

Post Training Follow-up for Skilled Birth Attendants: Review of Implementation Experiences

September 2009

1. Introduction

1.1 Background

In 2006 the Government of Nepal (GoN) approved the National Policy on Skilled Birth Attendants, in line with international recognition of the critical role of the Skilled Birth Attendant (SBA) in reducing maternal mortality. This policy used the standard international definition of an SBA as a qualified doctor, nurse or midwife who has received specific training in the defined SBA core skills. In Nepal this includes Auxiliary Nurse Midwives (ANM), who, with nurses, are the main providers of safe delivery and emergency obstetric care services in rural areas.

Following this, the National In-Service Training Strategy for Skilled Birth Attendants was approved and implementation initiated in 2007. This strategy outlines approaches for achieving the enormous task of training around 5,000 SBAs required by 2012 in order to meet the Millennium Development Goal target of 60% of all births attended by an SBA by 2015. Curricula and training materials were developed for courses ranging from 15 to 60 days to cater for the differing needs of doctors, nurses and ANMs with and without previous midwifery training. Currently there are 15 functioning SBA training sites around the country, each with a team of trainers and the capacity to provide didactic teaching with model practice and supervised clinical practice.

To date over 1,000 SBAs have received training, at least two from each of the 75 districts and with a focus on those with external project support and/or new infrastructure. Nurses and ANMs based in peripheral health facilities are a priority as they have previously received little support and yet are the front line service providers for needy rural women.

1.2 Rationale

It is widely acknowledged that the effectiveness of training is heavily dependent on the support the trainees receive after returning to their place of work. Trainees who display confidence and competence in the comfortable and well equipped environment of the training site may feel considerably less confident in the demanding atmosphere of a busy workplace, especially if they lack the support of more experienced staff or the necessary equipment, which is often the case. Caseload, especially for some of the less common conditions, may also be insufficient to enable them to retain all their new skills. A follow up visit by the trainer to assess the trainee's skills and provide on-site coaching and advice is therefore an essential part of the training, and not just an add-on extra. It is also an opportunity to assess the effectiveness of the training and highlight any adjustments needed.

Unfortunately, in the past shortages of staff and resources have often led to neglect of training follow up, although the National Health Training Centre (NHTC) has a stated policy of ensuring at least 30% of trainees receive follow up visits within any GoN training programme. It was felt that, in addition to strengthening the SBA training, successful implementation of effective follow up within this major programme would help to establish systems for follow up in other programmes and generate trainer commitment to this practice. Support to the Safe Motherhood Programme (SSMP)/ Options has therefore provided support to NHTC in implementing a pilot SBA follow up programme, using internationally

developed tools adapted for Nepal. Based on experiences from the pilot the tools are being refined and a follow up programme planned for future years under GoN work plans.

2. Objectives of Follow up

SBA training follow up has two major objectives. One is to provide support and coaching as required to the newly trained SBA, and is therefore in a sense a part of the training. The other is to collect information on the SBA's performance and working environment, which can be fed back into improving the training and other systems, including further follow up. These general objectives can be broken down into the following specific objectives:

1. To assess the performance of the individual SBAs visited
2. To provide on-site coaching and other support in addressing problems, as required
3. To assess the nature of the working environment of the SBAs, including professional support, supervision, equipment availability and caseloads
4. To assess the effectiveness of the training
5. To gather information to feed back into improving the training and follow up system, including assessment of the effectiveness of the tools
6. To enable trainers to better understand the working environment of the SBAs.

3. Methodology

The follow up was organised using the GoN system and usual terms and conditions, in order to ensure that in future it can be carried forward as a GoN programme.

