



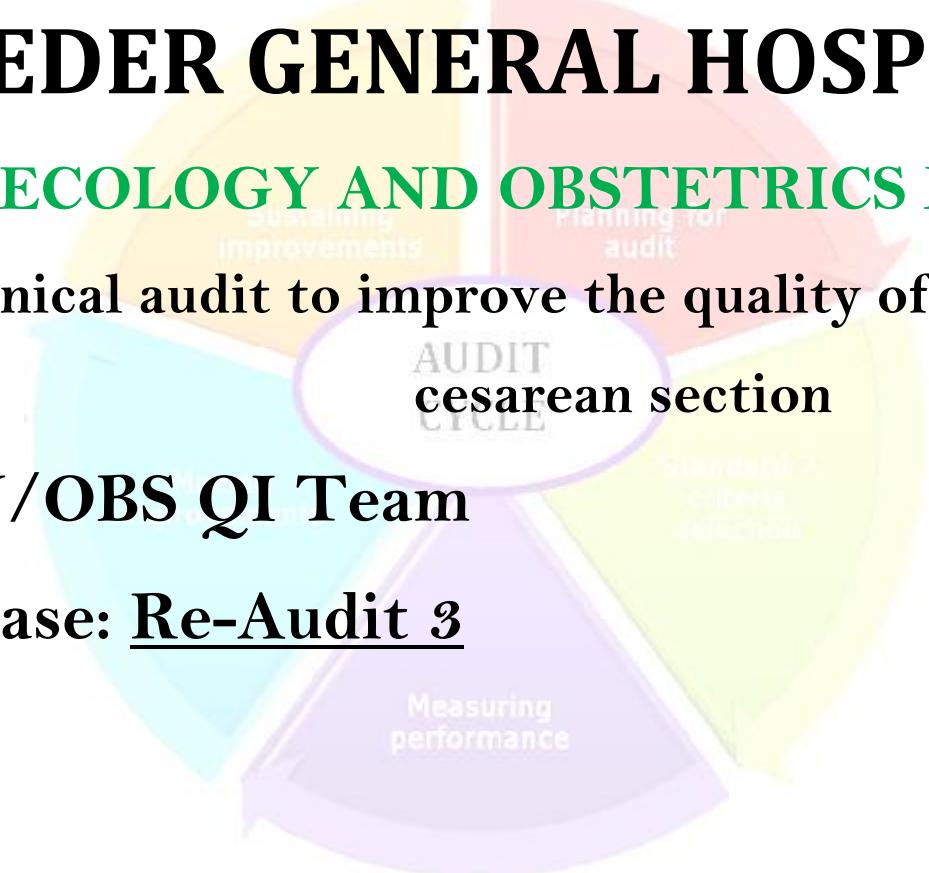
DEDER GENERAL HOSPITAL

GYNECOLOGY AND OBSTETRICS DEPARTMENT

Clinical audit to improve the quality of clinical care of
cesarean section

By: GYN/OBS QI Team

Audit phase: Re-Audit 3



Deder, Oromia

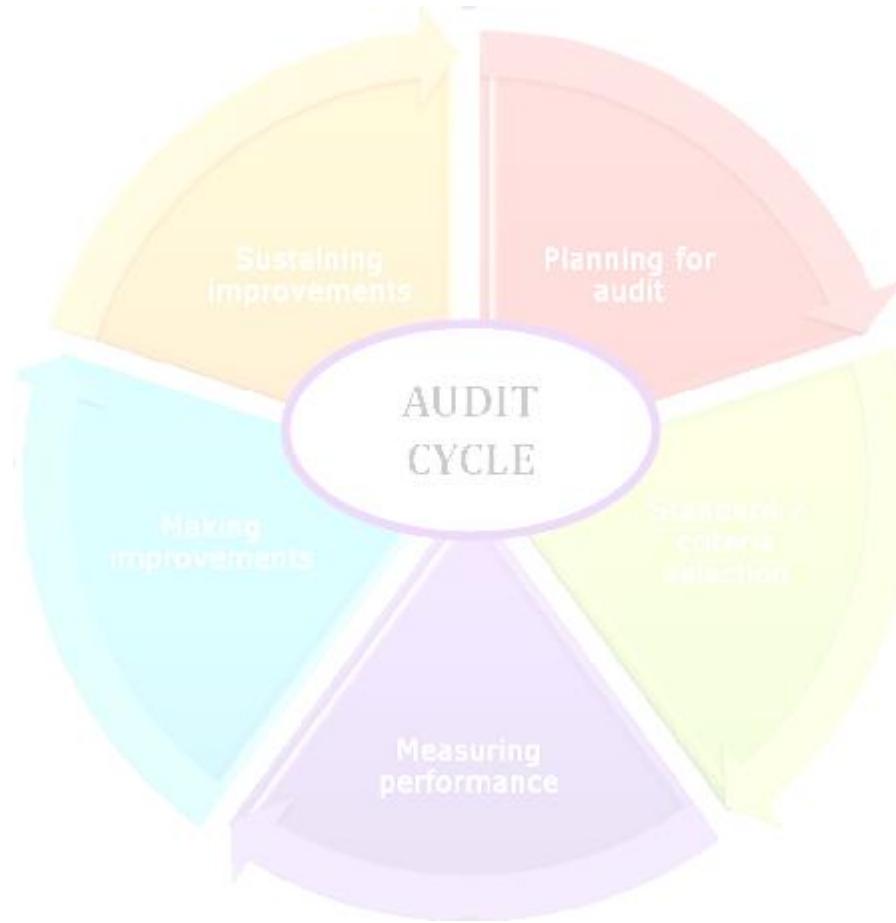
June 2017E.C

Table 1: List of Gyn/OBS Clinical Audit/QI team members, 2017E.C

S/N	Name	Responsibility
1.	Dr. Taju Abdi (MD, GYN OBS specialist)	Team leader
2.	Dr. Anwar Sham (MD, GYN OBS specialist)	Co-leader/ Advisor
3.	Beyan Abdo (IESO)	Member
4.	Abdella mohammed (BSc MW)	Secretary
5.	Addisu Wondimu (Labour & Delivery Ward head)	Secretary
6.	Arif Mohamed	Member
7.	Neima Abdo	Member
8.	Shukriya Hassen	Member
9.	Abdella Mohammed	Member
10.	Oromia Abdulaziz	Member
11.	Alfiya Abdella	Member
12.	Hangatu Yusuf	Member
13.	Tsion Tolasa	Member
14.	Hanan Usmail	Member
15.	Getahun Beleta	Member
16.	Dine Ahmed	Member
17.	Tuji Dawid	Member
18.	Wazira Mohamed	Member

