Reaching high-risk patient populations through emergency department opt-out HIV testing: A retrospective chart review

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**Recommended Citation**
Urban emergency departments (EDs) serve high-risk populations that face challenges in regards to chronic diseases like Human Immunodeficiency Virus infection (HIV), including the following:

- Limited access to care, and reliance on ED services for primary care.
- High prevalence of HIV seropositivity (3.5% to 11.8%) and unawareness of HIV infection (4.0% of those HIV positive).1 2
- Frequent engagement in HIV risk behaviors (37.6% to 89.0%).

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Exclusions: Patient records indicated a prior diagnosis of HIV infection; Confirmatory testing not performed or results negative for HIV infection

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Data were collected from electronic medical records (EMR) and forms completed by screening program personnel for mandatory reporting to the Philadelphia Department of Pubic Health.

Conclusions

- Unsafe sexual practices were the most commonly reported RF.
- Patients in this study rarely presented specifically for HIV testing, the majority reported SE and multiple sexual RFs, and many reported drug use.
- SE risks were associated with diagnosis in the chronic phase of HIV, reflecting a delay in identification and treatment.
- Patients were predominantly male and African American, two groups that have faced challenges in health care utilization.1 3
- No significant trends in IVDU were found, however a larger sample size may provide important means for reaching at-risk patients.

This study supported the notion that ED-based public health interventions are an important means for reaching at-risk patients.

Limitations

- EDs switch EMR software in 2017, limiting access to some older data. However, necessary data was accessible in mandatory reporting forms.
- ED HIV testing prior to 2014 did not include antigen detection, preventing acute phase diagnosis. Chronic vs. acute analysis therefore excluded pre-2014 patients.
- One ED’s proximity to a district historically associated with a large homosexual population may account for the high prevalence of males who have sex with males.

Reaching high-risk patient populations through emergency department opt-out HIV testing: A retrospective chart review

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Background

Urban emergency departments (EDs) serve high-risk populations that face challenges in regards to chronic diseases like Human Immunodeficiency Virus infection (HIV), including the following:

- Limited access to care, and reliance on ED services for primary care.
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Methods

- Retrospective chart review
- Setting: Urban academic level 1 trauma center and affiliated urban community ED
- Sample: All patients newly diagnosed with HIV infection through the ED opt-out HIV screening program from October 2009 to June 2017
- Data were collected from electronic medical records (EMR) and forms completed by screening program personnel for mandatory reporting to the Philadelphia Department of Pubic Health
- Exclusions: Patient records indicated a prior diagnosis of HIV infection; Confirmatory testing not performed or results negative for HIV infection
- Analysis was performed using chi-square and logistic regression analysis

Analysis

Having 1 or more SE RFs (77.4% of patient sample) was associated with diagnosis in chronic phase (OR, 3.41; 95% CI, 1.15 to 10.15; p = 0.02).

No similar significant association was found for IVDU or sexual RFs.

No statistically significant trend was found for changes in IVDU by year, likely due in part to the low number of IVDU (p = 0.57).

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References


