

SafeSurgery2020 in Ethiopia: Year One Results and Lessons Learned



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Background	Findings

SafeSurgery2020 (SS2020) is a multi-stakeholder initiative funded by GE Foundation that aims to improve access to surgical, obstetric, and anesthesia care in developing countries.

During 2016-2017, four interventions were implemented in 10 intervention hospitals across two regions of Ethiopia as part of the Federal Ministry of Health's national surgical plan, "Saving Lives Through Safe Surgery."

The following

Figure 1. Data is presented from SS2020 Year 1 (2016-2017) in five intervention hospitals across the Tigray Region of Ethiopia.





describes Year 1 results (2016-2017) after the implementation of four SS2020 interventions in five facilities across Tigray:



Figure 2. SS2020 partners Jhpiego and Assist International (AI) implemented (1) Leadership and Surgical Safety Training, (2) the Facility Accelerator Fund, (3) SPECT Training, and (4) Mentorship in an effort to strengthen the surgical services in SS2020-selected facilities.

- Leadership and Surgical Safety Training: conducted by SS2020 partner Jhpiego to empower surgical teams to identify context-specific problems and devise creative solutions.
- Facility Accelerator Fund: implemented by SS2020 partner Assist International (AI) in which surgical teams submit grant proposals of \$10,000 for facility-specific innovations.
- **SPECT Training:** classroom training, on-site mentoring, and assessment of sterilization techniques and processes provided to surgical teams by SPECT partners under AI support.
- **Mentorship:** on-site mentoring provided to interventions sites by multidisciplinary surgical, obstetric, and anesthesia teams from specialized hospitals to assess progress, provide surgical safety training, mobilize resources, and promote teamwork and communication.

Reporting Month*Includes only Available--Hospital 1--Hospital 2--Hospital 3--Hospital 4--Hospital 5Data Collected

Figure 4. No identifiable trend observed in surgical volume across the five intervention hospitals.

"The thing that helped us to look into our problems critically is leadership training. They told us to look at the problems and consider every one of us as a leader. And to examine ourselves. What am I contributing? We used to think the problem is the surgeon or the surgical wards. Not our problem. Now we think it is our problem. We are part of the team."

> SS2020 Hospitals: Referrals Tigray, Ethiopia | January 2016 - December 2017*

ey come to the hospital and inspect the surgical service, they see patient records, they see registration books, we will go to the office and we will have a discussion on the challenges we face, the improvements that we have made, the help we need."

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Methods

The study included three components:

- 1) a facility-based surgical assessment tool administered at baseline and midline
- 2) longitudinal prospective data collection of surgical volume and referral (transfer-out) rates
- 3) 36 retrospective qualitative interviews with administrative and surgical staff.

Findings



"It [Safe Surgery 2020] is one of the best team working with frequent follow up and idea sharing. Even not on surgical intervention, even the hospital quality improvement, they help us a lot. The mentors...the team from SPECT, everyone who come under the SaLTS team contributed to our



The qualitative assessments revealed that all ten hospitals perceived improvement in processes of care attributable to the SS2020 suite of interventions.

Figure 5. No identifiable trend observed in referrals-out rates across the five intervention hospitals.

Interpretation

The improved surgical service delivery reported in qualitative interviews was not reflected in quantitative data. Reasons for this discrepancy include:

- **1. Faults in overall M&E design** inappropriately selected process and outcomes indicators, insufficient time between implementation of interventions and data collection, and unmatched controls that precluded their inclusion in our analysis.
- 2. Facility-level factors- infrastructure and human resources challenges, service interruptions, and varying facility goals. Furthermore, three hospitals in close proximity to our sample sites introduced surgical services during the study period, influencing surgical volume and referral rates.

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Water	Electric	Generator	Internet
Negative Change	No Change	Positive Change or Consistently 100% Availability	

Figure 3. Persistent infrastructure challenges were observed with inconsistent availability of running water, electricity, generator, and internet. A total of 3 hospitals improved or maintained consistent availability of running water, 4 in electricity, 3 in a generator, and 1 in internet.

hospital. Each time when they were in our hospital, they commented on our problems, and then help us to prevent that."

- **3. Data quality** baseline data gaps, survey tool modifications and subjectivity, and lack of training on quality data collection and reporting at the facility-level.
- This assessment informed our year two SS2020 study design in Ethiopia and year one in Tanzania with a particular focus on data quality strengthening.



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