1. **Sample size:** A total of **119** SBAs, who had been trained at nine training sites, were followed up by trainers from five training sites (Table 1). This represents approximately 10% of the total number of SBAs trained since the programme began in January 2007. There was a strong focus on ANMs, of whom there were 58, (**48%** of the sample) and nurses, of whom there were 52 (**44%**) rather than doctors, of whom there were only nine (**8%**). As ANMs and nurses are key service providers at district level and below, additional coaching was considered important for them.
2. **Service sites covered:** 38 service sites were selected to receive follow up visits, based on criteria that included accessibility from the training site. These were: one central hospital (18 SBAs); one regional (8 SBAs) and four zonal (21 SBAs) hospitals; eight district hospitals (34 SBAs); one private hospital (7 SBAs); 19 Primary Health Care Centres (PHCC, 31 SBAs) and seven health posts (7 SBAs). See Annex 1.
3. **Training sites included:** 24 trainers from **five** training sites were selected to carry out follow up visits, based on criteria that included total number of trainers available (at least five), level of activity of the training site (high number of trainings) and whether the training site management and trainers were interested in supporting the exercise (Table 1). Seven of the trainers involved were doctors (at least one from each site, apart from Koshi) and the remaining 17 were nurses.
4. **Length of visits:** On average two trainers visited each site for three days to follow up between one and five SBAs; for larger numbers of trainees the days were increased.
5. **Tools:** The tools used included a mix of open and closed questions for SBAs and their supervisors, and skills checklists for observation of SBA performance of critical skills on clients (or models if no clients available). See Annex 2.
6. **Orientation of trainers:** Groups of trainers were oriented on the tools during the course of other meetings and visits, rather than all at the same time during a workshop. In some cases one trainer received orientation and was then responsible for orienting other trainers at her/ his site.
7. **Coaching:** On-site coaching was provided as needed for weak skill areas.

8. **Data compilation:** Information from the follow up tools was compiled and analysed by the NHTC Training Coordinator, working with the NHTC data entry officer and SSMP Human Resource Adviser.

Table 1: Training Sites Involved in Follow up

S.N	Training site	Trainers involved	SBAs followed up by trainers	Sites at which SBAs* were trained
1	Maternity Hospital (Kathmandu)	2	8	24
2	Koshi Zonal Hospital (Morang)	7	44	24
3	Bharatpur Hospital (Chitwan)	5	34	11
4	Seti Zonal Hospital (Kailali)	5	21	20
5	Baglung Hospital (Baglung)	5	12	10
6	AMDA Hospital (Jhapa)**	0	0	11
7	Western Regional Hospital (Kaski)**	0	0	9
8	Lumbini Zonal Hospital (Rupandehi)**	0	0	7
9	Sagarmatha Hospital (Saptari)**	0	0	3
Total		24	119	119

*SBAs trained at a particular site were not always followed up by a trainer from that site

**Although SBAs trained at these four sites were followed up, none of their trainers was involved

4. Findings

Tool 1: Discussion with SBAs about their post training experiences

4.1 Confidence and Attitude of SBAs

The level of confidence of the SBAs in using their new skills was assessed by asking them:

- how they felt their work as an SBA was going following the training
- which skills they felt they were performing well
- which skills they had difficulty with.

Since most of the SBAs could not immediately recall all 27 core skills, most **117** (total assessed 119) gave general answers, either stating that the training had made their job easier and confident, they felt they were performing well (**47**) or that they were using all skills equally (**60**). They were not confident in IUD insertion skills (**11**) Among the remainder some were not able to comment at all as they were working in positions that did not provide the opportunity for using SBA skills.

Table 2: Confidence in using SBA skills

S.N	Skill	SBAs saying they perform this well	SBAs saying they have difficulty
1	Training had made their job easier and confident	117	2
2	Vacuum delivery	12	0
3	MVA	11	0
4	Breech delivery	8	0
5	Episiotomy repair	6	0
6	Manual removal of placenta	5	0
7	Neonatal resuscitation/ kangaroo care	2	0
8	Shoulder dystocia	1	0
9	Cervical tear	1	0
10	Pre-eclampsia/ eclampsia	1	0
11	IUCD insertion/ removal	0	11
Total		124	11

Among those who did mention specific skills (and some mentioned more than one), the life saving skills such as Manual Vacuum Aspiration (MVA) and vacuum delivery were the most frequently mentioned, as shown in Table 2. Intra Uterine Contraceptive Device (IUCD) insertion and removal was the only skill specifically mentioned as a difficulty, because there was often no opportunity for those working in a maternity ward to use the skill and there was also little or no opportunity for clinical practice during the training. Overall these results indicate a high level of stated confidence among the SBAs, at least in the skills they can best recall and are most likely to use.

4.2 Use of SBA Core Skills

The SBAs were asked to name the life-saving knowledge and skills they had recently used and to identify the skills they thought were the most useful/ important. Table 3 shows the total number of such cases recently handled by the SBAs using the skills they had learned (some of the SBAs mentioned managing several types of case). It also shows the SBAs' opinions about the most important skills (again some mentioned more than one skill).

