

DEDER GENERAL HOSPITAL EMERGENCY INJURY AND CRITICAL CARE DEPARTMENT



CLINICAL AUDIT TO IMPROVE THE QUALITY OF CLINICAL CARE OF TRAUMA MANAGEMENT IN THE EMERGENCY DEPARTMENT

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Advisors:

F HSQU TEAM

Dader, Oromia

September 2017E.C

Emergency and critical care case team clinical Audit/QI members

S/N	Full Name	Status	Role	Remarks
1.	Dr. Dawit Seifu	Emergency	Chairperson	
		Director		
2.	Murad Amin	Emergency Head	Secretary	
3.	Wardi Usman	Staff	Deputy Secretary	
4.	Dachas Shamsadin	Staff	Member	
5.	Zabib Abrahim	Staff	Member	
6.	Alamudin Sufiyan	Staff	Member	
7.	Yosef Tesfaye	Staff	Member	
8.	Buzu Seyum	Staff	Member	

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ABSTRACT

Introduction: Trauma care is complex and challenging. People sustain multiple injuries requiring urgent medical attention. Many critical decisions are made during the early phases of trauma care. Initial resuscitation and ongoing care involve multiple specialist teams and disciplines.

Objective: To improve quality of clinical care provided to trauma patients

Method: Retrospective cross-sectional study

Result: The clinical audit included 16 patient charts that were evaluated according to nine main criteria. The main criteria consisted of 65 sub-criteria and one outcome criteria. Of the 8 criteria reviewed for trauma management, 6 criteria had a significant disagreement with the target, and 2 criteria achieved 100% Performance. The overall trauma management performance was **91%**.

INTRODUCTION

Trauma care is complex and challenging. People sustain multiple injuries requiring urgent medical attention. Many critical decisions are made during the early phases of trauma care. Initial resuscitation and on-going care involve multiple specialist teams and disciplines. Each and every part of this journey impacts on whether the patient lives or dies and what injuries they will live with for the rest of their lives. Since the beginning of the year 2022, DGH has encountered and still continues to encounter some challenges with case management of TRAUMA. Thus, DGH plan this clinical audit aim to improve the quality of clinical care provided for patient with the trauma ED.

OBJECTIVE

General objective

• To improve quality of clinical care provided to trauma patients

Specific objectives

- To ensure trauma patients presenting to the emergency are appropriately evaluated
- To ensure trauma patients presenting to the emergency are appropriately investigated
- To ensure trauma patients presenting to the emergency are appropriately treated
- To ensure trauma patients presenting to the emergency are appropriately disposed

Methods

Study area & period

The clinical audit was conducted in EOPD of Deder General Hospital from September 22-25, 2017EC

Study design

Retrospective cross-sectional study

Source population

All patients treated in the emergency with in the study period

Study population

All trauma patients treated in the emergency with in the study period Inclusion criteria

All trauma patients aged 14 and above, treated in the emergency from June 21,2016 to September 21, 2017E.C

Exclusion criteria

Patients who arrived 24 hours after sustaining trauma

Sampling technique

A total of 16 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:

Trauma management

Independent Variables

Demographic data, trauma, ABC of live, Mode of arrival, time of arrival Emergency OPD,

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 clinical audit included 16 patient charts that were evaluated according to nine main criteria. The main criteria consisted of 65 sub-criteria and one outcome criteria. Of the 8 criteria reviewed for trauma management, 3 criteria achieved 100% Performance while 4 criteria had a minor disagreement with the target, and only 1 criterion had significant disagreement with the target. The overall trauma management performance was **89%** (Table 1).

Table 1: ACTUAL PERFORMANCE ANDV PERFORMANCE AGAINST TARGET

Sno	Variables	Target	Actual Performance	Per aga
1	Identification Information Is Recorded for A Patient Presenting with Trauma	100	99	
2	Appropriate Evaluation and Management for Acute Life-Threatening Injuries Is Done for A Patient Presenting with Trauma Using Standard Trauma Care Principles		91	
3	Detailed History Taken and Physical Examination Performed for A Patient Presenting with Trauma	100	99	
4	Relevant Investigation Are Done for A Patient Presenting with Trauma	80	39	
5	Appropriate Diagnosis Is Made for A Patient Presenting with Trauma	100	100	
6	Appropriate Treatment Is Provided for A Patient Presenting with Trauma	100	100	
7	Appropriate Patient Disposition Is Done for A Patient Presenting with Trauma	100	100	
8	Identification Of Care Provider Is Documented for A Patient Presenting with Trauma	100	100	
9	A patient presenting with trauma died within 48 hours of hospital arrival to the hospital (can be within or outside the emergency department)	4	NA	
	Total Percentage (%)		728/8= 91 `%	•

