

**Supplemental Table 1. Data sources used for assessing results of the quality improvement initiative in Bihar, India**

Data source	Purpose	Frequency and representativeness	Methods of data collection	Data elements captured
<b>AMANAT -- Direct observation of deliveries<sup>1</sup></b>	Explore providers' skills, practices, and quality of care offered in facilities	Pre- and post- AMANAT training in BEmONC and CEmONC facilities; 4 phases (319 facilities total) between 2015-2017; 36 of 38 districts in the state	Direct observation of deliveries by trained nurses serving as evaluators	Infection control measures, intrapartum and essential newborn clinical practices
<b>Comprehensive Facility Assessments<sup>2</sup></b>	Identify gaps in health facilities' readiness for service delivery	Conducted by CARE's CML in all public facilities where deliveries are conducted; all 38 districts in the state; 3 rounds, about annual between 2015-2017	Direct observation of infrastructure (condition of wall, floor, roof, illumination), functionality of equipment, physical counting of drugs and consumables; review of records for completeness, up-to-date status and information related to case load, length of stay and bed occupancy	Infrastructure, human resources, availability and functionality of equipment, supplies (drugs and consumables), infection control, laboratory facility*, operation theatre*, referral system*
<b>Household Surveys<sup>3</sup></b>	Assess women's and their children's receipt of care	Annually during 2014-2017; state-representative	Self-reported information by women with live infants 0-2 months old during household interviews	Health service utilization, counseling and advice received from frontline health workers

AMANAT - *Apatkalin Matritvaevam Navjat Tatparta* (translated Emergency Maternal and Neonatal Care Preparedness), BEmONC, basic emergency obstetric and newborn care, CEmONC - comprehensive emergency obstetric and newborn care, CML - Concurrent Monitoring and Learning, GoB - Government of Bihar, HMIS - Health Management Information System

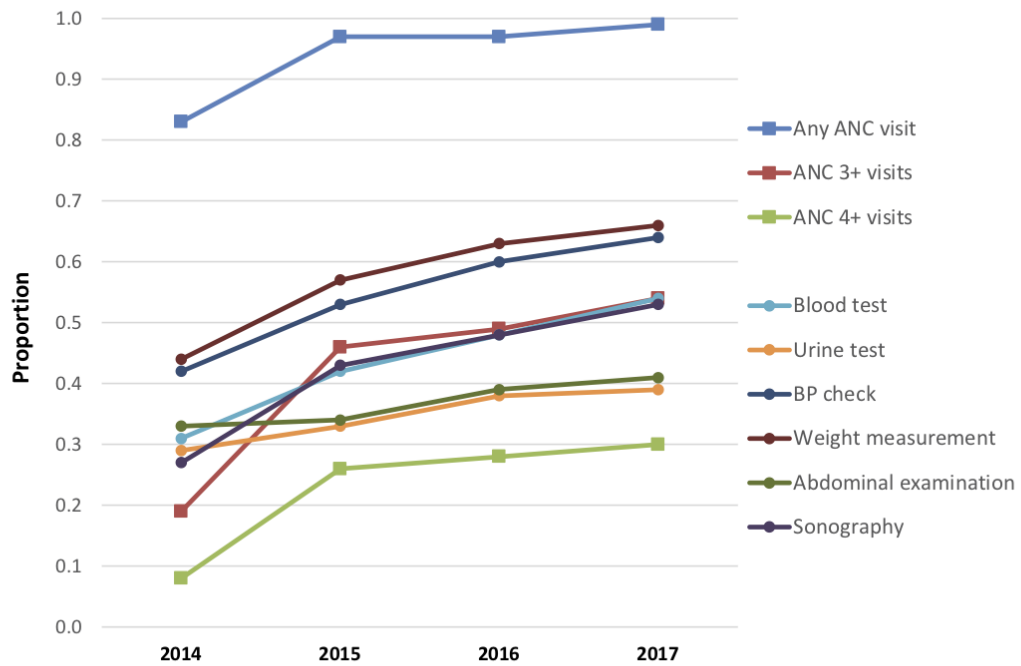
<sup>1</sup>All data used in analyses presented.

<sup>2</sup>Data from 2015 and 2017 surveys used in analyses presented.

<sup>3</sup>Data from all 4 rounds conducted between 2014 and 2017 used in analyses presented.

\*2017 data only.

