



CASE STUDY

Improving the process of antenatal care to increase detection of women with high-risk conditions in Zonal Hospital of Mandi, Himachal Pradesh, India

Zonal Hospital, Mandi identified that they were not identifying women with high risk conditions during their antenatal care (ANC) clinic. By re-organizing the clinic, the hospital was able to increase the proportion of pregnant women identified as being at high-risk from 1.6% to 12.3% in a matter of weeks. They used four interventions to improve care: on-the-job training about the essential elements of ANC, defining clear roles for staff, using standard government documentation tools, and counseling clients to return from the laboratory after their hemoglobin was tested.

Background

Zonal Hospital, Mandi is a district level 300 bed hospital which provides secondary level care in various medical disciplines. With the roll-out of the Reproductive, Maternal, Neonatal, Child and Health and Adolescent Health strategy (RMNCH+A), the hospital is focused on improving care for women, children and adolescents. One area of weakness at the hospital is antenatal care services. The ANC clinic is held every Thursday and provides services to around 50 women per day. Clinic records from July to December 2013 showed that 1023 women attended the clinic but only 18 high-risk patients were identified (1.6%). The USAID ASSIST project started work in Mandi as part of the RMNCH+A strategy in December 2013. The district improvement coordinator (DIC) for ASSIST worked with the team in the clinic to form a quality improvement (QI) team. The team decided that they needed to do a better job identifying and managing high-risk women and started improvement efforts in January 2014.

Mandi Quality Improvement Team

1. Dr. Anita Thakur—Medical Officer
2. Smt. Bhawna Sharma—Female Health Supervisor
3. Smt. Bimla Parmar—Female Health Worker
4. Smt. Teja Thakur—Female Health Worker
5. Smt. Harsha Sharma—Female Health Worker

Improving the organization of the ANC clinic

After looking at their data, the QI team realized that their clinic was not doing a good job of identifying high-risk clients. When they analysed their current system of providing care they found that staff were not clear about what service to provide to patients or who should do what. Because of this, the clinic was chaotic and not reliably providing standard care. For example, the percentage of women receiving a blood pressure measurement or haemoglobin (Hb) test varied from 0% to almost 100% depending on the day, and most weeks no high-risk women were identified (Figure 1).

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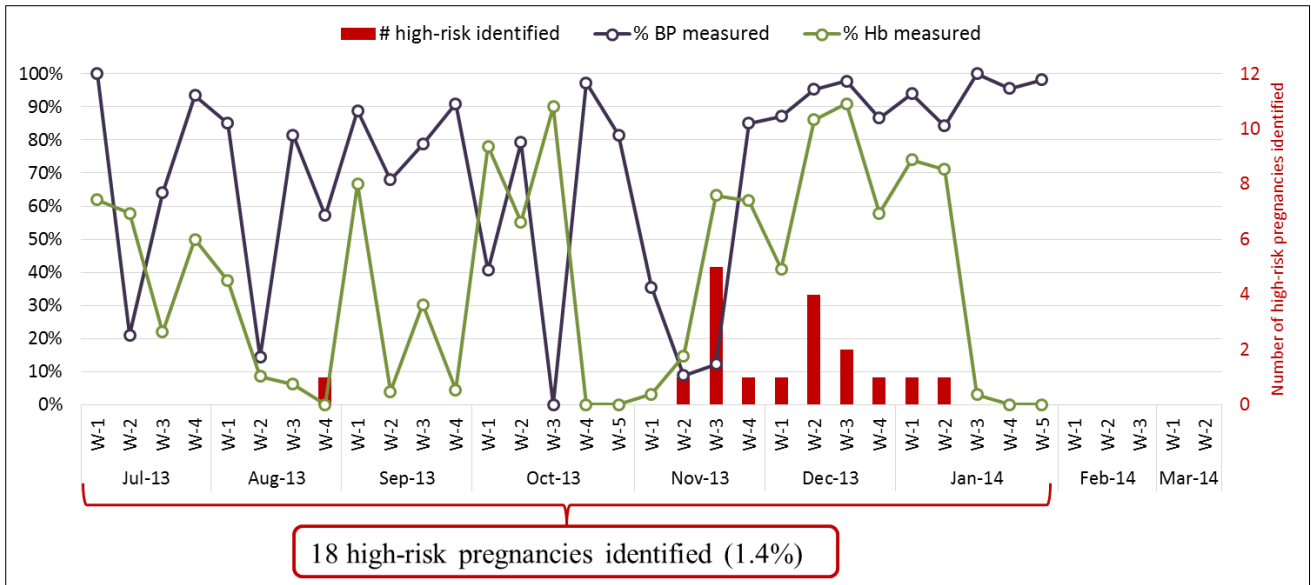


Figure 1: Number of high-risk pregnancies identified and percentage of ANCs during which blood pressure (BP) and haemoglobin (Hb) were measured before improvement activities

Based on their analysis of the problem, the QI team supported by the DIC tested four changes:

- On the job training about essential elements of ANC.** The DIC reviewed with the staff the government guidelines for ANC and helped make sure that all essential elements were included in their new system of care.
- Defining clear roles for staff.** After clarifying the elements of care that needed to be provided, the team assigned roles to staff describing who should perform which tasks and also clarified how patients should move between stations. The team started using the new system in the first week of February 2014.
- Using standard government documentation tools.** The DIC shared with the team the Government of India ANC register which they had not previously been using. The team started using this in December 2013.
- Counsel clients to return from lab.** A major issue in the clinic was that patients had their haemoglobin and urine checked in the laboratory but did not bring the results back to the ANC clinic so laboratory tests were of no clinical use. To address this, the ANC recording staff started asking the women to return to the clinic with their lab test reports so that any additional actions could be taken.

