

Introduction

- Access to quality surgical care remains a critical gap in LMICs.¹
- Surgical interventions with multiple components have heterogenous outcomes between and within facilities. Limited evidence exists on what drives their heterogeneity.^{2,3}
- There is a need to evaluate multi-component surgical interventions better to understand the heterogeneity of there effects in LMICs.^{2,4}
- Aim: To understand heterogeneity in the Safe Surgery 2020 experience - we hypothesized that the intervention facilities that performed better than others will highlight the best practices in implementation of a surgical quality improvement intervention in LMICs.**

Methods

Study Setting:

Lake Zone Region of Tanzania

Intervention:

3 phases – changing culture, building capacity, facilitating sustainability Over 9 months

Study Design:

In-depth qualitative study of 10 intervention facilities from a longitudinal quasi-experimental study

Data Collection:

Interviews conducted at 3 time points with facility leader & 3 surgical team members (n=105). 14 safety & teamwork indicators via SSC collected

Facility performance measurement:

Based on change in % points in improvement in safety and teamwork indicators. Higher (n=3) and lower (n=3) performers were facilities with the most/least improvement.

Data Analysis:

Constant comparative method of qualitative analysis
Inter-rater reliability: 0.85

Results

Six emergent themes highlight the differences between higher and lowering performing facilities:



Sample Quotes

Higher Performer

"In the past we didn't have time to discuss our data and never knew the importance of the data we collect. We thought we collected data to send to the government, nowadays we know this data belongs to us, they help us know where we are and where we want to go." (Surgical provider, Facility 3)

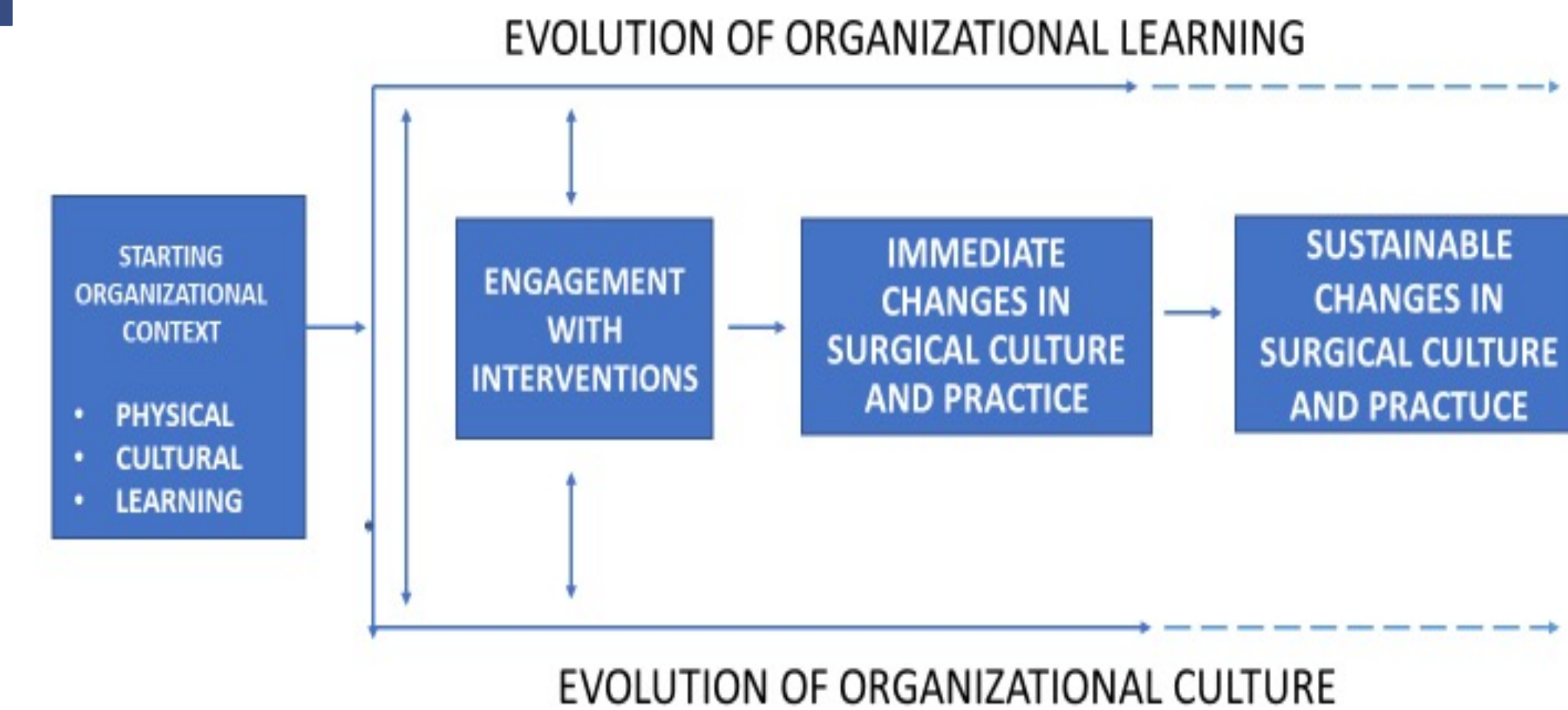
Lower Performer

"Data is important but we can do it after surgery improvement. It is big, we need training on how it can be done because they just say you look for the template and apply it. But coordinating, and using the data is difficult." (Nurse, Facility 9)

Table 1. Improvement in (a) safety practices (b) teamwork and communication indicators

	Average Adherence to Safety and Teamwork and Communication Indicators on the Composite Index		Average Improvement in Percentage Points
	Pre-intervention	Post-intervention	
Higher performers			
Facility 1	19%	95%	76
Facility 2	18%	92%	74
Facility 3	13%	73%	60
Lower performers			
Facility 8	8%	39%	31
Facility 9	14%	44%	30
Facility 10	15%	34%	19

Figure 1. Framework and Theory of Change



Discussion

- Surgical system strengthening efforts should focus on clinical interventions and organizational change².
- Tailor interventions to facility needs and context – one size does not fit all.
- Have facilities build receptive implementation climates and give them time to implement and to observe actual change.

Conclusion

- Safe Surgery 2020 provided facilities with the opportunity to improve their surgical practice surgical culture.
- Higher performers demonstrated stronger teamwork and commitment, more developed collective learning, highly engaged leadership, and a greater willingness to improve surgical culture overall.

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