Changes that improved maternal and neonatal health in Haryana
The ‘needle and syringe’ represents health service delivery or a health product change ideas.

The ‘classroom’ icon represents change ideas that were primarily related to classroom or on-the-job trainings, orientation and sensitization sessions.

The ‘notice’ icon represents change ideas where materials were created for ready reference or as reminders for action.

The ‘checklist’ icon represents change ideas that improved services by enhancing quality of reporting, recordkeeping and review.

The ‘box’ icon represents change ideas that improved procurement of products and services.

The ‘two bustheads’ icon represents change ideas which were either task shifting or was undertaken by introduction of a new health professional.

The ‘people across a table’ icon represents change ideas that were related to counseling practices.

Health facilities in Haryana where efforts to improve care led to this change package:

General Hospital / District Hospital / Sub-District Hospital

Community Health Center

Primary Health Center

The USAID ASSIST Project acknowledges the unwavering support of Dr. Rakesh Kumar, Joint Secretary (RCH), Ministry of Health and Family Welfare, Government of India in development of this change package.

The USAID ASSIST Project also acknowledges contribution of facility managers and health service providers who, as members of the quality improvement teams, initiated and implemented change ideas to improve quality of healthcare services in their facilities.
CONTEXT

Haryana is one of the wealthiest states in India, with one of the most economically developed regions in South Asia and second highest per capita income in the country. The maternal mortality ratio (MMR) of the state is 146 per 100,000 live births as compared to 178 per 100,000 live births in India. The maternal mortality ratio has steadily declined in the state to current levels from 153 per 100,000 live births in 2007-09 and 186 per 100,000 live births in 2004-06. The infant mortality rate (IMR) was 41 per 1000 live births compared to 40 per 1000 live births in the country. IMR has seen a sharp decline in the state from the highs of 65 per 1000 live births in 2001 and recorded a marginal decline to 26 per 1000 livebirths in 2013. The District Level Household Survey Round 4 (DLHS 4) done in 2012-13 in the state shows that nearly 77% of pregnant women in the state were going for institutional delivery. Of the delivery that happened at home, around 14% had a skilled birth attendant facilitating the childbirth. The survey also shows that a little over two thirds (67%) of mothers received postnatal care (PNC) within 48 hours of delivering at an institution, with just a fifth (22%) of all institutional deliveries getting discharged from facility after the minimum 48 hours of stay. The survey findings indicate need for improving quality of intranatal and postnatal services to achieve greater success in reducing maternal mortality and infant mortality in the state.

The USAID ASSIST project was mandated to accelerate the decline of maternal, neonatal, and consequently infant, mortality in select facilities of seven high priority districts in Haryana by improving quality of maternal and neonatal health services. Quality improvement teams from stakeholders in public health facilities were formed in select health facilities in high priority districts to facilitate assessment of process gaps in delivering quality maternal and neonatal health services and introduce interventions that will improve intranatal and postnatal care of mothers and essential care of newborns in Haryana.

GAPS IN QUALITY OF MATERNAL AND NEWBORN HEALTH SERVICES

The quality improvement teams used a mix of observations techniques and in-depth interviews on the maternal and newborn health interventions being practiced at the selected public health facilities in the high priority districts in the state and identified the following gaps in quality of maternal and newborn health services.

Gaps in maternal health services during intra-natal period

- There was inconsistency across the selected facilities in administration of Oxytocin, both in terms of timing and in appropriateness of dose that needs to be given. It was a common practice among labour room staffs to administered Oxytocin after removal of placenta.

Gaps in maternal health services during post-natal period

- There was inconsistency across selected health facilities in monitoring vital parameters of women postpartum. It was found that the vitals were getting monitored only once or twice post partum.

Gaps in newborn health services

- There was inconsistency across facilities in administration of Vitamin K injection, in terms of type of Vitamin K, appropriateness of dosage as well as the newborns who were being administered Vitamin K injection.
- Health workers were not counseling mothers with appropriate messages on early initiation of breastfeeding, resulting in delay in initiating breastfeeding by many mothers.

