



Integrating COVID-19 testing and treatment programs into HIV care in low- and middle-income countries: Initial success in Zambia

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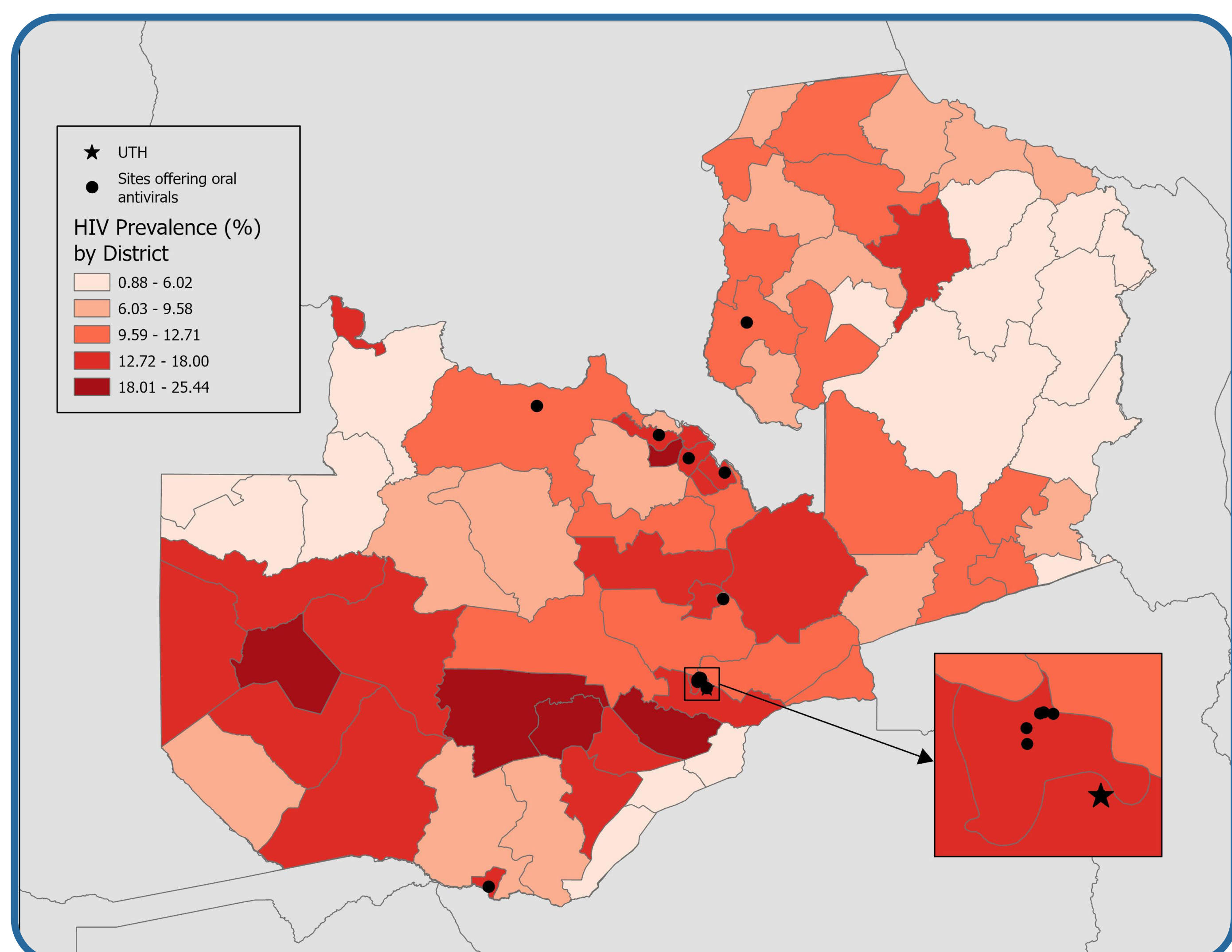
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Background

- COVID-19 test and treat programs have the potential to save lives and protect fragile health systems, particularly when integrated horizontally.
- The COVID Treatment QuickStart Consortium partnered with 10 countries to accelerate access and introduce oral antivirals such as nirmatrelvir/ritonavir.
- We present here Zambia's first public sector COVID-19 test and treat program, which demonstrates the model of integrating COVID-19 test and treat within the University Teaching Hospital (UTH), including the Adult Infectious Disease Center (AIDC) in Lusaka, Zambia, after 1,000 courses of donated nirmatrelvir/ritonavir arrived on December 22, 2022.

Description

- Client flow for COVID-19 at UTH involves conducting rapid antigen testing for symptomatic clients presenting for care in any department (e.g., inpatient, outpatient, emergency, antiretroviral therapy, noncommunicable diseases, tuberculosis)
- Eligibility criteria to receive treatment for the test and treat program in Zambia requires positive SARS-CoV-2 clients to meet the following criteria: high-risk (e.g., age 50+, people living with HIV (PLHIV), BMI>30, pregnancy, diabetes, hypertension, cardiovascular disease and other conditions), mild/moderate disease, and presenting within five days of symptom onset.
- COVID-19 oral antivirals are then prescribed by trained clinicians and dispensed from the TB/COVID clinic or emergency pharmacy. For PLHIV, bidirectional screening occurs for COVID-19 and TB; testing, prescribing, and drug dispensing all happens within AIDC.



(l-r): Professor Lloyd Mulenga, Prudence Haimbe, Honorable Minister of Health Sylvia T. Masebo, and Mwaba Mulenga attending the Ministry of Health press briefing for the launch of the COVID-19 Test and Treat program in Zambia.

“Having oral antivirals for COVID is something we have always looked forward to; with this new milestone, we expect less admissions and also fewer COVID related deaths leading to a reduced burden on our health system,” said Professor Lloyd B. Mulenga, Director of Infectious Diseases for the Ministry of Health, Zambia.

Lessons Learnt

- Between December 24, 2022, and May 31, 2023, out of 8,575 SARS-CoV-2 tests conducted at UTH, 584 (6.8%) clients had positive SARS-CoV-2 results, among which 330 (57%) chose to follow-up for further care.
- 10% of those testing positive for COVID-19 were HIV-positive or tested for COVID-19 at the AIDC.
- Nirmatrelvir/ritonavir was prescribed to 85% of all clients who tested positive for SARS-CoV-2.
- Of all clients who were prescribed nirmatrelvir/ritonavir, the median age was 39 years, 60% were female, and 70% were previously vaccinated.
- Bidirectional screening at AIDC helped identify clients with diabetes and hypertension; AIDC is now adopting this as standard-of-care.
- Acceptability of the test and treat program amongst health workers increased when training models were developed that emphasized a team approach to care and when screening for COVID-19 was integrated with screening for other high-risk conditions.

Conclusions/next steps

- Zambia was one of the first countries in Africa to prescribe nirmatrelvir/ritonavir to SARS-CoV-2 positive PLHIV.
- The quick roll-out succeeded because of strong leadership from the Zambian Ministry of Health and public-private partnerships.
- UTH has demonstrated the feasibility of integrating COVID-19 services into all hospital entry points, with a focus on high-risk clients such as PLHIV attending AIDC.
- Nirmatrelvir/ritonavir has subsequently been integrated into routine services at twelve other facilities throughout the country.
- Overall lessons learnt will enable further scale-up—both within Zambia and in other African countries—and allow for further learnings of integrated test and treat programs.

Acknowledgments

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