

CASE STUDY

The role of improvement teams in managing male circumcision-related adverse events: The experience of the mobile van clinic in Uganda

Since January 2013, the USAID ASSIST Safe Male Circumcision (SMC) team working with Ministry of Health (MoH), district health authorities and implementing partners has been supporting 30 health facilities across Uganda in quality improvement (QI) activities. The support was in form of QI training, supporting sites in QI team formation, monthly coaching and mentorship on national SMC quality standards, performance indicators, quarterly site assessments and quarterly meetings for all teams to share experiences and challenges of implementing improvement activities. This case study demonstrates the importance of quality improvement teams in identifying, investigating and dealing with moderate to severe adverse events secondary to safe male circumcision.

Introduction

Today, quality improvement is seen as a science of identifying and closing gaps between expected and actual performance. It hinges on four principles: providing client-centred care, focusing on systems and processes, using own data to guide in decision making, and working as a team. Though all are very important, the latter plays a pivotal role in the success of improvement projects. Improvement teams regularly identify gaps in their care delivery systems and processes, come up with new ideas (changes) for testing, implement those changes, and document the results to identify what changes of the changes being tested worked, needs to be modified or discarded.

After the Ministry of Health taking up SMC as an HIV combination prevention strategy, it developed quality standards which must be adhered to by all partners across Uganda for better service delivery and acceptable clinical outcomes one of which was keep SMC related adverse events within the least minimal levels.

Mobile van improvement team members

Masaba Peter (*team leader*)
Nanyonga Joselyn
Kizindo Clement
Kikooba Jim

Understanding adverse events

Adverse events are expected or un-expected side effects that may occur during, immediately after, and days or months post SMC procedure. Most of them take a mild form but may need further attention when they progress to moderate and severe forms. According to the MoH's adverse events grading scale, the most common adverse events from SMC include pain, excessive bleeding, swelling, anaesthesia-related events, excessive skin removal, infection, and damage to the penis. The Uganda MoH, World Health Organization (WHO), and Joint United Nations Programme on HIV/AIDS (UNAIDS) advise that moderate to severe adverse events should be limited to an average range of 0-2% of all circumcision procedures. If

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not handled well, adverse events can scare away probable clients for SMC, lead to poor cosmetic outcomes, anatomical abnormalities, and in the worst case, death. Documentation of all adverse events is very important if they are to be kept in check and stimulate action when they occur.

Start-up of improvement activities

The mobile van is a state-of-the-art clinic operating in Kayunga [home station], Mukono, Buikwe and Buvuma districts providing mobile SMC services supported by the Makerere University Walter Reed Project (MUWRP) with PEPFAR funding through the Department of Defense. The site was first visited by USAID ASSIST in March 2013 for a baseline assessment, and though the site met most of the national SMC quality standards, they had no quality improvement systems in place. That is, they had no improvement team, improvement team meetings were not being held, and available data were not being used to monitor the quality of SMC care provided. This meant that the site had no means to identify, investigate, and deal with any quality flaws, like the rising number of adverse events that was noted.

A USAID ASSIST improvement coach, together with MUWRP and district health representatives, worked with the site to build their skills and capacity to identify quality gaps and come up with aims for improvement of SMC care in the mobile van through:

- Formation of a quality improvement team
- Training the team in quality improvement
- Mentoring the team to start analyzing available data for on service quality through tracking performance indicators and filling in the documentation journal
- Monthly coaching and mentorship visits to handle any quality issues and support the site to define action plans to address issues and gaps

Identifying the “adverse events” problem

To identify quality gaps, improvement teams review and discuss their data, study quality performance trends, and go on to investigate the likely causes of the problems using known improvement methods and tools. “After the quality improvement training, we held a meeting and agreed to start tracking all performance indicators using the documentation journal [a QI tool used to detect changes in performance] and with this, one important aspect that stood out was the adverse events. Before using the documentation journal, we didn’t know that the number of moderate to severe adverse events was on the rise and in a special age group. But after filling it in for some time, we realised that this was happening. At one time it peaked at 5.47%, which was alarming,” reported Masaba Peter, SMC improvement team leader at the mobile van clinic.

Problem analysis

Team members met to discuss the likely causes of the rise in the number of adverse events. Root cause analysis ruled out the issue of infection prevention being the cause. As they brainstormed, the following issues were noted:

- Most of the clients with adverse events were children between the ages of 13 and 15 years.

“We thought everything was Okay”

“We thought we were doing well in all aspects of SMC but when USAID ASSIST came and explained the need and functions of a quality improvement (QI) team, it’s when I realised that we were missing out something.”

--Masaba Peter, SMC team leader
mobile van clinic (Makerere University Walter Reed Project)

A new perspective on tracking data

“I really want to thank USAID ASSIST because we really did not think this was a challenge until we started tracking the data. This is not only helping us in dealing with adverse events but also with other indicators like follow up and partner involvement.”

-- Abiriga Idi, SMC counsellor

- One of the counsellors noted that when the guardians for most children came, they would just consent for their children to undergo circumcision and they go back home, leaving the children alone at the van without listening to post-operative instructions.
- The nature of adverse events that were presenting showed a relationship with poor comprehension of post-operative instructions as most of them came back with infection secondary to not keeping the wound dry.

Dealing with the problem: Testing changes

To address this issue, the team made several changes. First, before any group education session, the team would start by explaining the importance of parents/guardians keeping around when their children are circumcised. Challenges of children comprehending the post-operative instructions would also be discussed. The team agreed not to circumcise any children whose guardians would not wait for their children. Though this was a challenge, it paid off in the long run.

Next, information given during post-operation instructions was repackaged so that it could be easier for the children to remember. For example, more demonstrations than talking were done. Finally, team members agreed to meet weekly to review data on adverse events.