TABLE OF CONTENTS

INTRODUCTION	1
AIM	1
Objectives.....	1
METHODOLOGY	2
Study area & period.....	2
Study design.....	2
Source population.....	2
Inclusion criteria	2
Exclusion criteria	2
Sampling technique.....	2
Study Variables.....	3
Data collection method	3
Data Processing & analysis	3
RESULTS	4
DISCUSSION	12
RECOMMENDATIONS	13
REFERENCES	15
 Figure 1: Overall Performance of Management of Women delivered by C/S, June 2017E.C	5
Figure 2: Adequate pre-operative preparation, June 2017E.C	6
Figure 3: STANDARD INTRAOPERATIVE CARE	8
Figure 4: APPROPRIATE POST-OP CARE	8
Figure 5: APPROPRIATE DISCHARGE CARE.....	9
Figure 6: APPROPRIATE DISCHARGE CARE	10
Figure 7: Trends of C/S clinical audit performance 2017E.C.....	11
 Table 1: Overall of Performance of Cesarean section Care Clinical Audit, June 2017E.C.....	6
Table 2: performance improvement plan to improve clinical care of C/S delivered mothers, June 2017E.C.....	14



INTRODUCTION

Cesarean section (CS) is a lifesaving surgical intervention for mothers and newborns. Ensuring high-quality care across the perioperative, intraoperative, and post-operative phases is critical to improving maternal and neonatal outcomes. Clinical audits help identify gaps in care and facilitate evidence-based improvements.

This audit evaluates adherence to standards of care for women undergoing CS at Deder General Hospital, Oromia, Ethiopia, to ensure safe and effective care delivery.

AIM

- >To improve the quality of care provided for women who delivered by cesarean section.

Objectives

- To ensure women who gave birth by CS are evaluated appropriately
- To ensure women had undergone CS received evidence based intraoperative care
- To ensure women who gave birth by CS received evidence based post operative care



METHODOLOGY

Study area & period

The clinical audit was conducted in C/S room of Deder General Hospital from **March 21, 2017EC to June 20, 2017E.C**

Study design

- ❖ Retrospective cross-sectional study

Source population

- ❖ All patients delivered by C/S and cards are available during the study period.

Inclusion criteria

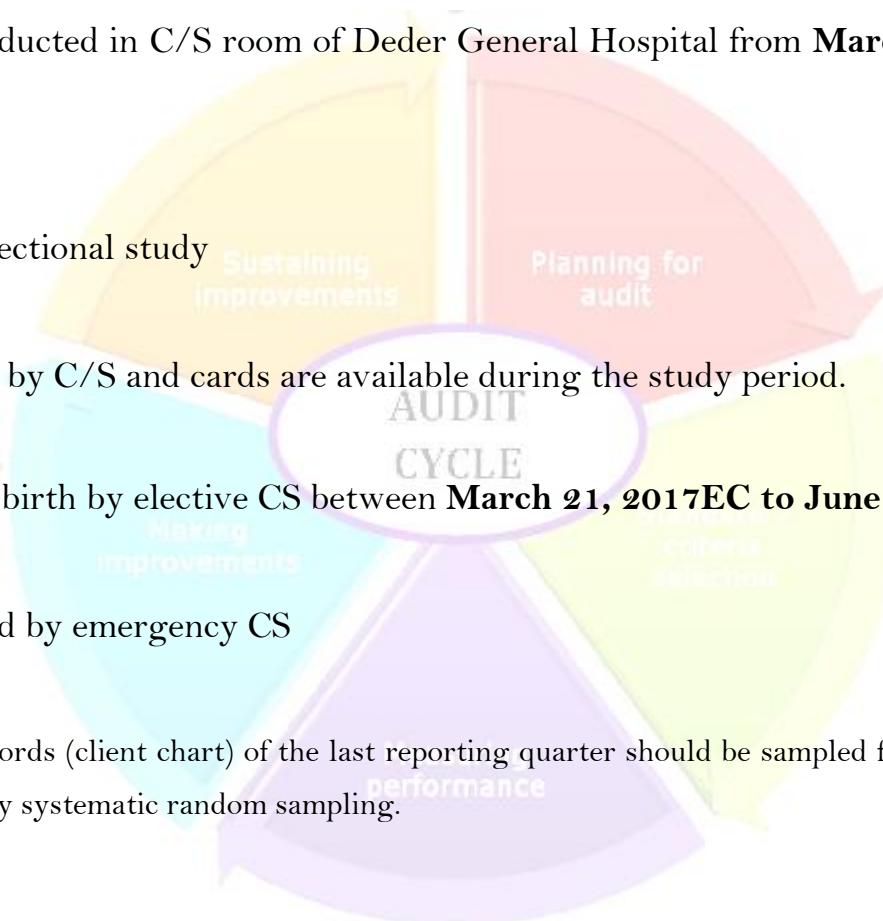
- ❖ All women who gave birth by elective CS between **March 21, 2017EC to June 20, 2017E.C** was included

Exclusion criteria

- ❖ Women who delivered by emergency CS

Sampling technique

- ❖ A total of 19 medical records (client chart) of the last reporting quarter should be sampled for the audit. The individual client charts were withdrawn by systematic random sampling.



Study Variables

Dependent variables:

- Cesarian section

Independent Variables

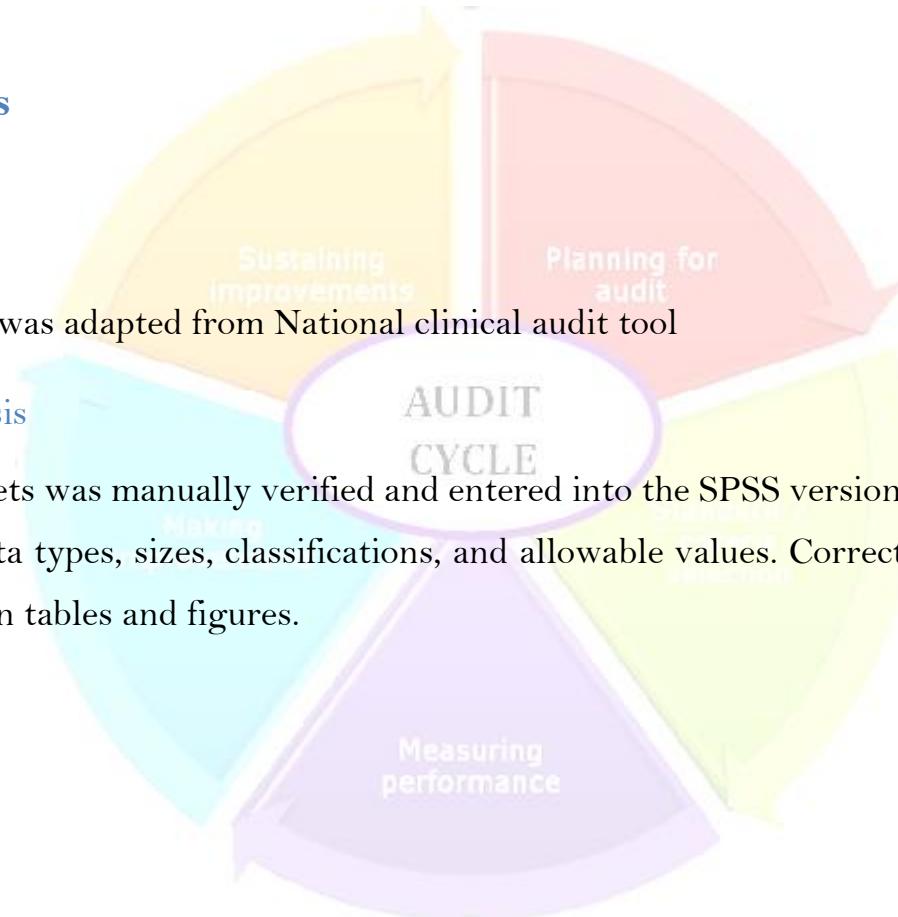
C/Section, OR,

Data collection method

- Data extraction sheet was adapted from National clinical audit tool

Data Processing & analysis

Data from extraction sheets was manually verified and entered into the SPSS version 25 software for analysis. The software checked data types, sizes, classifications, and allowable values. Corrections were made, and the findings were presented in tables and figures.



