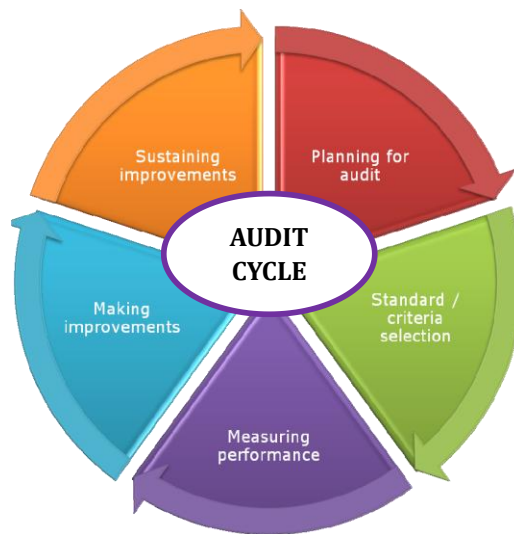




DEDER GENERAL HOSPITAL
GYNECOLOGY AND OBSTETRICS DEPARTMENT



**CLINICAL AUDIT TO IMPROVE THE QUALITY OF CLINICAL CARE OF
CISERAIAN SECTION**

By: Abdella Mohammed (BSc MW)- Maternity ward head
Dr. Taju Abdi (MD, GynOBS specialist)-Team leader

Advisors:

☛ **HSQU**

December, 2017 E.C
Deder, Oromia

Table 1: GynOBS Case team Clinical Audit/QI team members, 2025/17

S/N	Name	Responsibility	Remarks
1.	Dr. Taju Abdi (MD, GYNOBS specialist)	Team leader	
2.	Dr. Anwar Sham (MD, GYNOBS specialist)	Co-leader/ Advisor	
3.	Beyan Abdo (IESO)	Member	
4.	Wogayeho Birhanu (BSc MW)	Secretory	
5.	Addisu Wondimu (Labour & Delivery Ward head)	Secretory	
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
Methods.....	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
RESULT	4
Discussion	12
Recommendations	13
References	14
Figure 1: Overall Performance of Management of Women delivered by C/S, December 2017EC	5
Figure 2: criterion/standard for management of Women delivered by C/S, December 2017EC	6
Figure 3: ADEQUATE PRE-OPERATIVE PREPARATION	7
Figure 4: STANDARD INTRAOPERATIVE CARE.....	8
Figure 5: APPROPRIATE POST-OP CARE	9
Figure 6: APPROPRIATE DISCHARGE CARE	10
Figure 7: APPROPRIATE DISCHARGE CARE	11
Table 1: ACTUAL PERFORMANCE ANDV PERFORMANCE AGAINST TARGET	4



Implementation Status of Previous Audit Action Plan

The implementation of the previous audit action plan was partially successful, as reflected in the overall performance score of 83%. Key improvements were observed in areas such as intraoperative care (93%) and discharge care (100%). However, gaps remain in pre-operative preparation (75%) and post-operative care (69.5%). Specific challenges included inconsistent documentation of daily order sheets and incomplete follow-up of vital signs post-operatively.

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

Methods

Study area & period

The clinical audit was conducted in C/S room of Deder General Hospital from **September 21, 2017EC to December 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 **September 21, 2017EC to December 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. Clinical audit is not research. It is about evaluating compliance with standards rather than creating new knowledge, therefore sample sizes for data collection are often a compromise between the statistical validity of the results and pragmatic issues around data collection i.e., time, access to data, costs. The sample should be small enough to allow for speedy data collection but large enough to be representative. In some audits the sample will be time driven and in others it will be numerical.

Study Variables

Dependent variables:

- ☛ Cesarean 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.

RESULT

The overall compliance with standards of care for women undergoing cesarean sections was **83% (figure 1)**, highlighting both strengths and areas needing improvement. High compliance was observed in intraoperative care (93%) and discharge care (100%). Key successes included adherence to WHO surgical safety checklists, proper documentation of procedures, and comprehensive discharge counseling, including follow-up plans and supplementation with iron/folate. However, pre-operative preparation lagged at 75%, primarily due to the absence of timely administration of prophylactic antibiotics (0%) (**Table 1**).

