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Provider and Practice Characteristics Associated with Use of Rapid HIV Testing by General Internists

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ABSTRACT

Background. Rapid HIV testing could increase routine HIV testing. Most previous studies of rapid testing were conducted in acute care settings, and few described the primary care providers' perspective.

Objective – To identify characteristics of general internal medicine physicians with access to rapid HIV testing, and to determine whether such access is associated with differences in HIV-testing practices or perceived HIV-testing barriers.

Design – Web-based cross-sectional survey conducted in 2009.

Participants - 406 physician members of the Society of General Internal Medicine who supervise residents or provide care in outpatient settings.

Main measures. Surveys assessed provider and practice characteristics, HIV-testing types, HIV-testing behavior, and potential barriers to HIV testing.

Results. Among respondents, 15% had access to rapid HIV testing. In multivariable analysis, physicians were more likely to report access to rapid testing if they were non-white (OR 0.45, 95% CI 0.22, 0.91), had more years since completing training (OR 1.06, 95% CI 1.02, 1.10), practiced in the Northeastern US (OR 2.35; 95% CI 1.28, 4.32), or if their practice included a higher percentage of uninsured patients (OR 1.03; 95% CI 1.01, 1.04). Internists with access to rapid testing reported fewer barriers to HIV testing. More respondents with rapid than standard testing reported at least 25% of their patients received HIV testing (51% versus 35%, p =.02). However, access to rapid HIV testing was not significantly associated with the estimated proportion of patients receiving HIV testing within the previous 30 days (7.24% vs. 4.58%, p=.06).

Conclusion. Relatively few internists have access to rapid HIV testing in outpatient settings, with greater availability of rapid testing in community-based clinics and in the Northeastern U.S. Future research may determine whether access to rapid testing in primary care settings will impact routinizing HIV testing.

KEYWORDS. HIV testing, Rapid HIV testing, HIV/AIDS, general internal medicine physicians, HIV prevention, medical practice setting

BACKGROUND

In September 2006, the Centers for Disease Control and Prevention (CDC) recommended HIV screening all persons aged 13 – 64 years.[1] Prior to this, screening targeted individuals with high-risk behaviors and settings, and pregnant women. The rationale for expanded screening is that early diagnosis can reduce morbidity and mortality,[2] and persons who know their HIV status may modify their behaviors and reduce transmission.[3] Furthermore, as of 2006 an estimated 21% of persons with HIV were unaware of their status.[4] Recently, the American College of Physicians and the HIV Medicine Association endorsed CDC's screening recommendation.[5]

CDC recommendations recognize the potential role of rapid HIV testing to increase adoption of routine HIV testing. Rapid HIV testing became more consistently accessible in 2003 and may have reduced some barriers for testing.[6] Rapid HIV tests yield results in 20 to 30 minutes and can be performed on either saliva or whole blood. Sensitivity and specificity of commercially available rapid tests is over 99%[7] although specificity may be lower in actual practice.[8, 9, 10, 11, 12, 13]

Research has focused on use of rapid testing in episodic care settings such as emergency rooms,[11, 12, 13, 14, 15] hospitals,[16] STD clinics,[17] and jails and prisons.[9, 18] In these settings, rapid testing is acceptable and associated with a reduction of loss-to-follow-up after a positive HIV test.[9, 16, 17, 19] Therefore, the CDC recommends "episodic care settings in which continuing relationships do not exist" to consider rapid testing.[1]

Much less is known about primary care provider's experience with rapid HIV testing in outpatient settings.[8, 10] The American College of Physicians and HIV Medicine Association recognized the role "internists and other primary care clinicians" play in carrying out the CDC

recommendations for routine testing for all patients ages 13-64.[5] Early studies suggest rapid testing may be acceptable in primary care settings,[10] may increase testing rates,[20] and the receipt of results.[8] Focus groups of general internists suggest that rapid tests could help routinize HIV testing and reduce barriers to screening, although issues of costs, available personnel, time, and need for confirmatory testing were raised as potential limitations.[21] However, rapid testing could require more resources (time and personnel) than standard testing in primary care settings, and it is unclear whether availability of rapid testing increases HIV testing rates or helps remove barriers to HIV testing.

In 2009, the Society of General Internal Medicine's (SGIM) HIV/AIDS Task Force conducted a national survey of SGIM members regarding implementation of routine HIV screening among general internists.[22] The objectives of the current study are to identify characteristics of general internists and practices having access to rapid HIV testing, and to determine whether physician access to rapid HIV testing is associated with differences in testing practices and perceived barriers to testing.