Table 3: Cases recently handled by SBAs and skills considered most useful

SN	Skill	No. SBAs recently used this skill*	No. SBAs consider this skill useful*
1	Post partum haemorrhage	33 (1)	17 (5)
2	MVA	33 (1)	35 (1)
3	Vacuum delivery	27 (3)	26 (2)
4	Breech birth	25 (4)	17 (5)
5	Retained placenta (manual removal)	19 (5)	11 (7)
6	Eclampsia management	14 (6)	8 (10)
7	Newborn resuscitation	10 (7)	24 (3)
8	Repair of episiotomy/ cervical tear	10 (7)	9 (9)
9	Normal delivery	10 (7)	24 (3)
10	Antenatal care	8 (10)	4 (11)
11	Shoulder dystocia	6 (11)	10 (8)
12	Infection prevention	6 (11)	
13	No skill	2 (13)	
14	IUCD insertion	2 (13)	

**Ranking of which skills are most used/ considered useful shown in brackets*

The answers show that the skills most often recently used were not necessarily also identified as most useful or important. MVA was the most frequently recently used skill and considered the most important, reflecting the fact that post abortion complications are frequently seen and that nurses are now able to manage these. Management of post partum haemorrhage, vacuum delivery, breech birth and retained placenta were also among the top five most recently used skills and those considered most useful, but not in exactly the same order. Interestingly, normal delivery and newborn resuscitation were both ranked third most useful skills, but only seventh most frequently handled, which may reflect the fact that they were not considered new skills, as many of the SBAs felt they already knew how to handle a normal delivery and give at least basic resuscitation to the newborn, so they had not mentioned them as cases recently handled using new skills. Once again it seems they focused on the more dramatic life-saving skills learned.

4.3 Barriers to Using SBA Skills

The SBAs were asked about skills that were included in the SBA training but not covered sufficiently to enable them to achieve an adequate standard. Most of the SBAs replied that the theoretical coverage was adequate for all skills, but in some cases there was not sufficient opportunity for practice, or they were only able to practise the skill on models.

Table 4: Skills for which there was insufficient or no opportunity for practice during training

SN	Skill	No of SBAs replying more than one skill
1	IUCD insertion	46 Dr-1; Nurse-18; ANM-27
2	Vacuum delivery	27 Dr-6; Nurse-13; ANM-8
3	Breech birth	18 Nurse-3; ANM-15
4	MVA	17 Nurse-6; ANM-11
5	Repair of cervical tear	15
6	Shoulder dystocia	9 Nurse-3; ANM-6
7	Manual removal of placenta	7 Nurse-4; ANM - 3

Table 4 shows that some of the skills identified in section 4.2 as most useful and most frequently used (MVA, vacuum delivery, breech birth) were not considered to have been adequately covered during training by a large number of the SBAs, which is an issue of concern and needs to be addressed by the training sites. Of particularly significant concern is the fact that IUCD insertion was mentioned as being inadequately covered by so many of the SBAs, confirming the findings in Table 2, section 4.1.

The SBAs were also asked to identify factors that affected their ability to provide quality SBA care and/ or to use the skills they have learned. Table 5 shows that most (**45**) were not experiencing any specific barriers, but among those who were, lack of supportive supervision (follow up from the trainers) was the most commonly mentioned (**34**), closely followed by lack of other trained staff at their place of work (**31**).

Table 5: Factors negatively affecting SBAs' ability to provide quality services

SN	Factors negatively affecting service	No. of SBAs replying	No. of SBA reply by facility
1	None	45	Hospital: 62% (44/71) PHCC: 3% (1/31)
2	Lack of technical supervision/ follow up	34	Hospital: 27% (19/71) PHCC: 48% (15/ 31)
3	Lack of equipment	31	Hospital: 20% (14/71) PHCC: 45% (14/31) HP: 43% (3/7)
4	Lack of other trained staff	25	Hospital: 23% (16/71) PHCC: 23% (7/31) HP: 29% (2/7)
5	Lack of community support	8	Private Hospital: 100% (7/7) PHCC: 3% (1/31)

It is interesting to note that **62%** of the hospital based SBAs said there were no factors negatively affecting their service provision, whereas only **3%** of the PHCC SBAs and none of those from health posts said this. The percentage of SBAs in PHCCs citing lack of supportive supervision as a factor was double that in the hospitals, but strangely it was not mentioned by the health post SBAs, perhaps because they did not expect it. Lack of equipment appears to be a much bigger issue for health posts and PHCCs than for hospitals. Lack of community support did not appear to be a big issue, except for the SBAs working at the only private hospital included.

