Original Research: HIV Screening in the Urgent Care Setting

Urgent message: Increasingly, Americans do not know their human immunodeficiency virus (HIV) serostatus. Implementing rapid HIV testing can allow your center to play a key role in identifying new cases of HIV and linking patients to care.

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Abstract

Background: Data from the Centers for Disease Control and Prevention (CDC) suggest that an increasing number of Americans do not know their human immunodeficiency virus (HIV) serostatus. The CDC recommends routine screening for all patients 13 to 64 years of age, in all health-care settings.

Objective: A pilot study was developed to determine the feasibility of implementing an opt-in, point-of-care, rapid HIV testing program in the urgent care setting.

Methods: A 12-month rollout of point-of-care HIV testing at four urgent care sites was implemented. All patients between the ages of 18 and 64 years were offered a rapid fingerstick HIV test performed by nurses or medical assistants.

Results: During the pilot study, 12,237 urgent care patients were approached for HIV testing and 2751 (22%) were tested. One patient was identified as HIV positive and linked to care.

Conclusion: Rapid point-of-care HIV testing is feasible in the urgent care setting without additional support staff.

Introduction

Since 1993, emergency departments (EDs) have played a prominent role in screening for human immunodeficiency virus (HIV).[1] The Centers for Disease Control and Prevention (CDC) has long identified the ED as a key location for HIV testing because EDs serve as the most common health-care access point for seropositive patients who are unaware of their HIV status.[2] As the number of urgent care centers increases throughout the United States, it is natural to question whether urgent care centers may play a role similar to that of EDs in the identification of new HIV infections. There is a paucity of data regarding HIV screening in the urgent care setting, allowing a unique opportunity for analysis and discussion about the implementation of similar programs in an effort to more aggressively identify new cases of HIV. The study reported here explored whether point-of-care HIV testing in the urgent care setting is feasible.

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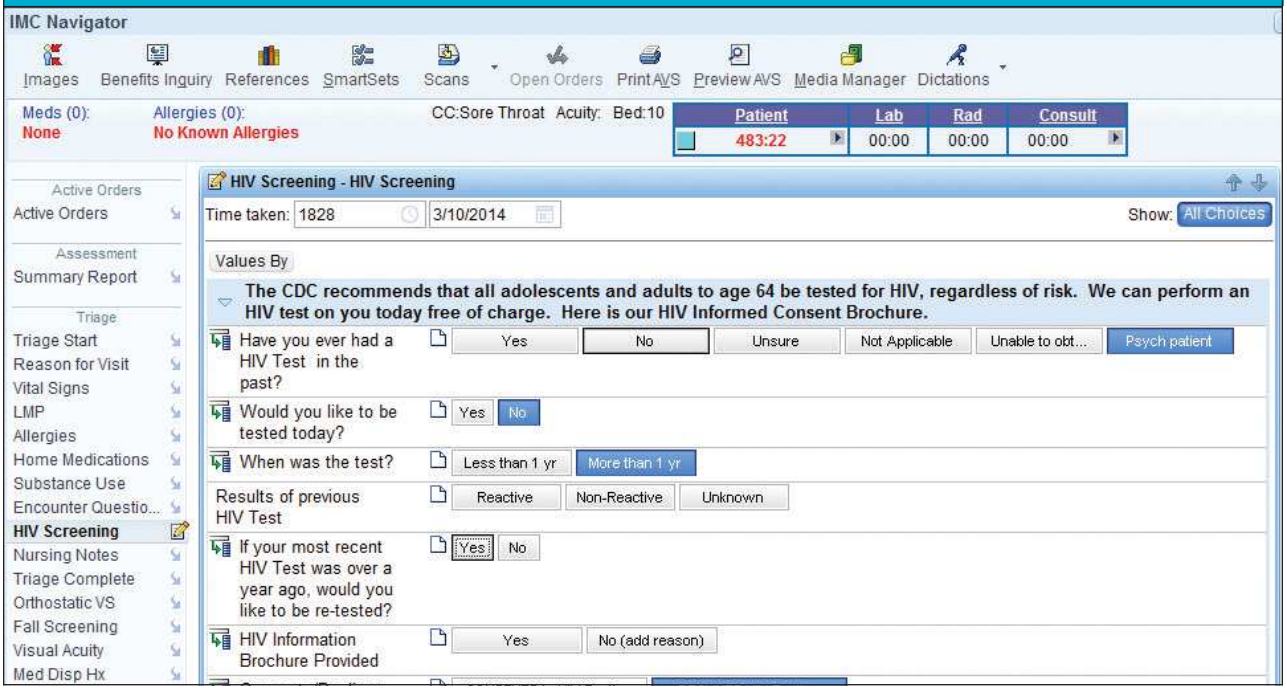
Figure 1. Screenshot of the testing consent questionnaire within the electronic health record.