METHODS

Participants

Our target population was general internists practicing or supervising trainees in outpatient settings. We conducted a national, cross-sectional survey of full members of the SGIM, a professional organization focused on general internal medicine practice, education and research. We compiled a confidential list of e-mail addresses for members who had completed internal medicine residency training. Investigators were blinded to personal identifying information, with subject consent implied by survey participation. Respondents were eligible for a lottery for one

of three $500 gift certificates. This study was approved by the Institutional Review Board at Oregon Health and Science University.

Measures

Survey items were adapted from previous literature about provider barriers to HIV testing,[23] and issues raised in preliminary focus groups.[21] We pilot-tested the 40-item survey in potentially eligible participants and modified accordingly (see online appendix).

Each respondent was classified based upon response to the question "What type of HIV testing is available in your practice?" followed by five options. General internists indicating rapid testing (either oral or blood) was available were classified as having rapid testing.

Provider characteristics. General internist characteristics assessed in the survey included gender, race/ethnicity, years since training completion, and whether they supervised trainees in an outpatient setting. Practice characteristics included geographic region, estimated percentage of minority patients in practice, estimated percentage of uninsured patients in practice, estimated local HIV prevalence (< or =>1.0%), type of practice setting, and whether state in which practice is located had current (2008) policies that were consistent, neutral, or inconsistent with revised CDC guidelines regarding consent and pre-test counseling.[24]

HIV testing behaviors. Measures of HIV testing behaviors included self report of 1) increased HIV testing since CDC HIV-testing recommendations were revised, 2) routinely providing HIV testing to all patients regardless of risk behaviors, 3) encouraging clinical trainees to perform routine HIV testing of all patients, regardless of risk, and 4) reporting at least 25% of their practice had ever had an HIV test. Each general internist reported the estimated percentage of patients tested for HIV in the last 30 days. Only those physicians who reported seeing 10 or

more patients in the past month were included in analyses of their HIV testing percentage (n=366).

Barriers to HIV testing. Participants were asked to identify barriers to implementation of routine HIV testing in their practice, from a list of 26 potential barriers (see Table 3).[21, 23] Barriers were grouped into nine patient-related barriers, nine provider/structural barriers, and eight clinic barriers. Respondents could also indicate they perceived having no barriers.

Participants were asked to rate, using a 5-point scale, the importance of performing screening for each of seven health conditions during a typical patient visit in their practice (colon cancer, prostate cancer, breast cancer, substance abuse, pain, depression and HIV). These results were used to rank-order the relative priority of routine HIV testing, compared to the other recommended screening tests.

Data Collection

Surveys were collected from March through May, 2009. An introductory e-mail with Web link to SurveyMonkey© was sent to 1592 potentially eligible SGIM members. Those not responding received reminder e-mail one, two, and three weeks after the initial e-mail. Participants could log-on to complete the survey for up to one month after the final e-mail was sent. Anonymous survey responses were downloaded from the SurveyMonkey© website for analysis following survey closure.

Data Analysis

Frequencies of respondents' individual and practice characteristics, barriers to testing, and HIV testing behaviors were assessed. One-way ANOVA tests were used to compare

characteristics of different clinic settings. Bivarate analyses, using t-tests, Chi-Square, and Fishers exact tests, were employed to compare characteristics and barriers in providers with rapid HIV testing vs. those with standard testing only. Multivariable logistic regression was then conducted to identify demographic and practice setting factors independently associated with having rapid HIV testing available in the practice. The multivariable model included three physician characteristics: gender, race/ethnicity, and number of years since training plus any practice characteristic that was associated with this outcome in bivariate analysis with *p*-value =<0.20). A second multivariable linear regression analysis was conducted to determine whether having access to rapid HIV testing was associated with the estimated percentage of persons tested for HIV in the previous 30 days. Additional variables in this multivariable model, selected for model inclusion using similar criteria, included general internist race/ethnicity, gender, and number of years since completed training, plus practice variables of estimated percentage of uninsured patients, and setting in Northeast Region. All analyses were conducted using SPSS version 16 (Somers, NY).

