Poster: 2493

User satisfaction and influencing factors of an integrated malaria information system in Mozambique

Neide Canana,[1] Arsénio Sérgio,[1] Joaquim Chau,[1] Maria Rodrigues,[1] Sónia Enosse,[1] Mariana da Silva,[2] Baltazar Candrinho,[2] Ruth Kigozi[3]

[1] Malaria Consortium, Mozambique
[2] National Malaria Control Programme Ministry of Health, Mozambique
[3] Malaria Consortium, Uganda

Read more
bit.ly/25mSBj0

Mozambique's integrated malaria information storage system is easy to use and improves decision-making. However, the platform could be improved by ensuring timely data updates.

Introduction

In 2019, Mozambique's National Malaria Control Programme (NMCP) and partners launched the integrated malaria information storage system (iMISS). The health information system tracks key malaria indicators, evaluates intervention impacts and informs decisions. This study gauges user-level satisfaction with the iMISS at provincial, district and health facility levels across urban and rural regions. The NMCP indicates 645 registered iMISS users, each with specific roles, including data entry and visualisation across various levels.

Methods

- We employed a descriptive exploratory design and collected data using a self-administered online Google survey, which was sent to all users of the platform.
- We collected data on the status of users (active/inactive), access rights (data entry, data visualisation and both), frequency of use, usability, interpretation of data, impact on the quality of monthly malaria reporting, usefulness for informing decision-making and training and supervision on the use of the platform.
- Descriptive statistics and logistic regression were used to summarise results and examine factors influencing satisfaction with the platform.

Results

- A total of 416 respondents completed the survey, with 384 (92.3) percent being active users of platform. The majority of active users (64.0 percent) had both data entry and data visualisation access rights (Table 1).
- The majority of active users (93.9 percent) were satisfied with the platform and found it easy to use, thought it improved the quality of malaria data and found it useful for decision-making (Figure 1).
- Users with both data entry and visualisation roles were more likely to be satisfied (97.1 percent) compared to data entrants (90.4 percent) and data visualisation roles (58.6 percent).
- Respondents who reported a lack of timely data updates on the platform were less likely to be satisfied compared those who reported fast data updates.
- Factors affecting satisfaction included user rights and perception towards timeliness of data.

Conclusion

The majority of respondents shared that the iMISS platform is easy to use and improved the quality of routine malaria data and decision-making. Ensuring timely updates would improve the platform and enhance user satisfaction.

Results

Figure 1: User perception of the platform

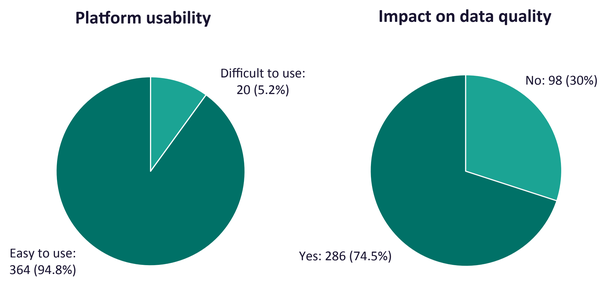

Figure 2: iMISS implementaiton districts, Mozambique

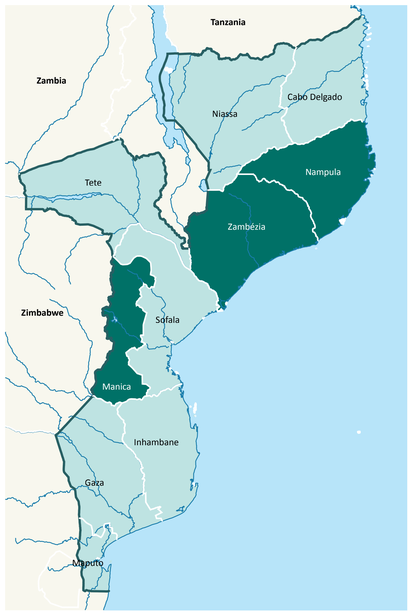

Table 1: Factors associated with satisfaction with the iMISS

Factor	# satisfied (%)	Crude odds ratio (95% CI)	p value	Adjusted odds ration (95% CI)	p value
User rights					
Data entry	66 (90.4)				
Data visualisation	58 (86.6)	0.68 (0.23–1.95)	0.48	1.02 (0.33–3.17)	0.97
Data visualisation	237 (97.1)	3.59 (1.21–10.60)	0.02	3.08 (1.25–12.01)	0.02
Availability of timely data updates					
Yes	281 (95.6)				
No	72 (87.8)	0.33 (0.14–0.79)	0.01	0.36 (0.14–0.90)	0.03
Cadre of user					
Doctor	68 (89.5)				
Other	10 (90.9)	1.17 (0.13–10.43)	0.88	0.68 (0.63–9.29)	0.75
Medium/basic technician	228 (95.4)	2.0 (0.94–6.31)	0.07	2.08 (0.75–5.77)	0.16
Senior technician	55 (94.8)	2.2 (0.54–8.51)	0.27	2.13 (0.43–9.63)	0.33
Support supervision					
No	24 (85.7)				
Yes	337 (94.6)	2.95 (0.90–9.31)	0.07	2.4 (0.69–8.89)	0.16
Length of time of access					
Less than six months	80 (90.9)				
6 months – 1 year	68 (94.4)	1.7 (0.49–5.89)	0.40	1.28 (0.34–4.73)	0.71
More than one year	213 (95.1)	1.9 (0.75–4.98)	0.17	1.42 (0.53–3.87)	0.48

Acknowledgements

The authors acknowledge the Mozamibique National Malaria Control Programme and the Bill and Melinda Gates Foundation for their support in this project.