

Tracking Malnutrition, Improving Lives; Evaluation of Acute Malnutrition Surveillance System in Mandera County, Kenya, 2025

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BACKGROUND

- Acute malnutrition (wasting) is assessed by WHZ <-2SD, MUAC<12.5cm, or bilateral pitting oedema.
- Remains a major public health concern in Mandera County, 17.3% (*KDHS 2022*)
- Exceeding the WHO emergency threshold of 15.0%

OBJECTIVE:

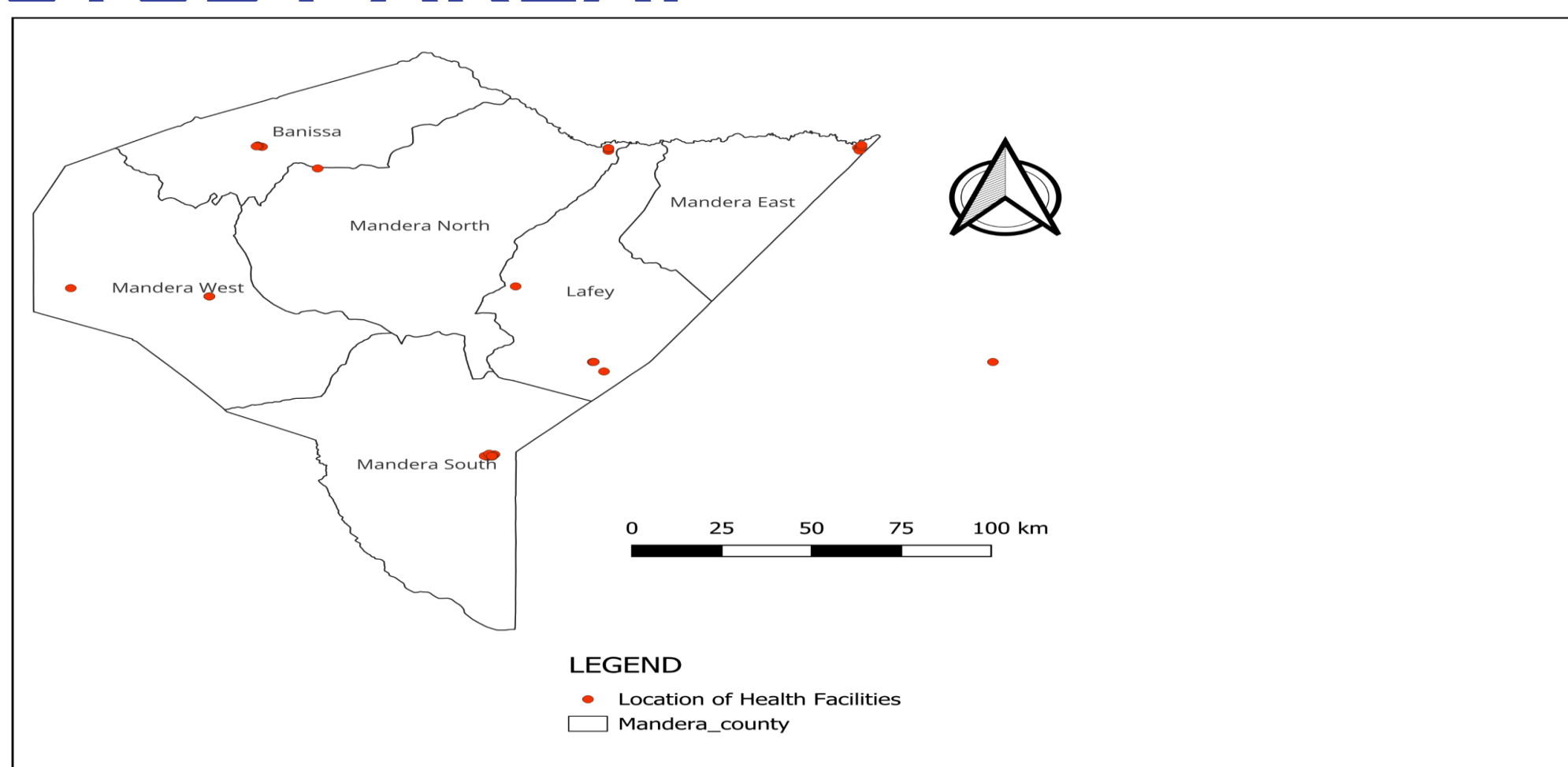
- Evaluate key surveillance system attributes
- Describe and characterize reported acute malnutrition cases
- Assess challenges and generate recommendations

