

# Improving HIV Treatment Outcomes among orphans and vulnerable children in Mozambique and South Africa

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## BACKGROUND

FHI 360 supports two orphans and vulnerable children (OVC) projects to improve pediatric and adolescent HIV treatment outcomes — COVida in Mozambique and Capacity Development and Support (CDS) in South Africa — both funded by the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR) and the United States Agency for International

Development (USAID). By December 2020, COVida had achieved 50% viral load (VL) coverage and 61% viral suppression (VS), while rates for CDS were 55% and 82%, respectively. We examined the association between community-based interventions and HIV treatment outcomes among children and adolescents living with HIV (C&ALHIV).

## RESULTS

By September 2021, VL coverage among COVida and CDS clients had increased from 50% to 86% and from 55% to 90%, respectively (Figure 1), and VS increased from 61% to 82% and from 82% to 87%, respectively (Figure 2). Z-test analysis comparing VL coverage between the two periods — October–December 2020 and July–September 2021 — from both projects showed a statistically significant

increase (COVida:  $n_1=13,144$ ,  $p_1=0.5$ ;  $n_2=24,099$ ,  $p_2=0.91$ ,  $[Z=89.218, P<0.0001]$  and CDS:  $n_1=7,400$ ,  $p_1=0.55$ ;  $n_2=21,670$ ,  $p_2=0.90$   $[Z=66.38, p<0.00001]$ ). Likewise, VS increased significantly for both projects (COVida:  $n_1=6,589$ ,  $p_1=0.61$ ;  $n_2=21,918$ ,  $p_2=0.82$   $[Z=35.5973, P<0.0001]$ , and CDS:  $n_1=6,081$ ,  $p_1=0.82$ ;  $n_2=18,912$ ,  $p_2=0.87$   $[Z=9.7122, p<0.0001]$ ).

## METHODS

In 2021, both projects implemented interventions to improve adherence to antiretroviral therapy (ART) and VL testing and VS among C&ALHIV younger than 18. They strengthened coordination with HIV clinical partners and health facilities (HFs), provided differentiated socioeconomic services, collected VL data from HFs, created new clinical staff positions to monitor and support unsuppressed C&ALHIV, and offered remote case management during COVID-19. In addition, COVida trained case workers on pediatric HIV care and treatment, implemented case management in HFs (when preferred by C&ALHIV and their caregivers), and triangulated program and HF data to confirm treatment status and eligibility for VL testing. CDS delivered ART to C&ALHIV homes, as needed, participated in multidisciplinary case conferences at HFs, and trained case workers as VL champions to improve VL literacy and testing.

## CONCLUSIONS

The achievements of COVida and CDS demonstrate that strong coordination with HIV clinical partners and HFs, engagement of OVC staff with HIV clinical expertise, and triangulating program data with HF data are invaluable in improving HIV treatment outcomes among C&ALHIV and should be standard practices in OVC programs.

## AUTHOR AFFILIATIONS

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FIGURE 1. Increase in VL coverage over time (COVida and CDS)

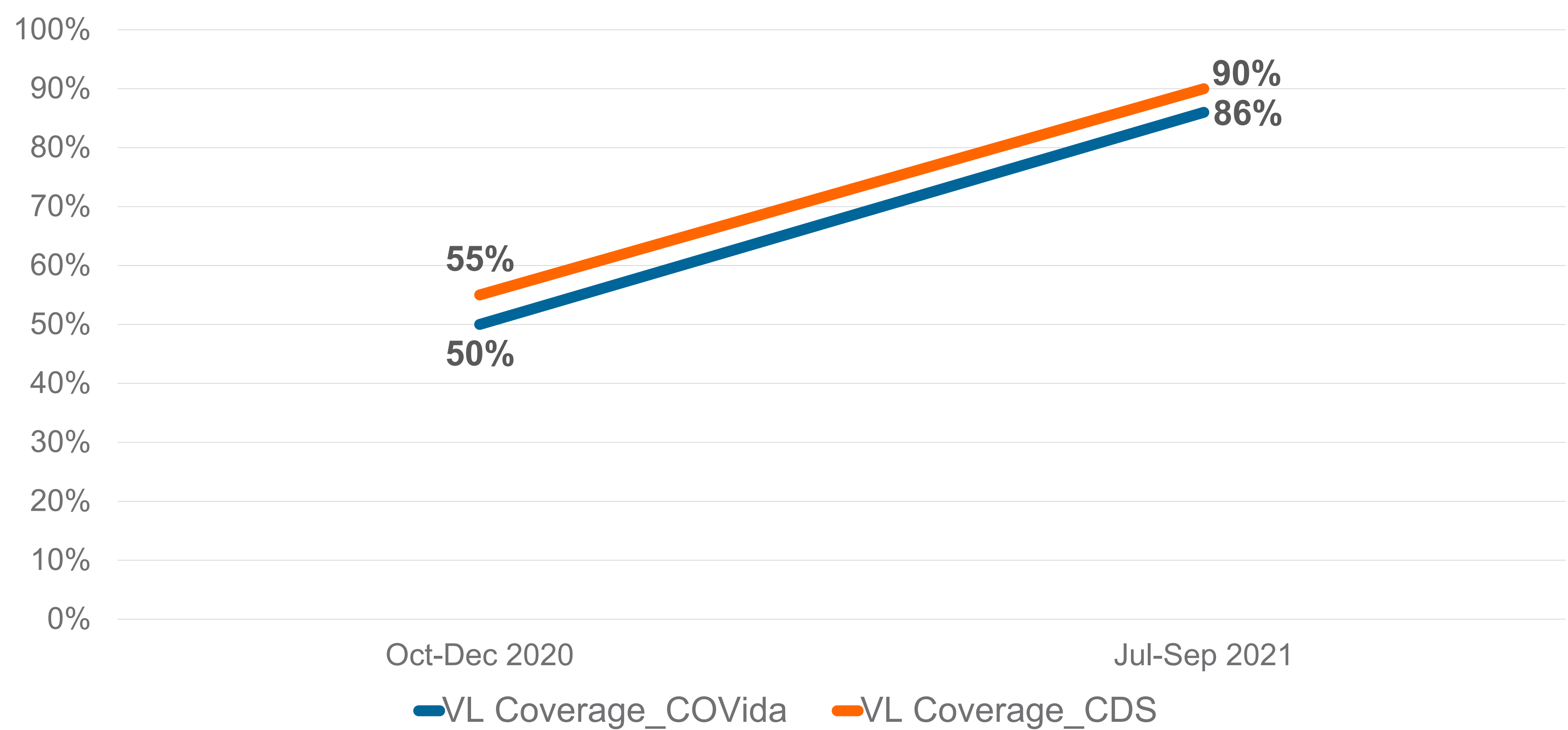


FIGURE 2. Increase in VL suppression over time (COVida and CDS)

