

SaLTS Project M&E Framework

Aim: To improve equitable access to quality and safe essential and emergency surgical and anesthesia care as part of the universal health coverage.

Objectives:

- To implement a nationally coordinated national plan on surgical care.
- To define and implement an essential surgery package for all levels of the Ethiopian health care delivery system.
- To create better awareness of surgical and anesthesia care with different stakeholders.
- To improve the safety of surgical care by implementing the surgical safety check list and improving the safety culture.
- To implement quality improvement and audit tools in surgical care.
- To proactively identify best practices and scale up rapidly through EHAQ.

Major Contents of SaLTS M&E Framework:

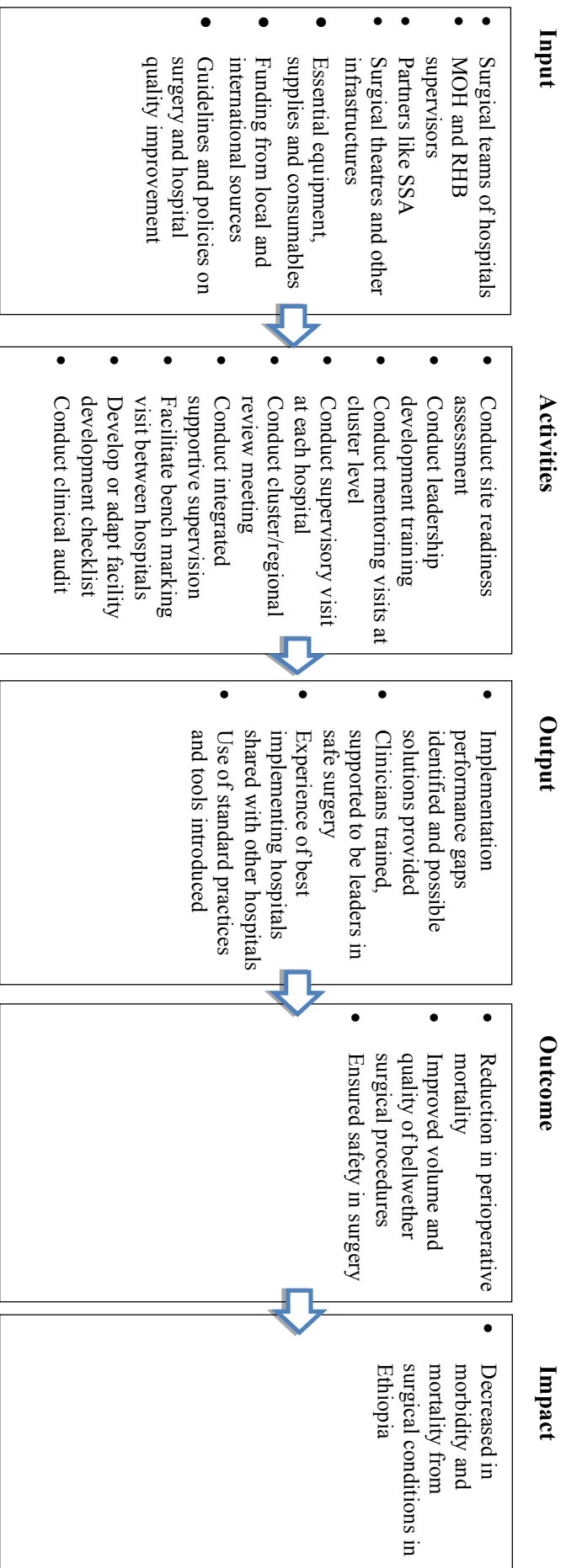
The SaLTS M&E framework is developed as part and parcel of the national Framework for Hospital Performance Monitoring and Improvement. The framework has four major components described in Table 1 below:

- 1) The establishment, reporting and review of a core set of hospital KPIs for SaLTS.
- 2) Facility monitoring of additional site level indicators that are not part of the KPIs but necessary for site-level decision making.
- 3) Supportive supervision site visits to surgical units of hospitals, led by the respective mentors at each cluster hospital and include other bodies such as RHB, MSD or partners as necessary.
- 4) Review meetings:
 - Regional (or cluster) review meetings with each RHB and all hospitals in the respective region (or cluster).
 - MSD and all Regional Curative and Rehabilitative Core Process Teams (CRCPTs) review meetings.