Background

Although HIV mortality rates have been declining since 2000, the rate of new infections has remained relatively stable.[1] This plateau has been attributed to the spread of infection by patients who are unaware of their HIV serostatus. According to the CDC, 1.2 million people in the United States are living with HIV, and 1 in 8 are unaware that they have the virus.[3] Data show that the diagnosis of HIV is being made in increasingly older Americans, suggesting that a growing number of young Americans are unaware of their serostatus. Later diagnosis of HIV has implications for response to therapy and continued transmission of the virus. In addition, longer periods of untreated infection, and lower CD4 levels at diagnosis, may reflect more rapid disease progression.[4]

In 2006 the CDC recommended that HIV testing be offered in all health-care settings in an effort to increase the number of HIV-infected persons who are aware of their serostatus. EDs are explicitly emphasized in the initiative.[5] In March 2013, the U.S. Preventive Services Task Force (USPSTF) released a draft statement[6] changing its assigned recommendation grade for routine HIV screening from a C to an A. Currently available commercial assays allow for increasingly early detection of HIV infection.

HIV testing in the urgent care setting was preceded by implementation of testing in the Loyola Emergency Department in conjunction with the Illinois Department of Public Health in a CDC Care and Prevention in the United States (CAPUS) grant using the fourth-generation Abbott Architect HIV antibody assay.[7] In 12 months, 1968 ED patients were tested and 16 new cases of HIV were identified. After the successful implementation of the ED screening program, a point-of-care HIV screening program was created at Loyola's urgent care sites.

Objectives

We developed a pilot study, and obtained approval of Loyola's institutional review board, to determine the feasibility of implementing an opt-in, point-of-care, rapid HIV testing program in four urgent care clinics.

Methods

On January 1, 2014, a 12-month rollout of point-of-care HIV testing at four urgent care sites was implemented. All patients between the ages of 18 and 64 years were offered a Clearview HIV 1/2 immunochromatographic test (sensitivity, 99.7%; specificity, 99.9%) by urgent care nurses or medical assistants. Tests results were available within approximately 20 minutes. Unlike the buccal swabs used in our prior ED testing efforts, Clearview fin-

Figure 2. Informational sheet given to patients with nonreactive test results.

Today's Result

The HIV test you had today shows no signs of infection. This is good news. However, within the last 3 months if you have

- had unprotected sex
- shared a needle
- become pregnant
- been exposed at work (for instance, a needlestick) or
- received a blood transfusion or organ transplant (rare in the United States)

then the test you took today may still not be able to determine if you have HIV. If you are concerned, please get tested again in 3 months. Below is a list of clinics that may be helpful to consult:

Clinics:
Loyola University Medical Center
Infectious Disease
2160 S. First Ave.
Maywood, IL 60153
HIV RN/Ryan White Care Coordinator: (708) 216-5024

The Ruth M. Rothstein CORE Center
220 W. Harrison St.
Chicago, IL 60612
Main: (312) 572-4500
or
Health Educator: (312) 208-6004

Austin Health Center of Cook County
4800 W. Chicago Ave.
Chicago, IL 60651
(773) 826-9600

HIV stands for the human immunodeficiency virus (HIV), which is the virus that can cause AIDS. Testing reactive for HIV does not mean that you have AIDS. Getting tested regularly and finding out early that you have HIV, along with taking medications and seeing your doctor, can help you live a long and happy life. If you would like more information about HIV, please contact:

- The State of Illinois HIV/AIDS & STD Hotline: (800) 243-2437
- The Centers for Disease Control and Prevention: (800) 448-0440
- If you have internet access or a smartphone, point your browser to www.hivtest.org

Prevention:
Although your test today shows that you did not test reactive to HIV, you should still be careful! You can still become infected if you have unprotected sex or share needles or works. Remember to always use a condom when having sex, and ask your partners about their status before having sex.

gerstick technology was chosen in the urgent care initiative for its ease of use and increased sensitivity.