CHANGE

PACKAGE

FOR IMPROVING MOTHER AND NEWBORN HEALTH SERVICES (7 DISTRICTS)

FOR IMPROVING MOTHER AND NEWBORN HEALTH SERVICES (7 DISTRICTS)

FOR IMPROVING MOTHER AND NEWBORN HEALTH SERVICES (7 DISTRICTS)

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FOR IMPROVING MOTHER AND NEWBORN HEALTH SERVICES (7 DISTRICTS)
## Delivering change in maternal and newborn health services

### Administration of Injection Oxytocin 10 International Units/intramuscularly within one minute of delivery to all the women delivering in labour room for active management of third stage of labour (AMTSL)

<table>
<thead>
<tr>
<th>Change idea</th>
<th>Logic for change</th>
<th>How the change happened</th>
<th>Change site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation of facility staffs on Government of India (GOI) guidelines related to Oxytocin administration, significance and advantages of timely administration of Injection Oxytocin.</td>
<td>The health facility staffs did not have complete understanding on the relevance of Oxytocin administration or knowledge of practice related guidelines from the Government of India.</td>
<td>The QI team members, after getting trained by the USAID ASSIST project team on Oxytocin administration, oriented the labor room staffs in the facility on correct way to administer Oxytocin. In addition, the nursing staffs of one shift oriented the staffs of the subsequent shift, who were not aware of the change idea being introduced in their facility.</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td>Early filling of Injection Oxytocin (10 IU) at the time of preparation of delivery.</td>
<td>Since most delivery points had only one staff in the labor room to attend to deliveries, the staff, especially those working in either evening or night shifts, was overloaded with care of both mother as well as the newborn, resulting in their inability to administer Oxytocin within one minute of delivery.</td>
<td>The labor room staffs were trained to load a syringe with Oxytocin during the preparation for delivery and keep it ready in the delivery tray. The prefilled syringes were also labelled in some facilities to avoid any confusion. They were trained to inject Oxytocin into gluteal muscles or antero-lateral thigh muscles as soon as the child is delivered.</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td>Handwritten notes on Oxytocin administration placed in line of eyesight, like wall in front of the labour table, to act as visual reminders for nursing staffs in the labour room.</td>
<td>The nursing staffs, who did not get trained in guidelines on Oxytocin administration, at times missed administering Injection Oxytocin within a minute of childbirth.</td>
<td>Details of the Oxytocin dosage, timing and method of administration were translated into Hindi, hand written on paper and pasted in the labor room and at the nurses’ duty station. This served as a ready reckoner for nurses on duty at the labor room.</td>
<td>✓ ✓ ✓</td>
</tr>
</tbody>
</table>

### Proportion of vaginal deliveries for which uterotonic was administered within one minute of delivery

| Proportion of vaginal deliveries for which uterotonic was administered within one minute of birth of baby in GH Panipat, November 2013 – November 2014 |
|---|---|---|---|---|---|
| | Nov/13 | Dec/13 | Jan/14 | Feb/14 | Mar/14 | Apr/14 | May/14 | Jun/14 | Jul/14 | Aug/14 | Sep/14 | Oct/14 | Nov/14 |
| Proportion | 0% | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100% | 100% | 100% |

### Sensitization

- OLS
- Use of prefilled syringe
- Orientation of all staff nurses
- Poster in LR entry gate
- Mujhe bhi batao register

**ASSIST coaches training members of quality improvement team**

**Orientation learning session facilitated by quality improvement teams**
**Delivering change in maternal and newborn health services**

**Administration of Injection Oxytocin 10 International Units/intramuscularly within one minute of delivery to all the women delivering in labour room for active management of third stage of labour (AMTSL)**

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</thead>
<tbody>
<tr>
<td>A collection of all change ideas being implemented in the facility called Mujhe Bhi Batao (Tell me too!) register to be used as ready reference.</td>
<td>The nursing staffs of one shift would some time miss reminding the nursing staff of the subsequent shift about the change idea. A ready reference of all change ideas would also facilitate newer staff to learn the practices in place in the facility.</td>
<td>A register was introduced to record all change ideas and how it will get implemented in their facility. This register was called as Mujhe Bhi Batao (Tell me too!) register. The register was made accessible to all staffs, who would not only record the change ideas agreed to and introduced in the facility but also refer to it regularly for any updates.</td>
<td>✓</td>
</tr>
<tr>
<td>Documenting Oxytocin usage in case files as well as delivery register.</td>
<td>The labour room staffs were erratically recording administration of Oxytocin in their delivery notes on casesheets. This resulted in the labor room staff missing oxytocin administration to some mothers.</td>
<td>A delivery register with details of Oxytocin administration, including time of administration of Oxytocin, was provided to labour room staffs. The staff, who assisted the delivery, was made responsible to enter the details, like dosage and time of Oxytocin administration, in the register. Reviews based on documentation helped identify mothers who got missed, establish reasons for the same and take measures to improve administration of Injection Oxytocin in time and in right quantity to mothers.</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Proportion of vaginal deliveries for which uterotonic was administered within one minute of delivery**
### Delivering change in maternal and newborn health services