RESULTS

A total of 515 responses were received (response rate of 32.4% after excluding persons whose e-mail addresses were inactive and those opting out of receiving any SurveyMonkey© surveys). Of 515 survey respondents, we excluded those not currently providing outpatient treatment or supervising residents at least one half-day per week (n=69), not offering HIV testing in their outpatient setting (n=25), and not knowing type of HIV testing available at their setting (n=15), leaving a sample of 406 available for the primary analyses. Of the 406 participating internists, 62 (15.3%) indicated they had rapid HIV testing available in their practice. Thirty-one

(50%) of those with rapid testing available had blood rapid testing, 27 (43.5%) had oral rapid testing, and four (6.5%) had both oral and blood rapid testing available.

The remaining internists in this sample (N=344, 84.7%) had only standard testing available, and of these, 248 (72.1%) had onsite testing, 87 (25.3%) had offsite testing, and eight (2.3%) had both types available. Most of the 62 rapid testers also had standard testing (90.3%). Participants practiced in a variety of clinic settings; 248 (64.9%) in university-based clinics, 33 (8.6%) in private practice, 51 (13.4%) at community-based federally qualified health center clinics, and 50 (13.1%) at VA facilities. The distribution of clinic types did not vary by region. However, participants working in the community-based clinics estimated significantly higher proportions of minority patients and uninsured patients, compared to providers in the other three types of clinics ($P<0.001$, data not shown). The state where each physician reported practicing was coded as having at least one law consistent (34.3%), neutral (21.2%), or inconsistent (44.5%) with CDC recommendations.[24]

Characteristics Associated with Access to Rapid HIV Testing

General internists having access to rapid HIV testing were similar to those who did not in terms of gender, race/ethnicity, years since completing training, and supervision of residents (Table 1). Compared to general internists without rapid testing, a greater proportion of those with rapid HIV testing worked in community-based federally-qualified health centers (25% vs. 11%, $p = .004$), practiced in the northeastern U.S. (50% vs. 34%, $p=0.02$), had a higher estimated percentage of minority patients (54% vs. 45%, $p=0.02$), and a higher estimated percentage of uninsured patients (33% vs. 17%, $p<0.001$) (Table 1). In multivariable analysis, factors significantly associated with having access to rapid HIV testing included non-white provider

race/ethnicity, more years since completing training, practice location in Northeastern US, and greater percentage of uninsured patients (Table 2).

Barriers to HIV Testing

The most commonly cited barrier to HIV testing was “other priorities at time of visit”, cited by 79% (Table 3). Other frequently cited barriers related to CDC recommendations included “patient refusal” (63%), “language barriers” (32%), “informed consent requirement” (49%), and “pre-test counseling” requirement (37%).

Three individual barriers to HIV testing were identified less frequently by general internists with access to rapid testing, compared to those without rapid testing. These were: “[my] patients don’t have high-risk behaviors” (15% vs., 32%, $p = 0.007$); having “other priorities at the time of visit” (62% vs., 82%, $p < 0.001$); and “low-risk established patients” (18% vs. 37%, $p = 0.004$). Moreover, a greater percentage of providers with access to rapid testing reported “no barriers” related to patient issues (30% vs. 19%, $p = 0.05$), structural barriers (23% vs. 11%, $p = 0.007$), or clinic barriers (33% vs. 16%, $p = 0.002$) (Table 3). Among providers without access to rapid testing, 43% identified lack of rapid testing as a barrier to their providing more HIV testing.

When compared to six other screening tests, respondents ranked importance of HIV screening as second to last, ahead of only prostate cancer screening but behind screening for colon cancer, breast cancer, substance abuse, pain, and depression. However, the importance of HIV screening was rated as very important or essential by more providers with rapid testing than those with only standard testing (56% vs., 44%, $p = .02$).

Access to Rapid Testing and HIV Testing Behavior

Regardless of type of HIV testing availability, the majority of providers indicated they had increased HIV testing since the new CDC recommendations, offer HIV testing regardless of risk behaviors, and encourage their residents to perform routine HIV testing (Table 4). Providers with access to rapid testing were more likely to report that at least 25% of their practice had ever been HIV-tested (51% vs. 35%, p=0.02). Providers with access to rapid testing also reported slightly higher proportions of patients who received HIV testing in the previous 30 days, although the difference was not statistically significant in bivariate analyses (7% vs. 5%, p=0.06) (Table 4) or in a multivariable linear regression analysis (data not shown).

