

HIV VIRAL SUPPRESSION

Issue

Although there is no cure for HIV, strict adherence to antiretroviral treatment (ART) – taking HIV medicines every day and exactly as prescribed – can reduce the amount of virus in the body to an undetectable level. This is called “viral suppression.”ⁱ Reaching and maintaining viral suppression is the goal of HIV treatment. It is a key factor in improving overall health for people living with HIV (PLWH), and a factor that determines long term survival.ⁱⁱ Viral suppression can also prevent the sexual transmission of HIV.^{iii,iv,v,vi} However, according to the Centers for Disease Control and Prevention (CDC), only around half of diagnosed PLWH are virally suppressed.^{vii}

Key Points

Viral Suppression Requires Treatment Access & Adherence

To reach viral suppression, PLWH must be adherent to ART that effectively combats HIV. Federal HIV clinical treatment guidelines^{viii} emphasize the importance of adherence as a key factor in treatment success.^{ix} Studies also demonstrate the cost of non-adherence.^x Successful treatment with an antiretroviral regimen results in virologic suppression and virtually eliminates secondary HIV transmission to others. As a result, it is possible to extrapolate that successful HIV treatment and medical care of each infected patient may save health systems expense by preventing further transmission to others. Achieving viral suppression – and thereby improving the health and wellness of PLWH – is the goal of HIV treatment.^{xi} However the importance of maintaining viral suppression over the long term (durable viral suppression) must be emphasized. PLWH often face a variety of social, economic, and medical challenges that impede access to HIV treatment adherence. Data shows that not all HIV-positive individuals on ART are virally suppressed,^{xii} and only about two-thirds of PLWH who achieved viral suppression maintained it over time.^{xiii} This highlights the need to remove barriers to accessing ART in order to facilitate viral suppression for PLWH.

Viral Suppression Prevents HIV Transmission

Effective treatment of HIV and viral suppression can also prevent new transmissions of the virus. When PLWH achieve and maintain viral suppression, there is *no risk* of transmitting HIV to their HIV-negative sexual partner.^{xiv} Preventing additional infections offers significant financial benefit – as studies estimate that each HIV positive patient may approach \$338,400 in costs to the healthcare system over a lifetime.^{xv}

Undetectable = Untransmittable

The scientific breakthrough that viral suppression not only improves the health of the individual, but also prevents HIV transmission led to the development of an international movement called “U=U” or Undetectable = Untransmittable. The federal DHHS, CDC and NIH have endorsed the U=U message, as have many state health agencies and regional health departments.^{xvi,xvii,xviii,xix} Over 1,000 organizations from 102 countries have also endorsed the U=U message internationally.^{xx}

ViiV Healthcare has a long-established track record of proactively supporting numerous public campaigns to address HIV stigma, challenge social prejudice, and eliminate discrimination experienced by people living with and affected by HIV. We were a founding corporate supporter of the Undetectable = Untransmittable (U=U) global campaign, which seeks to champion important evidence-based public health messaging.

The U=U campaign reinforces the message that viral suppression can allow PLWH to live their lives, encourages PLWH to start and stay on their prescribed medication, and helps to end HIV-related stigma at the personal, clinical, and community level.^{xxi} The message of viral suppression and U=U also offers a strong public health argument for policies that increase access to treatment, and adherence.

Viral Suppression Will Help End the HIV Epidemic

In 2019, the US government announced the "Ending the HIV Epidemic: A Plan for America," a multi-agency initiative with the goal of reducing new HIV infections by 90 percent over the next decade.^{xxii} This plan proposes to use scientific advances in antiretroviral therapy to treat PLWH and expand proven models of effective HIV care and prevention. Viral suppression is one of six HIV indicators the EHE initiative is measuring in key jurisdictions – 48 counties and 7 states - as part of this effort.^{xxiii}

Quality Measurement of Viral Suppression

The Centers for Medicare and Medicaid (CMS), and Health Resources and Services Administration (HRSA) have included HIV measures in their quality program measures.^{xxiv,xxv,xxvi,xxvii} The CMS 2020 Adult Core Set includes the HIV measure of HIV Viral Load Suppression^{xxviii} as an indicator of quality HIV care in Medicaid.^{xxix} The HIV Viral Load Suppression quality measure is endorsed by the National Quality Forum (NQF).^{xxx}

Conclusion

ViiV Healthcare encourages federal and state policy makers to establish and promote policies that support adherence to prescribed HIV therapies so that PLWH may achieve viral suppression and live long healthy lives. We also urge adoption of, and reporting of, HIV quality metrics, in addition to promotion of the U=U message, in order to prevent new HIV infections, and help end the HIV Epidemic.