Table 1. Key Elements of the Hospital Performance Monitoring and Improvement Framework

Element	Description
KPIs for SaLTS	<ul style="list-style-type: none"> • A set of core hospital KPIs on SaLTS that meets the needs of Governing Boards, CRCPTs, MSD and the public will streamline reporting processes and prevent duplication of efforts by the different stakeholders. The burden on hospitals will be minimized. • A common set of KPIs on SaLTS will allow hospital performance on surgery to be tracked over time, and comparisons between hospitals and regions can be made. • The KPIs on SaLTS can be used by Governing Boards to monitor hospital performance. Problems will be identified at an early stage, allowing the Governing Board to take remedial action where necessary. • KPIs on SaLTS should be reported by each hospital to the RHB CRCPT every month. Comparisons between hospitals can be made, identifying best practice as well as areas where improvement is needed. • The SaLTS team at MSD can review cluster, regional and hospital performance and identify areas where additional support is needed.
Site level indicators	<ul style="list-style-type: none"> • A set of indicators used to monitor performance of surgical units at each hospital but not reported to CRCPTs and MSD. The site level indicators will be used by surgical teams and hospitals to improve their performance routinely. The clinical mentors assigned in each cluster will also use the site level indicators for the routine performance improvement.
Supportive supervision site visits	<ul style="list-style-type: none"> • Supportive supervision site visits to hospitals should be conducted in order to check (validate) hospital performance in relation to the KPIs on SaLTS, to identify good practice, and to provide supervision and guidance to help surgical units of hospitals to improve areas that require strengthening. • Supervision should be conducted by a team of supervisors. The supervisors could include cluster mentors, RHB CRCPT staff, MSD staff, staff from other hospitals (e.g. CEOs) and other partners such as SSE. It would not be necessary for all stakeholders to attend every supervision visit, rather the team for each visit can be drawn from the different stakeholders. • All supervision should be under the direction of the respective CRCPT. No stakeholder should conduct supervision without the approval or awareness of the CRCPT.
Review meetings	<p>Regional</p> <ul style="list-style-type: none"> • Review meetings between the CRCPT and hospitals (either region wide or in clusters) will allow for benchmarking and the dissemination of good practices. • At each review meeting, hospitals should present a performance report based on their KPIs on SaLTS. Hospitals will have the opportunity to share successes and challenges in order to learn from each other. • Regional “all hospital” review meetings can also be used to discuss other relevant topics. <p>National</p> <ul style="list-style-type: none"> • Review meetings between MSD and all regional CRCPTs will allow for benchmarking and the dissemination of good practice between regions. • At each review meeting, CRCPTs should present a regional performance report based on their KPIs. Regional CRCPTs will have the opportunity to share successes and challenges in order to learn from each other. • MSD/CRCPT meetings can also be used to discuss other relevant topics.

Logic Model for SaLTS Project



Indicators for Safe Surgical and Anesthesia Care Program

S/No	Indicator	Definition	Formula	Data source	Measuring unit	Category	Frequency of reporting
1	Delay for elective surgical admission	The average number of days patients who underwent major elective surgery waited for admission during the reporting period.	$\left[\frac{\text{Total sum of (Date patient is admitted for elective surgery - Date patient is added to the surgical waiting list)} / (\text{Total number of patients admitted for elective surgery during the reporting period})}{100} \right]$	Surgical waiting checklist; admission/ discharge registry	Number	Quality	Monthly
2	Peri-operative mortality	All-cause death rate prior to discharge among patients who underwent a major surgical procedure in an operating theatre during the reporting period. Stratified by emergent and elective major surgical procedures.	$\left[\frac{\text{Total number of deaths prior to discharge among patients who underwent a major surgical procedure in an operating theater}}{\text{Total number of patients who received major surgery}} \right] \times 100$	Patient charts; admission/ discharge registry; OR registry	Percentage	Quality	Monthly
3	Surgical site infection rate	Proportion of all major surgeries with an infection occurring at the site of the surgical wound prior to discharge.	$\left[\frac{\text{Number of inpatients with new surgical site infection arising during the reporting period}}{\text{Number of major surgeries (both elective \& non-elective) performed during the reporting period on public patients}} + \left(\frac{\text{Number of major surgeries (both elective \& non-elective) performed during the reporting period on private wing patients}}{100} \right) \right] \times 100$	SW Registry (SSI); routine surveillance (surgical site infection report forms)	Percentage	Safety	Monthly
4	Rate of safe surgery checklist utilization	Proportion of surgical cases in which the WHO Surgical Safety Checklist was fully implemented.	$\left(\frac{\text{Number of surgical patient charts in which the WHO Surgical Safety Checklist was completed}}{\text{Total number of OR charts reviewed}} \right) \times 100$	Random review of 20-25 surgical patient charts; OR records	Percentage	Safety	Monthly