4.4 Implementation of action plans

The SBAs were asked if they had been able to implement the action plans developed at the end of the SBA training, and if not, why this was the case. Around half said they had been successful in implementing their action plans (**56**), while the remainder had either forgotten about them (**37**) or not completed implementation (**15**). In many cases this was related to the

time since training – the trainers said those who were trained more recently had not had time to complete implementation, while those trained much earlier had forgotten about them. Eleven said they had not been taught about action plans during the training; the trainer visited for follow up helped trainees to remind the action plan what they developed and helped to develop a new plan to do something new which is essential to improve at the health facilities. Such as use of pantograph, use of Magnesium sulphate for pre/eclampsia cases etc and the issues that trainees did not taught about action plan was discussed during the trainers' interactive meeting held in June, when it was found that one training site had failed to cover action plans. This has now been addressed.

Table 6: Action plan implementation status

SN	Reply	No. of SBAs by cadre
1	Action plan completed	56 (Dr-2; Nurse-25; ANM-29)
2	Action plan forgotten	37 (Dr-2; Nurse-20; ANM-15)
3	Action plan not completed	15 (Dr-5; Nurse-4; ANM-6)
4	No action plan developed	11 (Nurse-3; ANM-8)

Tool 2: Review of records related to SBAs

4.5 Period of service

Around two thirds of the SBAs had been at their present post for more than 20 months, with the majority (**45%**) in the 21 to 30 months bracket. This is a positive indicator for continuity of quality service. One third had been at post for less than 10 months.

Table 7: Period of SBA service

SN	Period of work at current place	No. of SBAs	% of SBAs
1	< 10 months	41	34%
2	10 to 20 months	0	0
3	21 to 30 months	53	45%
4	31 to 40 months	14	12%
5	41 to 50 months	8	7%
6	> 50 months	3	3%

4.6 Number of Deliveries Attended by SBAs Since Training

Table 8 shows the number of deliveries attended by the SBAs since training, either assisting or independently managing cases; 21 SBAs had not attended any deliveries because they were either working in antenatal clinics or in management positions, and therefore not in a position to provide delivery care. It is encouraging to note that nearly a quarter of the SBAs have managed more than 50 cases independently since their training, although since their exact training date was not recorded, it is not possible to translate this into a monthly rate.

Table 8: Number of Deliveries Attended by the SBAs Since Training

SN	No. of deliveries	No. of SBAs assisting	% SBAs assisting	No. SBAs independently managing	% SBAs independently managing
1	None	21	18%	21	18%
2	1 to 9	16	13%	16	13%
3	10 to 20	17	14%	21	18%
4	21 to 30	0	0	15	13%
5	31 to 40	15	13%	7	6%
6	41 to 50	12	10%	11	9%
7	> 50	38	32%	28	24%

4.7 Complicated Deliveries Assisted by SBAs Since Training

The facility records confirmed that the SBAs are using their life saving skills to assist or independently manage complicated deliveries. As noted above, **21** of the SBAs were working in positions where they were not providing delivery care.

Table 9: Number of Complicated Deliveries Assisted by SBAs since Training

SN	Complications managed/ assisted	No. cases assisted by SBAs
1	Vacuum delivery	55
2	Breech birth	43
3	Manual removal of placenta	32
4	Post partum haemorrhage	20
5	Repair of cervical tear	6
6	Pre/ eclampsia	5
7	Newborn resuscitation	3
8	Shoulder dystocia	3
9	Ante partum haemorrhage	3

Many answered more than one skill

4.8 Post Abortion Care Provided

Use of the MVA technique to manage cases presenting with abortion complications (either due to mismanaged induced abortion or incomplete spontaneous abortion) is a skill that many nurses and ANMs had not previously been taught, so they would have had to refer cases to a higher institution or to a doctor or more senior nurse. Since abortion complications are a key cause of maternal deaths, it is important that SBAs are now able to perform MVA. Table 10 shows that almost a third of the SBAs had performed more than 50 MVAs, confirming that this essential skill is being used, especially at the larger institutions. A quarter of the SBAs had not performed any, either because they were working in positions where they did not provide direct care, or because MVA sets were not available or they were working alone and did not feel confident about providing this high risk service without higher level support.

