

Impact of an Emergency Department HIV Testing and Screening Program on the Proportion of Patients Who Have Received Prior Testing

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OBJECTIVES

Only 40% of the United States population reports having ever been tested for HIV, and this proportion has changed little over the past decade. As the number of patients tested by ED-based HIV screening programs increases, it is hoped that eligible patient populations will be more fully screened over time. We hypothesized that:

- the proportion of patients tested by our HIV targeted emergency department (ED) HIV testing and screening program who have had a prior HIV test increases over time.
- increases are found both for self reported testing and for prior testing history as documented in program records.

METHODS

The ED HIV testing program offers targeted testing and screening 24 hours per day to eligible patients. Conventional HIV testing with delayed result notification is used, and testing is either by providers or by trained patient counselors who also provide risk reduction counseling. Data were extracted from electronic program records for the period January 2005 to December 2007. We ascertained the proportion of patients each month who self reported a prior HIV test, and the proportion with a prior test in program records. Linear regression was used to assess whether these proportions increased over time.

RESULTS

Over the five year period, there were 9,629 tests performed in the ED. Patient demographics, behavioral risk, and test positivity are reported in Table 1. Figure 1 demonstrates the proportion of tested patients who reported a prior test and the proportion found to have been tested previously in the ED by review of program records.

- The proportion of tests that were for patients self-reporting a prior test increased by a small but significant amount of 0.07% per month (95%CI 0.00 to 0.14, $p=0.044$).
- The proportion of tests that were for patients previously tested by the program increased significantly by 0.26% per month (95%CI 0.22 to 0.30, $p<0.001$).

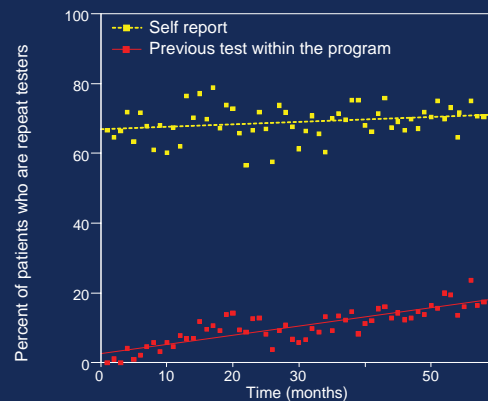


Figure 1 Proportion of tested patients each month who have had a prior test

CONCLUSIONS

The proportion of patients who had ever been tested for HIV increased over time.

- This was true both for self-reported testing history and testing history documented by program records.
- This demonstrates the ability of the screening program to effect the epidemiological metric, number of patients previously tested.
- This also documents the growing extent to which maturing screening programs will likely be involved with repeat as opposed to initial testing.
- The implications of repeat screening are likely to vary by patient according to risk profile and frequency of testing. Our results are critical to understanding the costs and effects of ED HIV testing programs and demonstrate the importance of improving understanding of repeat screening.

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Table 1 Patient characteristics, risk for HIV and HIV test results, N=9,629

Demographics		
Age (median, range)	27	12-77
Male	5084	52.8
Female	4489	46.6
Transgender	2	0.0
Unknown	2441	25.4
Black	6721	69.8
Other or mixed raced	100	1.0
Hispanic	196	2.0
Unknown	171	1.8
Risk factors		
No partners in past year	1047	10.9
One partner in past year	3277	34.0
Multiple partners in past year	5305	55.1
MSM	52	0.5
Sex with a male	4655	48.3
Sex with a bisexual male	457	4.7
Sex with a female	5572	57.9
Sex with an IDU	768	8.0
Sex with an HIV+ve partner	154	1.6
Sex while using drugs/intoxicated	5207	54.1
Exchanged sex for drugs or money	1344	14.0
Sexually assaulted	1907	19.8
Prior STD	5070	52.7
IDU	751	7.8
Shares works	316	3.3
Crack use in past year	1027	10.7
Transfusion	816	8.5
Transplant	50	0.5
Exposed to body fluids (healthcare)	758	7.9
Test results		
Negative	9203	95.6
Positive	77	0.8
Indeterminate	46	0.5
Unknown	303	3.1