5	Mean duration of in-hospital pre-elective operative stay	The average number of days patients waited in-hospital (after admission) to receive elective surgery during the reporting period.	[Total sum of (Date patient received elective surgery – Date patient was admitted for elective surgery) / Total number of elective surgical patients during the reporting period]	OR registry; admission/discharge registry	Number	Quality	Monthly
6	Surgical bed occupancy rate	The average percentage of occupied surgical beds during the reporting period.	[(The sum total surgical patient length of stay (days) during the reporting period) / (Average number of operational surgical beds during reporting period x Number of days in reporting period)] x 100	Admission/discharge registry	Percentage	Access	Monthly
7	Rate of first elective case on time theater performance	The percentage of first elective cases that began on or prior to the scheduled time per agreed hospital protocol during the reporting period.	(Number of first elective cases commenced on time / Total number of first elective cases performed) x 100	OR registry	Percentage	Quality	Monthly
8	Rate of cancellation of elective surgery	Percentage of elective surgeries that were cancelled on the planned day of surgery.	(Number of elective surgeries cancelled / Total number of elective surgeries scheduled) x 100	OR registry	Percentage	Access	Monthly
9	Emergency surgical access	The proportion of patients whose travel time from when they first seek care to their arrival at a facility providing ANY of the selected Bellwether procedures (C-sections, laparotomies, or open fracture repairs) is less than or equal to 2 hours. Stratified by each of the three procedures.	(Number of emergency surgical patients whose travel time from when they first seek care to their arrival at a facility providing C-sections, laparotomies, or open fracture repairs is less than or equal to 2 hours / Total number of emergency surgical patients) x 100	Patient survey; OR registry	Percentage	Access	Quarterly



10	Surgical volume	Total number of major surgical procedures performed in operating theatre per 100,000 population per year.	(Total number of major surgical procedures performed in OT per year / Total population of catchment area) x 100,000	OR registry	Number	Access	Annually
11	Proportion of budget spent on surgical services	Proportion of recurrent budget spent on surgical services.	(Amount of recurrent budget spent on surgical services / Total health facility budget) x 100	Hospital finances record	Percentage	Financing	Annually
12	Blood unavailability ratio	The percentage of major surgical cases for which blood was unavailable upon request.	(Total number of major surgical cases for which blood was unavailable upon request) / (Total number of major surgical cases for which blood was requested) x 100	Laboratory blood records	Percentage	Quality	Monthly
13	Patient satisfaction	Average rating of hospital on a score of 0-10 from The Out-Patient and In-Patient Assessments of Healthcare Survey (O-PAHC & I-PAHC surveys) collected from surgical patients only.	[(Sum total of O-PAHC rating scores + Sum total of I-PAHC rating scores) / (Number of O-PAHC surveys completed + Number of I-PAHC surveys completed)]	Survey	Number	Quality	Every 6 months
14	Protection against catastrophic expenditure	Proportion of households protected against catastrophic expenditure from direct out-of-pocket payments for surgical and anesthesia care.	(Number of patients whose aggregate cost for accessing and receiving care is less than 40% of reported household income/ Total number of surgical patients)	Patient quality survey (for self-reported income and additional costs for accessing and receiving care) Hospital cashier records (for cost of procedure)	Number	Financing	Annually



15	<p>Surgery, anesthesia, and obstetric provider density</p>	<p>Number of surgical, anesthetic, and obstetric physicians, integrated emergency surgical officers, and anesthetic providers including BSc. anesthetists, nurse anesthetists and 'others' (nurses, MS anesthetists and health officers), who are working per 100,000 population.</p>	<p>(Number of surgical, anesthetic, or obstetric physicians, integrated emergency surgical officers, or anesthetic providers including: BSc. anesthetists, nurse anesthetists and 'others' (nurses, MS anesthetists and health officers) working / Total population of catchment area) x 100,000</p>	<p>Survey</p>	<p>Number</p>	<p>Quality</p>	<p>Annually</p>
16	<p>Anesthetic adverse outcome</p>	<p>Percentage of surgical patients who developed any of the following: cardio respiratory arrest, failed intubation, or failed spinal anesthesia. Stratified by each of the three adverse events.</p>	<p>(Number of patients with an adverse anesthetic outcome/ Total number of surgical patients) x 100</p>	<p>Anesthesia sheet and logbook</p>	<p>Percentage</p>	<p>Safety</p>	<p>Monthly</p>