DISCUSSION

In this national survey of general internists, many with responsibility for supervising residents, approximately 15% reported having rapid HIV testing available in their practices. Similarly, a study about the barriers to adoption of rapid HIV testing found that while 50% of hospital clinics had rapid HIV testing available, only15% of respondents from clinics and community based organizations did.[25] In our study focused on primary care settings, rapid testing appeared to be offered more commonly in community health centers and public hospital-based clinics, in settings with a higher prevalence of minority and uninsured patients, and in the northeastern US. Having rapid testing in these settings may have been influenced by CDC funding of rapid testing in certain types of communities and settings,[8] but our study did not assess source of funding for rapid testing. One individual provider characteristic related to rapid testing, race/ethnicity of the physician, is consistent with another study showing Black and Asian physicians being more likely to provide HIV testing than white physicians.[26] Providers with

more time since completing training were also more likely to practice in settings with access to rapid testing. Otherwise, system issues and characteristics associated with the surrounding community appeared to be more important in predicting rapid HIV testing availability.

Our study and others suggest more HIV testing is done in settings where rapid testing is available, although causality is difficult to determine. Recent evidence from Washington, D.C. shows a 335% increase in the number of persons who were tested after CDC recommendations and rapid testing were widely distributed;[27] however, several additional public health measures were simultaneously implemented, making it difficult to attribute testing changes to any single intervention. Studies suggest that consumers more often choose rapid testing when both rapid and standard tests are available.[7, 20, 28] A primary rationale for placing rapid HIV testing in episodic care settings is the greater chance for patients to be lost to follow-up compared to primary care practices. While rapid testing may be perceived to have less benefit when physicians and patients have ongoing relationships, outpatient internal medicine practice frequently involves urgent care visits.

A greater proportion of providers with access to rapid testing reported no structural, clinical, or patient-related barriers to provision of HIV testing. It is not clear whether this finding means rapid testing actually reduced these barriers to testing, or whether rapid testing is more often present in practice locations where barriers to HIV testing have already been addressed. Two of the three individual barriers that were lower in settings with rapid HIV testing were related to perceptions of patients' high-risk behaviors, whereas the third specific barrier relates to priorities at the time of patient visit. In contrast, rapid testing availability did not appear to impact several other common barriers, including patient refusal, language issues, cultural issues, or consent issues regarding HIV testing. In general, primary care providers rated HIV testing a

lower priority than many other common screening tests or inquiries; and this finding was supported by "other priorities at the time of visit" being the most frequently cited individual barrier to screening. Improved understanding of the reasons for the low prioritization of HIV testing may be needed to improve HIV testing rates in primary care settings.

We are just beginning to see efforts at offering HIV testing in rural[29] and urban[30] primary care settings. Recent data from community care clinics suggest that implementing rapid HIV testing, together with a systematic method to encourage HIV testing, resulted in an increased number of persons being tested.[10] However, few new HIV-infections were identified.[10] Reports indicate rapid testing is viewed favorably by patients; however, we are not aware of studies that have focused on physicians offering HIV testing or having access to rapid HIV testing, as was done in this study. Challenges with rapid HIV testing also need to be considered, including higher initial cost,[9, 31] although rapid testing could save money over time if it improves overall detection and treatment rates.[32] Another potential downside to rapid testing is a higher proportion of false positive results compared to standard testing,[10, 11, 33] which can result in additional counseling time for the providers[10] and may result in psychological stress.[34]

Several study limitations should be noted. First, although the results suggest an association between availability of rapid HIV testing and decreased barriers to HIV testing, the cross-sectional nature of the study precludes establishing causality. Second, primary outcome measures were based on self-report and could not be validated. Although our study focused on provider-related issues that may impact access to rapid HIV testing, it may be that the decisions to offer rapid HIV testing occurs at the level of the practice or university setting, and the internist has little influence on this decision. Our sampling strategy targeted members of an organization that includes a high proportion of general internists in academic settings practicing in diverse

settings, but may not be representative of all practicing general internists. However, one of our goals was to evaluate those training the next generation of internists, an influential sample in the field of general internal medicine.