Table 10: Number of MVAs Performed by SBAs Since Training

SN	Number of MVAs	No. SBAs performing	% SBAs performing
1	None	30	25%
2	1 to 9	40	34%
3	10 to 20	7	6%
4	21 to 30	0	0
5	31 to 40	3	3%
6	41 to 50	1	2%
7	> 50	38	32%

Tool 3: Assessment of SBA Competency Using Checklists

4.9 Observation of Competency

During their follow up visits, the trainers observed the SBAs carrying out a sample of the core skills, on clients if available, but otherwise on anatomical models, which they carried with them. Not all SBAs were observed performing all skills. Where the skills were observed to be below acceptable levels, corrective coaching was provided. A score of less than 85% on any core skills was not considered acceptable. Table 11 is based on the standard

checklist provided and shows the number and percentage of SBAs considered competent. Encouragingly **92%** of the SBAs observed conducting normal delivery with Active Management of Stage Three of Labour (AMSTL) were considered satisfactory, and the reasons for not meeting the required standard were mostly associated with recording or communicating with (providing explanations to) the client. When using a model it can be difficult to “act” communication correctly.

Table 11: SBAs’ Competency Observed in Key Skills

SN	Procedure	No. cases observed	No. satisfactory	No. not satisfactory	% satisfactory
1	Normal delivery + AMSTL	100	92	7	92%
2	Newborn resuscitation	52	39	13	75%
3	Manual removal of placenta	40	18	22	45%
4	Vaginal/ cervical inspection	35	28	7	80%
5	Repair of 1 st and 2 nd degree tears	39	39	0	100%
6	MVA management	20	15	5	75%
7	Vacuum delivery	46	32	14	70%
8	Breech birth	92	40	52	43%
9	Shoulder dystocia	68	50	18	74%
10	Processing gloves/ instruments	108	100	8	93%
11	Pre/ eclampsia	45	20	25	44%

The skills not performed satisfactorily by a significant proportion of the SBAs were manual removal of placenta (**45%**), management of breech birth (**43%**) and management of pre-eclampsia/ eclampsia (**44%**). This is because these skills are complex and cases are not frequently seen, so opportunities for practice are limited. It was encouraging to see that instrument processing for infection prevention, for which most of the SBAs (108) were observed was satisfactory in the great majority of cases (**93%**).

Tool 4: Discussion with the SBA supervisors or other SBA colleagues

4.10 Impressions of Supervisors

A total of **87** supervisors were interviewed and asked for their opinion of the performance of the SBAs since their training, including whether they thought they were competent in using their new SBA skills. Table 12 shows the skills that the supervisors could recall observing the SBAs providing competently. Again, MVA is high on the list, as are some of the life saving skills, such as postpartum haemorrhage management and vacuum delivery. It should be noted that as many of the supervisors have not themselves received SBA training, their ability to accurately assess the SBAs is limited. It is also likely that the supervisors would not be present all the time. For these reasons their opinions should be viewed more as a general impression of the level of confidence and activity of the SBA than a proper assessment.

The 87 supervisors were also asked if the SBAs lacked any skills that negatively affected their ability to provide services. Their replies showed that 76 (**87%**) felt the SBAs they supervised were sufficiently competent in all the required skills, and only 11 (**13%**) considered there were some gaps in their knowledge, mostly due to lack of caseload within the institution.

Table 12: Skills used competently by SBAs, as observed by supervisors

SN	Procedure	No. observed to be competent
1	Post partum haemorrhage	21
2	MVA	18
3	Vacuum delivery	15
4	Newborn resuscitation	14
5	Normal delivery with AMSTL	13
6	Pre/ eclampsia	11
7	Antenatal and postnatal care	10
8	Infection prevention	9
9	Referral of complications	7
10	All skills	7
11	Repair of episiotomy	5
12	Breech birth	3
13	Manual removal of placenta	3

Note: Supervisors replying more than one skills

The supervisors were also asked about other factors at the health facility that affected the ability of the SBAs to provide services. Less than half (**44%**) said there were no barriers, while most of the others identified lack of trainer follow up or lack of equipment as important factors, as shown in Table 13.

