Learnings from Safe Surgery 2020:
A multicomponent intervention in Ethiopia, Tanzania, and Cambodia

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SAFE SURGERY 2020 PARTNERS

Lead partners...

Country partners...

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SAFE SURGERY 2020 APPROACH

1. Advocating for Policy
2. Strengthening and Supporting the Surgical Workforce
3. Testing and Scaling Innovations
4. Sharing Insights and Elevating Surgery
SAFE SURGERY 2020 SNAPSHOT

Implemented our programs in **58 health facilities** in three different countries.

Launched **2 oxygen plants** to improve the availability of oxygen at 40 medical facilities.

Trained over **2,900** healthcare workers.

Made over **45 contributions** to the overall safe surgery body of evidence.
SAFE SURGERY 2020 IN ETHIOPIA

**OUTPUTS**

- 150 surgical providers trained on leadership at 10 hospitals
- 89 Bio Medical Equipment Technicians (BMETs) trained
- 631 staff and new trainers trained on sterilization
- Developed 2 plants to provide medical oxygen to 40 hospitals

**OUTCOMES**

In select health facilities in Ethiopia:

- 50% increase in volume of surgical services
- 1/3 reduction in surgical mortality after 6 months
- 78% reduction in referrals to other hospitals
“Safe Surgery 2020 has helped us strengthen our Saving Lives Through Surgery national plan by providing expertise and additional resources. We now have strong legislation in place to elevate the importance of this issue and ensure the government’s health activities are aligned.”

Ethiopia Ministry of Health official
SAFE SURGERY 2020 IN TANZANIA

High quality evidence
Longitudinal, multi-site, quasi-experimental design

Knowledge for scale up
Mixed quantitative and qualitative methods

High quality primary data
Prospective; direct observation; weekly data quality checks
TANZANIA DATA COLLECTION

- 10 intervention facilities + 10 control facilities
- 40 Tanzanian medical doctors trained
- 200+ days of on-site data collection
- 18,864 study participants enrolled
- 2,712 surgeries observed
- 140 interviews with leaders and surgical team
Better adherence to Safe Surgery Checklist is associated with lower risk of maternal sepsis.
“The SSC implementation has become an obligatory practice for all my surgeries... everyone in the theatre understands their roles prior to surgery. The SSC is an imperative tool that I can no longer leave behind for my surgeries.”

Dr. Tubeti Chacha, Surgical Team Leader
SAFE SURGERY 2020 IN CAMBODIA

SS2020 Trainings & Programs

Leadership and Mentorship Training
Clinical Skills Training
Surgical Key Performance Indicator Training
SPECT Equipment Sterilization Training
WFSA Safe Anesthesia Training
Touch Surgery App Training
Bio-medical Engineering Training
Project ECHO Mentorship through Video Conferencing
Perioperative Enhancement Project

February 2019 to January 2020

~200 Staff Trained
7 OR Packages Donated
Routine Video Conferencing
CPD Credits Awarded
OUTCOMES OVERVIEW

Evaluation: Surgical Observations

Conducted at baseline and endline to assess adherence to 20 key performance items included in the Safe Surgery Checklist (SSC)

Rate of surgical safety checklist utilization (any attempt)

+15.5%

Increase among all hospitals between baseline & endline
SURGICAL OBSERVATIONS – HIGHEST PERFORMING ITEMS

1. Appropriate prophylactic antibiotic administration rate
   - Increase among all hospitals: +27.5%

2. Rate of post-op decontamination of all (used and unused) instruments
   - Increase among all hospitals: +25.3%

3. Rate of vaginal preparation with povidone-iodine (for C/S)
   - Increase among all hospitals: +21.8%

4. Instrument, sponge, and needle count verifications
   - Increase among all hospitals: +19.2%
All of us have increased our knowledge and [have] begun to play the role of a leader [after the trainings on leadership and teamwork]. Each of us is skilled in something. If we work together, we can achieve something big.”

Surgical Provider, Calmette Hospital, Cambodia
CONCLUSIONS AND IMPLICATIONS

Safe Surgery 2020 is transforming both practice and culture, but it is a journey.

A multicomponent intervention is key to strengthening the surgical system.

Need to design the intervention with sustainability in mind.

Non-technical aspects of surgery may be key to improving surgical quality — culture and organizational “readiness”.

Safe Surgery Organizational Readiness Tool (SSORT)