RESULTS

The Cesarean section care audit for June 2017 E.C. demonstrated a high level of adherence to established standards, achieving an **Overall Performance rate of 93%**. This falls slightly short of the ambitious 100% target but indicates that the vast majority of care processes across the audited pathway were performed according to protocol. The result reflects significant strengths in several key areas while highlighting specific domains requiring focused improvement efforts to reach the desired universal standard.

The audit revealed outstanding performance in numerous critical areas. Pre-operative Preparation, Intraoperative Care, Provider Identification, and Discharge Without Complication all met their stringent 100% targets. Furthermore, the standard for Newborn Apgar Score ≥ 7 was successfully achieved at 90%, meeting its specific target. These results indicate highly reliable processes and consistent practice in patient identification, surgical preparation, intraoperative management, immediate newborn assessment, and preventing complications leading up to discharge.

Despite the strong overall performance, two specific care phases fell significantly below their 100% targets and require urgent attention. **Post-operative Care** achieved only 86%, indicating gaps in the management and monitoring of mothers during the recovery period immediately following surgery. More critically, **Discharge Care** showed the largest deficit, achieving only 75% compliance. This substantial gap suggests that processes related to patient education, discharge planning, medication reconciliation, follow-up arrangements, or documentation at the point of discharge are not being consistently followed. Addressing these specific shortcomings in post-operative and discharge care is essential to elevate the overall performance to the 100% target level.

Overall Performance of C/S

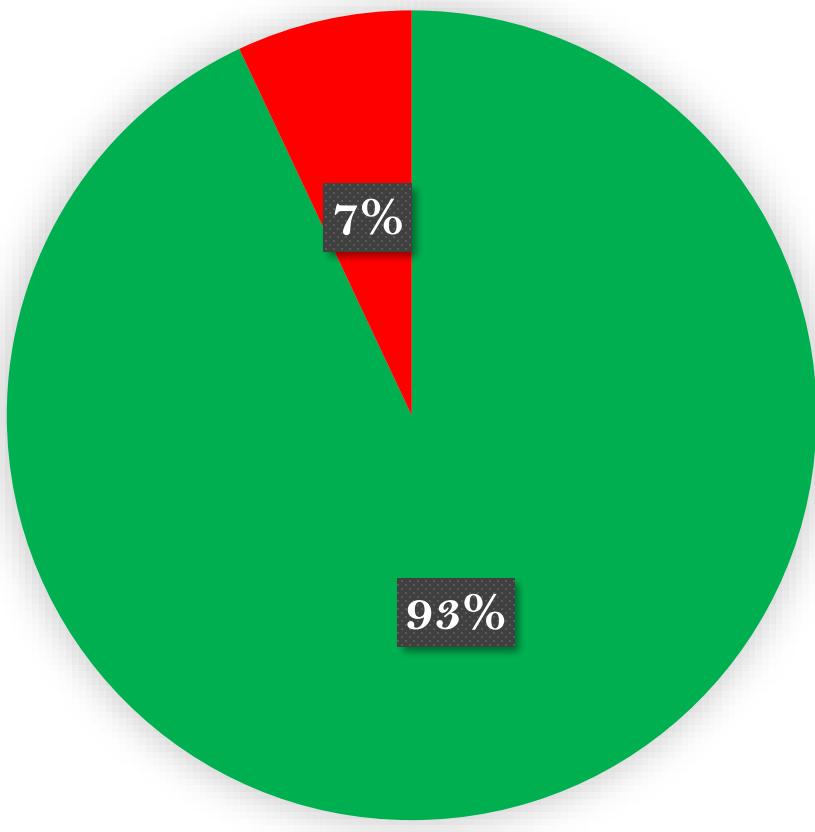


Figure 1: Overall Performance of Management of Women delivered by C/S, June 2017E.C

Table 1: Overall of Performance of Cesarean section Care Clinical Audit, June 2017E.C

Standard	Target (%)	Actual (%)
Pre-operative Preparation	100	100
Intraoperative Care	100	100
Post-operative Care	100	86
Discharge Care	100	75
Provider Identification	100	100
Newborn Apgar Score ≥ 7	90	90
Discharge Without Complication	100	100
Overall Performance	100	93

100% compliance across all sub-criteria in 19 audited cases. Key requirements— informed consent, decision notes, pre-surgery antibiotics, and hemoglobin/blood group testing—were consistently fulfilled.