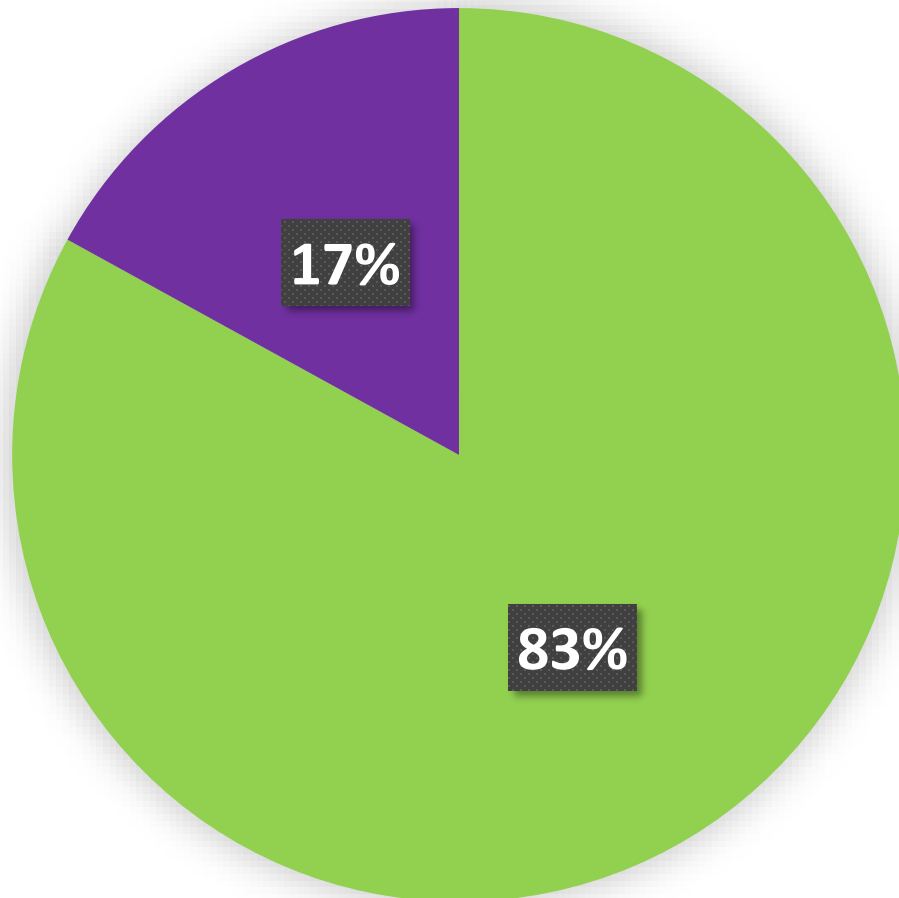
Post-operative care compliance was 69.5%, with notable gaps in daily order sheet revisions (0%) and inconsistent follow-up of vital signs. Additionally, while provider documentation on key forms such as admission and discharge sheets were complete, progress notes were often missing (0%). These gaps underscore the need for better workflow management, enhanced staff accountability, and regular training to ensure consistent adherence to clinical standards (**Table 1**).

Table 1: ACTUAL PERFORMANCE ANDV PERFORMANCE AGAINST TARGET

Sno	Variables	Target	Actual Performance	Performance against
1	Adequate pre-operative preparation is made for a mother who delivered by cs	100%	75	25
2	Standard intraoperative care is provided during c-section for a mother who delivered by cs	100%	93	7
3	Post operative care to be carried out in the post anesthesia care unit and ward clearly communicated for a mother who delivered by cs	100%	69.5	30.5
4	Appropriate discharge care is provided for a mother who delivered by cs	100%	100	0
5	Identification of provider is documented for a mother who delivered by cs	100%	75	25
	Overall performance	100	83%	17

Overall Performance of clinical audit of C/S delivery women

The overall Performance of Management of Women delivered by C/S was 88%.



■ Actual Performance

■ Performance against target

Figure 1: Overall Performance of Management of Women delivered by C/S, December 2017EC