Overall Performance of trauma management in the ED

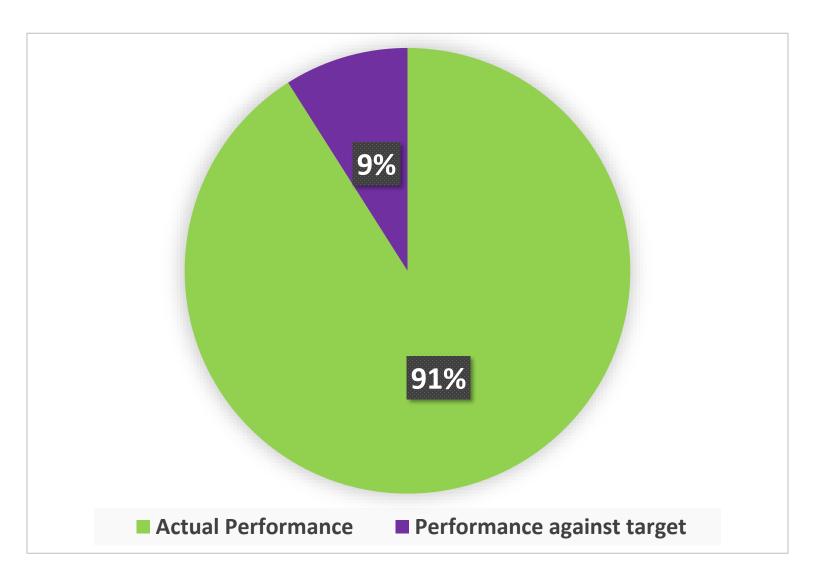


Figure 1: Overall Performance of trauma management in the ED, Sept 2017E.C

Graph showing score for each criterion/standard for trauma management in the ED

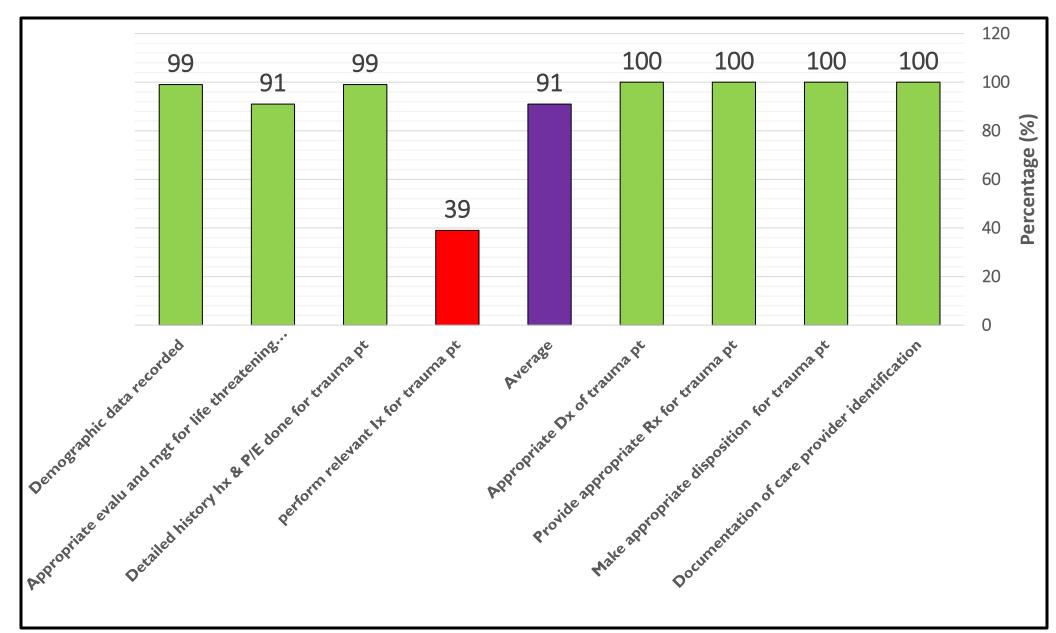


Figure 2: score for each criterion/standard trauma management in the ED, Sept 2017E.C

 Table 2: Prioritization matrix for Identified problems

S.No	List of identified problems	Prioritization criteria		Total	Rank	
		Magnitude	Feasibility	Importance		
		(out of 5)				
1	Relevant Investigation Are Done for A Patient Presenting with Trauma	3	4	5	12	1

Table 3: Root Cause Analysis]

S	List of problems	Specific sub criteria	Root cause of the Problem	
1 Relevant investigation are not done for a patient		Imaging of the affected parts is not done	Failure of imaging machine	
	presenting with trauma	CBC, BG/Rh, and cross- match is not done	Lack of reagents supply	

Table 4: Action **plan**

Summary of problem	Root cause	Change ideas	Responsible body	Time frame
Imaging of the affected parts is not done	Failure of imaging machine	Do maintenance	RHB & SMT	3 months
CBC, BG/Rh, and cross- match is not done	Lack of reagents supply	Availing lab reagents	Finance head, & lab head	1 month