

# Assessment of primaquine utilization in four health facilities of Ethiopia in the context of malaria elimination strategy

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# Outline

- Background and objective
- Methods
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- Conclusion and recommendations
- Acknowledgement
- References

# Background

- Appropriate use of antimalarial drugs:
  - is vital in the effective management of malaria
  - reduces the development of drug resistance and cost of therapy
  - supports appropriate supply plans to prevent from stockouts or wastage
- National Malaria Treatment Guidelines and malaria elimination strategy recommend:
  - Primaquine 0.25mg/kg for 14 days for radical cure, with chloroquine for patients with *P. vivax* (Pv) or with artemether-lumefantrine (AL) for mixed malaria; and
  - Single dose of primaquine 0.25mg/kg with AL in patients with *P. falciparum* (Pf) to prevent its transmission



## Background cont'd

- Supportive supervision and routine reports indicated that consumption of primaquine did not match with the uptake of AL and chloroquine.
- Although primaquine has been used in patients with malaria in Ethiopia, much is not known about the extent of its use.
- Hence this study was conducted to assess the appropriateness of malaria treatment and the extent of primaquine utilization in patients with malaria in Ethiopia.

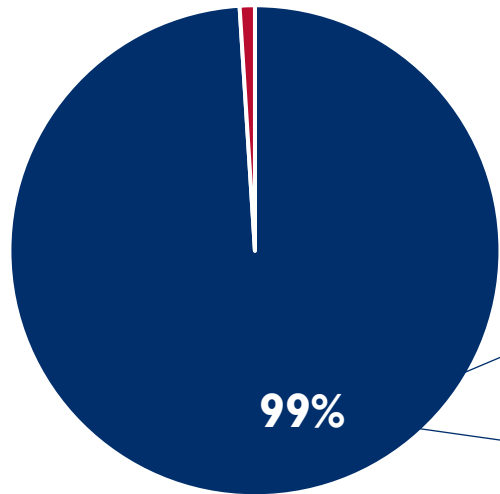


## Methods

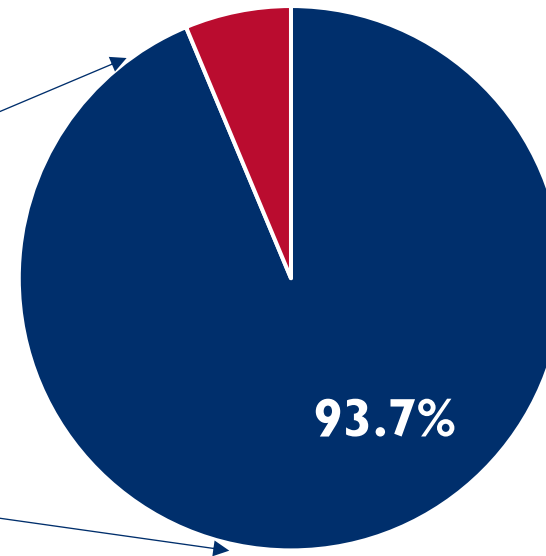
- PMI funded GHSC-PSM to support 2 hospitals and 2 health centers to conduct retrospective cross-sectional study through a review of 593 patient medical records taken from malaria register using the drug use evaluation (DUE) approach.
- From August to December 2021, trained data collectors reviewed, on average, 2-years of patient charts (2019-2021) using a structured data collection tool developed as per WHO recommendations.
- GHSC-PSM evaluated the appropriateness of malaria treatment in terms of extent of primaquine utilization per the national Malaria Treatment Guidelines-2018.