Table 13: Factors noted by trainees' supervisors that affect the performance of SBAs

SN	Factors	No. saying this	% saying this
1	No problems	38	44%
2	Lack of trainer follow up	21	24%
3	Lack of equipment	20	23%
4	Low caseload	4	5%
5	Lack of management support	4	5%
Total		87	

5. Conclusions and Recommendations

5.1 Discussion of Conclusions

1. **Scaling up:** Overall, the follow up exercise proceeded smoothly, adequately covering a significant number of trainees (119) in a relatively short period of time (about two months in the field). This is a very positive indicator of the practicability of scaling up sustainably under the GoN system, especially as NHTC was supportive and involved throughout. However, if all SBA trainees are to be followed up, as should be the case, creative approaches will be needed to ensure availability of the necessary human resources. Trainers should certainly carry out a proportion of visits, in the interests of developing their own professional skills by seeing the results of their training, but cannot be expected to cover all. Other options to consider include:

- Assignment of other qualified SBAs working at training sites to carry out visits
- Recruitment of additional SBAs at training sites, so that follow up visits can be rotated amongst all qualified SBAs without disrupting services
- Involving district based Public Health Nurses (PHN), as the GoN designated safe motherhood point persons. However, since they are not qualified SBAs, their support role would be limited to environmental and management issues, rather than technical skills

- Involving the five regional training coordinators that NHTC plans to recruit for 2009/10 under SSMP Financial Aid
- An additional support strategy, already practised by some of the trainers, is to maintain telephone contact with the newly trained SBAs, enabling them to request immediate advice in handling complicated cases or addressing other problems. This is particularly important for SBAs working alone in small and/ or remote health facilities.

The fact that so many SBAs and their supervisors commented on the lack of trainer follow up as a significant barrier to optimum development of the SBA skills and confidence further reinforces the importance of this activity.

2. **On-site coordination:** Follow up is also important as a mechanism for improving coordination among key stakeholders at site level, to ensure the SBA has the necessary support from management and other staff. To further promote this understanding, the trainers have recommended providing a structured SBA orientation for facility in-charges and/ or SBA supervisors, in the form of interactive meetings at regional or national level.
3. **Trainer orientation:** During review of the tools while compiling the data, some inconsistencies were noted in the way the trainers interpreted and used the tools. This is not surprising in view of the fact that their orientation on the tools was carried out in a rather ad hoc manner, rather than at a joint workshop at which issues could be fully discussed and any confusions brought to light and corrected. Under the circumstances the course taken was probably an acceptable way to get the exercise completed in time, but the findings confirm the desirability of using a workshop approach in future. It is reported that some of the issues were discussed and addressed at the trainers' interactive meeting held in June, confirming the usefulness of this event.
4. **Visit objectives:** There may be a tension between the two main objectives of follow up visits, both of which are valid and should not be mutually exclusive. At the outset it should be clearly understood that supporting the SBAs, providing coaching and advice, including intervening with the supervisors as necessary to address management and environmental issues, is the primary aim of the visit, making follow up an integral part of training. Data collection is also important to inform improvements in the training and support of SBAs, enable trainers to learn more about the workplace realities of the SBAs they train and as a basis for discussion. However, there is a danger that the specificity of the tools may affect the balance of the visit, with trainers focusing on completion of forms to capture data, rather than spending more time informally talking and "drawing out" the SBAs. Careful consideration was given to addressing this balance when the tools were revised after initial assessment of the follow up results. Proper orientation of the trainers before future visits will also be important to ensure the different objectives are met.
5. **Trainer learning:** One of the key aims of the exercise was to help trainers understand importance of follow up in helping them to improve their training, and to motivate them to continue following up trainees in the future. They commented that they had indeed learned a great deal from trainees during their visits, in particular the difficulties the SBAs face at their normal place of work, where the equipment and supplies they had access to during training were either not available or very limited. As a result they recommended steps be taken to ensure that at least MVA sets and vacuum delivery equipment are made available at PHCCs and health posts where a trained SBA is working. In reality, it may be better to ensure these are available before the SBA goes for training, so that on return she can immediately use the skills.

