Routine emergency dept. HIV screenings find only small increase in newly diagnosed HIV patients

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The use of routine HIV screening in a hospital emergency department, which patients had the option to decline, was associated with only a modest increase in the number of patients with newly diagnosed HIV infection, compared to physician-directed diagnostic rapid HIV testing, according to a study in the July 21 issue of *JAMA*, a theme issue on HIV/AIDS.

Jason S. Haukoos, M.D., of the Denver Health Medical Center, Denver, presented the findings of the study at a *JAMA* media briefing at the International AIDS conference in Vienna.

Infection with the human immunodeficiency virus (HIV) remains an important public health problem in the United States, with more than 1 million people estimated to be infected, and approximately 230,000 infections being undiagnosed. Additionally, approximately 56,000 people are newly infected each year, according to background information in the article. Testing for HIV infection remains an important preventive strategy, and in 2006, the Centers for Disease Control and Prevention (CDC) published revised guidelines for performing HIV testing in health care settings, recommending widespread routine (nontargeted) opt-out (the option to decline) HIV screening in settings where the prevalence of undiagnosed infection was 0.1 percent or greater.

Emergency departments (EDs) have been an important focus for HIV prevention efforts, including testing and screening initiatives, and since 2006, efforts to integrate nontargeted HIV screening into EDs have increased, although limited research supports this practice, and it remains unknown if nontargeted opt-out HIV screening, when incorporated into an ED setting, is associated with the identification of patients with HIV infection as a prevention strategy, the authors write.

Dr. Haukoos and colleagues conducted a study to determine whether nontargeted opt-out rapid HIV screening in a high-volume ED was associated with identification of more patients with newly diagnosed HIV infection than physician-directed diagnostic rapid HIV testing. The study included an urban hospital with an approximate annual ED census of 55,000 patient visits. Patients were 16 years or older and capable of providing consent for rapid HIV testing. The interventions included nontargeted opt-out rapid HIV screening and physician-directed diagnostic rapid HIV testing alternated in sequential 4-month time intervals between April 2007 and April 2009.

Of the 28,043 eligible patients included in the opt-out phase, 6,933 patients (25 percent) completed HIV testing (6,702 patients were screened; 231 patients were diagnostically tested). Of the 6,702 patients screened, 10 patients (0.15 percent) had new HIV diagnoses. Of the remaining 21,281 patients who opted out or were opted out by registration personnel, 231 (1 percent) subsequently underwent diagnostic testing and 5 patients (2.2 percent) had new diagnoses.

Of the 29,925 eligible patients included in the diagnostic phase, 243 patients (0.8 percent) underwent testing and 4 patients (1.6 percent) had new diagnoses. The overall prevalence of newly detected HIV infection during the opt-out phase (including those diagnostically tested) and during the diagnostic phase was 15 in 28,043 (0.05 percent) and 4 in 29,925 (0.01 percent), respectively.

The authors found that nontargeted opt-out screening was associated with newly identified HIV-infected patients. Most of these patients were identified late in the course of disease and met serological criteria for acquired immunodeficiency syndrome (AIDS) at the time of their diagnoses.

"Nontargeted opt-out rapid HIV screening in conjunction with diagnostic testing was associated with approximately 30 times the number of rapid HIV tests performed, yet only a few more patients were newly identified with HIV infection when compared with diagnostic testing alone," the authors write.

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