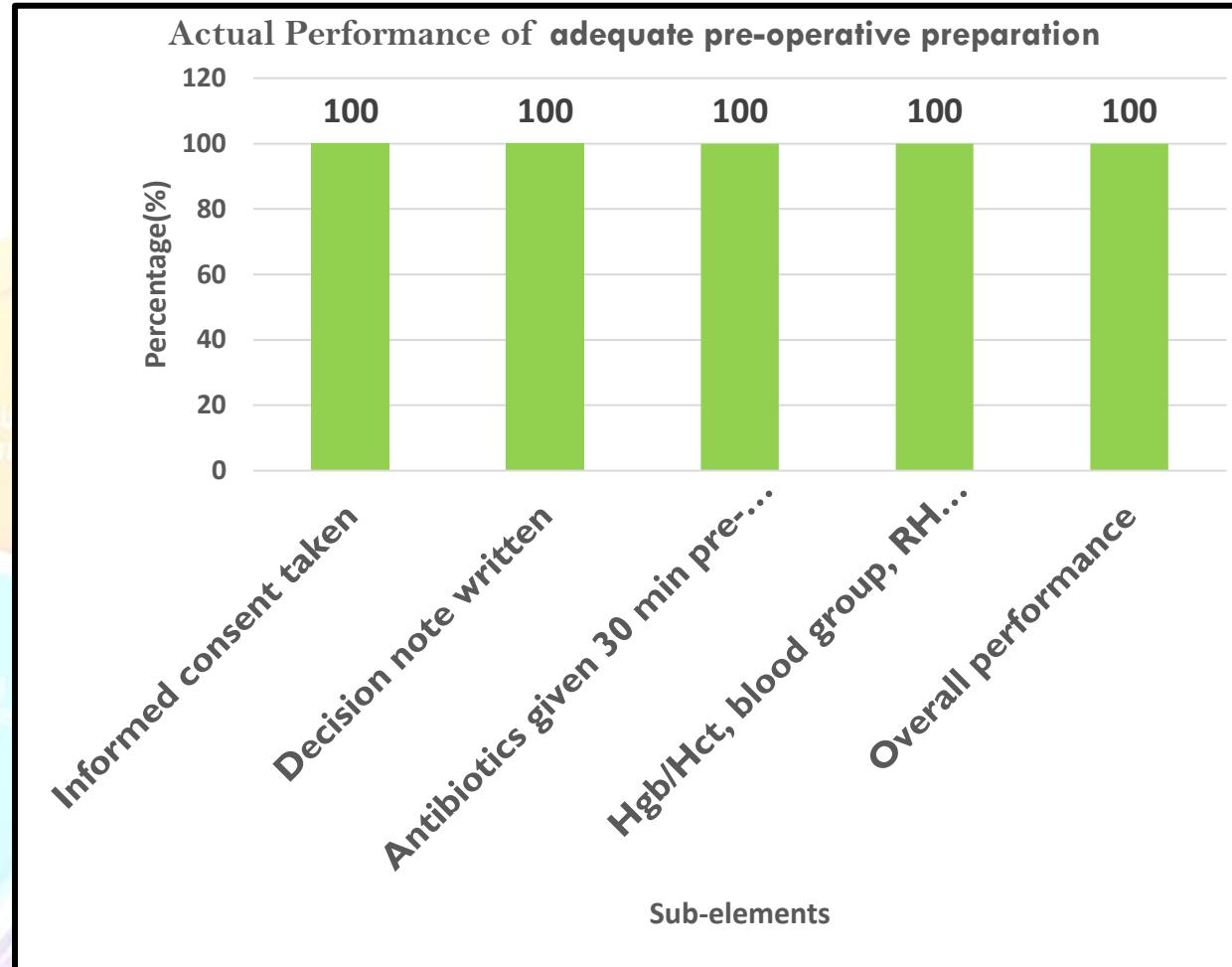
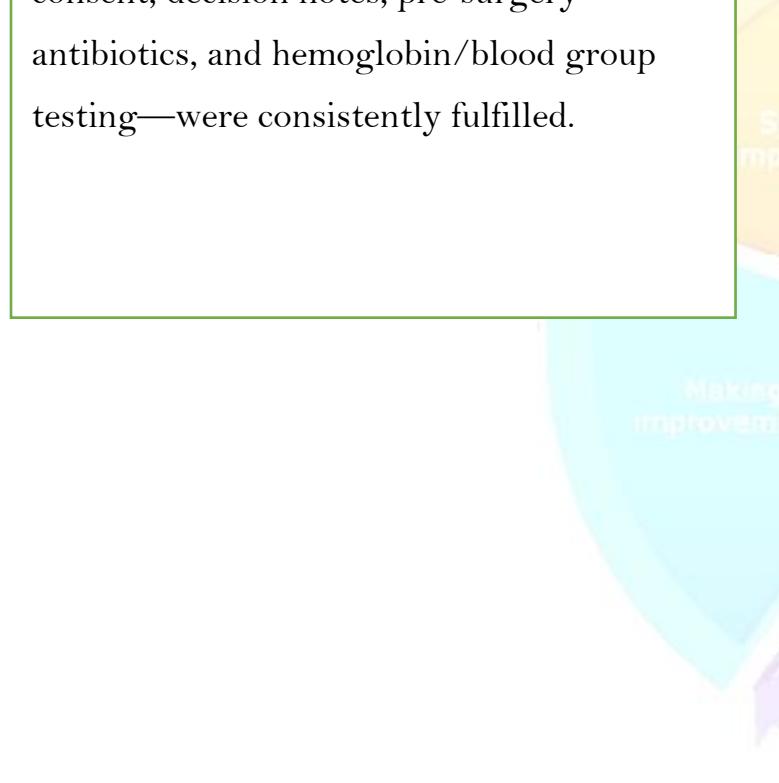
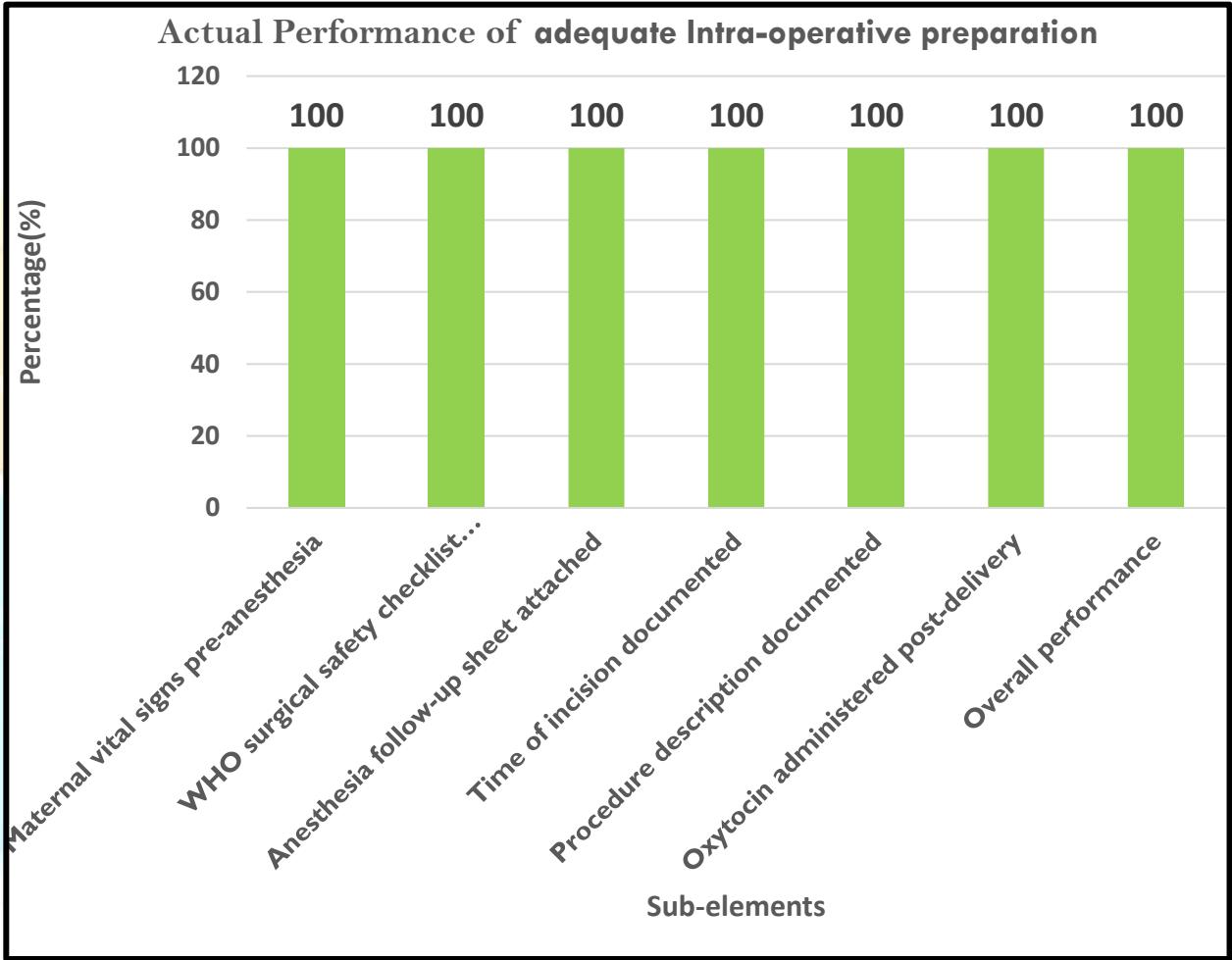


