Poster No:

Rapid introduction of oral antivirals for COVID-19: implementation of a test and treat program in four African countries

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COVID TREATMENT QuickStart CONSORTIUM

Introduction

- Despite availability of approved oral antivirals like nirmatrelvir/ritonavir to treat COVID-19 in high-income countries since 2021, access to these drugs remained largely unavailable across the African continent.
- Ghana, Malawi, Rwanda and Zambia, all members of the COVID Treatment QuickStart Consortium, leveraged existing infrastructure to be among the first African countries to rapidly commence a COVID-19 test-and-treat program through QuickStart-donated nirmatrelvir/ritonavir that arrived in each country between December 2022 and April 2023.
- The first comprehensive review of the individual-level data collected from test and treat programs in LMICs implementation research is captured here.

Methods

- A retrospective cohort study was conducted in 36 primary, secondary, and tertiary facilities across the four countries.
  - Larger facilities acted as hub site to distribute drugs to lower-level facilities
- All people testing positive for SARS-CoV-2 at study sites who were screened for treatment were included in the study.
- Treatment criteria included high-risk for severe COVID-19 disease progression, presenting within five days of symptom onset, and mild-to-moderate COVID-19 disease severity; treatment eligibility was ultimately determined by trained healthcare workers.
- Baseline data were captured by these health care workers, who also conducted 10- and 30-day follow-ups to assess side effects and patient outcomes, including serious adverse events.
- Data was collected when each country's program began (varied from Dec 2022-Jul 2023) through Jun 2024.