**AIM#2**

**Monitoring and documentation of vital parameters (blood pressure and pulse) in the post partum period to identify and manage complications in mothers**

<table>
<thead>
<tr>
<th>Change idea</th>
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</thead>
<tbody>
<tr>
<td>Orientation to labour room staffs on importance of monitoring and recording vital parameters of the woman periodically during the postpartum period.</td>
<td>The staffs used to measure and record the vital parameters only once after delivery as they were not sensitized on the value of checking vital signs repeatedly during the immediate postpartum period. This resulted in their missing many cases of postpartum complications.</td>
<td>Staffs of the labour room and postnatal ward were oriented on the importance of repeatedly monitoring vital parameters during the postpartum period and how to use the collected data for identifying and managing complications. These orientations were given by Senior Medical Officers (SMOs) or Lady Medical Officers (LMOs), who underwent training with the QI teams.</td>
<td>DH</td>
</tr>
<tr>
<td>Formation of a feasible aim that helps labor room and postnatal ward staffs monitor the vital parameters (blood pressure and pulse) at least six times in the postpartum period.</td>
<td>The staffs in the labour and postnatal wards used to monitor vital parameters only once or twice as opposed to monitoring them 11 times and as per the Government of India (GOI) guidelines. Monitoring vitals 11 times was not considered feasible by staffs.</td>
<td>The QI team members, in consultation with medical officers in-charge and staffs managing postpartum care, established benchmark for checking vital parameters postpartum – (1) 15 minutes post delivery, (2) 30 minutes post delivery, (3, 4 and 5) on the stroke of 1, 2 and 3 hours post delivery and (6) at the time of discharge.</td>
<td></td>
</tr>
<tr>
<td>Setting a schedule of monitoring vital parameters in the reporting template and documenting vital parameters (blood pressure and pulse) taken during the postpartum period along with time of measurement.</td>
<td>The staff sometime delayed measuring vitals of women who were ‘asleep’, increasing the risk of missing danger signs of women who had complications and otherwise appeared to be ‘sleeping’. There were other inconsistencies, for example, in frequency of checking and recording vital parameters postpartum. Advance recording of the time for checking the vital signs served as a reminder for the nursing staffs of time for next check and the vitals they need to check.</td>
<td>A reporting template was created with four columns (headed time, blood pressure, pulse and signature) and provided to the staffs in the labour room for recording vitals. The schedule for postpartum checks was made from the time of birth of the child. The staff nurses were instructed to adhere to schedule, even if it meant measuring and recording vital parameters when the woman is sleeping. Abnormal readings were checked again by a senior nursing staff before proceeding to management.</td>
<td></td>
</tr>
</tbody>
</table>

**Average number of times vital signs (BP and pulse) were checked and recorded within the first six hours of delivery in CHC Hodal, July 2013 – December 2014**

<table>
<thead>
<tr>
<th>Number</th>
<th>DH</th>
<th>CHC</th>
<th>PHC</th>
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<tbody>
<tr>
<td>7.0</td>
<td></td>
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<tr>
<td>6.0</td>
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<td>0.0</td>
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</tbody>
</table>

**Average number of times vitals (both BP and pulse) checked and recorded within first 6 hours post partum in CHC Hodal, July 2013 – December 2014**

<table>
<thead>
<tr>
<th>Number</th>
<th>North</th>
<th>South</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.0</td>
<td></td>
<td></td>
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<tr>
<td>6.0</td>
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<td>0.0</td>
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**Data related issues**

- **Vital monitoring started in sleeping women**
  - Vital monitoring started from 3 Mar 2014
  - One of the four staff nurses was out on training.
  - Mothers were not being monitored during their sleep.
  - BP apparatus was out of order for one day.

