DEDER GENERAL HOSPITAL

EMERGENCY DEPARTMENT

Diabetic Mellitus (DM) management STG utilization monitoring report

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Purpose

Since EBC was launched in 2014 it was mentioned that monitoring Utilization to STG was necessitated as mentioned in EBC document to make sure that clients was treated as per the protocol and there is uniformity of the care provided for the all clients. Deder General Hospital has also followed this and conducting the Monitoring of STG adherence.

Introduction

Diabetes Mellitus (DM) is a chronic condition with significant public health implications. Effective management relies on adherence to Standard Treatment Guidelines (STG) to ensure consistency and quality of care. This monitoring report evaluates the utilization of STG for DM at **Deder General hospital**, identifies gaps in compliance, and proposes actionable recommendations to improve outcomes.

AIM

- To assess adherence to Standard Treatment Guidelines for managing Diabetes Mellitus and enhance the quality of care provided to patients.

Objective

- Evaluate the compliance of healthcare providers with STG standards for DM management.
- Identify gaps and challenges in STG utilization.
- Provide actionable recommendations to address identified gaps.
- Develop an action plan with clear responsibilities and timelines.

Methodology

Study Design: Cross-sectional audit of DM case management.

- **Data Collection:**
  - **Sources**: Patient medical records, and audit checklists.
  - Study period: from **June 01-30, 2017E.C**
  - **Sample Size**: **10 cases of DM** management reviewed.
  - **Key Indicators**: Compliance with 12 key STG standards, including diagnosis confirmation, glucose monitoring, dietary counselling, and foot care.

Data Analysis:

- Compliance rates were calculated as the percentage of compliant cases out of the total reviewed.
- Non-compliance trends were identified and categorized.

Table 1:CRITEREA AND STANDARDS

S.No	Standards
1.	Diagnosis type confirmed (Type 1, Type 2, etc.)
2.	Baseline blood glucose and HbA1c levels documented
3.	Treatment initiation based on severity and type
4.	Accurate insulin or oral agent dosing based on STG
5.	Administration of DKA management per protocol if required
6.	Monitoring of blood glucose as per protocol
7.	Dietary and exercise counseling provided
8.	Documentation of foot care and eye examination
9.	Adherence to protocol for comorbid conditions
10.	Regular follow-up and HbA1c monitoring
11.	Assessment for hypoglycemia risk and prevention
12.	Documentation of patient education and compliance

RESULT

Overall, the STG utilization performance for diabetes management in June 2017 E.C. demonstrates a high level of compliance. The overall compliance rate across all 12 standards was **96% (115 compliant instances out of 120 possible instances**). This indicates that the established protocols were followed effectively in the vast majority of cases reviewed, reflecting strong adherence to clinical guidelines overall during this period.

However, one specific standard stands out as a significant area of non-compliance. Standard 8, concerning "Foot care and eye exam documentation," achieved only a 50% compliance rate (5 compliant vs. 5 non-compliant). This highlights a critical gap in the documentation or performance of essential preventative care components for diabetes patients, namely foot examinations and eye screenings, which are vital for preventing long-term complications.

In contrast, all other 11 individual standards achieved perfect 100% compliance. This includes crucial aspects like confirming diagnosis type, documenting baseline glucose/HbA1c, initiating appropriate treatment, accurate medication dosing, managing DKA, blood glucose monitoring, providing dietary/exercise counseling, managing comorbidities, ensuring regular follow-up/HbA1c monitoring, assessing hypoglycemia risk, and documenting patient education. The consistent perfect scores across these diverse elements underscore the robustness of protocol adherence in nearly all facets of diabetes management captured by this audit.

