New Jersey Medical School

INTRODUCTION

Since 1985, the Centers for Disease Control and Prevention (CDC) has recommended routine HIV testing and counseling were intended to include persons obtaining health care in the Emergency Department (ED). In 2003, the recommendations were modified to allow screening without counseling for patients in all health care settings. In 2013, the USPSTF revised their previous recommendations and recommended routine testing for patients age 15-65 years in any health care setting with an A grade. Additionally, the USPSTF included a recommended screening interval of one test per patient; "there is no role at risk of HIV infection, those who are actively engaged in high-risk behaviors, and those who seek medical care in a high-prevalence setting." (Commentary of 2012)

Situated in Newark, New Jersey, University Hospital of Newark serves as a "safety net" hospital, providing care to underserved populations who are often at increased risk of HIV.

From Data from December 2013 that Essex County had 1240 cases of HIV per 100,000 people (1.2%). The city of Newark itself, with approximately 5767 people living with a diagnosis of HIV and a population of 378,000, has a prevalence rate of 1.5%

A recently published study from 2008 looking at de-identified blood specimens from the ED discovered that 6.3% of patients were HIV-positive and that 15% of these were unaware of their diagnosis.

METHODS

Electronic records for patients seen in the ED from October 1st 2014 to February 28th 2015 were obtained. Information for each visit was electronically collected on age, gender, ED diagnosis ICD codes, care location, triage date and time, disposition, and if they were tested for HIV at that visit.

Excluded patients: patients under the age of 18, patients whose charts were entered in error, and patients who walked out prior to being triaged.

Patients who were tested for HIV in the ED and patients with HIV as part of their ICD diagnosis were electronically identified.

Patients due for screening were defined as those without a diagnosis of HIV who had not been documented in the prior 12 months.

A retrospective chart review was done via random sampling of 500 patients, representing 1200 visits, to determine the estimated percentage of patients with a history of HIV not documented in the ED diagnosis, those screened in the past 12 months, and those patients due for screening.

Univariate and multivariate analyses were done to assess the percentage of eligible patients screened by age, gender, care location, ED diagnosis code, disposition, and time of day.

RESULTS

Differences in HIV Screening by Age, Gender, Location, Time of Day, and Diagnosis in a High Prevalence Emergency Department

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In the city of Newark, University Hospital of Newark serves as a "safety net" hospital, providing care to underserved populations who are often at increased risk of HIV and the ED is their only access to care. Due to the high prevalence of HIV in our community and the ED as an integral public health site in the early intervention of HIV, our ED has a responsibility to implement routine HIV screening for all ED visits resulting in proper HIV screening, our current screening process has resulted in a substantial number of missed opportunities for screening. Using a project driven or decision support process to ensure that all of patients are offered screening is the likely next step to reduce the missed opportunities for diagnosis.

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Swaminathan, S. (2014). "Estimating the number of new HIV infections is highest among individuals aged 25-34. Patients seen in fast track between AMH and UCM were statistically more likely to be screened than patients seen in fast track at other times of day in all areas of care. Given that fast-track primary screening using the rapid HIV test, these results may reflect the availability of consultation and rapid testing provided to the patients during the daytime hours. Screening could potentially be increased by making that service available 24 hours a day.

Major care screening for HIV significantly less than fast track which may be due to physician reluctance to refer, belief that screening could be targeted, or that their patients are at low screening becomes a secondary issue. Potentially screening could improve in the major care area by developing a nurse or technician driven protocol that providers the burden from the physician.

Patients discharged had the highest rate of screening when looking at disposition. This may represent the increased screening done at fast track and may contribute to patients circle to access additional testing. Several studies have demonstrated that patients with a diagnosis of renal disease had an increased HIV screening rate. This study has demonstrated that patients with a diagnosis of renal disease had an increased HIV screening rate.

LIMITATIONS: This was a retrospective study that utilized random sampling done at a single institutions emergency department.

CONCLUSION

This analysis demonstrates that despite a high background prevalence routine HIV testing is not being performed.

Younger patients are statistically significantly more likely to be screened than older patients in both the major care and fast track areas. Those aged under 25 were more likely to be screened if they were tested for HIV at the ED. In fact the estimated number of new HIV infections is highest among individuals aged 25-34.

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