Results

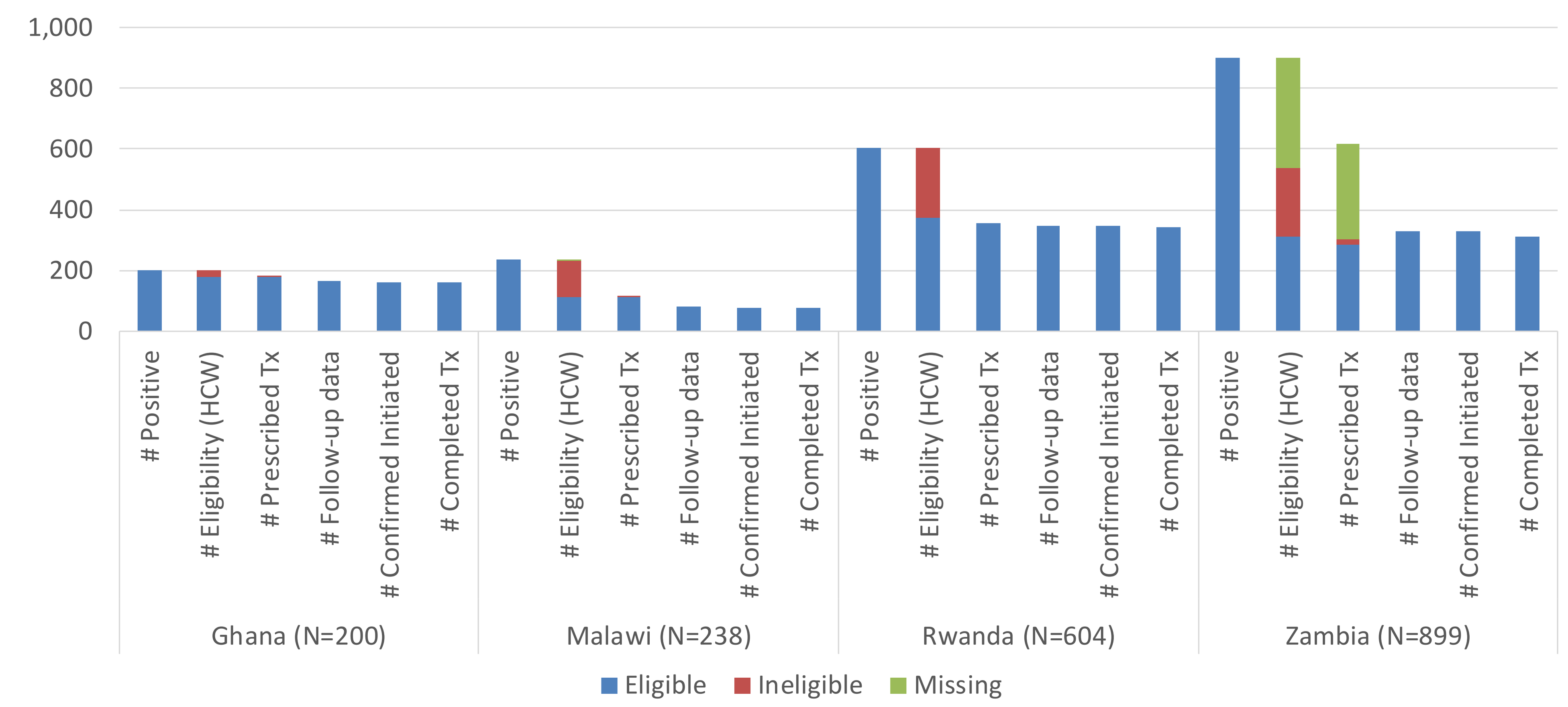


Figure 1: Cascade of Care

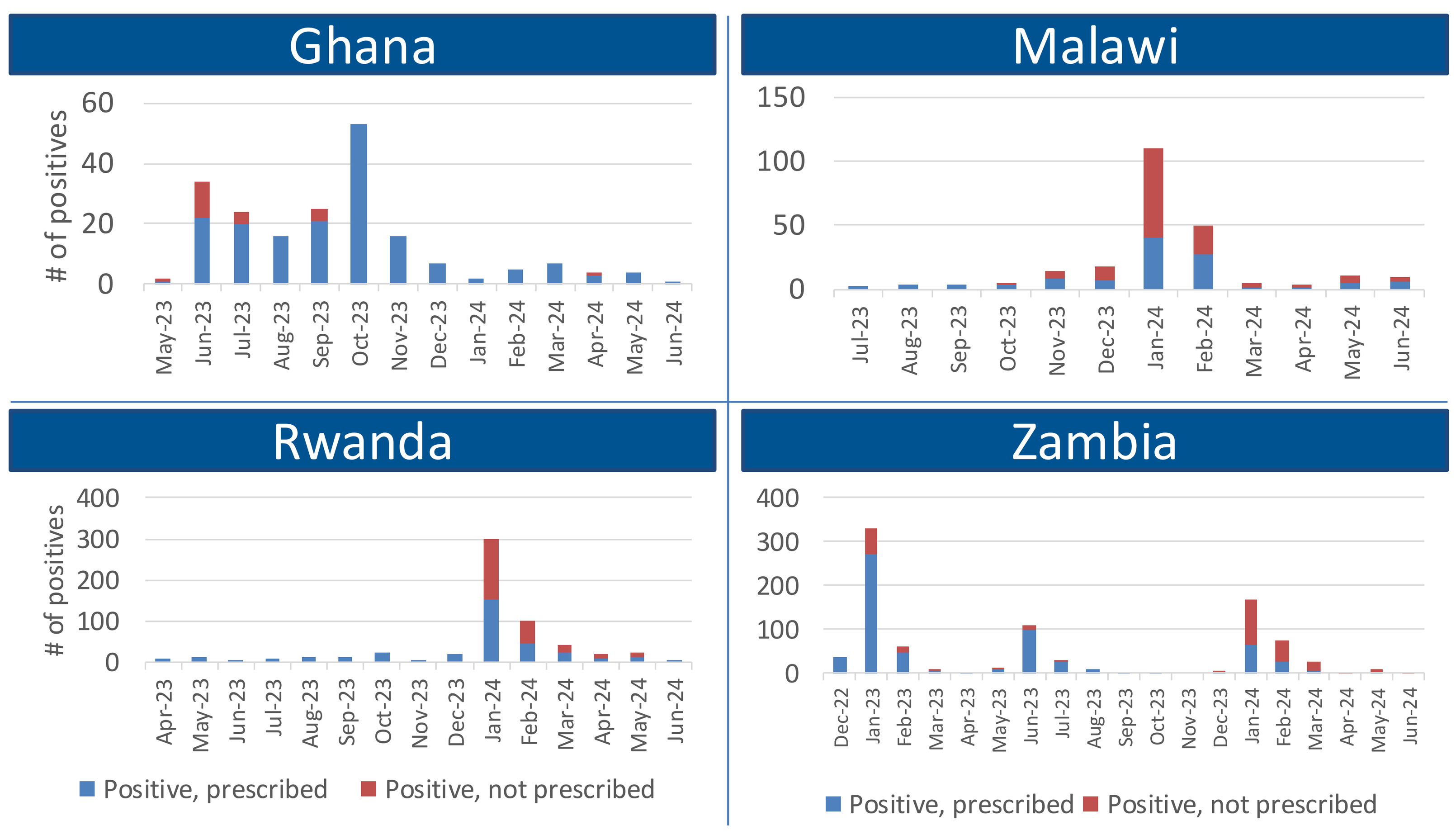
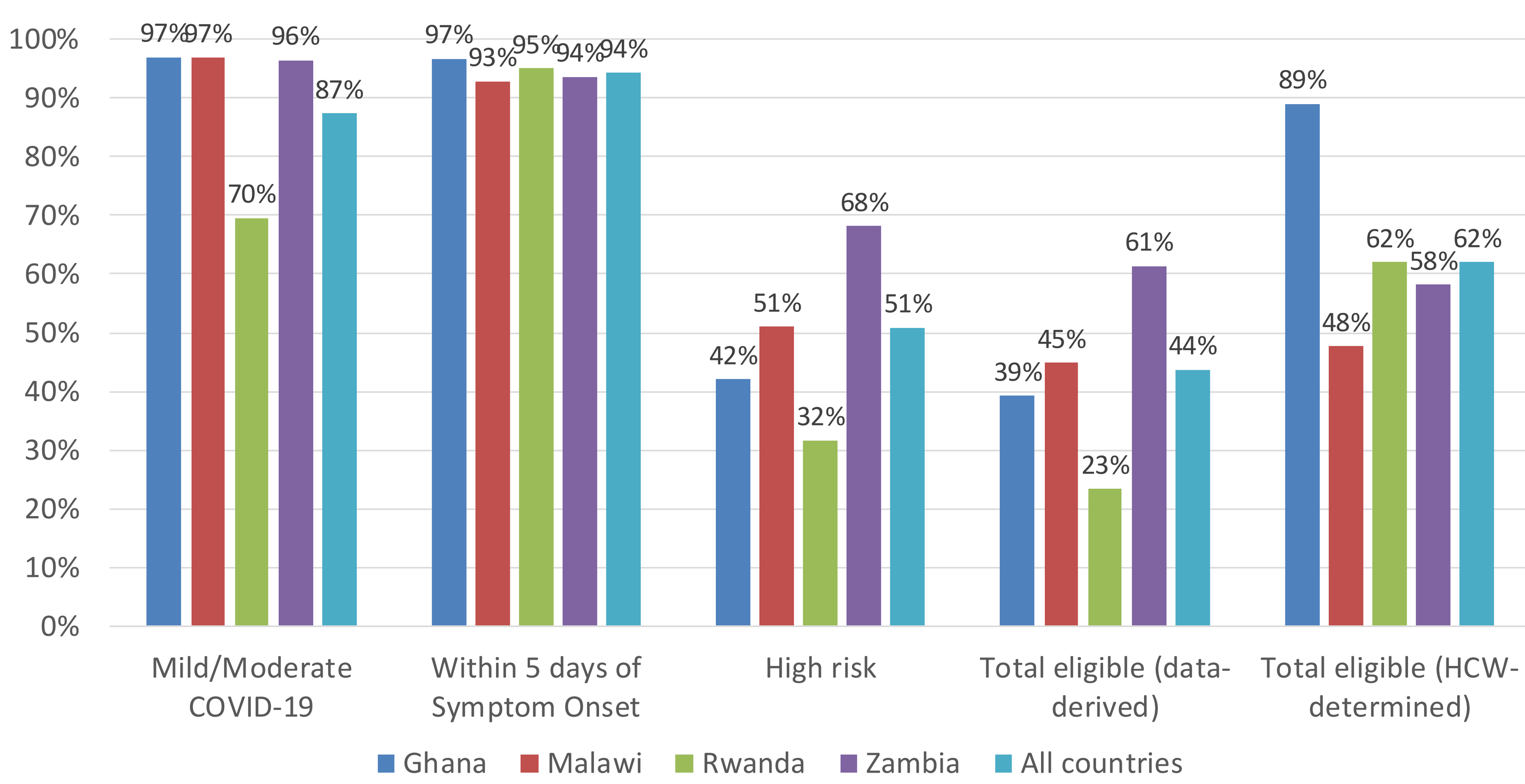