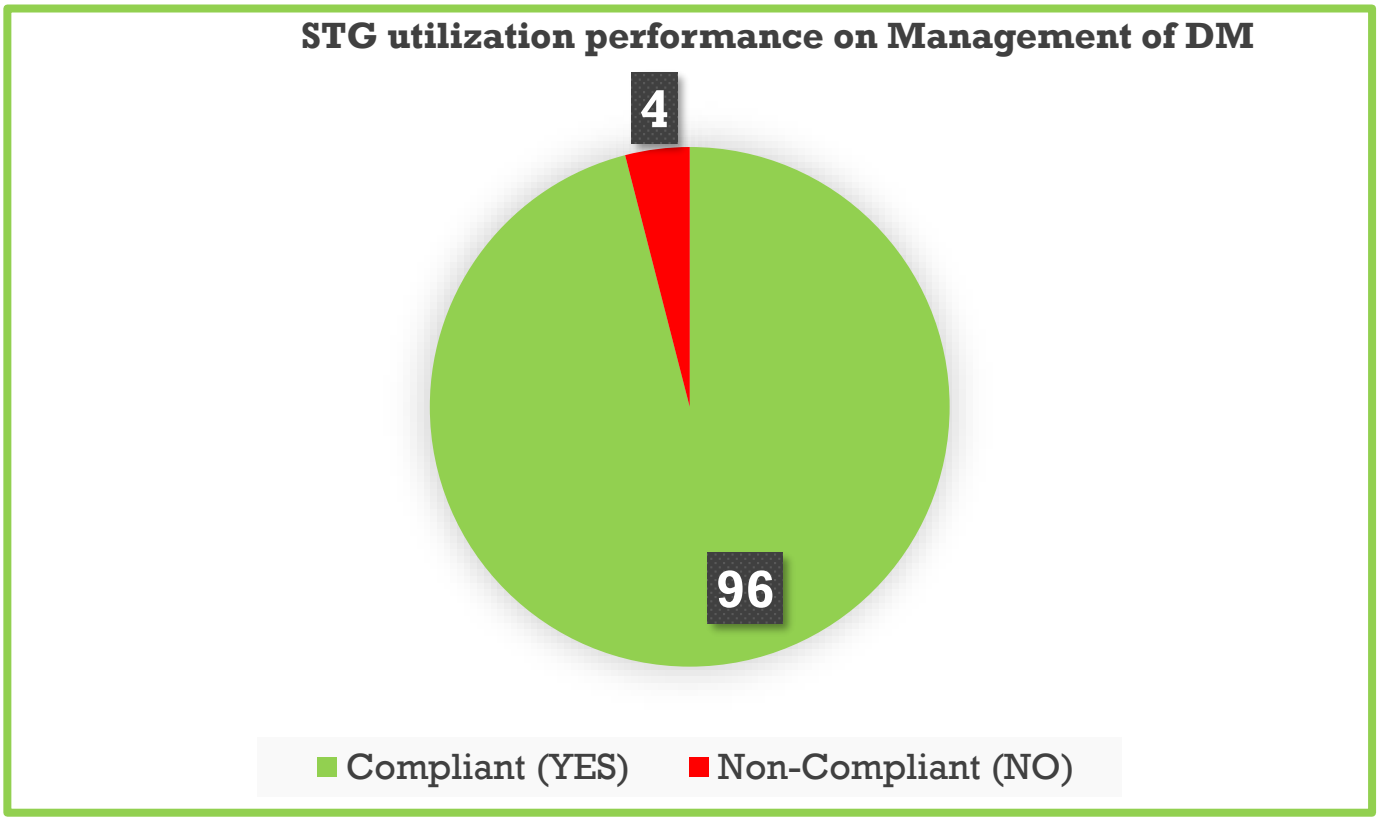

***Figure** 1: STG utilization performance on Management of DM, June 2017E.C*

Table 2: STG utilization performance on management of DM, June 2017E.C

S. No	Standards	Compliant (YES)	Non-Compliant (NO)	Compliance (%)
1.	Diagnosis type confirmed	10	0	100
2.	Baseline blood glucose and HbA1c documented	10	0	100
3.	Treatment initiation based on severity/type	10	0	100
4.	Accurate insulin/oral agent dosing	10	0	100
5.	DKA management as per protocol	10	0	100
6.	Blood glucose monitoring	10	0	100
7.	Dietary and exercise counseling	10	0	100
8.	Foot care and eye exam documentation	5	5	50
9.	Adherence to comorbid conditions protocol	10	0	100
10.	Regular follow-up and HbA1c monitoring	10	0	100
11.	Hypoglycemia risk assessment	10	0	100
12.	Patient education documentation	10	0	100
	OVERALL	**115/120**	**5/120**	**96**