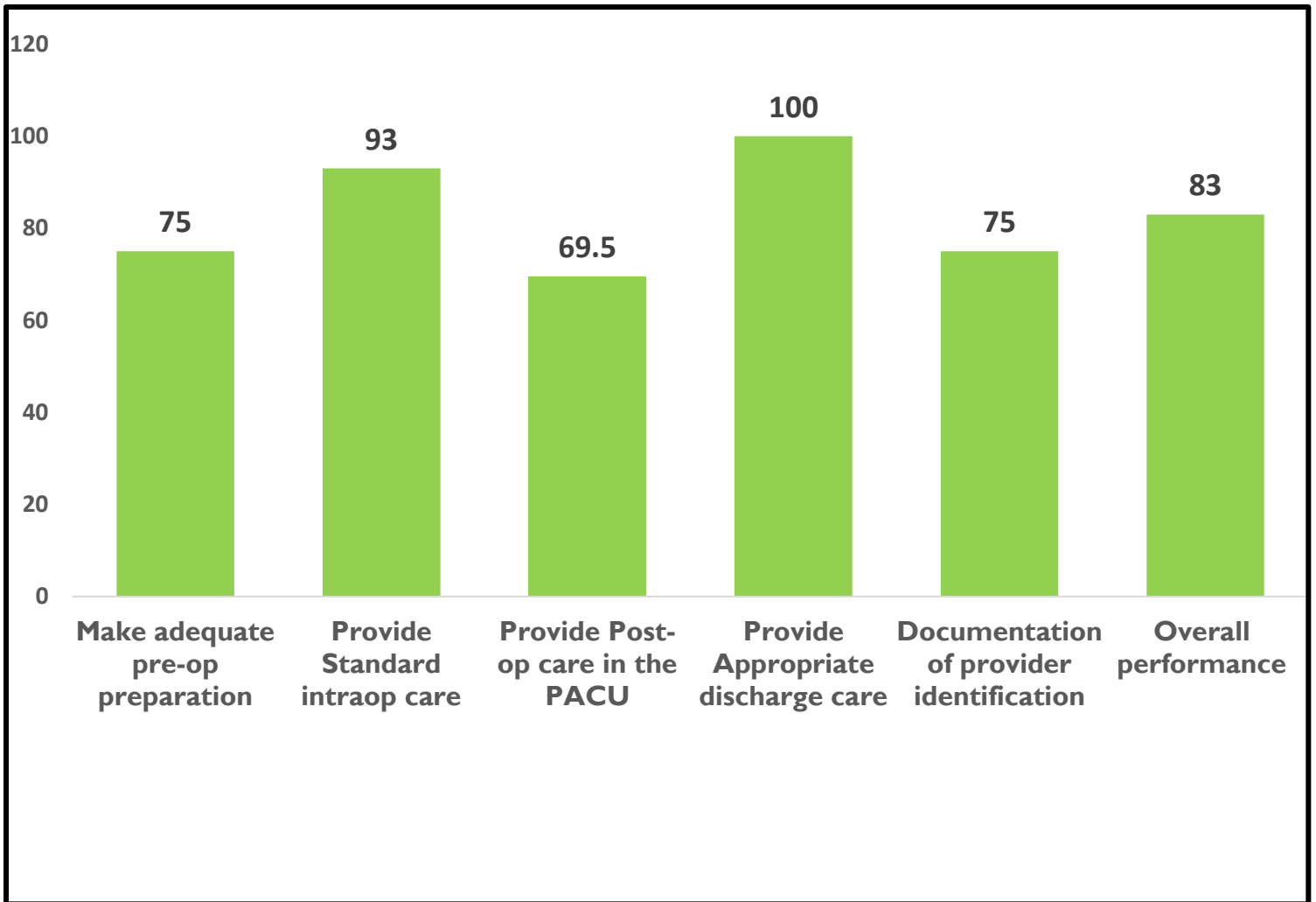


Figure 2: criterion/standard for management of Women delivered by C/S, December 2017EC

Pre-operative Preparation (75%)

- Informed consent and decision notes achieved full compliance (100%).
- Antibiotic administration 30 minutes prior to surgery was not performed (0%).

