Same-Day Viral Load Testing Improves Treatment Outcomes in South Africans With HIV

Receiving viral load results within hours as opposed to weeks was linked to higher rates of HIV suppression and retention in medical care.

March 18, 2019 By Benjamin Ryan

Providing HIV-positive individuals with results from viral load testing within a few hours as opposed to weeks later was associated with higher rates of viral suppression and retention in medical care in a recent study conducted in South Africa, aidsmap reports.

Paul Drain, MD, MPH, of the University of Washington in Seattle presented findings from an open-label, randomized controlled trial of what is known as point-of-care viral load testing (meaning it is done on site) at the 2019 Conference on Retroviruses and Opportunistic Infections (CROI) in Seattle.

A total of 390 HIV-positive patients at a public clinic in Durban, South Africa, were randomized to one of two groups. One group received point-of-care viral load testing—results were provided after about two hours—as a part of their routine HIV care as well as counseling on the same day. This group began with receiving care from a nurse with four years of training, known as a professional nurse. And then, if they had a fully suppressed viral load and otherwise were in stable health, were transferred to an enrolled nurse, who had two years of training.

The other group received typical laboratory-based viral load testing and care from a professional nurse.

Otherwise, all participants were to follow the standard South African guidelines for HIV care, which included visiting the clinic every two months and receiving viral load testing six months after entry into care, again at the 12-month mark and then annually. If individuals have stable viral suppression and health, they can transfer to a program in which their antiretroviral treatment is delivered to them in their community.

The participants had an average age of 33 years old. Sixty percent were female and one in three were diagnosed more than a year prior to entering the study. The median initial CD4 count was 468. The majority lived more than five kilometers (3.1 miles) from the clinic.

Twelve months into the study, 89.7 percent (175 of 195) of those in the point-of-care viral load testing group were both still engaged in medical care and had a viral load below 200, compared with 75.9 percent (148 of 195) of those in the arm that received laboratory-based viral load testing. That meant that the study's intervention increased the likelihood of this composite outcome by 13.9 percent.

Separating those two outcomes, the study authors found that at the 12-month point, the intervention increased the likelihood of viral suppression by 10.3 percent and retention in medical care by 7.7 percent.

The lab-based viral load tests were entered into medical records within just two hours but were relayed to the patients after a median 28 days. One in four participants in this study group received their test results after 54 days or longer; 18.5 percent never got their results.

Looking at all the costs associated with providing each type of viral load test, including the test itself, staff time and other factors, the investigators found that the point-of-care test was cheaper than the laboratory test, at $21.53 compared with $25.98.

To read the aidsmap article, click here.

To read the conference abstract, click here.

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