STUDY DESIGN AND SAMPLING

- Design:** mixed-methods cross-sectional evaluation was guided by CDC surveillance guidelines (7 core system attributes assessed)
- Sampling:** purposively selected 18 health facilities, Mandera County, Kenya

METHODOLOGY:

STUDY AREA:



STATISTICAL ANALYSIS:

Analysis: Descriptive Microsoft Excel, thematically of qualitative data

RESULTS

Table 1: Respondents' experience in implementing acute Malnutrition surveillance, Mandera County

Years of Experience	Frequency	Proportion(%)
>5 years	47	75.8%
3–5 years	11	17.7%
1–3 years	2	3.2%
<1 year	2	3.2%

- A total of 62 respondents (82.7% response rate)
- Staff experience ≥ 5years (75.8%), as shown in Table 1
- Training by cadre, Nutritionists (94%), while CHAs (57%) and HRIOs (40%) on the acute malnutrition surveillance system, as shown in Figure 5
- Usefulness and simplicity (98%),
- Acceptability and representativeness (96%)
- Declined reported timeliness from 86.6% in 2023 to 71.1% in 2025,
- Flexibility (56%) and stability, with only 25% of facilities accessing stable internet connectivity
- Caseloads: SAM remains similar & MAM were declining over the three years (2023-2025), as shown in Figure 1.
- Spikes were observed in specific months when nutrition mass screening was conducted, as shown in Figure 2.
- Both SAM and MAM cases, Mandera West, Mandera South and Mandera East Sub-counties reported the highest cases, while Lafey reported the least cases (2023-2025), as shown in Figures 3 & 4
- Key challenges included commodity stockouts, climate-related shocks