- **Staff Nurse joins back post training.**
  - Additional staff nurse recruited for newborn care at CHC also engaged for post partum vitals monitoring.

- **Number Number**

---

**A senior staff made responsible to ensure that no service is missed to a pregnant woman**

---

**Measuring and recording blood pressure levels during every ANC visit**

---

**A senior staff made responsible to ensure that no service is missed to a pregnant woman**
## Delivering change in maternal and newborn health services

### AIM#2

**Monitoring and documentation of vital parameters (blood pressure and pulse) in the post partum period to identify and manage complications in mothers**

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<tbody>
<tr>
<td>Informing ASHAs and family members accompanying the delivered women about the postpartum check schedule and engaging them to remind the staff on duty to check vitals as per schedule.</td>
<td>Due to high caseload and shortage of staffs in the postnatal ward, nursing staffs at times missed measuring vital parameters despite setting the schedule for it. ASHAs and family members were available beside the delivered women to facilitate a reminder system.</td>
<td>The QI team members advised the nursing staffs in the postnatal ward to inform the ASHAs and family members accompanying the delivered woman about the post partum vitals monitoring schedule, and engage them to remind the staff to monitor post partum vitals as per the set schedule.</td>
<td>DH</td>
</tr>
</tbody>
</table>

**Average number of times vital signs (BP and pulse) were checked and recorded within the first six hours of delivery**

### AIM#3

**Administration of Injection Vitamin K to all newborn to prevent Vitamin K deficiency bleeding**

<table>
<thead>
<tr>
<th>Change idea</th>
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<th>How the change happened</th>
<th>Change site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation to nursing staff on GOI guidelines of administration of Injection Vitamin K to all neonates.</td>
<td>Vitamin K was being administered only to those newborns that were either pre-term or underweight. Staffs in many facilities were not clear on dosage and correct time of administering Injection Vitamin K. In some cases, Vitamin K was also being diluted prior to administering it to the newborn.</td>
<td>The facility medical officer oriented the nursing staffs in labour room and in postnatal ward on the importance of Vitamin K administration, the correct dosage, syringe specifications, time of administration and the procurement of injection Vitamin K, especially replacement of Vitamin K3 with K1.</td>
<td>DH</td>
</tr>
</tbody>
</table>
## Delivering change in maternal and newborn health services

### Administration of Injection Vitamin K to all newborn to prevent Vitamin K deficiency bleeding

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Replacement of Vitamin K3 with Vitamin K1, as per GOI guidelines, for preventing Vitamin K deficiency bleeding in newborns</td>
<td>While the central drug store in the district supplied Vitamin K1 (phyloquinone) to facilities, the facilities, in case of stock-outs, were using untied funds to procure Injection Vitamin K from local pharmacy as a stop gap arrangement. The local vendor supplied them with Injection Vitamin K3 (menadione), which was used by the staffs.</td>
<td>The USAID ASSIST Project team brought this gap to attention of both the district and state level authorities, with information that Vitamin K1 is not only recommended by GOI but also a natural and non-toxic product versus Vitamin K3 being a synthetic product, with evidence of toxicity for the newborns. As a result, the state issued a directive to all facilities across all districts emphasizing use of Vitamin K1 only. The staffs engaged in procurement in the facilities were oriented to differentiate Vitamin K1 vials from Vitamin K3 vials.</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td>Keeping record of Vitamin K having been administered to all newborns, including those being referred to another facility for more care and support.</td>
<td>It was not a standard practice to keep record of Vitamin K administration to newborn. Whether or not Vitamin K has been administered to a newborn could not be verified in absence of record.</td>
<td>The labour room staffs were encouraged to record the date and time of administering Vitamin K, along with their signature, in the case sheet. Review of records ensured that all newborns, including those who were getting referred to a higher facility for better care and support, were administered Injection Vitamin K1 before transfer to that facility.</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td>Handwritten notes on guidelines related to Vitamin K administration were placed in line of sight, like the walls of labour room and postnatal ward.</td>
<td>As the labor room staff and postnatal room staff were overloaded with care of both mother as well as the newborn, this resulted them missing the administration of Vitamin K to all newborns.</td>
<td>Key points in the GOI guidelines mentioning the dosage of Vitamin K for newborns and the type of syringe to be used, were translated into Hindi and posted on the wall of the newborn care corner.</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td>Administration of a Vitamin K injection before the newborn leaves the labor room or the operation theatre (OT)</td>
<td>The more common practice was to administer Vitamin K injections to newborns after they were moved out of the labor room or the OT, resulting in them missing Vitamin K administration to those newborns who are not transferred immediately to the postnatal ward.</td>
<td>It was agreed among the nursing staffs of the facility not to transfer newborns out of the labor room or the OT until Injection Vitamin K is administered to them.</td>
<td>✓ ✓</td>
</tr>
</tbody>
</table>
### AIM#3: Administration of Injection Vitamin K to all newborn to prevent Vitamin K deficiency bleeding