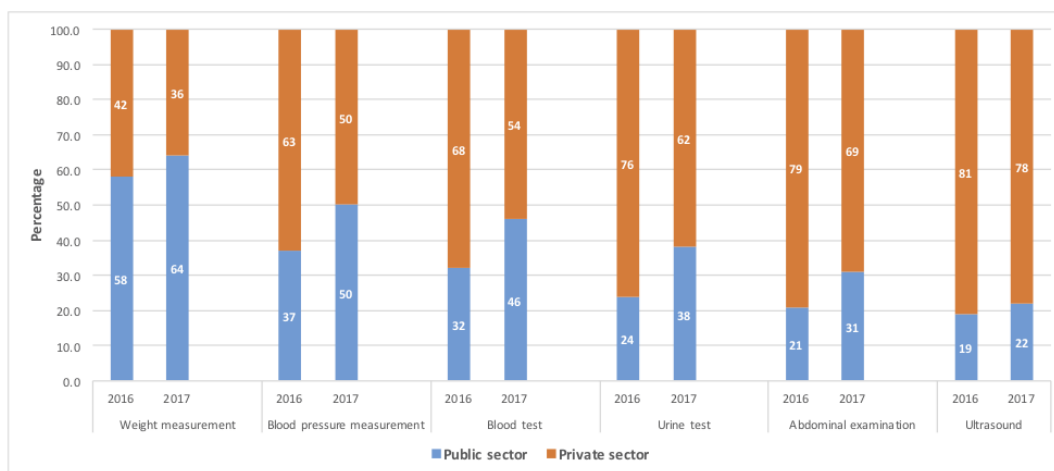
**Supplemental Figure 1. Changes in antenatal care attendance and content indicators: Bihar, 2014-2017**



**Notes:** Data are from annual state-representative Community-based Household Surveys with women. For antenatal content, data are proportions of women with at least one ANC visit. All p-values for trend < 0.05.

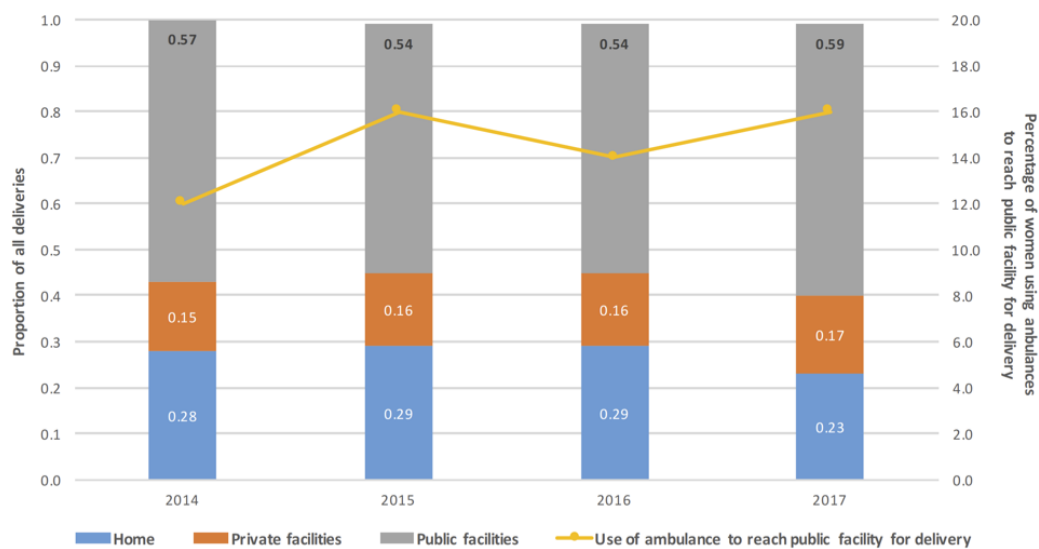
ANC, antenatal care; BP, blood pressure.

**Supplemental Figure 2. Antenatal care content by source of care: Bihar, 2016 and 2017**



**Notes:** Data are from annual state-representative household surveys with women. For antenatal content, data are proportions of women with at least one antenatal care visit. Differences between 2016 and 2017 surveys are statistically significant at  $p$ -value $<0.05$ .

**Supplemental Figure 3. Changes in institutional deliveries and use of ambulances: Bihar, 2014-2017**



**Notes:** Data are from annual state-representative Community-based Household Surveys with women. Year-to-year differences in place of delivery are statistically significant at  $p\text{-value} < 0.05$ .