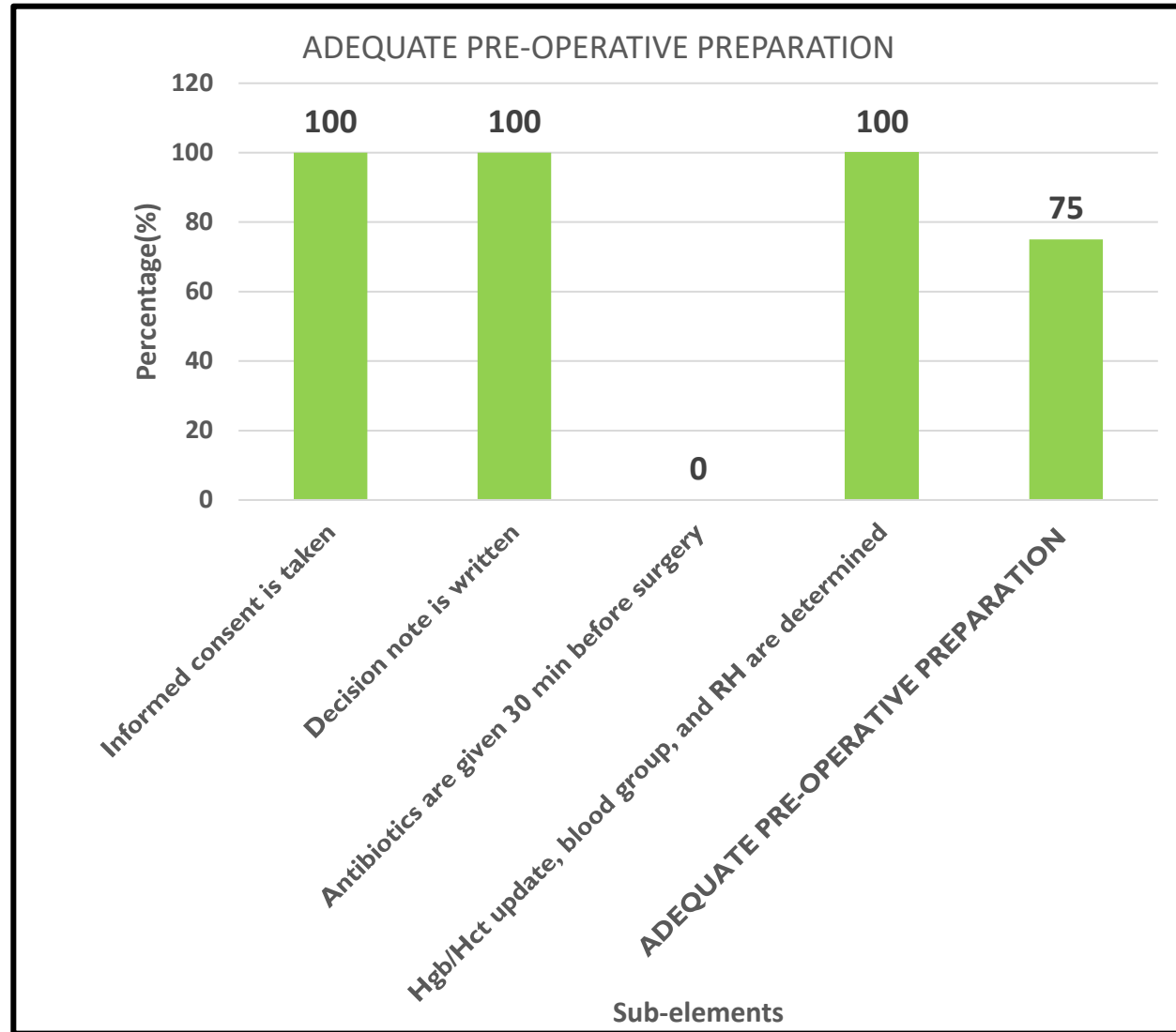
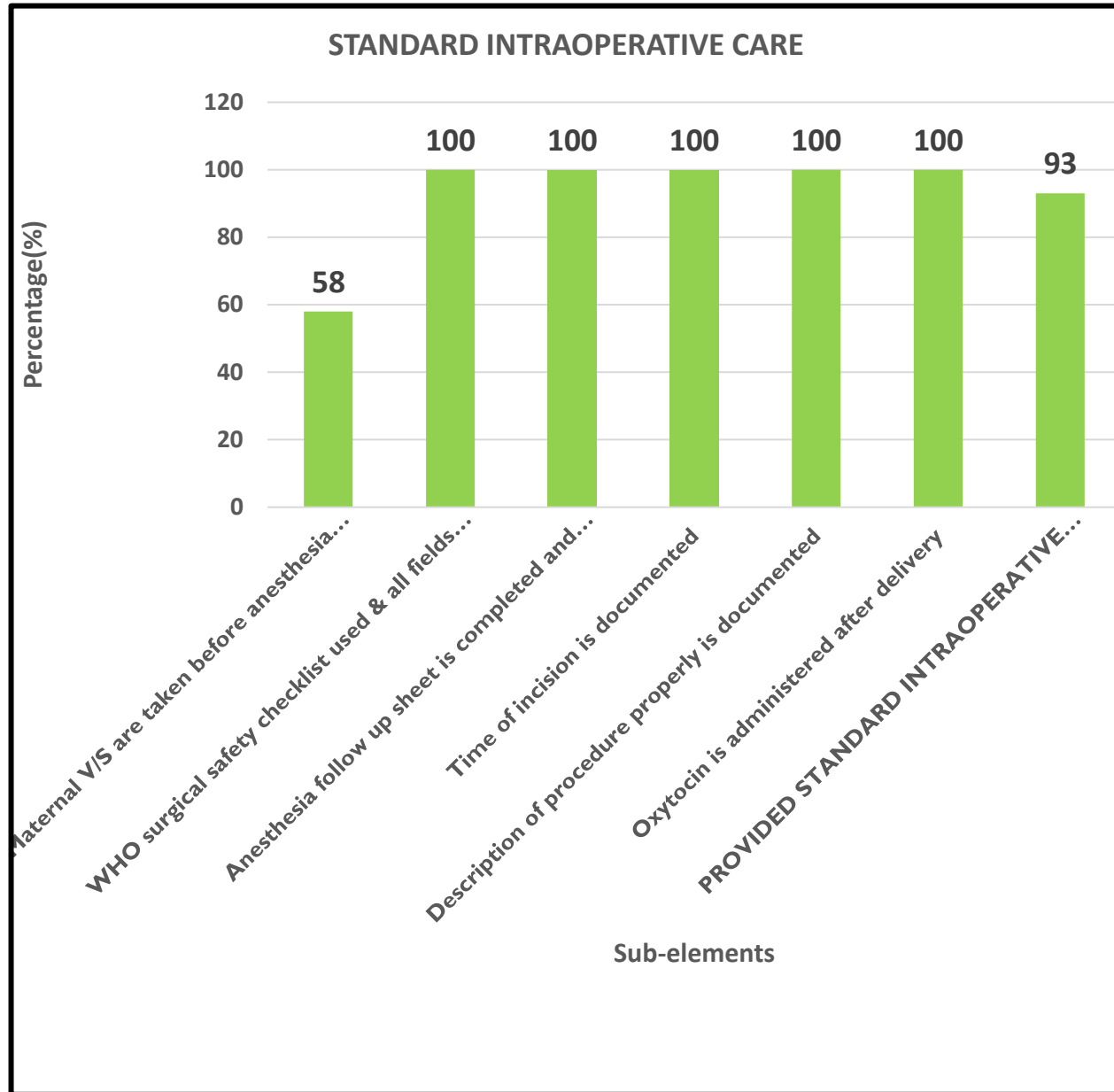