<table>
<thead>
<tr>
<th>Change idea</th>
<th>Logic for change</th>
<th>How the change happened</th>
<th>Change site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration of Vitamin K injection to newborn, who require referral to a higher facility, before transferring it out of the facility.</td>
<td>Vitamin K administration was often missed in babies who had to be referred to another facility for better management of newborn complications.</td>
<td>It was agreed among the nursing staffs of the facility to administer Vitamin K to newborns before they are transferred to higher level facility for additional care, and maintain a record of such cases.</td>
<td>DH ✓ CHC ✓ PHC ✓</td>
</tr>
<tr>
<td>Planned procurement (in time and in adequate quantity) of Injection Vitamin K and Insulin syringes to ensure 24 x 7 availability</td>
<td>While Injection Vitamin K and Insulin syringes were available at all facilities, they were not procured on the basis of delivery load at the facility.</td>
<td>The staffs involved in procurement were oriented to calculate average delivery load of the facility and keep three months of injection Vitamin K and Insulin syringes supply in stock. Staff nurse was made responsible for indenting the stock from the pharmacist of the facility. The Medical Superintendent was aligned to ensure that Vitamin K is procured locally.</td>
<td></td>
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</table>

### AIM#4: Early initiation of breastfeeding in all newborns

<table>
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<tr>
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<th>How the change happened</th>
<th>Change site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation of QI team members and other labor room staffs on infant and young child feeding (IYCF) practices and importance of early initiation of breastfeeding to newborns.</td>
<td>The nursing staffs were not fully aware of the guidelines on IYCF practices, advantages of early initiation and exclusive breastfeeding and ways to motivate mothers and their families to practice early initiation and exclusive breastfeeding to newborns.</td>
<td>QI team members were oriented on IYCF and advantages of early initiation and exclusive breastfeeding. Other nursing staffs in the labor room were oriented by the SMO/ LMO.</td>
<td>DH ✓ CHC ✓ PHC ✓</td>
</tr>
<tr>
<td>Engage various categories of health workers to counsel and motivate</td>
<td>Most facilities had only one nursing staff to facilitate delivery as well as take care of postnatal services. Heavy</td>
<td>Yashoda13 in labor rooms of district hospitals were relieved of other tasks and engaged in taking care of mothers, including counselling on early initiation of</td>
<td>DH ✓ CHC ✓ PHC ✓</td>
</tr>
</tbody>
</table>
Delivering change in maternal and newborn health services

### Early initiation of breastfeeding

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>mothers delivering in the facility on early initiation of breastfeeding.</td>
<td>workload on both fronts resulted in them missing the component of getting breastfeeding initiated within an hour of delivery.</td>
<td>breastfeeding. The nurses in Newborn Stabilization Units (NBSUs), who are available in shifts round the clock in CHCs, were engaged by the Medical Officers In-Charge of the facility to counsel mothers on early initiation of breastfeeding. In other facilities, the nursing students who are placed in the facilities were involved to assist the labour room staffs to counsel and motivate mothers begin breastfeeding within one hour of birth and document it in the labor room register.</td>
</tr>
<tr>
<td>Initiate breastfeeding, right in the labour room, immediately post delivery.</td>
<td>Most facilities had only one nursing staff to facilitate delivery as well as take care of postnatal services. This resulted in the staff counselling the mothers to initiate breastfeeding in the labor room.</td>
<td>The labor room staffs of the facility brought in a practice of getting the mothers initiate breastfeeding in the labour room before administering Injection Vitamin K and before transferring the mother and newborn to the postnatal ward.</td>
</tr>
<tr>
<td>Counselling of mothers and family members on breastfeeding practice and engaging one of the family members to help get breastfeeding initiated.</td>
<td>There was no staff dedicated to counsel the pregnant woman and her family members, who either had limited knowledge on early and exclusive breastfeeding or had misconceptions regarding child feeding practices. Yashodas, who are resources available at district hospitals, could be engaged to counsel on breastfeeding and encourage a family member to support early initiation of the practice.</td>
<td>The quality improvement team identified GNM trainees and Yashoda (facility based counterparts of ASHAs) to counsel family members and other companions of the pregnant woman on early initiation of breast feeding and made them responsible for this change.</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Change site</th>
<th>DH</th>
<th>CHC</th>
<th>PHC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of newborns who were breast fed within one hour of birth in DH Mandikhera, July 2013 - October 2014</td>
<td>100%</td>
<td>90%</td>
<td>80%</td>
</tr>
</tbody>
</table>