Figure 2: Adequate pre-operative preparation, June 2017E.C

100% compliance across all sub-criteria in 19 audited cases. Key requirements— informed consent, decision notes, pre-surgery antibiotics, and hemoglobin/blood group testing—were consistently fulfilled.



- 86% overall compliance. Vital signs monitoring (sub-criteria 3.1–3.3) achieved 100%, but daily order sheet revisions (3.4), daily progress tracking (3.5), and pain score management (3.6) each scored 74% (14 compliant, 5 non-compliant cases) (**figure 5**)

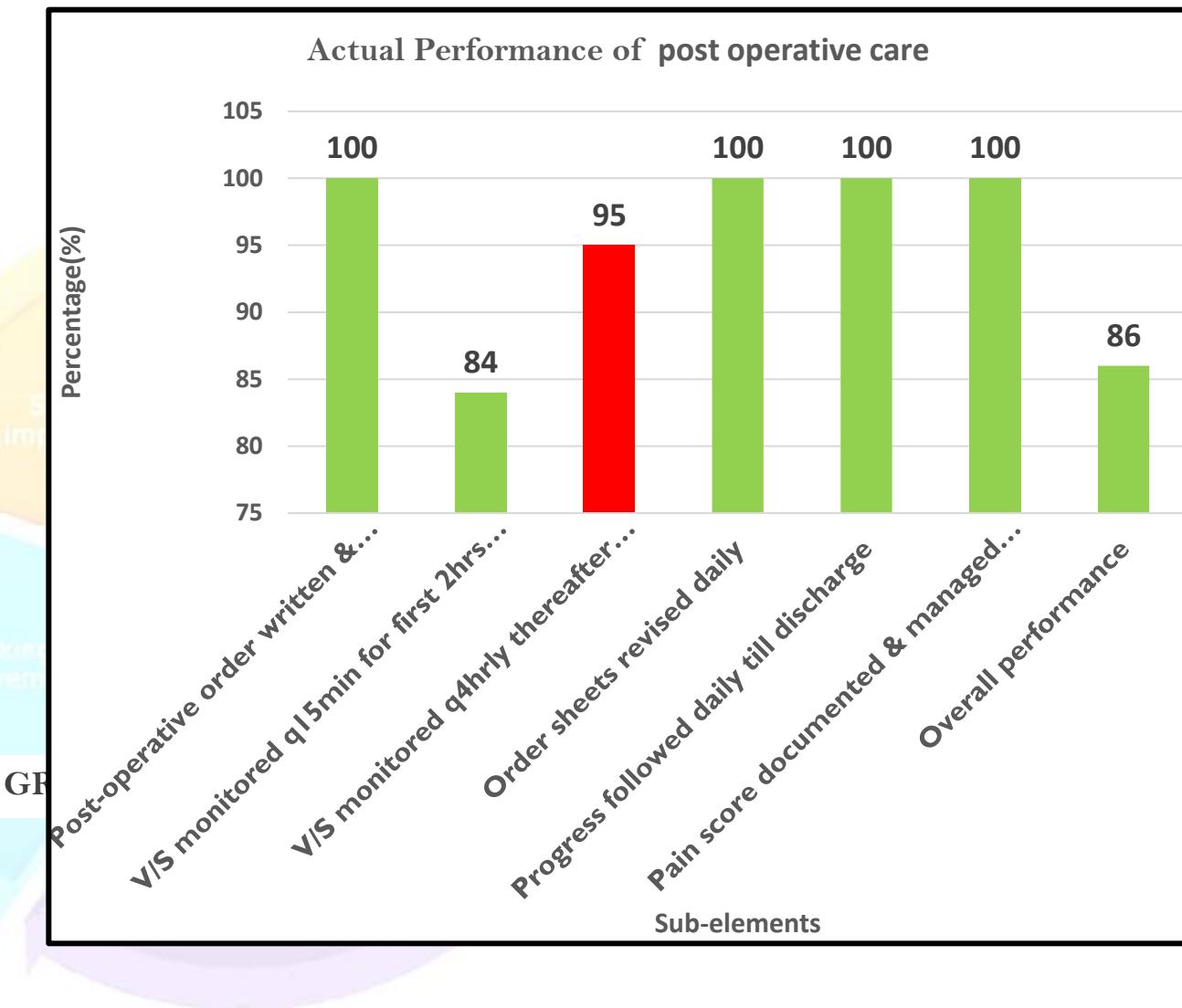


Figure 4: APPROPRIATE POST-OP CARE

75% overall compliance. Iron/folate prescriptions (4.2), appointment scheduling (4.3), and DVT assessments (4.4) were 100% compliant. However, proper counseling (4.1) was 0% compliant (0/ 19 cases).