RESULTS

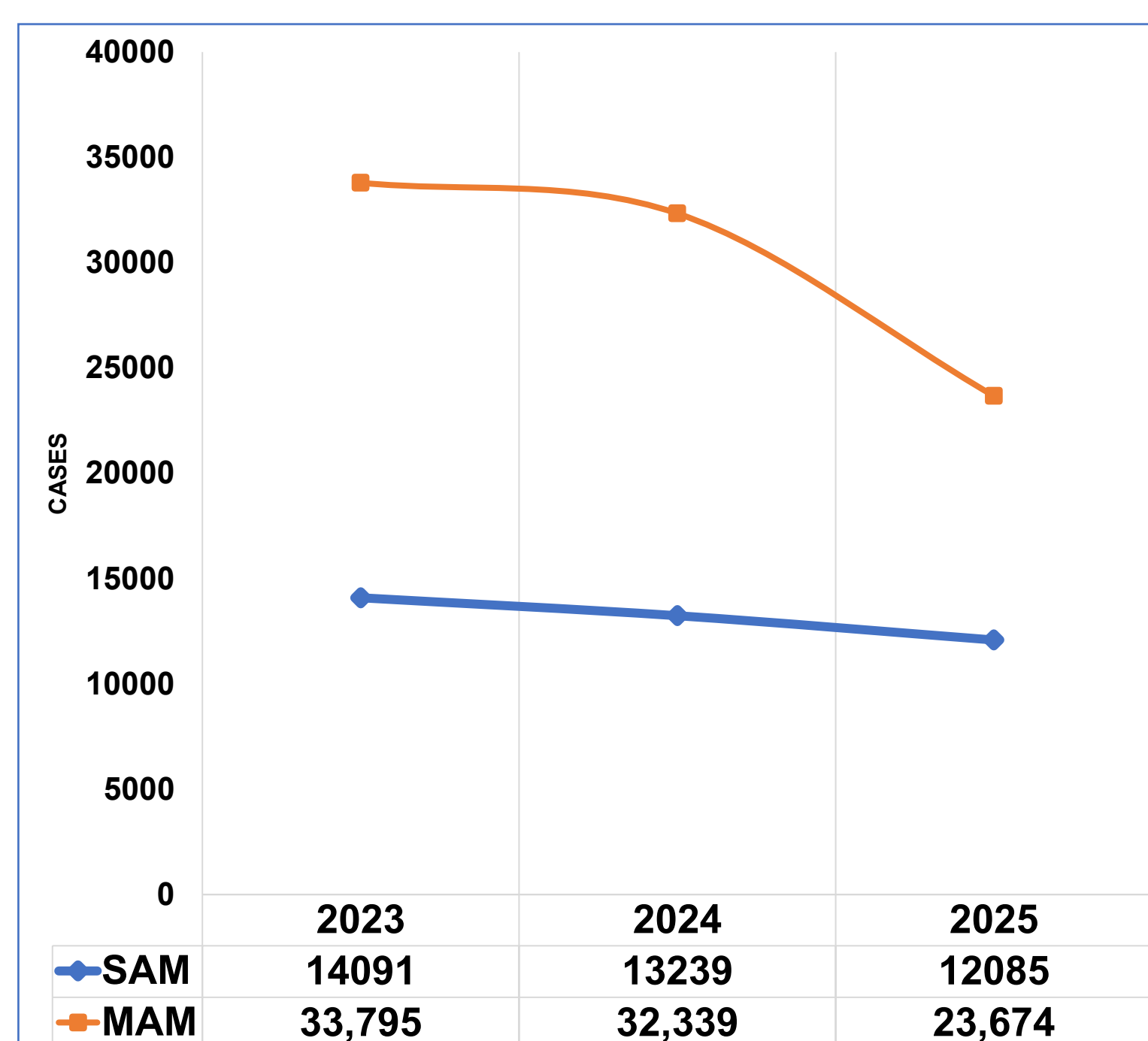


Figure 1: Total SAM and MAM case admissions in Mandera County

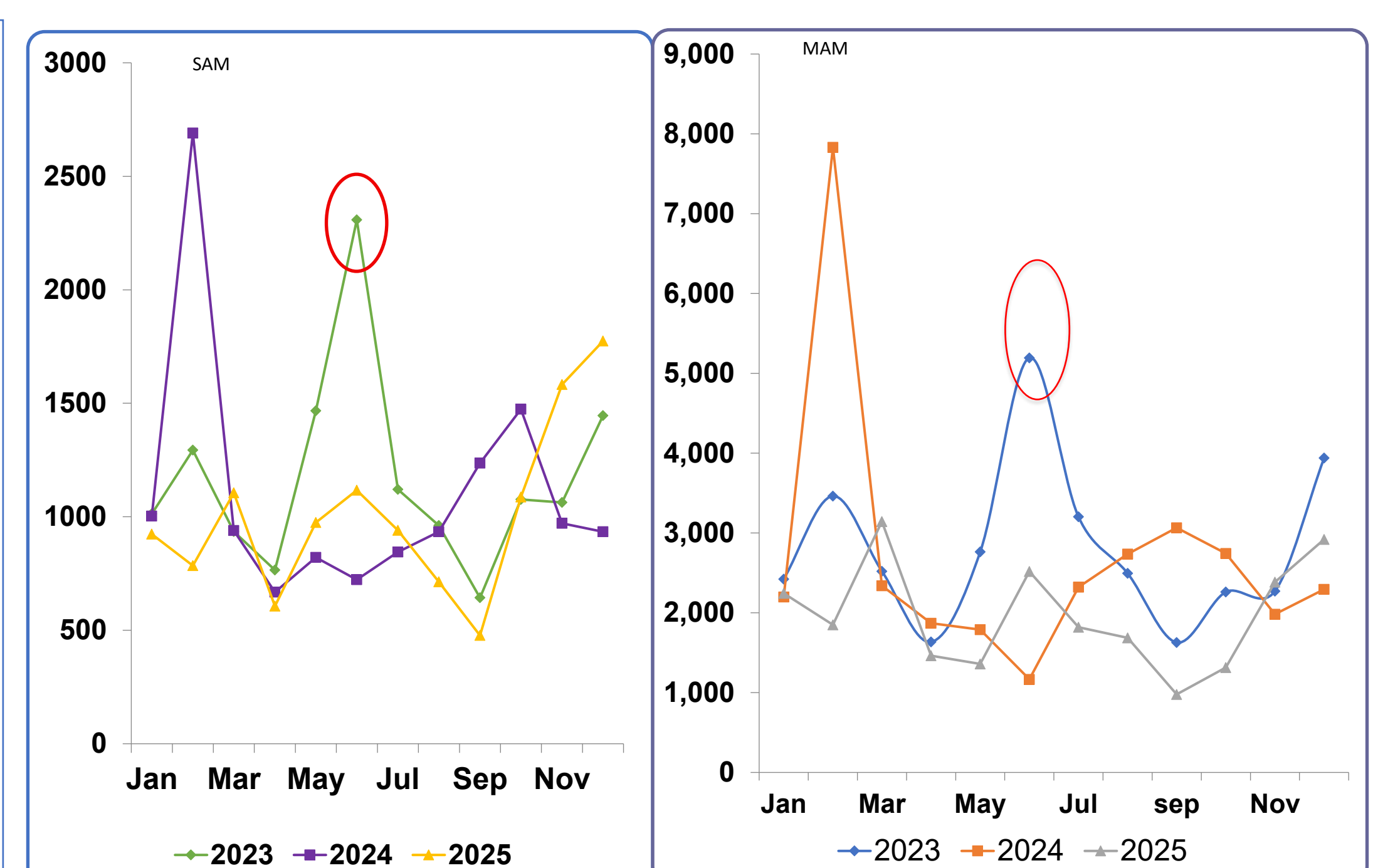


Figure 2: Trend admissions for SAM & MAM children 6 to 59 Months in Mandera County

