Background
Studies have shown that HIV-infected individuals who receive antiretroviral therapy (ART) and maintain an undetectable viral load (VL) cannot transmit the virus to others. In 2015, the World Health Organization recommended countries adopt universal ART initiation regardless of CD4 count (“Treat all”). We evaluated changes in the HIV cascade of care coverage, and viral load suppression (VLS) (VL<1,000 copies/ml), at the community level in two different settings.

Methods
Cross-sectional population-based surveys were implemented in Eshowe-Mbongolwane sub-district (South Africa) in 2013 and 2018 and in Ndhiwa sub-county (Kenya) in 2012 and 2018. Using multistage cluster sampling, we recruited all individuals aged 15-59 years living in selected households. Consenting participants were interviewed, tested for HIV at home and assessed for viral load when HIV-positive regardless of ART-status.

Results
Overall, 5,649 and 3,278 individuals were included in the surveys conducted in 2013 and 2018 in Eshowe-Mbongolwane, and 6,076 and 6,029 individuals were included in the surveys conducted in 2012 and 2018 in Ndhiwa, respectively.

In Eshowe-Mbongolwane, HIV-positive status awareness was 76.4% (95% CI: 74.1–78.6) in 2013 vs 89.9% (95%CI: 87.7- 91.8) in 2018.ART coverage among HIV-infected was 53.5% (50.6- 56.3) in 2013 vs 84.3% (95%CI: 81.7- 86.5) in 2018.

In Ndhiwa, 59.4% (95% CI 56.8–61.9) of the HIV-infected participants knew their status in 2013 vs 93.4% (95%CI: 91.7- 94.8) in 2018, and ART coverage among HIV-infected was 39.6% (36.7-42.5) in 2012 vs 90.4 % (95%CI: 88.5- 92.2) in 2018.

Overall, in Eshowe-Mbongolwane, 57.1% (54.6- 60.1) of all HIV-positive participants were virologically suppressed in 2013 compared to 83.8% (95%CI: 81.1- 86.1) in 2018. In Ndhiwa, VLS coverage was 39.7% (95% CI 37.1–42.4) in 2012 compared to 88.3% (95%CI: 86.1- 90.1) in 2018.

Conclusion
HIV status awareness, linkage to care and viral load suppression improved dramatically in each setting.