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ⁱⁱ HRSA, Guide for HIV/AIDS Clinical Care (April 2014). <https://hab.hrsa.gov/sites/default/files/hab/clinical-quality-management/2014guide.pdf>. Accessed October 13, 2017.

ⁱⁱⁱ CDC. Dear Colleague: September 27, 2017. https://www.cdc.gov/nchhstp/dear_colleague/2017/dcl-092717-National-Gay-Mens-HIV-AIDS-Awareness-Day.html. Accessed December 18, 2020

^{iv} NIAID. <https://www.niaid.nih.gov/news-events/undetectable-equals-untransmittable>. Accessed August 1, 2018.

^v Prevention of HIV-1 infection with early antiretroviral therapy. Cohen, et. al: HPTN 052 Study Team. N Engl J Med. 2011 Aug 11;365(6):493-505.

^{vi} CDC, "Effectiveness of Prevention Strategies to Reduce the Risk of Acquiring or Transmitting HIV"

<https://www.cdc.gov/hiv/risk/estimates/preventionstrategies.html>. Accessed September 20, 2019.

^{vii} CDC. MMWR. Vol 67 No.4 Feb. 2, 2018. <https://www.cdc.gov/mmwr/volumes/67/wr/pdfs/mm6704a2-H.pdf>.

^{viii} Guidelines for the Use of Antiretroviral Agents in HIV-1-Infected Adults and Adolescents, HIV.gov <https://clinicalinfo.hiv.gov/en/guidelines/adult-and-adolescent-arv/whats-new-guidelines> Accessed: December 20, 2020.

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^{xi} Crepaz, Nicole et al. "Durable Viral Suppression and Transmission Risk Potential Among Persons With Diagnosed HIV Infection: United States, 2012-2013" Clinical infectious diseases : An Official Publication of the Infectious Diseases Society of America vol. 63,7 (2016): 976-83.

^{xii} CDC., MMWR. Vol 67 No.4 Feb. 2, 2018. <https://www.cdc.gov/mmwr/volumes/67/wr/pdfs/mm6704a2-H.pdf>.

^{xiii} CDC.gov, "Evidence of HIV Treatment and Viral Suppression

in Preventing the Sexual Transmission of HIV," December 2020 <https://www.cdc.gov/hiv/pdf/risk/art/cdc-hiv-art-viral-suppression.pdf>

^{xiv} Id.

^{xv} Schackman BR, Fleishman JA, Su AE, Berkowitz BK, Moore RD, Walensky RP, et al. The lifetime medical cost savings from preventing HIV in the United States. Medical care. 2015;53(4):293-301. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4359630/>.

^{xvi} HIV.gov, The Science Is Clear: With HIV, Undetectable Equals Untransmittable <https://www.hiv.gov/blog/science-clear-hiv-undetectable-equals-untransmittable>.

^{xvii} CDC, "Treatment as Prevention <https://www.cdc.gov/hiv/risk/art/index.html>"

^{xviii} NIH, "HIV Undetectable=Untransmittable (U=U), or Treatment as Prevention" <https://www.niaid.nih.gov/diseases-conditions/treatment-prevention>.

^{xix} NASTAD, Undetectable = Untransmittable: Health Department Engagement Map., <https://www.nastad.org/maps/undetectable-untransmittable-health-department-engagement-map>.

^{xx} Prevention Access Campaign <https://www.preventionaccess.org/community>.

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^{xxi} The Lancet, Providers Should Discuss U=U with all Patients Living with HIV,

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^{xxii} HIV.gov, What is "Ending the HIV Epidemic: A Plan for America?". Retrieved from <https://www.hiv.gov/federal-response/ending-the-hiv-epidemic/overview>.

^{xxiii} "Ending the HIV Epidemic: 6 Indicators. 4 Strategies. 1 Goal – The AHEAD Dashboard" <https://www.hiv.gov/blog/ending-hiv-epidemic-6-indicators-4-strategies-1-goal-ahead-dashboard>.

^{xxiv} America's Health Insurance Plans Consensus Core Set: HIV / Hep C Core Measures https://www.ahip.org/wp-content/uploads/2016/02/Public_Consensus-HIV-Hep-C-Measure-List_FINAL.pdf.

^{xxv} CMS (2017). Core Measures. Retrieved from <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityMeasures/Core-Measures.html>.

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^{xxviii} Medicaid.gov, 2020 Core Set of Adult Health Care Quality Measures for Medicaid (Adult Core Set), <https://www.medicaid.gov/medicaid/quality-of-care/downloads/performance-measurement/2020-adult-core-set.pdf>.

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^{xxx} NQF, Measure Evaluation Criteria. Retrieved from

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