Figure 3: ADEQUATE PRE-OPERATIVE PREPARATION

Intraoperative Care (93%)

- Compliance was high across most indicators, including maintaining patient safety using WHO checklists, documenting procedures, and administering oxytocin.
- Maternal vital signs monitoring before anesthesia lagged behind (11%).

Figure 4: *STANDARD INTRAOPERATIVE CARE*



GRAPH SHOWING SCORE APPROPRIATE POST-OP CARE

The performance for appropriate post-op care was **70%**. This indicates suboptimal compliance with recommended practices. Specific sub-elements include:

- Post-operative orders and progress tracking were consistent (100%), but daily order sheet revisions were absent (**0%**) (**figure 5**)

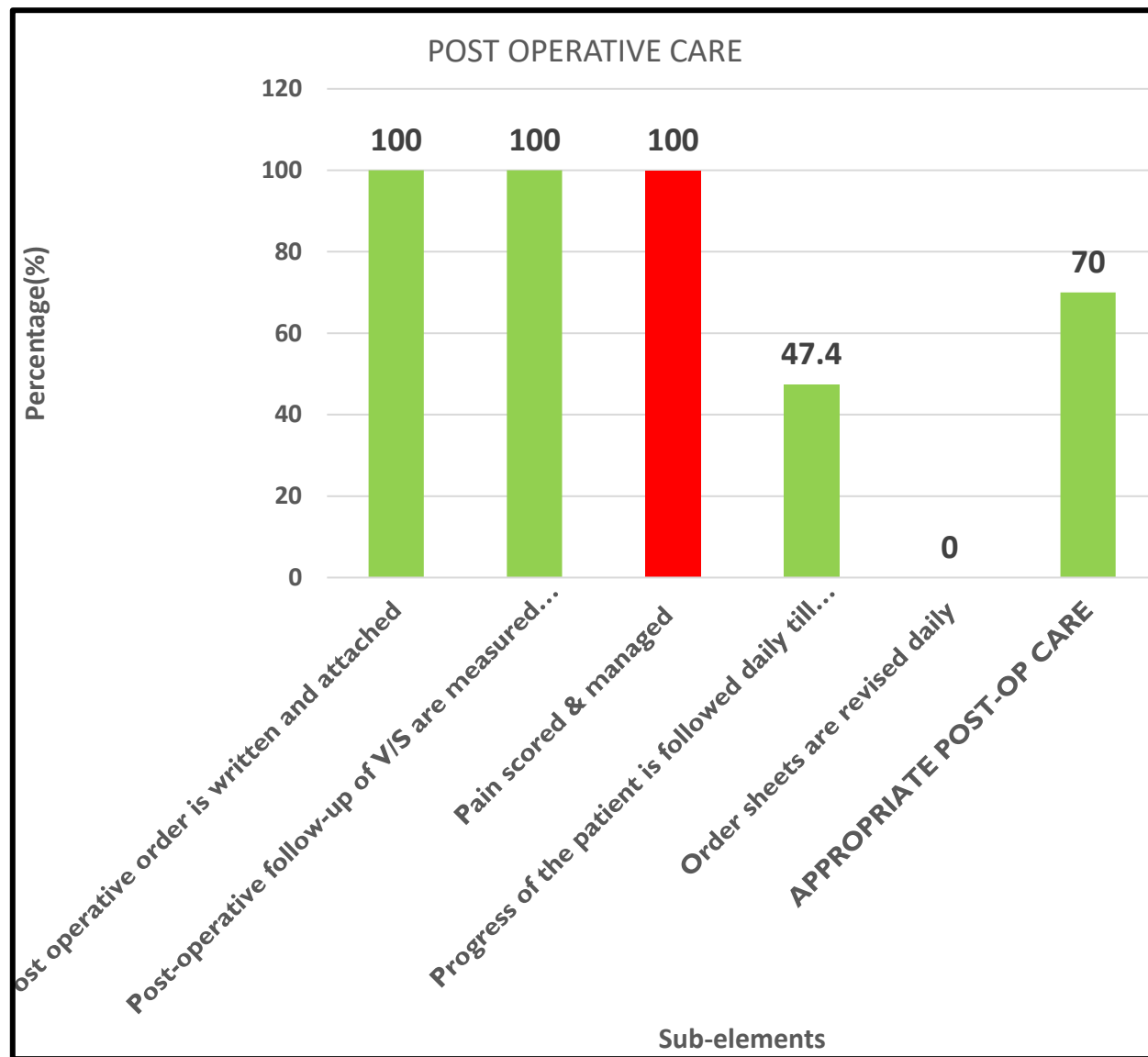


Figure 5: APPROPRIATE POST-OP CARE

GRAPH SHOWING SCORE APPROPRIATE DISCHARGE CARE

The performance for appropriate discharge care was **10%**.

- All indicators, including counseling, follow-up appointments, and iron/folate supplementation, were fully met (**100%**) (**figure 6**)

