

Same-Day Treatment Starts Work for Adolescents, Too

The number of days to an undetectable viral load dropped by nearly two weeks, but there's more work to do.

March 3, 2021 By [Heather Boerner](#)

[Teens](#) diagnosed with HIV started antiretroviral (ARV) treatment a median of 18 days earlier and achieved an undetectable viral load 13 days earlier when they were offered a prescription at their [first HIV appointment](#). Those are the findings of a single-site study published in [The Pediatric Infectious Disease Journal](#).

Past research has found that teens and young adults are less likely to be [tested](#) for HIV and less likely to have an undetectable viral load than their adult counterparts.

The study looked at St. Jude Research Hospital's move from traditional treatment initiation to rapid ARV start in April 2018. Because St. Jude's has a different funding structure than most hospitals, they were able to offer ARVs to everyone willing to take them, regardless of ability to pay. These data run from two years before the switch to rapid ARV starts until two years after, covering 2016 through 2020. Notably, the study period ended in February 2020, excluding care offered during the COVID-19 pandemic.

Between March 2016 and February 2020, 124 young people enrolled in HIV care at St. Jude's Research Hospital in Memphis. Fifty-four participants enrolled before the introduction of same-day ARV prescription and 70 did so in the two years after. The median age (19 years) and gender mix (91% male) of participants remained stable between the two time periods. Both cohorts included mostly Black participants, at 96% and 93%, respectively.

Median CD4 counts at first visit were roughly the same between time periods, at 410 before April 2018 and 390 after the switch. Teens who started ARVs at their first appointment had a slightly lower viral load, though the difference was not statistically significant: 31,000 after rapid ARV initiation compared to 36,700 before.

The researchers reported that 90% of teens who were offered ARVs at their first clinic visit accepted them.

The ARV regimens prescribed were almost all integrase inhibitor-based. Most of the pre-rapid-start

era participants received Triumeq (dolutegravir/abacavir/lamivudine) or Symtuza (darunavir/cobicistat/emtricitabine/tenofovir alafenamide), while those in the rapid-start era received mostly Biktarvy (bictegravir/emtricitabine/tenofovir alafenamide). The proportion receiving Tivicay (dolutegravir) plus Descovy (emtricitabine/tenofovir alafenamide) remained the same before and after the switch to same-day ARVs.

Interestingly, retention in care didn't vary much between the two time periods, with a slight but nonsignificant increase in the percentage of people retained in care at six months before same-day ARV prescription (94% versus 92%) and at 12 months (89% versus 88%). The same was true of undetectable viral load status one year after ARV initiation (82% versus 74%). There was also not much difference between retention in care at six and 12 months among people who started ARVs

All but one young person in each time cohort reached an undetectable viral load, defined as below 200, during the study period.

“Potential barriers to adherence need to be assessed and addressed on an ongoing basis in youth living with HIV infection, but should not delay initiation of ART,” wrote Nehali Patel, MD, and colleagues. Notably, the clinic has funding for linkage-to-care coordinators and social workers who can bring patients to their visits, which researchers said was essential as part of the ARV initiation process.

“Based on these findings, we propose that once youth have engaged for their first clinical appointment, they are accepting of immediate initiation of [antiretroviral treatment], which has the potential for a quicker time to virological suppression and reduction in HIV transmission.”

Click here to read the [study abstract](#).