Although meeting all prevention and care needs is a challenge in primary care, both the 2010 Institute of Medicine (IOM)'s report regarding HIV prevention and the U.S. President's National HIV/AIDS strategy prioritize early intervention in order to treat and prevent further spread of HIV. These are consistent with the CDC's 2006 Recommendations to increase routine HIV testing.[1, 35, 36] The IOM report identifies rapid testing as one method to increase HIV testing. If rapid HIV testing is seen as a tool in the effort to increase testing rates in the US, the findings of this study provide some guidance. Our study suggests that rapid HIV testing is currently available to a minority of general internists and is more prevalent in settings serving minority and uninsured communities where there is a higher HIV prevalence. Clinic and systems-based factors may have a greater relationship to rapid testing utilization than individual provider characteristics. Future research should evaluate whether offering rapid HIV testing, rather than standard HIV testing, is effective at increasing detection and treatment of persons with HIV in primary care settings.

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Table 1. Individual and Practice Characteristics of 406 General Internal Medicine Physicians who Provide HIV Testing in Outpatient Settings.

Characteristic	Overall	**Access to Rapid HIV Testing**		***P*-value**
		Yes (N=62)	**No (N=344)**	
Individual Characteristics				
Gender (female) (N %)	202 (52.9%)	37/60 (61.7%)	165/322 (51.2%)	0.14
Race/Ethnicity (White) (N %)	301 (78.8%)	42/60 (70.0%)	259/322 (80.4%)	0.07
Years since completed practice (mean, SD)		15.2 (SD = 9.6)	13.6 (SD=8.5)	0.19
Supervise Trainees (N %)	340 (84.2%)	53/62 (85.5%)	287/342 (83.9%)	0.76
Practice characteristics				
Type of Clinic				
University-Based	241 (63.1%)	32/60 (53.3%)	209/322 (67.1%)	0.03*
Private Practice	33 (8.6%)	4/60 (6.7%)	29/322 (9.0%)	
Community Based Federally Qualified Health Centers	51 (13.4%)	15/60 (25.0%)	36/322 (11.2%)	
Veterans Affairs	50 (13.1%)	9/60 (15.0%)	41/322 (12.7%)	

Table 1. Continued

US Regions (%. N) –				
Northeast	138 (36.1%)	30/60 (50%)	108/322 (33.5%)	0.02*
Midwest	80 (20.9%)	7/60 (11.7%)	73/322 (22.7%)	
South	98 (25.7%)	10/60 (16.7%)	88/322 (27.3%)	
West	69 (18.1%)	13/60 (21.7%)	56/322 (16.5%)	
Estimate Mean Percentage Minority Patients		54.08 (SD=28.4)	45.15 (SD=26.5)	0.02*
Estimate of Mean Percent Uninsured		33.3 (SD=30.6)	17.0 (SD=22.9)	<0.001**
Estimate of HIV prevalence				
>=0.1%	299 (76.1%)	50/60 (83.3%)	249/333 (74.8%)	0.15
>=1.0%	131 (33.3%)	25/60 (41.7%)	106/333 (30.9%)	0.10
Practice located in City with >500, 000 population	206 (54.6%)	39/59 (66.1%)	167/318 (52.5%)	.054
One State Law Consistent with CDC Recommendations	131 (34.3%)	24/60 (40%)	107/322 (33.2%)	0.31

SD = Standard Deviation

† Table includes number of persons with available data for each characteristic; some items were missing or refused for some participants.

* $P < .05$, ** $P < .01$

Table 2 Association of Provider and Practice Characteristics and Availability of Rapid HIV Testing: Multivariable Analysis

Physician and Clinic Characteristics	OR	95% Confidence Interval
Physician gender female (vs. male)	1.66	0.85 to 3.24
Physician race/ethnicity white (vs. all other)	0.45	0.22 to 0.91
Physician years since completing training	1.06	1.02 to 1.10
Clinic practice in Northeastern US (vs. all other regions)	2.35	1.28 to 4.33
Clinic setting community-based (vs. all other types)	1.30	0.57 to 3.00
Clinic city population =>500,000 (vs. <500,000)	1.84	0.98 to 3.48
Clinic % Patients with no insurance	1.03	1.01 to 1.04
Clinic % Patients of minority race/ethnicity	1.00	0.98 to 1.01

Table 3. Barriers to HIV Testing Identified by General Internal Medicine Physicians who Provide HIV Testing in Outpatient Settings.

