

# Analytic Framework: Clinical Decision Support Systems (CDSS) for HIV Screening

The analytic framework shows the postulated pathways through which Clinical Decision Support Systems (CDSS) may increase HIV screening.

CDSS use a variety of tools to help healthcare providers make informed clinical decisions at the point of care. CDSS to increase HIV screening use patient data to identify those eligible for HIV screening and send computerized alerts or reminders to healthcare providers, increasing providers' knowledge about patients' eligibility for routine HIV screening and risk status for HIV infection, creating a norm for routine HIV screening, increasing providers ordering of HIV tests, and reducing stigma association with HIV.

These changes can increase HIV testing and patients' knowledge of their status. Patients who test negative and are at high risk for HIV infection can be linked to preventive services. Patients who test positive can be linked to, and retained in, HIV care, to improve their viral suppression and other HIV-related health outcomes, decreasing HIV-related morbidity and mortality.

HIV-related health disparities exist among population groups such as people from racial and ethnic minority groups, those who have male-to-male sexual contact, transgender persons, and people who inject drugs. CDSS could focus on these population groups, increase HIV screening among them and link patients tested positive to care and treatment and improve health equity.

One postulated harm is that patients learning and disclosing their HIV status may face HIV-related stigma that could lead to disruption of social relations and possible acts of violence.

Key potential effect modifiers include age and gender of patients, and HIV-related stigma held by providers and patients.

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 September 2020.