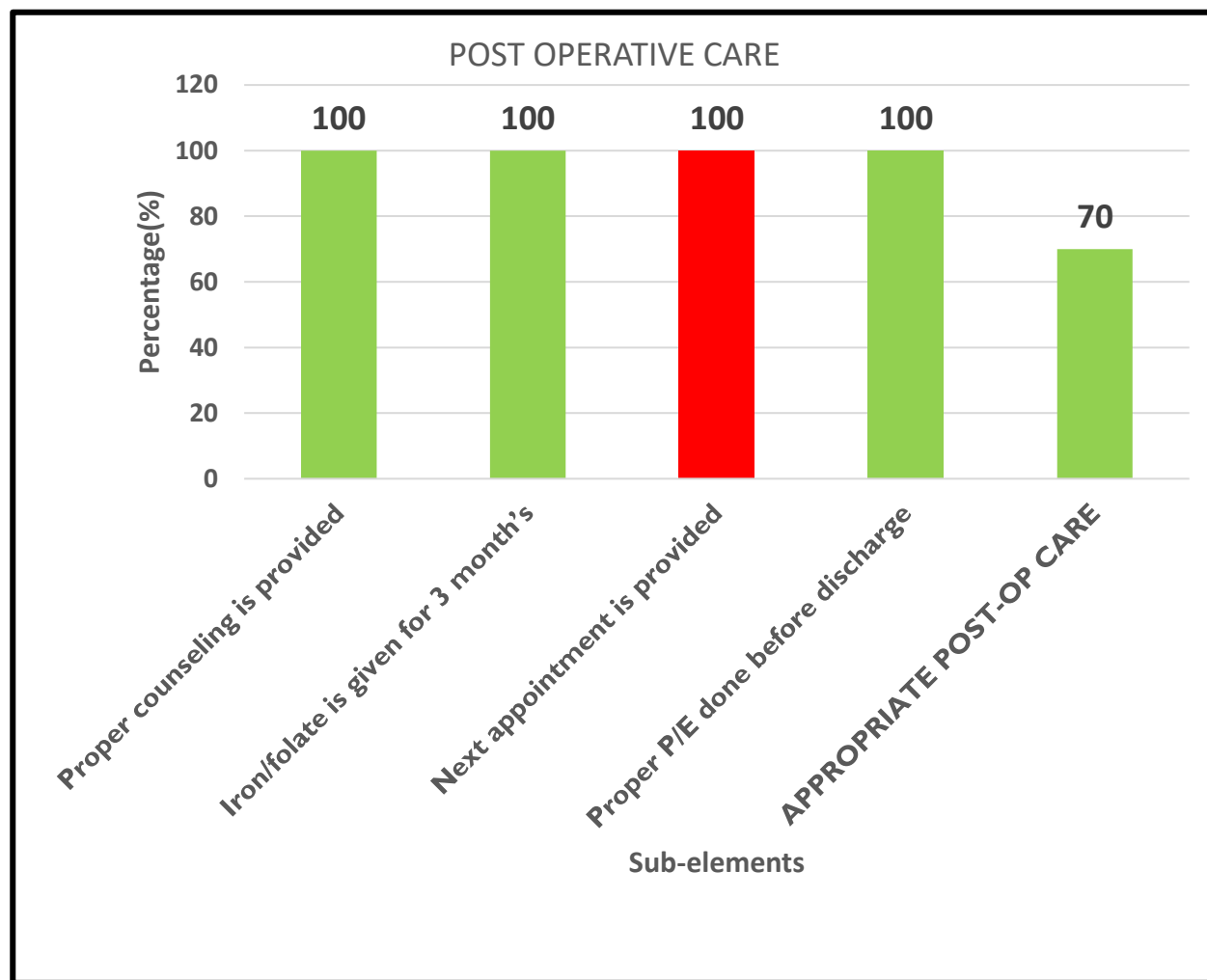


Figure 6: APPROPRIATE DISCHARGE CARE

GRAPH SHOWING SCORE PROVIDER IDENTIFICATION

The performance of provider documentation was 75%.

- Physician and nurse documentation were generally complete, except for progress notes (0%) (**figure 7**)