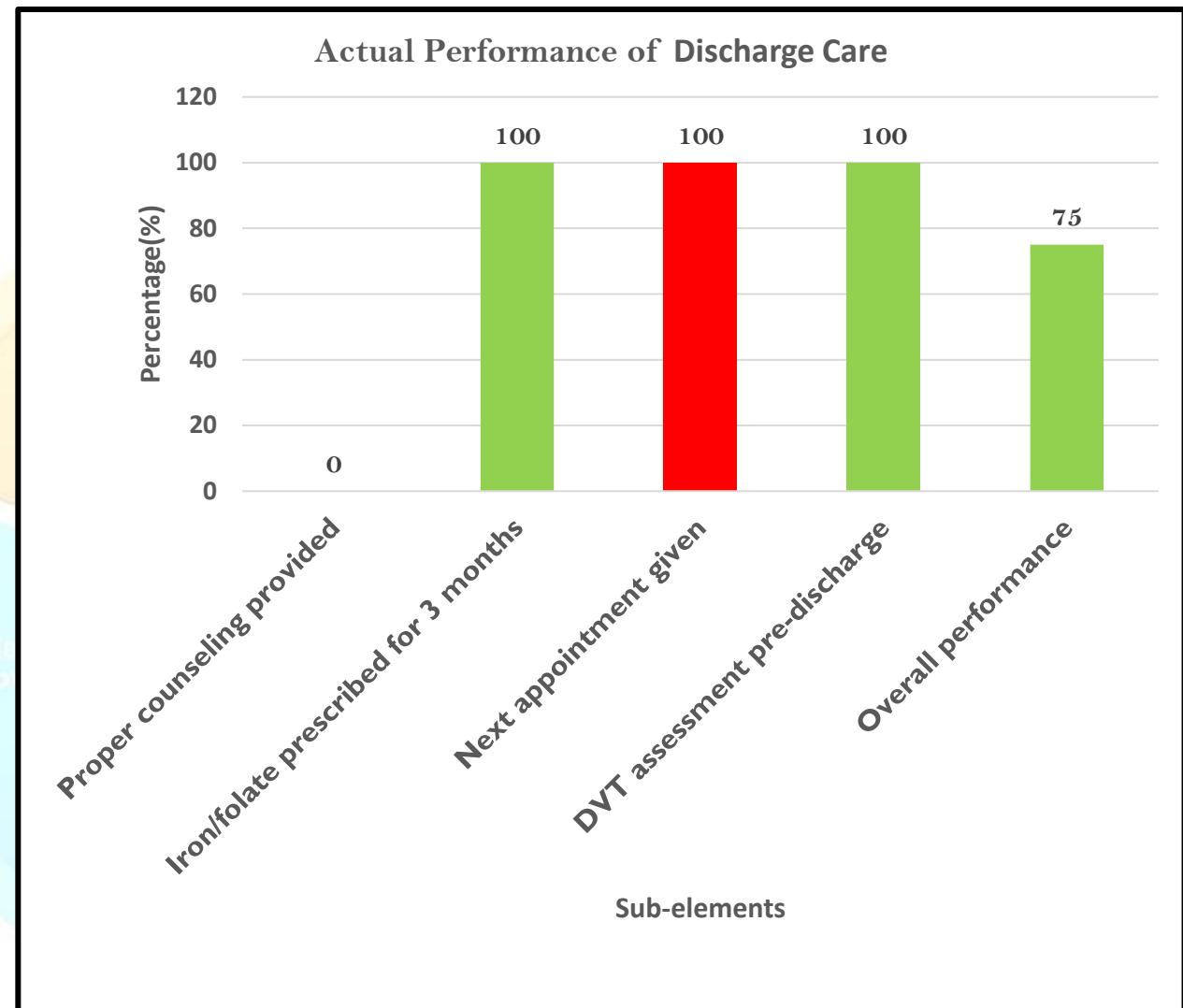


Figure 5: APPROPRIATE DISCHARGE CARE

The performance of provider documentation was **100%**.

- ❖ All sub-criteria achieved full compliance (100%).

