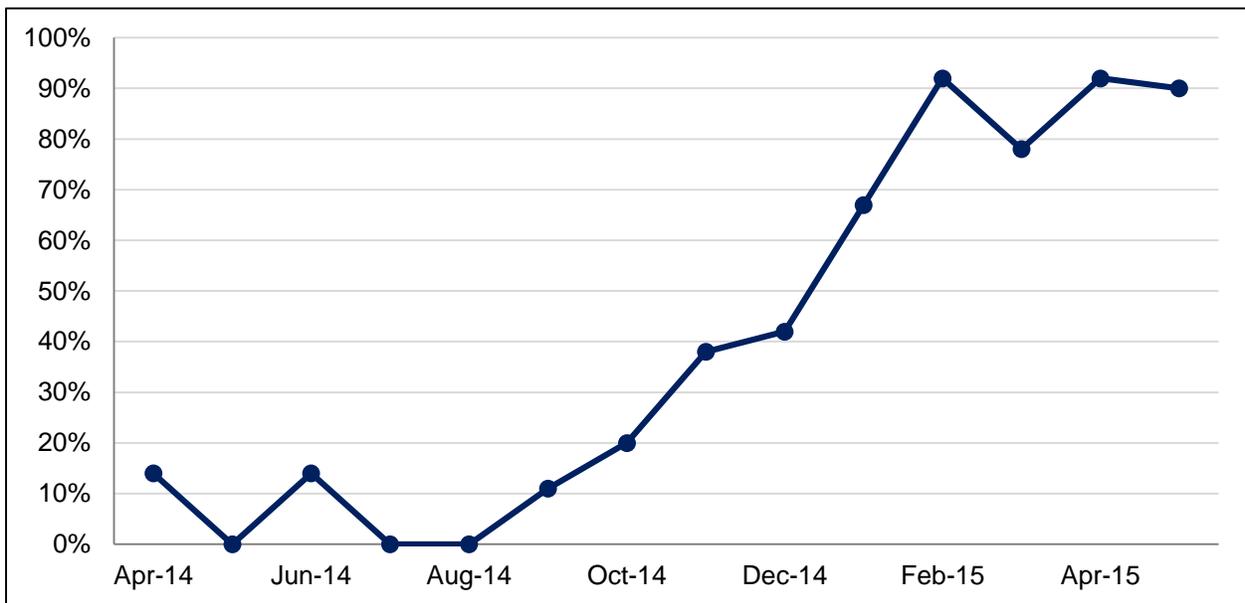
Initial results of scale-up

New quality improvement teams were formed in five health centres and started improvement projects in December 2014; the 29 additional sub-centres started quality improvement work in April 2015. After initial classroom training by ASSIST, these teams are being supported to improve quality of care using district resources. For example, district funds finance on-site support in applying quality improvement approaches, and regular district meetings now have time allotted to review quality improvement progress. The teams are already making progress on improving routine care. For example, before December 2014, there was no Vitamin K, towels for new-borns, or sterile cord clamps at any of the five health centres. This has been addressed, and now almost 100 percent of babies are receiving these elements of essential new-born care.

In addition to fixing facility-level problems, building QI teams at multiple levels and a cadre of QI coaches to support these teams allows the district to address more complex issues that are caused by problems at multiple levels of the health system. For example, the Jowang Primary Health Centre, one of the five facilities that started quality improvement work in December, had very few deliveries. Most women in the catchment area choose to deliver at home because they saw limited value in getting health services. This was partially due to the fact that the care they were receiving at the facilities was poor. Specifically, the

sub-centres feeding into Jowang did not have any way of measuring haemoglobin or blood pressure, and women did not receive good care during antenatal care (ANC) visits. This led to low confidence in the health centre and low care-seeking behaviour. The Jowang quality improvement team worked with the block program officer and sub-centre staff to provide the right equipment and clarify what should happen at ANC visits in the sub-centres feeding into Jowang. They also involved the Sahiyaas (community health workers) in identifying eligible couples, telling them about the improvements at the sub-centres, and explaining the value of seeking care early. This has led to a substantial increase in the percentage of women accessing antenatal care in the first trimester (Figure 1). The teams are currently working on efforts to improve institutional delivery.

Figure 1: Percentage of pregnant women registered in the first trimester (within 12 weeks) out of total new ANC registered in the month, Jowang Public Health Centre, April 2014-May 2015



Conclusion

After seeing the progress in four health centres, the district officials want to scale up the quality improvement approach to all facilities in Lohardaga. ASSIST is now helping them build a system to do so. The district is currently using their own staff and resources to support an additional 34 facilities to scale up quality improvement activities. This means that three of the five blocks (sub-district administrative structures) in the district have set up management structures to support quality improvement activities in their facilities. These facilities account for 54% of all facilities in the district and provide care to roughly 85% of all institutional deliveries or 40% of all deliveries (institutional delivery rate in Lohardaga was 48% in 2011). Initial results show that the system is working and that care in the sites supported by the government is improving. ASSIST will continue to support the district to scale up to the remaining blocks and facilities and to support improvement teams to solve more complex issues.

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