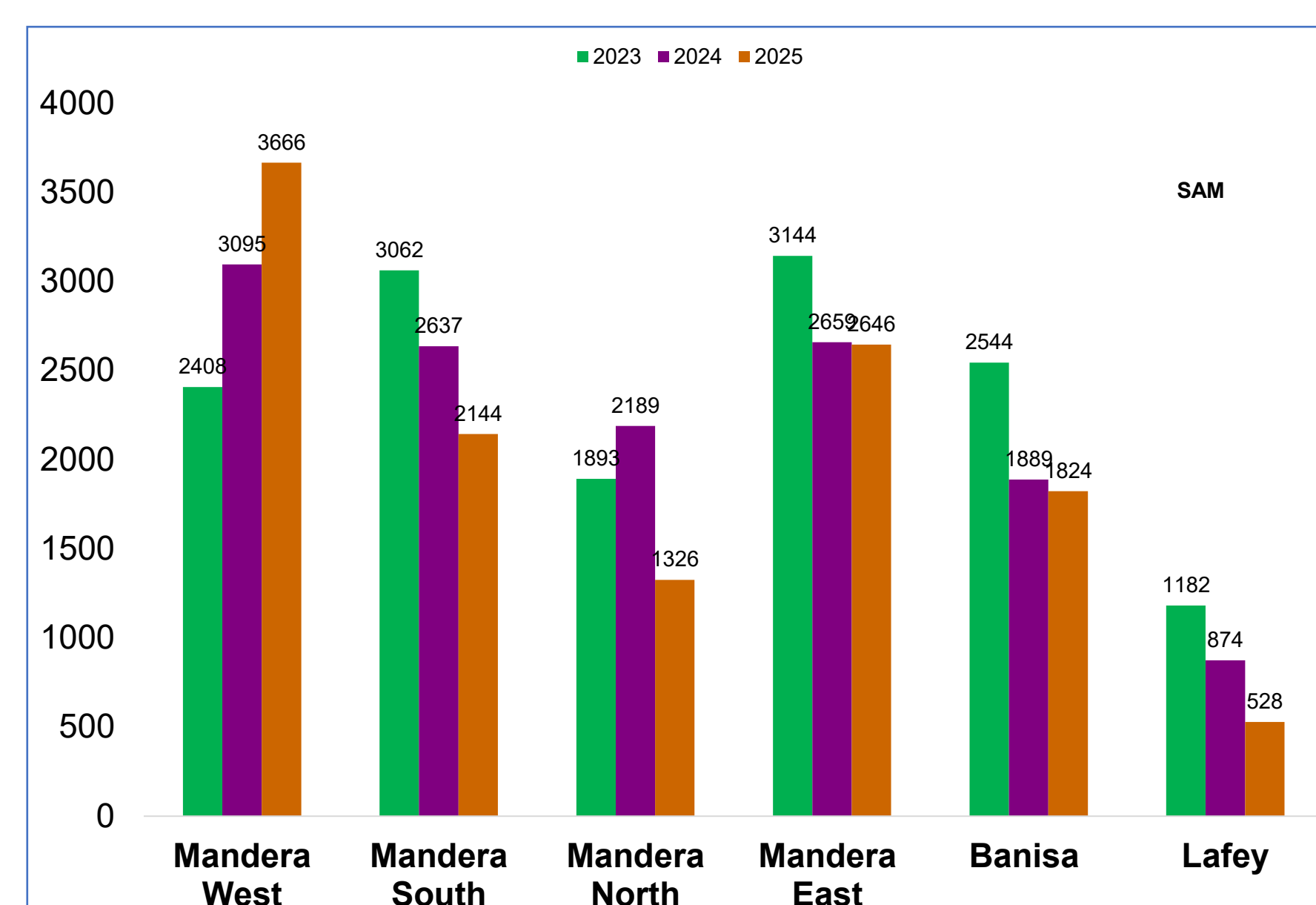


Figure 3: SAM admission trends per Sub County

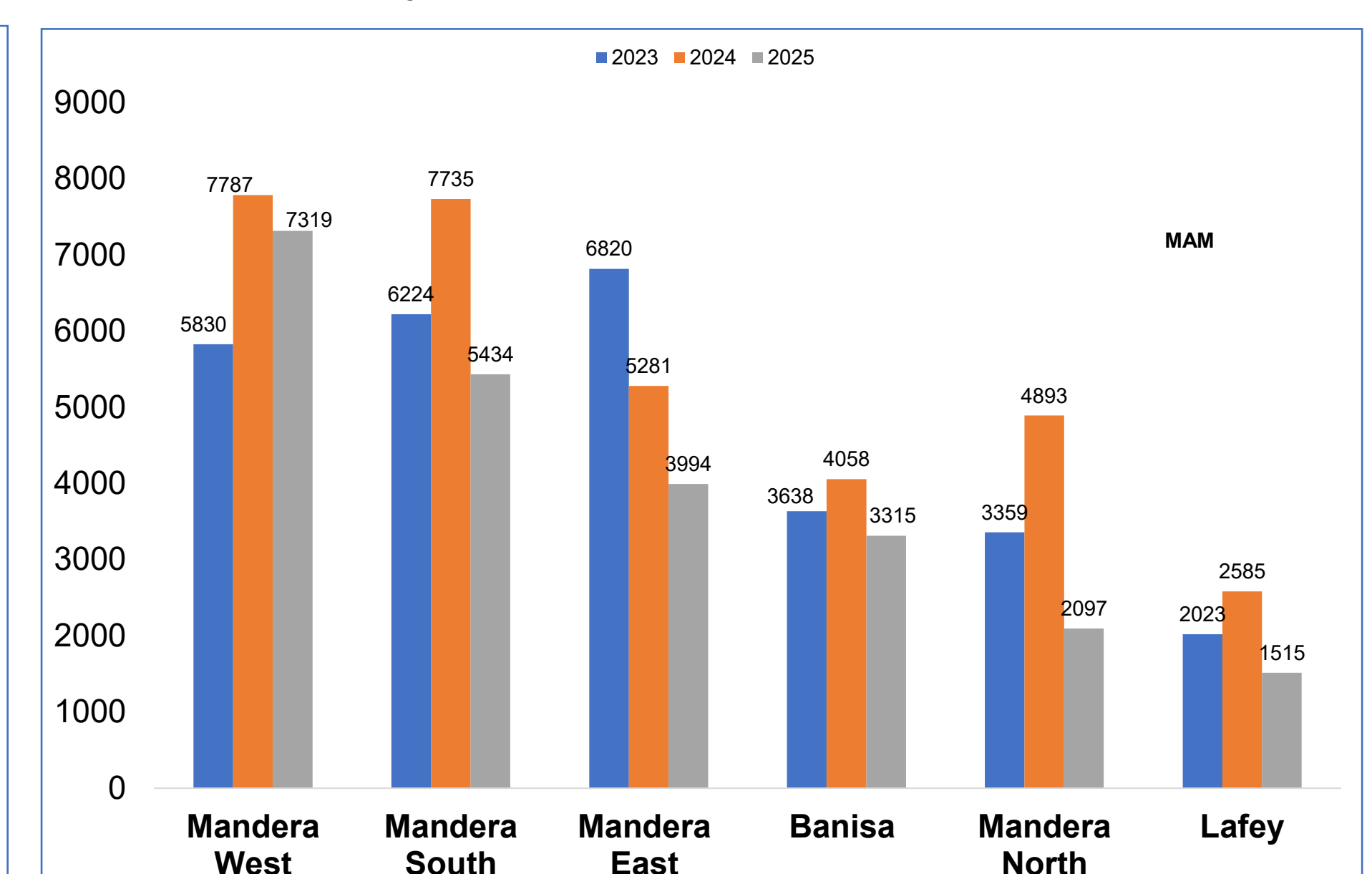


Figure 4: MAM admission trends per Sub County, 2023-2025

DISCUSSION

Strengths

- Simple: Easy case classification (MAM/SAM), MoH 713 completion, and KHIS data entry.
- Acceptable: High facility participation and staff willingness
- Representative: Wide geographic and population coverage.

Weakness

- Timeliness: On-time reporting declined to 71.1% in 2025
- Stability Issues: Poor internet connectivity and KHIS downtime

CONCLUSIONS

Strong system performance in usefulness, simplicity, acceptability, and representativeness and Timeliness and infrastructural instability limit optimal real-time responsiveness

Recommendations

- Strengthening the stability and infrastructure of the system
- Support routine community-level screening
- Enhancing Human Resource Capacity
- Support routine community-level screening

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