# Results of 593 patient charts

Practice of doing laboratory tests for malaria diagnosis, N=593



Proportion of laboratory confirmed malaria, N=588

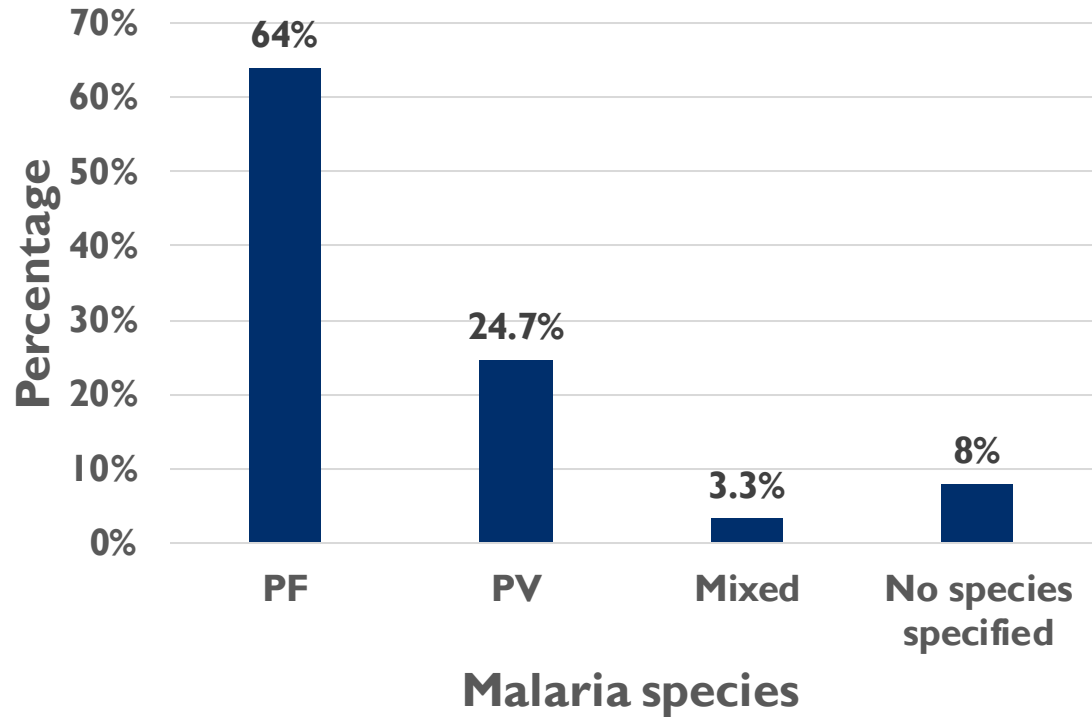


- Laboratory done for malaria diagnosis
- No laboratory done

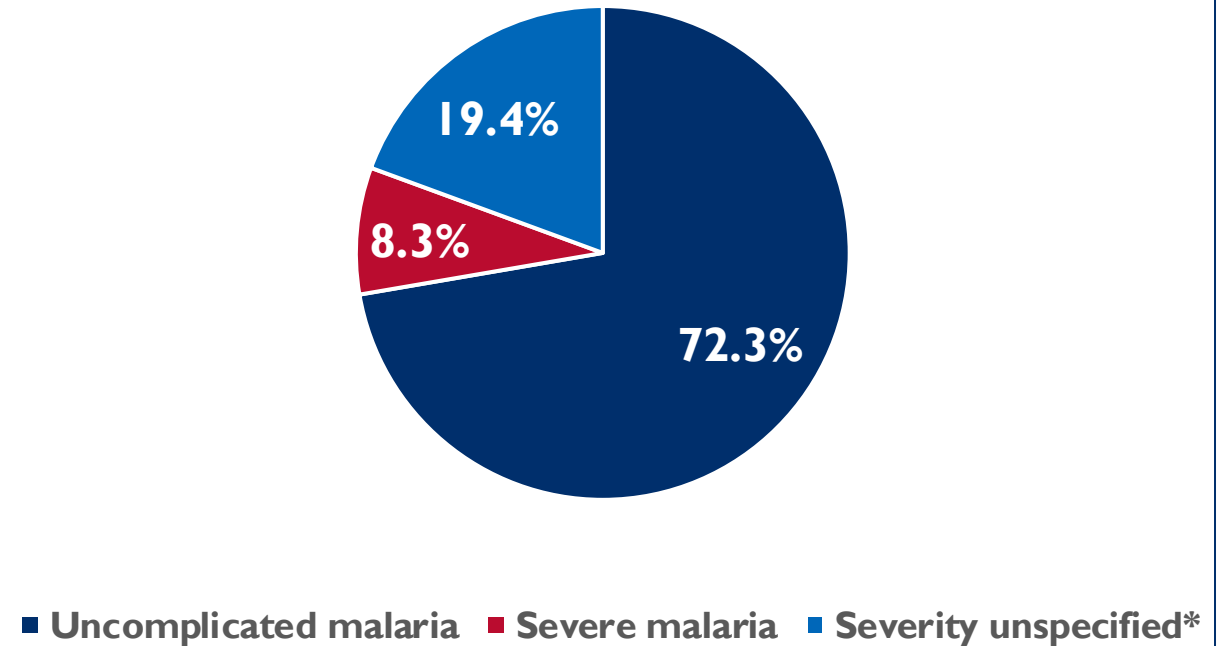
- Laboratory confirmed malaria
- No malaria