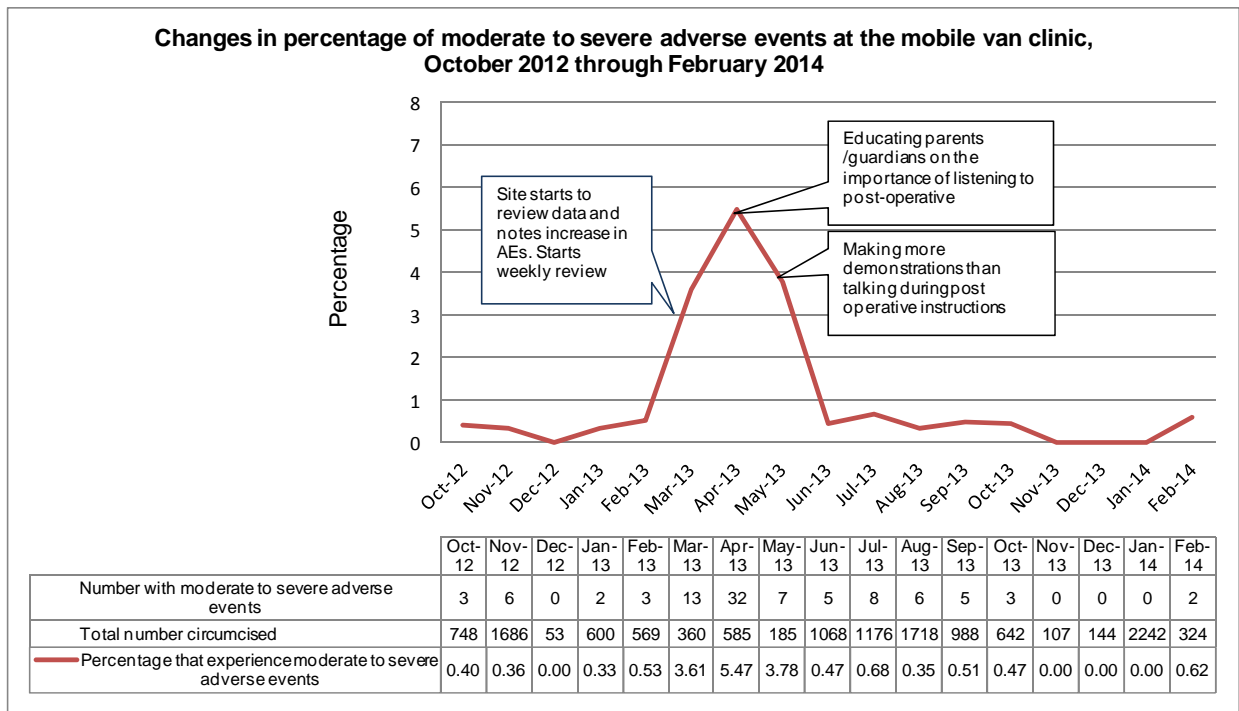
The way forward

"I cannot say that right now we are there, I know that quality improvement is a continuous process so we shall continue to test these changes and other new innovations. I know USAID ASSIST will be with us."

--Masaba Peter, SMC team leader, mobile van clinic

Results

With continuous implementation and testing of the above changes, adverse events were reduced from the peak of 5.47% in April 2013 to 0.62% in February 2014 which is within manageable levels. The graph below shows the changes the team tested and their impact on the number of adverse events seen at the facility.



Conclusion

The experience of the mobile van clinic demonstrates that a fully constituted and functional improvement team is one that meets to identify quality gaps, innovates ideas (changes) for testing, collects data to track performance, and meets regularly to discuss findings from improvement activities. All these play an important role in maintaining good quality care. With orientation to improvement methods and modest coaching support, this team was able to identify and deal with its quality challenge (adverse events) and will be able to handle any new challenges that come up going forward.



The mobile van clinic setup during an outreach in Baale sub county in January 2014. Photo by Ssensamba Jude T, URC.

USAID ASSIST will continue to support the site through monthly coaching visits, mentorships, and technical support and review meetings (learning sessions) to help them achieve their improvement objectives. USAID ASSIST will also scale up the learnt best practices to other health facilities where SMC quality improvement is still a challenge.

About USAID ASSIST Technical Support in Safe Male Circumcision

USAID ASSIST was asked by USAID to provide technical support to Uganda MoH and implementing partners to improve quality and safety of SMC services in 29 fixed sites and 1 mobile van in 27 districts, working with 10 partners: Strengthening TB and HIV&AIDS Responses in East Central Uganda (STAR- EC), Strengthening TB and HIV&AIDS Responses in Eastern Uganda (STAR E), Strengthening TB and HIV&AIDS Responses in Southwestern Uganda (STAR SW), Northern Uganda Health Integration to Improve Services (NUHITES), Strengthening Uganda's Systems for Treating AIDS Nationally (SUSTAIN), Inter Religious Council of Uganda (IRCU), RTI, Health Initiatives in the Private Sector (HIPS), Makerere University Walter Reed Project (MURWP), Uganda People's Defense Forces, Supporting Public Sector workplaces to Expand Action and Responses against HIV/AIDS (SPEAR).

USAID ASSIST is providing phased support, starting with intensive support to the 30 sites involving direct activities with these sites and their partners to understand what needs to change to see measurable improvement in the quality of SMC services. Concurrently, light support is provided to the rest of the partner sites to guide duplication of activities at the 30 intensive sites. In 2014, USAID ASSIST will scale up intense support to 20 new sites and support the MoH and partners to spread the SMC improvement lessons learnt at the first 30 sites to an additional 150 sites.