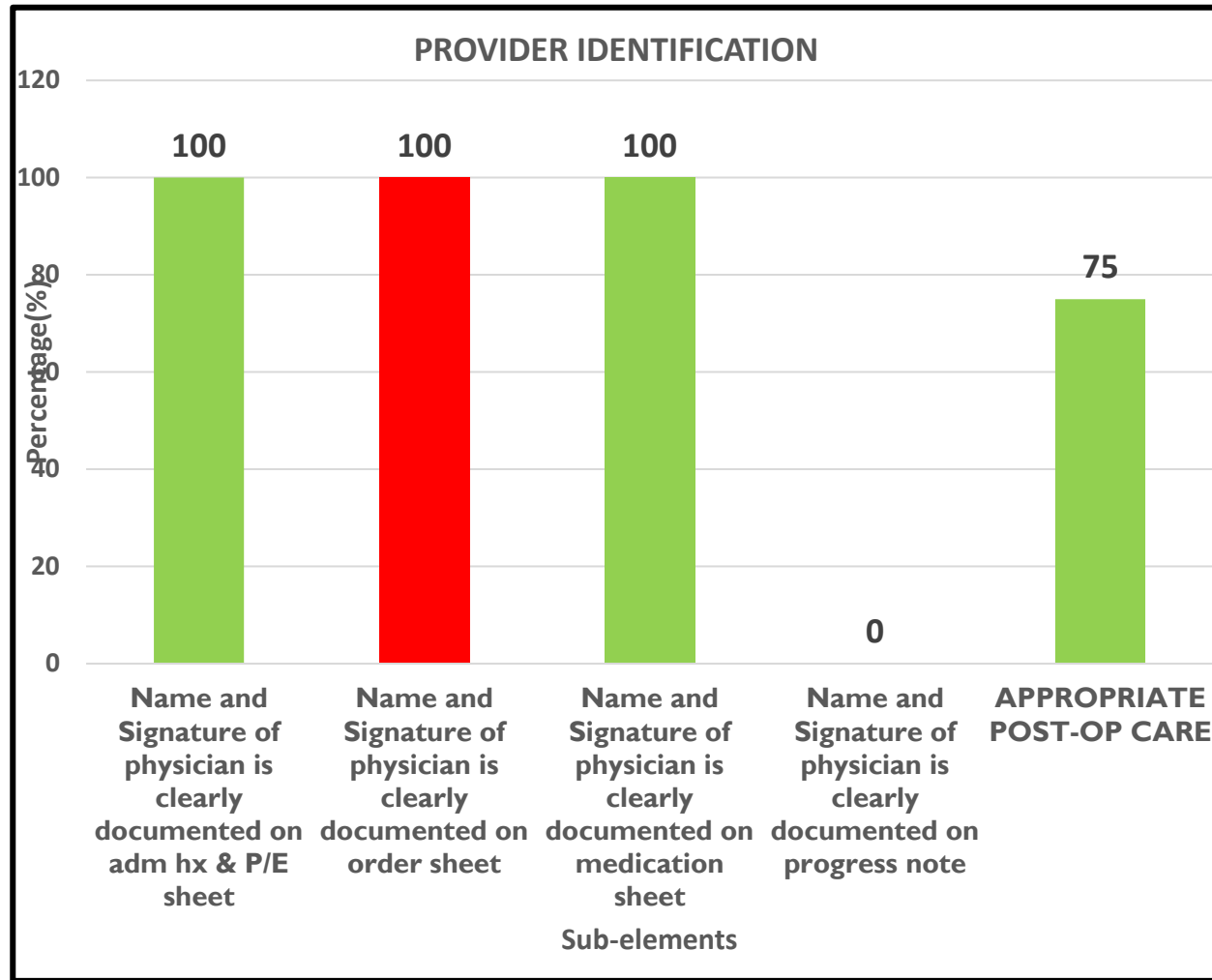


Figure 7: *APPROPRIATE DISCHARGE CARE*

Discussion

The audit revealed an overall compliance score of 83%, indicating substantial progress in meeting clinical standards for cesarean section care. Strengths were observed in intraoperative care and discharge practices, with most indicators fully met, reflecting adherence to WHO guidelines and effective teamwork during critical phases of care. Proper use of surgical safety checklists, complete documentation of procedures, and comprehensive discharge planning contributed to these successes. These achievements demonstrate the hospital's ability to deliver high-quality care in certain areas and the potential to sustain and build on these strengths.

However, significant gaps were identified in pre-operative and post-operative care, with specific challenges such as the failure to administer pre-operative antibiotics within the recommended timeframe (0%) and the lack of daily order sheet revisions (0%). These gaps are likely due to inadequate workflows, limited staff training, and inconsistent monitoring mechanisms. Additionally, the absence of proper documentation in progress notes reflects a need for stronger accountability among providers. Addressing these challenges requires a multi-faceted approach, including training, improved coordination, and ongoing audits to ensure sustained improvements in care quality.

Recommendations

1. Ensure timely administration of pre-operative antibiotics through staff education and workflow adjustments.
2. Improve monitoring of maternal vital signs during intraoperative care with proper training and equipment availability.
3. Reinforce the need for daily order sheet revisions by assigning specific responsibilities to team members.
4. Regularly review physician documentation, particularly for progress notes.
5. Conduct routine audits to sustain compliance with discharge care standards.



DEDER GENERAL HOSPITAL
CLINICAL AUDIT QUALITY IMPROVEMENT PLAN/PDSA FORM

Clinical Audit Title: To improve the quality of clinical care provided for C/S women

Clinical Audit Lead: Dr. Taju Abdi (GYN/OBS Specialist). Department /Team: GY/OBS WARD

Date: 28/4/2017E.C

	Plan					DO	STUDY	ACT
