Background Bihar, India has higher maternal mortality rates than the country on average. A Collaborative Quality Improvement (CQI) program was created to improve data transparency and accuracy, with the aim of increasing maternal complication identification and improving key life-saving processes for cesarean section and blood transfusion.

Objectives To estimate the impact of the CQI program on identification of maternal complications and use of C-section and blood transfusion for maternal complications in participating hospitals relative to non-participating facilities in Bihar.

Methods Ten district hospitals participated in the collaborative from February 2018 to September 2019. Activities included leadership and improvement workshops; learning sessions; and monthly onsite support provided by IHI and CARE India. Data from HMIS was used to assess change from baseline to after the start of the collaborative in CQI district hospitals, compared to non-participating district hospitals for: maternal complication identification, C-sections, and blood transfusions.

Results Figures 1–3 illustrate improvement over time for all measures. For example, across all CQI hospitals, control chart methodology suggested C-sections (percent all births) increased from a rate of 6.2% (95% CI 5.9%, 6.7%) at baseline to 8.3% (95% CI 7.8%, 9.0%) after the start of the collaborative. Comparative analysis found C-sections increased by 2.2% (95% CI 1.8%, 2.64%) per month in CQI facilities during the collaborative period, relative to non-CQI facilities.

Conclusions Application of this QI collaborative led to improvement in identification of maternal complications and use of C-section and blood transfusion.

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AN INNOVATIVE INTERVENTION TO IMPROVE RESPECTFUL MATERNITY CARE IN THREE DISTRICTS IN ETHIOPIA

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Background Disrespect and abuse (D&A) during childbirth are major violations of human rights and often deter women from accessing skilled delivery. In Ethiopia, D&A has been documented to occur in 49.4% of mothers delivering in health facilities.

Objectives To describe the development, implementation and results of a novel intervention to improve Respectful Maternity Care (RMC) in three districts in Ethiopia.

Methods As part of a national initiative to reduce maternal and perinatal mortality in Ethiopia, we developed a novel RMC training module with three core components; testimonial videos, didactic session on communication, and onsite coaching to devise local solutions that enhance RMC. We implemented these in three districts in each of Oromia; Southern Nations, Nationalities, and Peoples' and Tigray regions as of February 2017. We deployed mixed methods to assess effectiveness of the approach. Measures of births with privacy and birth companion from a 27-month data from 20 health facilities were analyzed using STATA version 13 for interrupted time series. Facilitated discussion with health care providers was held to assess feedback.

Abstract 15 Figure 1 Percentage of births with the companion allowed in three regions in Ethiopia

Abstract 15 Figure 2 Percentage of births with privacy maintained in three regions in Ethiopia

Abstract 15 Table 1 Regression analysis for percentage of births with companion and privacy, by region

Tigray Births with companion and privacy	Coef.	Std. Err.	T	P>t	[95% Conf. Interval]	
Time	−0.27	0.06	−4.8	0	−0.38	−0.15
Short term intervention effect	0.18	0.05	4.06	0.001	0.09	0.28
Long term intervention effect	0.27	0.06	4.8	0	0.15	0.38
_cons	1.85	0.22	8.39	0	1.39	2.31
SNNP Births with companion and privacy	Coef.	Std. Err.	T	P>t	[95% Conf. Interval]	
Time	0.01	0.07	0.18	0.86	−0.13	0.16
Short term intervention effect	0.26	0.11	2.46	0.02	0.04	0.48
Long term intervention effect	−0.01	0.07	−0.08	0.94	−0.15	0.14
_cons	0.48	0.22	2.22	0.04	0.03	0.94
Oromia Births with companion and privacy	Coef.	Std. Err.	T	P>t	[95% Conf. Interval]	
Time	−0.78	0.23	−3.39	0.003	−1.25	−0.30
Short term intervention effect	−0.46	0.18	−2.55	0.019	−0.83	−0.09
Long term intervention effect	0.77	0.22	3.48	0.002	0.31	1.24
_cons	3.8	0.93	4.08	0.001	1.87	5.75

Results Significant improvement with regression coefficients ranging from 0.18 to 0.77 was noted following the RMC training, which was sustained beyond the project intervention. Facilitated discussion showed improved understanding of patients' perspectives and the psychosocial needs of their clients.

Conclusions This study suggests that use of testimonial videos are especially helpful as they remind providers of the need to treat mothers with dignity and helped them reflect on potential root causes for this type of treatment and develop effective solutions.

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THE IMPACTS OF QUALITY IMPROVEMENT ON MATERNAL AND NEWBORN HEALTH: FINDINGS FROM AN INTEGRATED INTERVENTION IN FIVE REGIONS IN ETHIOPIA

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Background Despite progress in reducing maternal and neonatal deaths in the last two decades, Ethiopia continues to have