Study personnel were trained in obtaining verbal consent, completing documentation in the electronic health record, administering the test, disclosing results, and providing routine HIV counseling. Examination rooms were stocked with an HIV informational brochure regarding the value of testing for everyone. The consent process was integrated into the rooming process using a standardized questionnaire (**Figure 1**) embedded in the electronic health record; total time devoted to consenting was less than 2 minutes, and tests were completed in parallel with other point-of-care tests. Timers ensured that tests were run and results were obtained within 20 minutes. A process for counseling and confirmatory testing of preliminary positive findings involved physician champions, members of the infectious-disease staff, social workers, and the state health department. Patients with nonreactive test results were provided with an informational sheet (**Figure 2**) about nonreactive results, resources for further testing, and general HIV facts.

Results

Between January 2014 and October 2015, a total of 12,237 urgent care patients were approached for HIV testing, and 2751 were tested (22%). Women and men accounted for 62% and 38% of those tested, respectively. The average patient was 40 years of age. Of those patients tested, white persons accounted for 53% and persons of color accounted for 47%. All patients were notified of their results before discharge. One patient was identified as HIV positive and was linked to care with an affiliated infectious-disease clinic. There was no statistically significant difference in the demographics (age, ethnicity, etc.) of patients who opted out of testing compared with those who consented.

Discussion

When HIV screening is implemented in a health-care setting (emergency, urgent care, or primary care), there are often concerns,

including possible interruptions in office work flow and the impact on overall cost of care to the patient. Technological advances in rapid testing for HIV have helped alleviate some of these concerns. HIV testing in this study was performed at the patient's bedside after consent was obtained by a nurse or medical assistant. Because the consent process was integrated into the rooming process and tests were completed in parallel with other point-of-care tests, there was little or no effect on throughput for patients with nonreactive test results.

Whether payors will cover the cost of HIV screening in the ED or urgent care setting has been discussed as a potential barrier to testing. Under the Patient Protection and Affordable Care Act, preventive services, including HIV testing, must be covered without the requirement of copayment, co-insurance, or meeting a deductible.[8] The change in USPSTF rating to an A in 2013 was believed to translate into full coverage by payors for HIV testing. Our experience in transferring the cost of testing in the ED to the payors has been without denials or patient complaints.

Screening for and identifying new cases of HIV are just the first step in minimizing transmission. It is equally important to ensure that seropositive patients are linked to continued care. As part of an integrated health system, including one with a department of infectious disease that had funding from the federal Ryan White HIV/AIDS Program, Loyola was well positioned to link patients to care. However, provision of similar institutional follow-up is not required so long as a process is created to provide resources and referrals for follow-up at privately funded or publicly funded infectious-disease and HIV clinics in the United States.

Limitations

Because a single patient with reactive test results was identified across the four urgent care centers participating in the study, covering a large geographic region, the demographics regarding our population with reactive results were limited. Anecdotal feedback from staff members negated concerns that HIV testing would prolong patients' overall time in the department, but we did not include a time analysis in the initial evaluation of our urgent care HIV testing program. A comparison of patients who refused testing and healthy patients would have been of value to other institutions considering a similar process. Barriers to testing were not addressed directly in this study but were acknowledged to have affected testing rates, and they included urgent care location, time of day, overall patient volume, biases of health-care providers, and age, sex, and ethnicity of providers.

Conclusion

Rapid point-of-care HIV testing is feasible in the urgent care setting without the need for additional support staff members. The CDC has long identified EDs as a key location for HIV testing because they serve as the most common health-care access point for seropositive patients who are unaware of their HIV status. Urgent care centers provide a similar opportunity for screening. Since the implementation of the Patient Protection and Affordable Care Act, the number of urgent care visits has increased,[9] whereas the ability of both insured and uninsured patients to access primary-care providers has become more difficult.[10] As a result, urgent care centers will serve a similarly important role as health-care access points for patients with HIV. As the U.S. health-care system and the CDC work toward reaching the UNAIDS 90-90-90 goal[11] (90% of all HIV-infected patients identified, 90% receiving treatment with antiretroviral therapy, and 90% having an undetectable HIV RNA level), urgent care sites may serve an essential role in the identification of new cases of HIV. Changes in USPSTF ratings regarding strength of evidence for HIV testing to level A have made it financially more feasible for health-care providers and facilities with a concern for public health to screen for HIV. We recommend that state and national public health departments consider the urgent care setting for future HIV screening efforts. ■

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