6. **Tools design:** As this exercise was in essence a pilot, the effectiveness and user-friendliness of the tools and process was evaluated. Discussions are ongoing about the tools design, and achieving a balance between closed, “multiple choice”, ticking the box and yes/ no style questions, which are less prone to inconsistency but also less likely to yield detailed information, against more open analytical questions that may be harder and more time consuming to record accurately. In particular it has been agreed that the tools for the supervisor discussions be revised as many supervisors are not trained SBAs and therefore cannot comment on technical issues. It is also worth noting that when asked about their caseloads and the skills most recently used, SBAs are most likely to remember the busiest periods and most dramatic cases and therefore not give accurate figures. It was therefore agreed that the tools be adjusted so that hard data are sourced from the facility records and the tool for the SBA perspective on skill utilisation is more discussion based.

At the trainers’ interactive meeting in June, the trainers commented that many of the tools were difficult to administer and ambiguous, covering too much in one question. They suggested simplification by separating each factor to be addressed, and this has been done. They also confirmed their preference for a mix of open and closed question styles.

It is recommended that some kind of SBA evaluation of the usefulness of the visit be included, such as post visit anonymous completion of a form or a follow up telephone call from a neutral person (not the trainer who carried out the visit).

7. **Logistics:** Other process issues to consider are the length and timing of visits, whether visits are done in batches or one at a time, logistics management, realistic budgeting and ensuring the right people carry out follow up. The trainers indicated they would like more autonomy so that they are given a reasonable, but not too tight, timeframe and a lump sum budget, enabling them to make arrangements to fit in with their other commitments and the characteristics of the area they are visiting. NHTC and their training team may wish to develop guidelines in collaboration with supporting partners, such as Nick Simons Institute, for the current year’s planned follow up.
8. **Skill use:** Overall it appears that most of the SBAs are using their new skills and are confident about doing so. The most commonly used life-saving skills were MVA, vacuum delivery, newborn resuscitation, and management of post partum haemorrhage. Management of shoulder dystocia and breech positioning, although less commonly seen, are also important as both can be easily managed after training (skills easily learned), but without professional help these conditions can be fatal.
9. **Competency:** Generally most of the SBAs were assessed as competent and confident in performing the samples of key skills observed, with the only major exception being IUCD insertion. This problem appears to be due to lack of opportunities for clinical practice during training, as most training sites do not have clients for IUCD and there is generally not a family planning clinic on site. Thus most of the SBAs had only practised on models, which is a serious concern as the potential for uterus perforation in unskilled hands is high and model practice is not adequate for developing this skill. Although IUCD insertion appeared to be the skill for which clinical practice is most lacking, this was also said to be an issue for other skills, such as MVA, vacuum delivery and breech births, at least at some training sites, and this needs to be addressed.
10. **Skill retention:** It is difficult for ANMs posted in remote health posts to retain all their skills, as caseloads may be low and they may be the only person with SBA training and therefore have no professional support. Strategies for addressing this need to be developed, perhaps by providing rotational posting at the district hospital.