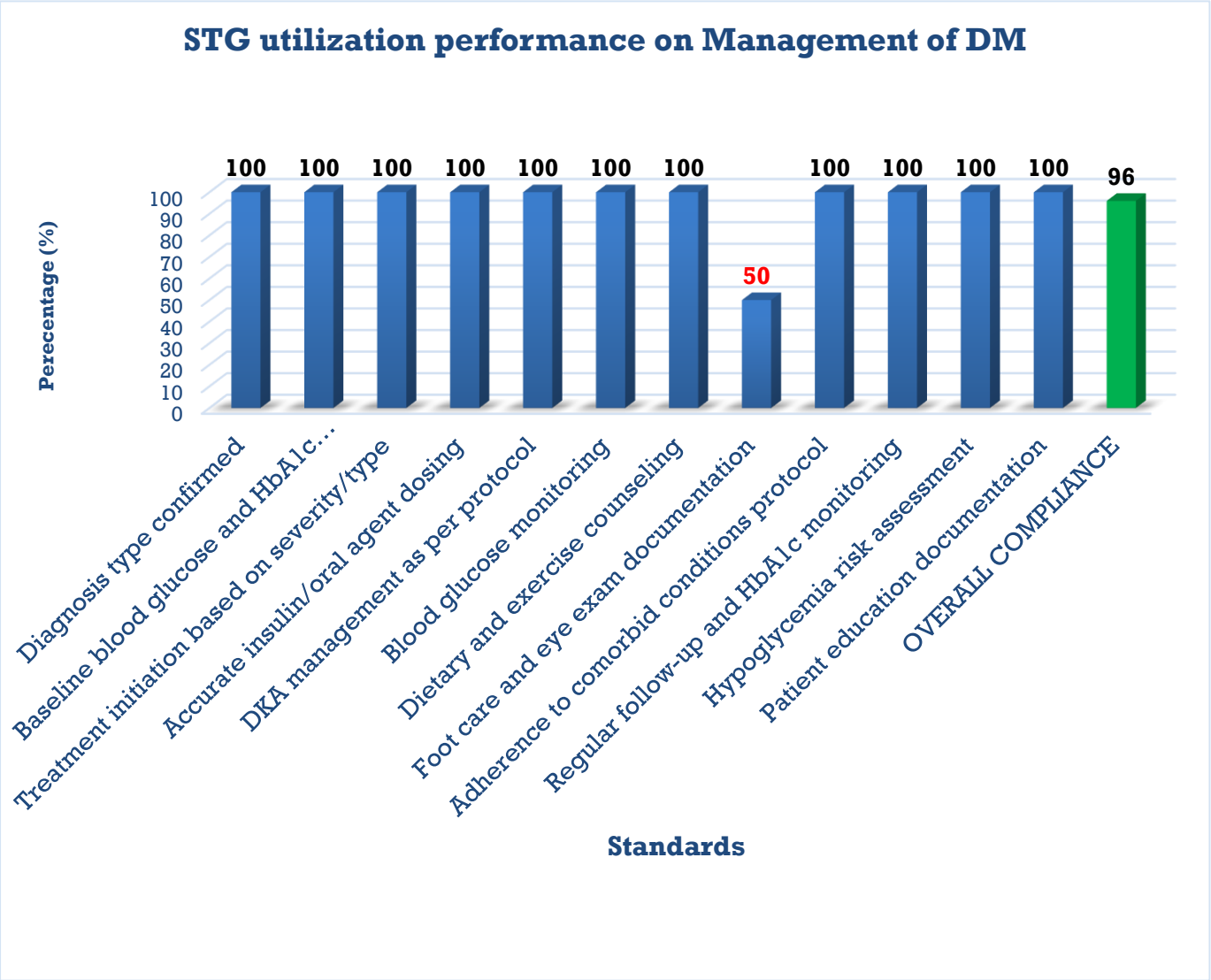

***Figure 2**:* STG utilization performance on management of DM, June 2017E.C

DISCUSSION

The data reveals exceptionally strong adherence to Standard Treatment Guidelines (STGs) for Diabetes Mellitus management overall (96% compliance), indicating a well-functioning system in most critical areas. Eleven of the twelve specific standards achieved perfect 100% compliance. This encompasses fundamental aspects of diabetes care: accurate diagnosis confirmation, thorough baseline documentation (blood glucose, HbA1c), appropriate treatment initiation and dosing (insulin/oral agents), acute complication management (DKA protocol), essential monitoring (blood glucose, HbA1c follow-up), core patient education (diet, exercise, hypoglycemia risk), and management of comorbidities. This high level of compliance across such a broad range of standards suggests that established protocols for routine diabetes care and acute management are consistently understood and implemented by the clinical staff. The perfect scores in critical areas like treatment initiation, dosing accuracy, and DKA management are particularly noteworthy, reflecting robust clinical processes and patient safety regarding immediate risks.