## Results cont'd

**Malaria diagnosis by species type,  
N=550**

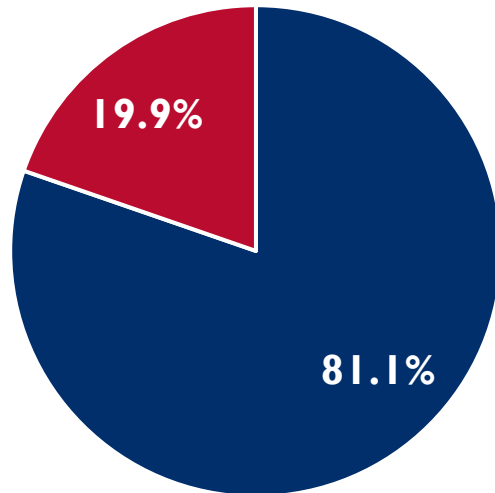


**Malaria diagnosis by severity or as  
documented in patient chart, N=593**



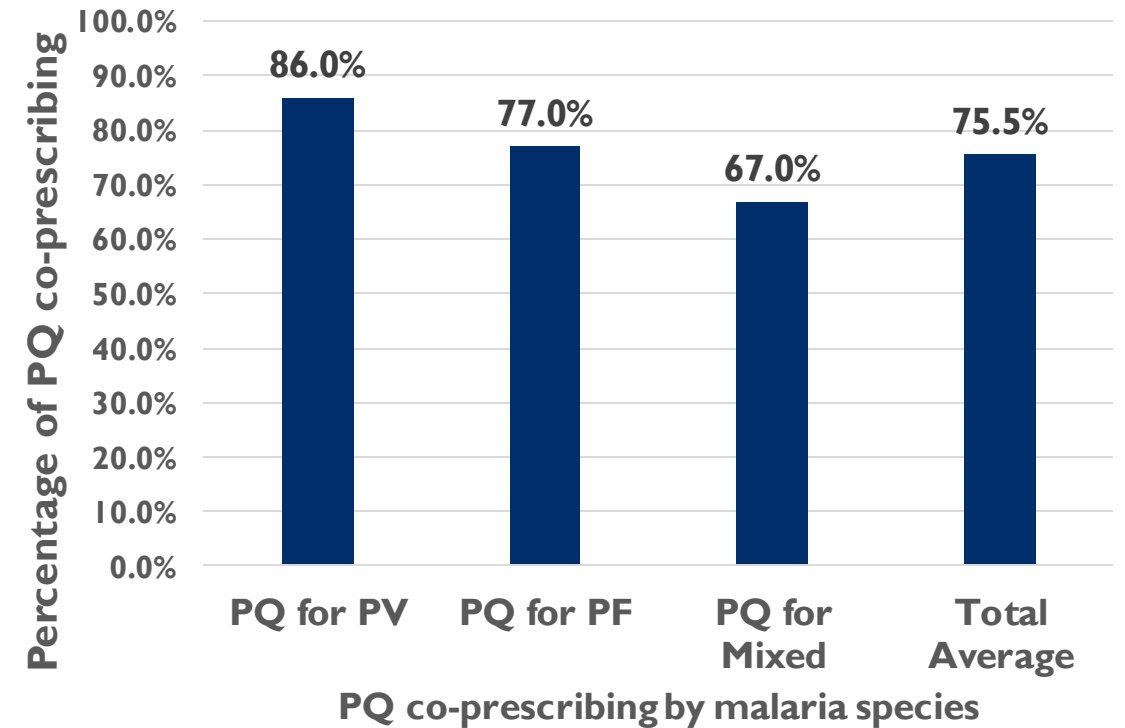
## Results (cont'd)

Appropriateness of malaria treatment by indication, N=593



- Malaria treatment is appropriately indicated
- Malaria treatment is not indicated

Primaquine prescribing rate as appropriate\*, N=507





# Conclusion and recommendations

## Conclusion

- Primaquine utilization rate in the studied facilities was found to be lower than the national recommendations
  - ✓ unless contraindicated, all patients should receive PQ together with CQ/AL.
- Appropriateness of malaria treatment in the facilities is not optimum.

## Recommendations

- Trainings and supportive supervisions to improve the rate of PQ co-prescribing and appropriate malaria treatment to enhance the malaria elimination efforts.
- Additional nationally representative primaquine utilization studies to identify causes of under-use.



# Acknowledgements

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- PMI
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- Data collectors
- HSS FS team

# References

- MOH. National malaria strategic plan (2021-2025), Addis Ababa, Ethiopia.
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# THANK YOU.

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