“These changes will lead to improvement definitely. More women will be detected for high-risks and timely referred to the doctors for proper care. The results of these changes will be appreciated in one month or so.”
-Bimla Parmar, QI Team Member

Results

Based on these changes, the clinic has started identifying greater numbers of high-risk clients. In the first 5 weeks of using the new clarified system of care, 39 high-risk cases were identified as compared to 18 in the preceding 7 months combined. These clients comprised 20 with bad obstetrical histories, 3 with hypertensive disorders, 1 with severe anemia, 1 elderly primiparous mother, 1 with short stature and 13 with previous C-sections. The women identified as being at high-

“ANC is now reorganized and we are doing detailed history taking and recording it in the new format. The BP and Hb% is checked in most of the beneficiaries and recorded against her name. It will be easier to track a high-risk case and make an appropriate referral.”
-Teja Thakur, QI Team Member

risk were then accompanied by one of the health workers to an obstetrician for further advice and management. Figure 2 below shows improvement in percentage of haemoglobin and blood pressure measured and high-risk case detection.

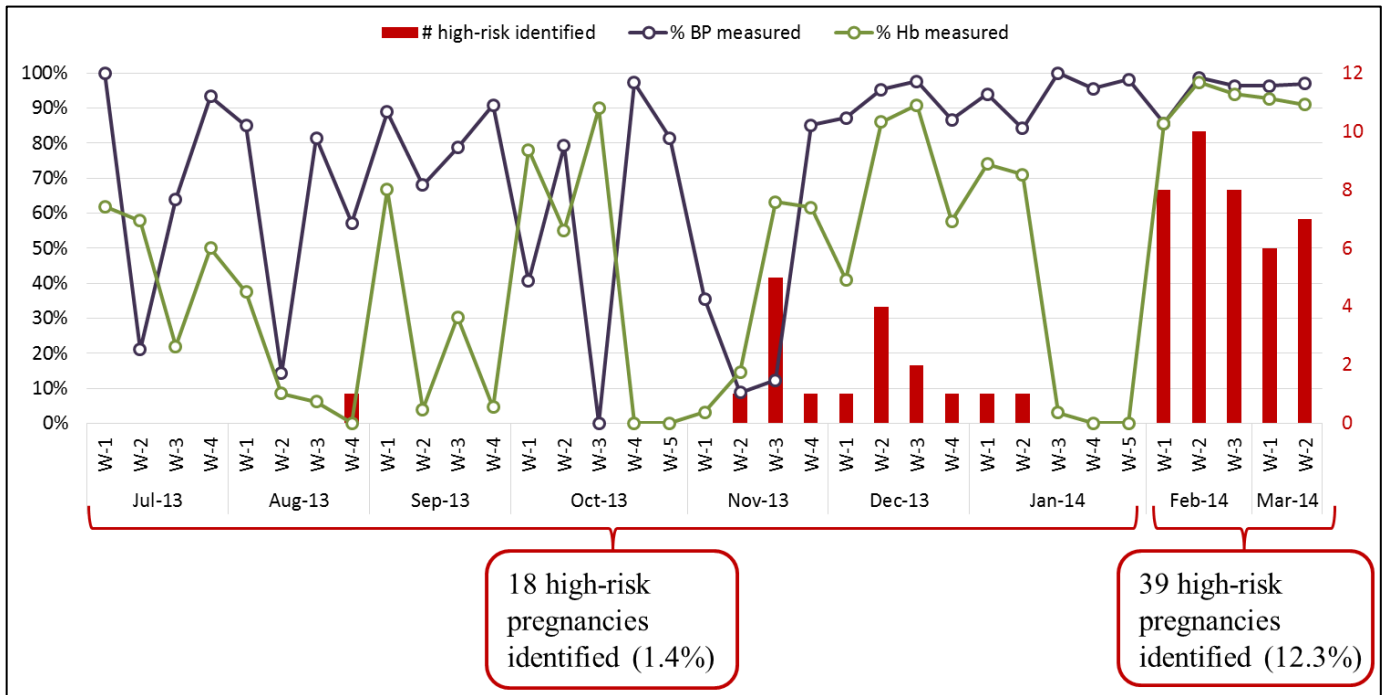


Figure 2: Number of high-risk pregnancies identified and percentage of ANC visits during which blood pressure (BP) and haemoglobin (Hb) were measured after improvement activities started (area shaded in blue)

Next Steps

The team will continue working to improve their system for providing ANC. Now that they have a system that is working to identify high-risk clients they will work on making sure it becomes more efficient and reliable. They will also start working on other improvement aims along the RMNCH+A continuum of care.