**Recording of postpartum vital parameters (BP and Pulse) in the delivery register**

**Data related issues**

- Sensitization and training of providers
- Breastfeeding started in the labor room within one hour of child birth
- Counseling of mother and family members and using of family member to initiation of breastfeeding

**Poster reminding nursing staff to inject Vitamin K after initiating breastfeeding to the newborns**

**Proportion of newborns breastfed within one hour of birth in DH Mandikhera, July 2013 - October 2014**

**Total no. of newborns observed**
USAID ASSIST Project

The USAID Applying Science to Strengthen and Improve Systems (ASSIST) is a USAID funded project managed by University Research Co., LLC (URC) to support the government and to strengthen and improve the health system so that the quality of maternal & newborn care becomes better and more lives are saved. URC’s global partners for USAID ASSIST include: EnCompass LLC; FH 360; Harvard University School of Public Health; Health Research, Inc.; Institute for Healthcare Improvement; Initiatives Inc.; Johns Hopkins University Center for Communication Programs; and Women Influencing Health Education and Rule of Law, LLC. For more information on the work of the USAID ASSIST Project, please visit www.usaidassist.org or write assist-info@urc-chs.com.

References

8. The Government of India considers the skilled birth attendant as a person who can handle common and major obstetric and neonatal emergencies as well and recognizes when the situation reaches a point beyond his/her capability and refers the woman or the newborn to a First Referral Unit/appropriate facility without delay. GOI. Handbook for ANMs, LHVs and staff nurses as a skilled birth attendant. New Delhi: Department of Family Welfare, Ministry of Health and Family Welfare, 2006. Accessed http://mohfw.nic.in/NRHM/ANM_Facilities_Guide.pdf on 12 December 2014
10. Ibid reference 9
11. Quality improvement team consisted of select medical and paramedical staffs of the participating public health facility.
13. Yashoda is a non medical volunteer who are placed at facilities to take care of mother and child post delivery. She facilitates post partum care and essential newborn care.

Abbreviations

AMTSIL Active Management of Third Stage of Labor
ANM Auxiliary Nurse Midwife
ASHA Accredited Social Health Activist
ASSIST Applying Science to Strengthen and Improve Systems
BHT Bed Head Ticket
BP Blood Pressure
CHC Community Health Center
DH District Hospital
DLHS District Level Household Survey
GOI Government of India
IM Intramuscular
IMR Infant Mortality Rate
IU International Units
IYCF Infant and Young Child Feeding
MIIM Maternal Mortality Ratio
MOIC Medical Officer In-Charge
OT Operations Theater
PPH Postpartum Hemorrhage
QI Quality Improvement
SDH Sub-District Hospital
USAID United States Assistance for International Development

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Model for improvement

What are we trying to accomplish?
What change can we make that will result in improvement?
How will we know that a change is an improvement?

Act
Plan
Study
Do

USAID ASSIST Project consists of seven steps:
1. Defining the improvement aim
2. Forming the improvement team
3. Understanding the current system
4. Developing a measurement system
5. Developing changes
6. Testing changes
7. Implementing and sustaining changes

The QI approach used in the USAID ASSIST Project involves the following steps:
1. What change can we make that will result in improvement?
2. What are we trying to accomplish?
3. How will we know that a change is an improvement?
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Many change ideas mentioned in this change package were context and facility specific. They may not necessarily be applicable across the board in their current form and may require modifications to achieve desired results.