Declines but Not a Decisive Effect of the Intervention: Key results from “universal test and treat” trials

UNAIDS’ Fast-Track Goals for ending the epidemic focused on testing 90 percent of people living with HIV, linking 90 percent of those people to ART, and supporting 90 percent of those individuals to reach virologic suppression. The busy figure below summarizes recent research on how reaching these targets impacts incidence. Each orange arrow shows the level of virologic suppression among PLHIV in the community at the start and end of the trial, the pairs of arrows represent different trial arms. The figure in the box above is the absolute difference in suppression between the two arms. For PopART, which had three arms, there are two different comparisons. The longer arrows belong to the intervention arms, which had a greater increase in virologic suppression across the trials. The blue bars show the point estimate for, and confidence interval around, the relative incidence in the intervention arm compared to the control arm. The bottom line: arms with community-wide testing saw incidence drop. Rapid expansion of ART leading to virologic suppression is feasible. This is good news for communities and individuals.

1 Difference in virologic suppression (<400 copies/mL) between the intervention and control groups at the end of the trial.
2 The dot is the virologic suppression percentage at baseline, and the arrow is the virologic suppression percentage at the end of the trial. The figure in the orange box is the absolute difference in suppression between arms.
3 HIV incidence is per 100 person-years.
4 The dot and blue box is the point estimate for effectiveness in preventing HIV (relative HIV incidence in intervention versus control arm) and the lines on either side represent the 95% confidence interval.
5 Viral suppression at baseline was estimated from baseline ART coverage, assuming 90% of ART patients were virally suppressed.
