

ELECTRONIC HEALTH RECORD (EHR) ALERT for HIV SCREENING



Evidence-Informed for the Structural Interventions Chapter

POPULATION

- Persons of unknown HIV status recommended for routine HIV screening

KEY INTERVENTION EFFECTS

- Increased HIV screening

BRIEF DESCRIPTION

Electronic Health Record (EHR) Alert for HIV Screening uses an electronic health record algorithm that identifies patients in an urban emergency department (ED) who meet specific criteria for HIV screening, as defined by the United States Preventive Services Tasks Force (USPSTF). The EHR alert is activated for patients aged 18-64 years who have no prior HIV results.

- Triage nurses receive the alert, obtain consent from the patient, and place an order for the screening.
- Nurse navigators, upon availability meet with patients who test positive for HIV in the ED or follow up with a phone call to provide counseling and offer information and resources for linkage to care.

DURATION: Ongoing

SETTING: St. Louis, Missouri

STUDY YEARS: 2019

STUDY DESIGN: Non-randomized trial

DELIVERERS: ED triage nurses and nurse navigators

DELIVERY METHODS: HIV counseling and testing, Technology

STUDY SAMPLE

The analytic study sample of N = 3,727 patients screened post HER alert was characterized by the following:

- 61% Black or African American persons
36% White persons
3% persons who are American Indian or Alaska Native, Asian, Multi-racial, Native Hawaiian or Pacific Islander (less than 1% each)
- 51% female persons, 50% male persons
- Mean age is 41 years

Percentages may not add up to 100% due to rounding

STRUCTURAL COMPONENTS

Access – HIV testing

- Increased access to HIV testing

Policy/Procedure – Institutional policy

- An algorithm was created within the EHR system to alert ED triage nurses of eligibility for recommended HIV screening

KEY INTERVENTION EFFECTS (see **Primary Study** for all outcomes)

- The mean number of HIV tests performed per month increased from 289 HIV tests pre-intervention to 373 tests post-intervention, $p = 0.0002$.
- The number of HIV positive cases per month increased from 0.5 pre-intervention to 1.3 post-intervention, $p = 0.022$.

CONSIDERATIONS

- A higher percentage of HIV positive tests was found post-intervention (0.35%) compared to pre intervention (0.17%).
- All patients with a new HIV diagnosis (5/5) were linked to care pre-intervention while 85% of patients with a new HIV diagnosis (11/13) were linked to care post-intervention.
- After the EHR alert, approximately 32% of guideline-appropriate patients were screened.

ADVERSE EVENTS

The author did not report adverse events.

FUNDING

- Gilead Science FOCUS Program grant awarded directly to SSM Saint Louis University Hospital

PRIMARY STUDY

Bitter, C. C., Parmentier, M., Subramaniam, D. S., Byrne, L., & Buchanan, P. (2022). [An electronic health record alert increases human immunodeficiency virus screening and case identification in a high-risk emergency department population.](#) *International Journal of STD & AIDS*, 33(7), 722-725. doi: 10.1177/09564624221096001.

PLEASE CONTACT STUDY AUTHOR FOR TRAINING AND INTERVENTION MATERIALS.

Contact information

Cindy Bitter, MD, MPH

Saint Louis University School of Medicine
Department of Surgery, Division of Emergency Medicine
361 Rutger Street
St. Louis, MO 63110

Email: cindy.bitter@health.slu.edu