

Clinical Decision Support Systems to Increase HIV Screening

Summary of Community Preventive Services Task Force Recommendation*

The Community Preventive Services Task Force recommends clinical decision support systems (CDSS) to increase HIV screening. Evidence shows CDSS increase HIV screening for the general population and for people at higher risk for HIV infection.

Major Findings*

The CPSTF finding is based on evidence from a systematic review of 23 studies (search period January 1985 to October 2019).

- CDSS increased HIV screening and identified more HIV infections when compared with no intervention.
 - The percent of eligible patients tested for HIV increased by a median of 10.3 percentage points (16 studies).
 - The number of patients tested positive each month increased by a median of 1.3 (13 studies).



• Greater increases in HIV screening were reported when providers were educated about HIV, HIV testing, and CDSS before the program started (10 studies), when compared with studies that did not include an education component (8 studies).

What Are Clinical Decision Support Systems?*

CDSS encompass a variety of tools such as computerized alerts and reminders to enhance decision making about patient care. To increase HIV screening, CDSS use patient data and current clinical guidelines to identify those eligible for HIV screening and send healthcare providers computerized alerts or reminders to order tests.

CDC guidelines¹ recommend routine screening for all patients aged 13-64 years and all pregnant people, and at least annual screening for people at high risk for HIV. Risk is assessed based on patients' or their partners' sexually transmitted disease diagnosis, sexual behavior, or history of injection drug use.

Patients may receive information about HIV transmission and testing prior to screening, and healthcare providers may receive education about HIV transmission, patient eligibility for screening, and how to correctly use CDSS.

Why Is This Important?

- There are approximately 38,000 new HIV diagnoses in the United States each year.²
- Among those living with HIV, 15% do not know they have the virus and another 23% know their status but are not receiving care.³
- Nearly 40% of new HIV infections are transmitted by people who don't know they have the virus.⁴
- People with HIV who are aware of their status can get treatment and remain healthy for many years. Treatments can also dramatically reduce, if not eliminate, the risk of sexually transmitting the virus to HIV-negative partners.³
- Ending the HIV Epidemic: A Plan for America features HIV testing as a key component of the operational plan to reduce new HIV infections in the United States by at least 90% by 2030.⁵

Learn More

*Read a complete summary of the systematic review and CPSTF finding.

www.thecommunityguide.org/findings/hiv-prevention-and-control-clinical-decision-support-system-increase-hiv-screening

CDC, HIV

www.cdc.gov/hiv/

Ending the HIV Epidemic: A Plan for America

www.cdc.gov/endhiv

America's HIV Epidemic Analysis Dashboard (AHEAD)

https://ahead.hiv.gov

- ¹ Branson BM, Handsfield HH, Lampe MA, Janssen RS, Taylor AW. Revised recommendations for HIV testing of adults, adolescents, and pregnant women in healthcare settings. *Morbidity and Mortality Weekly Report: Recommendations and Reports* 2006;55(14):1-17.
- ² Centers for Disease Control and Prevention. HIV Surveillance Report, 2018 (Updated); vol. 31. http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html. Published May 2020. Accessed 12/7/20.
- ³ Harris NS, Johnson AS, Huang YA, et al. *Vital Signs*: Status of Human Immunodeficiency Virus Testing, Viral Suppression, and HIV Preexposure Prophylaxis United States, 2013–2018. *MMWR Morb Mortal Wkly Rep* 2019;68:1117–1123. DOI: https://www.cdc.gov/mmwr/volumes/68/wr/mm6848e1.htm.
- ⁴Centers for Disease Control and Prevention. HIV Testing. https://www.cdc.gov/hiv/testing/. June 2020. Accessed 12/7/20.
- ⁵ Centers for Disease Control and Prevention. Ending the HIV Epidemic: A Plan for America. https://www.cdc.gov/endhiv/. Published July 2020. Accessed 12/7/20.

Established in 1996 by the U.S. Department of Health and Human Services, the Community Preventive Services Task Force (CPSTF) is an independent, nonfederal panel of public health and prevention experts whose members are appointed by the director of CDC. CPSTF provides information for a wide range of decision makers on programs, services, and other interventions aimed at improving population health. Although CDC provides administrative, scientific, and technical support for CPSTF, the recommendations developed are those of CPSTF and do not undergo review or approval by CDC. Find more information at www.thecommunityguide.org.