Specific Barriers to testing (% agree to each barrier)	Overall (n=394)	**Access to Rapid HIV Testing**		*P*-Value
		Yes (n=61)	No (n=333)	
Patient Barriers				
Patient reluctance/refusal	250 (63.5%)	36 (59.0%)	214 (64.3%)	0.43
Language barrier	124 (31.5%)	19 (31.1%)	105 (31.5%)	0.95
Cultural diff between you and your patient	86 (21.8%)	12 (19.7%)	74 (22.2%)	0.66
Your patients don't have high-risk behaviors	115 (29.2%)	9 (14.8)	106 (31.8%)	0.007**
Patients uncomfortable discussing HIV testing	104 (26.4%)	16 (26.2%)	88 (26.4%)	0.97
Lack of trust/relationship with patient	52 (13.2%)	8 (13.1%)	44 (13.2%)	0.98
Discomfort discussing high-risk behaviors with your patients	23 (5.8%)	5 (8.2%)	18 (5.4%)	0.39
Gender difference between you and your patient	7 (1.8%)	1 (1.6%)	6 (1.8%)	0.70
Difference in sexual orientation between you and your patient	7 (1.8%)	0 (0.0%)	7 (2.1%)	0.39
Structural Barriers				
Lack of/ low reimbursement	64 (16.2%)	6 (9.8%)	58 (17.3%)	0.14
Other priorities at time of visit	310 (78.7%)	38 (62.3%)	272 (82.2%)	<0.001**
Lack of time	252 (64.0%)	34 (55.7%)	218 (65.5%)	0.13
Confidentiality	31 (7.9%)	5 (8.2%)	26 (7.8%)	0.93
No place to refer patients with positive test	7 (1.8%)	2 (3.3%)	5 (1.5%)	0.60
Lack of skills or training in this area	10 (2.5%	3 (4.9%)	7 (2.1%)	0.37
Not your job; someone else is doing it	1 (0.3%)	0	1 (0.3%)	0.85
HIV is not a major issue in your community	29 (7.4%)	2 (3.3%)	27 (8.1%)	0.28
Lack of clinic space	7 (1.8%)	1 (1.6%)	6 (1.8%)	1.00

Table 3. Continued

Clinic Barriers				
Informed consent requirement	193 (49.0%)	24 (39.3%)	169 (51.1%)	0.09
Pre-test counseling requirement	146 (37.1%)	18 (29.5%)	128 (38.7%)	0.17
Lack of staffing	68 (17.3%)	10 (16.4%)	58 (17.5%)	0.83
Testing low-risk established pts	134 (34.0%)	11 (18.0%)	123 (37.2%)	0.004**
Concerns about clinic confidentiality	50 (12.7%)	8 (13.1%)	42 (12.7%)	0.93
Our system of scheduling patient follow-up	97 (24.6%)	12 (9.7%)	85 (25.7%)	0.32
Lack of training in how to offer routine testing	33 (8.3%)	6 (9.8%)	27 (8.2%)	0.66
Rapid testing not available	146 (37.1%)	3 (4.9%)	143 (43.2%)	<0.001**
No patient barriers	80 (20.3%)	18 (29.5%)	62 (18.6%)	0.05
No structural barriers	49 (12.5%)	14 (23.0%)	35 (10.6%)	0.007**
No clinic barriers	75 (19.0%)	20 (32.8%)	55 (16.5%)	0.002**

** $P < 0.01$

Table 4. Bivariate Associations between Access to Rapid HIV Testing and HIV-testing Behaviors

Characteristic **HIV testing behaviors (main outcomes)***	**Access to Rapid HIV testing**		***P*-value**
	Yes	No	
Increased HIV testing since CDC HIV testing recommendations	32/57 (56.1%)	161/309 (52.1%)	0.58
Does HIV testing regardless of risk behaviors	42/57 (73.7%)	186/307 (60.6%)	0.07
Encourages clinical trainees to perform routine HIV testing of all patients	32/48 (66.7%)	142/259 (54.8%)	0.13
Reports that at least 25% of their patients had ever had an HIV test	29/57 (50.9%)	107/309 (34.6%)	0.02
Did any HIV testing in last 30 days	42/57 (73.7%)	202/309 (65.4%)	0.22
Estimated percent of patients ordered tested for HIV in past 30 days†	7.24% (SD=10.0)	4.58% (SD=8.0)	0.06
Mean Percentage (Standard Deviation)			

* This analysis was limited to 366 physicians who saw at least 10 patients in the past 30 days.

†Estimated percent of patients calculated as estimated number of HIV tests ordered in the last 30 days/estimated number of primary care patients seen in the last 30 days.