

Venue-Based HIV  
Testing at Sex Work  
Hotspots to Reach  
Adolescent Girls and  
Young Women  
Living With HIV: A  
Cross-sectional  
Study in Mombasa,  
Kenya

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# Venue-Based HIV Testing at Sex Work Hotspots to Reach Adolescent Girls and Young Women Living With HIV: A Cross-sectional Study in Mombasa, Kenya

## IMPLEMENTATION SCIENCE

### OPEN

## Venue-Based HIV Testing at Sex Work Hotspots to Reach Adolescent Girls and Young Women Living With HIV: A Cross-sectional Study in Mombasa, Kenya

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**Background:** We estimated the potential number of newly diagnosed HIV infections among adolescent girls and young women (AGYW) using a venue-based approach to HIV testing at sex work hotspots.

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H.M., L.W., and S.M. conceptualized and designed the study and developed the plan of analyses. M.L.B., S.M., H.K.M., and P.B. developed the study tools; M.L.B., P.G., G.M., H.K.M., and P.B. led the hotspot enumeration and Transitions study data collection. F.C. and P.S. led the serological testing and developed the reference testing algorithms. All authors contributed to interpretation of results and manuscript editing. S.M. and H.M. drafted the manuscript. H.M. conducted the analyses with input from L.W. and S.M.

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## INTRODUCTION

Adolescent girls and young women (AGYW) aged 15–24 years face a disproportionate risk of HIV acquisition in sub-Saharan Africa (SSA).<sup>1</sup> In Kenya, AGYW comprise 18.4% of the adult population but acquired 23.7% of new infections in 2017, such that, by 2018, an estimated 2.6% of AGYW in Kenya were living with HIV<sup>2–5</sup>; yet, most infections remain undiagnosed.<sup>4</sup> The most recent data available on AGYW suggest that, in 2012, only 25% of AGYW living with HIV were diagnosed and aware of their HIV status.<sup>4</sup> The consequence of undiagnosed HIV among AGYW