However, the significant outlier is Standard 8 (Foot care and eye exam documentation), with only 50% compliance. This starkly contrasts with the otherwise outstanding performance. It highlights a potentially serious gap in the documentation (and possibly the delivery) of essential preventative care for diabetes-related complications. Diabetic foot ulcers and retinopathy are leading causes of amputation and blindness, respectively, and regular screening/foot care is a cornerstone of long-term management to prevent these devastating outcomes. The 50% non-compliance rate suggests that either the importance of these screenings is not fully prioritized, the process for performing or documenting them is flawed, or resources/training for these specific aspects are inadequate. This finding is critical as it identifies a specific vulnerability in the system that could lead to increased long-term morbidity for patients, despite otherwise excellent acute and metabolic management.

While the overall 96% compliance is commendable and reflects significant strengths, the deficit in foot/eye care documentation demands targeted intervention. The high compliance in other areas demonstrates the capacity of the system to adhere to protocols effectively. Therefore, addressing Standard 8 should be a clear quality improvement priority. Strategies could include: reinforcing education on the importance of preventative screenings for complications, implementing structured templates or checklists within patient records specifically for foot exams and eye referral/documentation, auditing the actual performance (not just documentation) of these exams, and investigating any systemic barriers (time, resources, awareness) preventing consistent execution. Focusing improvement efforts on this specific gap is essential to ensure truly comprehensive diabetes care that addresses both immediate metabolic control and the prevention of debilitating long-term complications.

RECOMMENDATIONS

- Strength foot Care & Eye Exams documentation
- Monitor blood glucose protocol

Table 3: *Improvement plan, June 2017E.C*

Area to be improved	Action to be taken	Responsible body	Timeline
Strength foot Care & Eye Exams documentation	Give written feedback for Emergency assigned physician	Emergency Director (Dr. Samuel Shimelis) Em dept head (Jabir M)	July 01-30, 2017E.C

Table 4. The previous Improvement plan implementation status report, June 2017E.C

Area to be improved	Action to be Taken	Responsible Body	Implementation Status	Evidence/Comments
Monitor blood glucose protocol	Give written feedback for Emergency assigned physician	Emergency Director (Dr. Samuel Shimelis) Em dept head (Jabir M)	**Completed**	Written feedback addressing adherence/compliance gaps with the blood glucose monitoring protocol were delivered to all assigned Emergency physicians
Strength foot Care & Eye Exams documentation	Give written feedback for Emergency assigned physician	Emergency Director (Dr. Samuel Shimelis) Em dept head (Jabir M)	Pending	

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1. Ethiopian Ministry of Health. (2021). **National Standard Treatment Guidelines for General Hospitals**. Addis Ababa: Ethiopian Public Health Institute.
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4. Fashner, J., & Gitu, A. C. (2015). **Diagnosis and Treatment of Diabetic Mellitus Disease**. American Family Physician, 91(4), 236-242.
5. Ethiopian Food and Drug Authority. (2020). **Guidance on the Rational Use of Antimicrobials**. Addis Ababa: EFDA.

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- **Garee tajaajila Dhibee Hatattamaa /EOPD irraa**
- **Garee Qulquullina Tajaajila Fayyaatiif**

Dhimmi: **waa'ee Gabaasa STG protocol mon erguu ilaala**

Akkuma mata Dureerrattii ibsamuuf yaalameettii **STG protocol mon "Diabetic Mellitus (DM) management"** Jedhamu kan **ji'a 10ffaa** bara **2017** xalayaa **Fuula 10** qabuu gaggeessituu kana waliin walqabsiifnee isiiniif eerguu keenya kabajaan isiniif beeksiifnaa.

Nagaya wajjiin!!