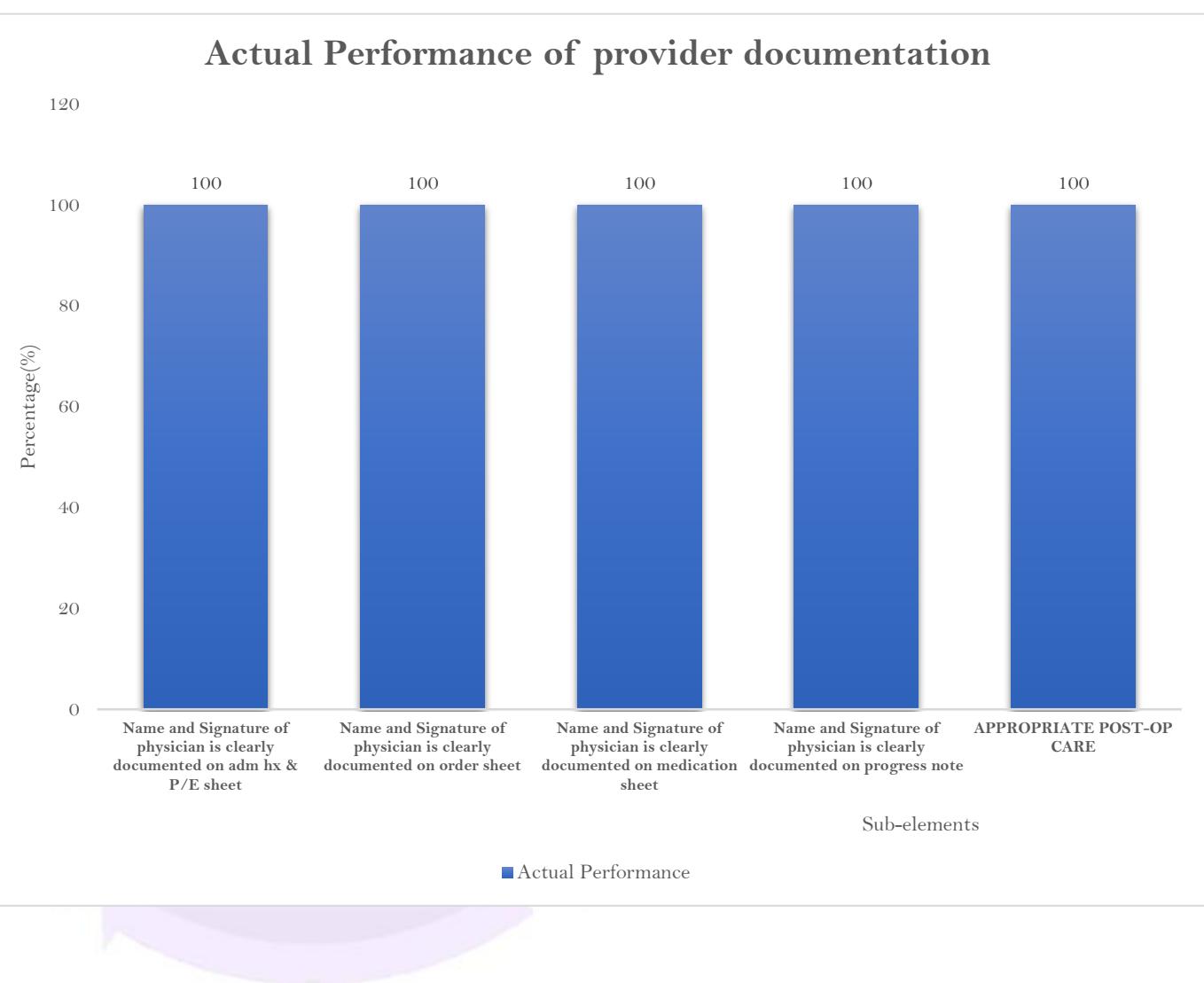


Figure 6: APPROPRIATE DISCHARGE CARE

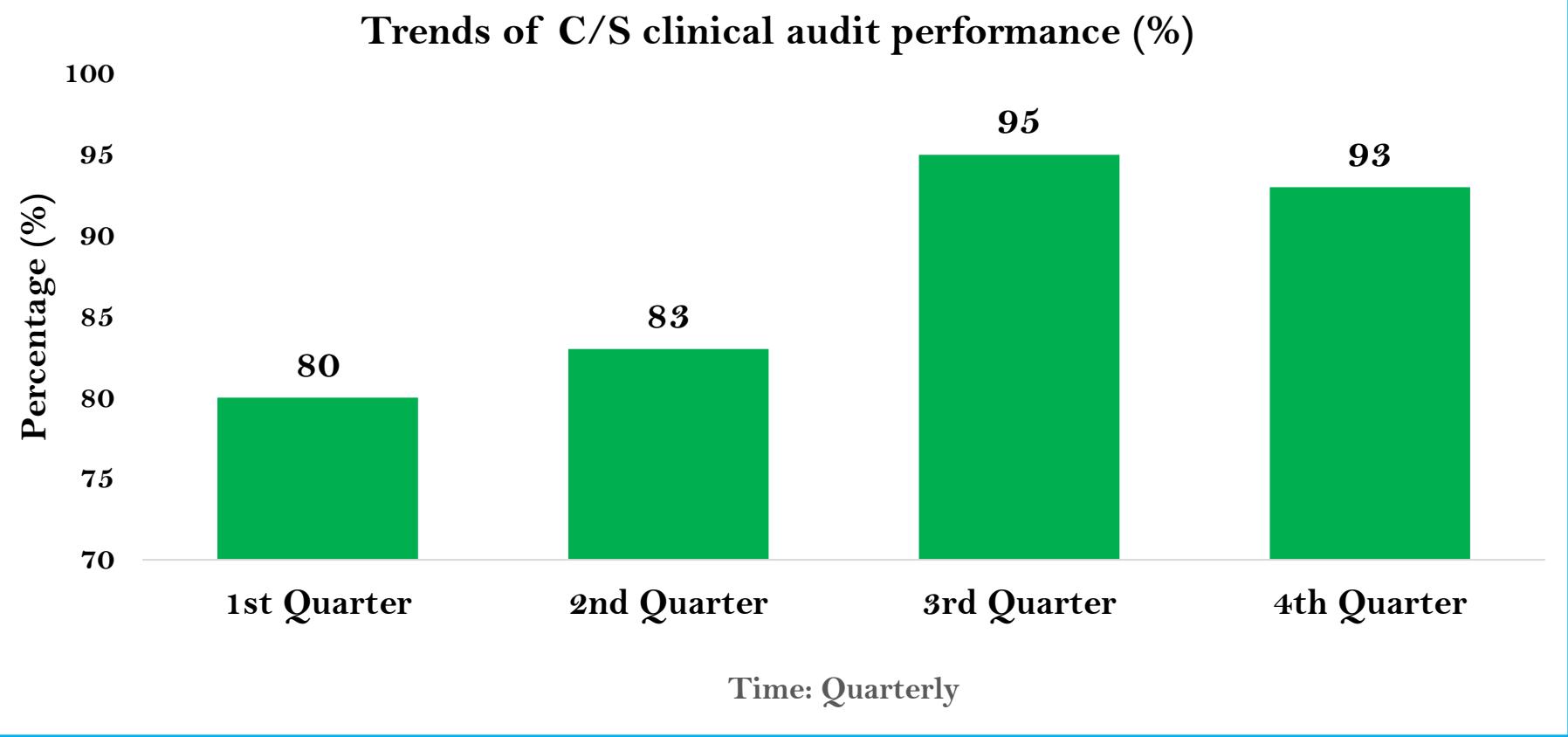


Figure 7: Trends of C/S clinical audit performance 2017E.C

DISCUSSION

This clinical audit of Cesarean section care for June 2017 E.C. reveals a generally high standard of practice, achieving an **overall performance rate of 93%**. This indicates that the majority of the audited care processes across the pathway are being delivered effectively and in line with established protocols. The achievement of 100% compliance in critical areas like Pre-operative Preparation, Intraoperative Care, Provider Identification, and Discharge Without Complication is particularly commendable. These results demonstrate strong adherence to fundamental safety and procedural standards, contributing significantly to the positive overall outcome. Furthermore, meeting the specific 90% target for Newborn Apgar Score ≥ 7 signifies appropriate immediate newborn care and assessment.

CYCLE

However, the audit clearly identifies two significant areas requiring focused improvement: **Post-operative Care (86%)** and, most critically, **Discharge Care (75%)**. The deficit in post-operative care (14% below target) suggests potential gaps in the consistent monitoring, management, and support provided to mothers during the crucial recovery phase immediately after surgery. This could involve aspects such as pain management, vital sign monitoring, ambulation support, breastfeeding initiation, or wound care. The more substantial shortfall in discharge care (25% below target) is a major concern. This indicates significant inconsistencies or deficiencies in processes vital for safe transition home, potentially including comprehensive patient education (wound care, signs of complications, medication instructions), discharge planning, follow-up arrangement scheduling, medication reconciliation, completion of necessary documentation, and ensuring patient understanding.

These findings suggest that while the core surgical and immediate perioperative processes are robust, systems supporting the later stages of recovery and transition out of the hospital require strengthening. Addressing the deficiencies in post-operative and discharge care is essential not only for reaching the aspirational 100% targets but, more importantly, for optimizing patient outcomes, preventing readmissions, enhancing patient satisfaction, and ensuring continuity of care after Cesarean delivery. Targeted interventions, such as process mapping, root cause analysis of the gaps, staff retraining, checklist implementation, and enhanced patient education tools specifically for discharge, should be prioritized to improve performance in these vulnerable phases of care.