Figure 2: Treatment over time, by country



Data-derived eligible must meet the three eligibility criteria:

- Within 5 days of symptom onset
- Mild-Moderate illness
- Have at least one high-risk factor

HCW-determined is a yes/no checkbox they select on a form

Figure 2: Eligibility Criteria

- A total of 1,941 Sars-CoV-2 individuals were identified as positive across all countries
- 1,265 were prescribed nirmatrelvir/ritonavir, inclusive of 95% of those documented as eligible by HCWs (Figure 2)
- 73% had follow-up, and among those 99% initiated and 98% completed treatment (Figure 1)
- Having a high-risk factor was the limiting eligibility factor; HCWs had the final say in eligibility, being able to consider other factors, if needed.

Discussion

These data are the first to suggest COVID-19 treatment with an oral antiviral can be quickly, efficiently and safely deployed in lower resourced countries. Nirmatrelvir/ritonavir proved acceptable, evidenced by high uptake and adherence (Figure 1). There were also no serious adverse events reported, showing the safety of the drug in a generally young but high-risk population, consistent with previous research studies.

Conclusion

Programs successfully integrated their COVID-19 response into existing health service delivery infrastructure, allowing for rapid roll-out and decentralization of test and treat programs, demonstrating that introducing diagnostics and new treatment in government health systems is feasible in lower resourced settings during health emergencies. Equitable and timely access to diagnostics and treatments across the globe is crucial to combat emerging disease threats

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Learn more about the QuickStart Consortium:

Acknowledgments: We would like to express our heartfelt gratitude to all the people who participated in this piece of research work, including all the Ministries of Health, healthcare workers, study staff and QuickStart consortium members. Without your commitment, this work would not have been possible.