Recommendation	Actions to address the recommendation/Change idea	Person Responsible	Target Date	Data collection plan		Carry out the plan. Record data, observations and modifications to the plan. Use visual descriptions such as run charts to describe what actually	Complete analysis and synthesis. Do the results align with the explicit criteria? Write the progress made in the implementation, the difficulties faced and actions taken to address them.	Decision: What action are we going to take as a result of this cycle (Adopt, Adapt, or Abandon)? Are we ready to implement? What other processes or systems might be affected by this change?
	What change will we test? What do we need to try the change?	Who will perform the test? (Name or Role)	When will this be complete?	How will we collect data? (Checklist, Chart audit,)	Who will collect the data? (Name or Role)			
Improve Pre-operative Care	Develop and implement a standard operating procedure (SOP) for administering antibiotics 30 minutes before surgery.	OR nurse head (Shame) anesthesiologist (Ahmed Bune) & L&D ward head (Addisu)	Jan 30, 2017E.C	Regular review of patient records by the quality team to ensure compliance	Quality U(Abdi T+ Abdella A)			
Enhance Intraoperative Care Monitoring	Documenting maternal vital signs before anesthesia administration	Anesthesia team (Ahmed Bune)	Jan 10-feb 10, 2017E.C	Spot checks during procedures and review of anesthesia follow-	Quality U(Abdi T+ Abdella A)			
Strengthen Post-operative Care Practices	Assign responsibility for daily order sheet revisions to specific staff members and integrate it into the routine handover process.	Ward Midwives head (Abdella) and Senior physician's coordinator (Dr. Taju).	From Jan 10, 2017E.C onward	Weekly audits of patient records by the ward supervisor.	Quality U(Abdi T+ Abdella A)			
Improve Documentation in Progress Notes	Provide feedback on the importance of accurate documentation in progress notes and set up regular feedback sessions.	Quality director and medical records officer.	From January 10, 2017, onward	Monthly audits of provider documentation.	Quality U (Abdi T+ Abdella A)			

☐ **Adapt** (Modify this change and plan next PDSA cycle; loop back to "Plan") ☐ **Abandon** (Change didn't work/won't lead to improvement. Identify new change; plan new PDSA cycle; loop back to "Plan")
☐ **Adopt** (Data revealed this change was effective and worked well; Next step, develop implementation plan) >>>>

Completed by:

Sign off:

Date of review of PDSA:

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.