RECOMMENDATIONS

- ☒ Enhance Post-operative Care
- ☒ Strengthen Discharge Care Processes

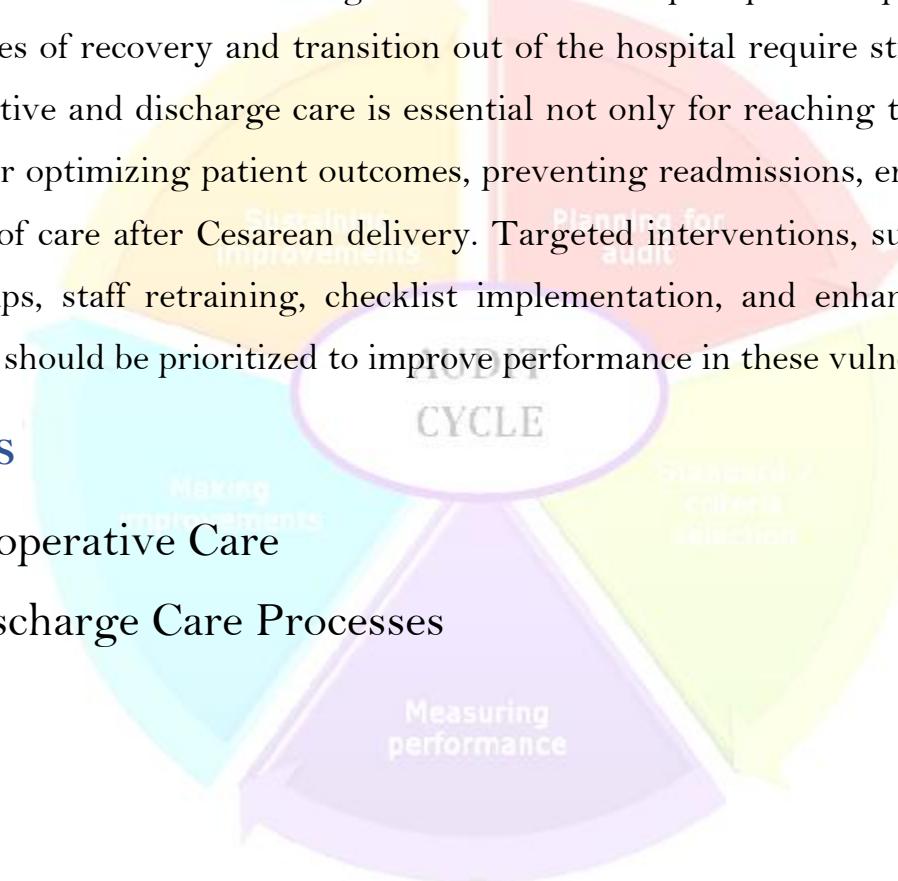
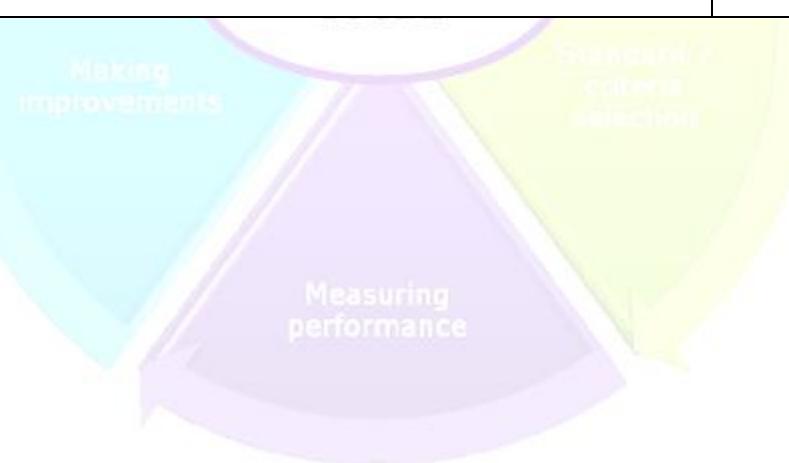


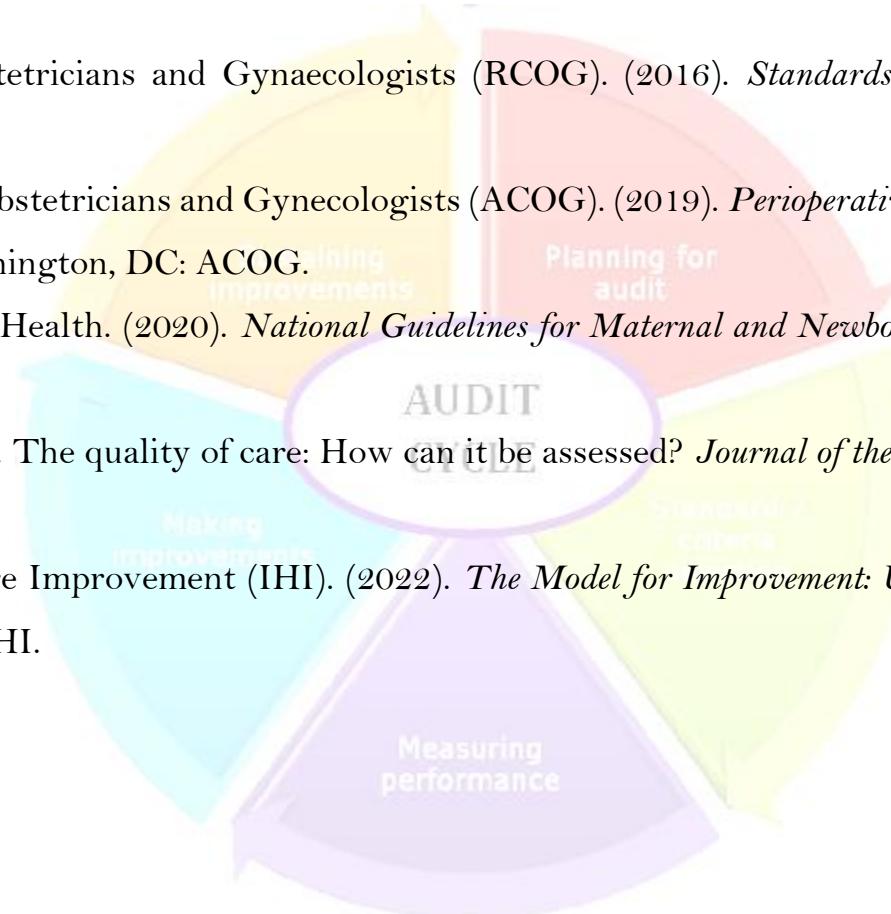
Table 2: performance improvement plan to improve clinical care of C/S delivered mothers, June 2017E.C

Recommendation	Action to be taken	Responsible Party	Timeline
Enhance Post-operative Care	Implement standardized post-operative monitoring (vital signs, pain, bleeding) every 2 hours for the first 24 hours. Ensure timely pain management and early mobilization protocols.	Midwifery Staff, Obstetricians	By September 20, 2017 E.C.
Strengthen Discharge Care Processes	Provide structured education on postpartum self-care and newborn feeding.	Midwives, Discharge Coordinator	By September 20, 2017 E.C.



REFERENCES

1. World Health Organization (WHO). (2016). *WHO Surgical Safety Checklist: Implementation Manual*. Geneva: WHO.
2. Royal College of Obstetricians and Gynaecologists (RCOG). (2016). *Standards for Maternity Care*. London: RCOG Press.
3. American College of Obstetricians and Gynecologists (ACOG). (2019). *Perioperative Standards and Guidelines for Obstetric Patients*. Washington, DC: ACOG.
4. Ethiopian Ministry of Health. (2020). *National Guidelines for Maternal and Newborn Health Care*. Addis Ababa, Ethiopia.
5. Donabedian, A. (1988). The quality of care: How can it be assessed? *Journal of the American Medical Association*, 260(12), 1743-1748.
6. Institute for Healthcare Improvement (IHI). (2022). *The Model for Improvement: Using PDSA Cycles for Quality Improvement*. Boston: IHI.



**Guyyaa/ቁጥር Date:** _____ / _____ / _____

- ❖ Garee tajaajila GYN ward irraa
- ❖ Garee Qulquullina Tajaajila Fayyaatiif

Dhimmi: waa'ee Gabaasa CLINICAL AUDIT galchuu ilaallata

Akkuma mata Dureerrattii ibsamuuf yaalameettii clinical audit” **C/S**” jedhamu kan **kurmaana 4ffaa** bara **2017** xalayaa Fuula **20** qabuu gaggeessituu kana waliin walqabsiifnee isiiniif eerguu keenya kabajaan isiniif beeksiifnaa.

Nagaya wajjiin!!