5.2 Recommendations

1. **Scale up:** Set in motion procedures for scaling up post SBA training follow up training under GoN work plans, to ensure all trained SBAs receive a visit, ideally within three to six months of completing their SBA training. (*NHTC to plan and manage, with partner support*).
2. **Human resources:** Review and implement possible options for ensuring the availability of sufficient and appropriate human resources to carry out follow up. (*NHTC, using SSMP Financial Aid*).
3. **Orientation:** Ensure all personnel carrying out follow up visits receive an initial formal workshop orientation on the tools, and issues arising during the course of the follow up, including adjustments required in the training, are discussed at regularly organised trainers interactive meetings. (*NHTC to plan at trainers interactive meeting*).
4. **Objectives:** Ensure those carrying out follow up visits are clear about the objectives of the visit and particularly the importance of providing adequate technical support to the SBAs and not allowing the visit to be over dominated by completion of forms. (*NHTC at trainers interactive meeting*).
5. **Supervisor orientation:** Arrange regional or national orientation meetings for in-charges/ supervisors from facilities where trained SBAs are working. Ideally this should coincide as closely as possible with the timing of the concerned SBAs' training. (*NHTC working with FHD and Regional Health Directorates*).
6. **Equipment:** Selection of trainees should include the criterion that the facility has/ will receive the required equipment for SBA services (at least MVA sets and vacuum delivery equipment) and the trainee will be assigned to delivery care after training. (*NHTC, LMD and FHD*).
7. **Tools:** Continue with the process of reviewing the completed forms at trainer interactive meetings, adjusting the tools as needed to ensure they provide clear, unambiguous and consistent information and are easy to administer. Include a question on length of time since training and provision for SBA evaluation of the usefulness of the visit. Simplify the questions so that only one factor is addressed at a time. Ensure a mix of open and closed style questions, as appropriate. (*NHTC at trainer interactive meetings*).
8. **Logistics:** Make the system as flexible as possible to make it easier for trainers to manage the visits; consider providing a lump sum budget with reasonable timeframe and guidelines. (*NHTC, working with the accounts department*).
9. **Clinical practice:** Address the issue of lack of skills in IUCD insertion, either ensuring training sites develop links with nearby family planning clinics for clinical practice or, if this is not possible, removing this skill from the training. Also ensure sufficient clinical practice is available for all key skills. (*Trainers at training sites; NHTC to consider omitting from the training competencies for which clinical practice cannot be assured*).
10. **Skill retention:** Develop strategies for helping SBAs in remote postings to retain their skills (for example rotational posting in the district hospital). (*Trainers explore with individual SBAs and discuss with District Health Officers during follow up*).

Key Lessons Learned

- It is possible for NHTC to manage an SBA training follow up programme
- More human resources are needed if all trainees are to receive follow up visits
- There are major benefits (learning) from follow up for the trainers as well as the SBAs
- Most SBAs are successfully using their new skills
- It is important to address on-site coordination/ support for the SBAs during the follow up visits and through formal orientation of in-charges and supervisors
- Rural/ remote SBAs need more support
- The SBAs' lack of confidence and competence in IUCD insertion is a major concern that has come to light and needs to be addressed through improved provision for clinical practice

ANNEX 1

Distribution of Follow up:

SN	Hospitals	No. SBAs in Hosp	No. SBAs in PHCC	No SBAs in HP
1	Maternity Hospital, KTM	18		
2	Western Regional Hospital, Kaski	8		
3	Lumbini Zonal Hospital, Rupandehi Dist	7		
4	Seti Zonal Hospital, Kailali Dist	5		
5	Sagarmartha Zonal Hospital, Saptari Dist	8		
6	Mahakali Zonal Hospital, Kanchanpur	1		
7	Baglung Hospital, Baglung Dist.	14		
8	B'pur Hospital Chitwan Dist.	3		
9	Lahan Hospital, Siraha Dist.	1		
10	Doti Hospital, Diti Dist.	1		
11	Chautara Hospital, Sindhupalchok Dist	4		
12	Parbat Dist	2		
13	Myagdi Dist	1		
14	Tikapur Dist (Kailali)	1		
15	Amda Jhapa (pvt)	7		
16	Kalanpur PHC, Lahan		1	
17	Mangal Bae , Morang		3	
18	Dhulabari PHC, Jhapa		3	
19	Khaireni, PHC Chitwan		1	
20	Jhutpani PHC, Chitwan		1	
21	Madhi bhagauda , Chitwan		1	
22	Chaumala PHC , Dhangadhi		2	
23	Udasipur PHC		1	
24	Malakheti PHC		2	
25	Dodhara PHC		1	
26	Bhajani PHC, Dhangadhi		2	
27	Balauri PHC, Kanchanpur		3	
28	Raikwar PHC, Kanchanpur		1	
29	Rayapur PHC		1	
30	Barabise PHC , Sindhupalchok		1	
31	Jalbire PHC , Sindhupalchok		1	
32	Haichaure PHC, Baglung		1	
33	Darbang PHC, Magdhi		3	
34	Thulopokhari PHC, Parbat		1	
35	Kaiko PHC,		1	
36	Joshiapur HP, Seti			1
37	Chandi Bhanjang HP, Chitwan			1
38	Sivanagar HP, chitwan			1
39	Dada Bhanjang, baglung HP			1
40	Dumkibas, Baglung HP			1
41	Bulungtar, Baglung			1
42	Dadakhadka, Sindhupalchok			1

