

NATIONAL HIV
PREVENTION INVENTORY



2012 TESTING
SURVEY REPORT



2012 Testing Survey Report

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Executive Summary

In 2009, the National Alliance of State and Territorial AIDS Directors (NASTAD) in conjunction with the Kaiser Family Foundation (KFF) released the first [National HIV Prevention Inventory: The State of HIV Prevention Across the U.S.](#) (NHPI). This seminal report provided the first, comprehensive inventory of HIV prevention efforts at the state and local levels. The document provided a baseline picture of how HIV prevention is delivered across the country in an effort to provide policymakers, public health officials, community organizations and others with a more in depth understanding of HIV prevention and the role played by health departments in its delivery.

The past several years have seen several critical developments in the field of HIV prevention. The release of the President's [National HIV/AIDS Strategy](#) (NHAS), the Centers for Disease Control and Prevention (CDC) funding opportunity announcement (FOA) *PS12-1201: Comprehensive HIV Prevention for Health Departments* and the introduction of "high impact prevention" (HIP) and the Affordable Care and Patient Protection Act of 2010 have compelled health departments to make significant steps to refocus their HIV prevention programming. Additionally, scientific breakthroughs in the area of treatment as prevention (TasP) and pre-exposure prophylaxis (PrEP) are leading towards changes in HIV prevention activities.

Throughout 2012-2013, NASTAD will be updating the NHPI to support policy makers, public health officials, community organizations and other stakeholders in better understanding the current state of U.S. HIV prevention. The updated NHPI will be produced as a series of modules examining various aspects of health department HIV prevention programs in the U.S.

As the first module of NASTAD's 2012-2013 National HIV Prevention Inventory (NHPI) NASTAD conducted a survey of the 67 CDC-funded state, territorial and directly-funded cities in May 2012. A total of 56 health departments responded to this survey, including 49 states, the District of Columbia, Puerto Rico, and five cities funded directly by CDC for HIV prevention, for an overall response rate of 84 percent.¹

This survey was designed as a follow-up to previous surveys conducted by NASTAD and will contribute to NASTAD's continuing efforts to monitor health department supported HIV testing programs. The findings from this survey will contribute to the development and prioritization of NASTAD's technical assistance activities and will also guide education and advocacy efforts.

This report highlights major topic areas addressed by the survey including: description of HIV testing services implemented by health department supported HIV testing providers; integration of HIV testing with testing for HCV and STDs; reimbursement practices; and referral and linkage to medical care for HIV-positive clients.

¹ Two of the CDC-directly funded cities that did not respond were funded for the first time by CDC in 2012 and therefore did not have federal funding for HIV testing in 2011.

HIV Testing Services

Health departments report having conducted 3,324,689 tests in 2011. NASTAD has collected data regarding testing volume on previous surveys. In 2009, health departments reported having performed 2,977,369 tests. Thus, there was a 12 percent increase in testing volume between 2009 and 2011. Thirty-eight health departments provided data on testing volume for each of the three most recent surveys. In 2007, these 38 health departments performed 1,633,485 tests compared with 2,554,424 in 2011, representing a 56 percent increase in volume between 2007 and 2011. The increase in testing is likely attributable to a number of factors, including CDC's expanded HIV testing initiative, implemented in 2007, and uptake of rapid HIV testing.

Between 2009 and 2011, the total number of tests conducted by health department supported programs increased by 12 percent. Sixty-seven percent of the increase in the number of tests between 2009 and 2011 was due to conventional tests. The disproportionate increase in the volume of conventional tests performed may be partially attributable to expansion of HIV testing in clinical settings where conventional testing is generally more feasible, less expensive, and is often associated with bundled screening tests. Conventional testing on oral fluid accounts for a very small percentage (three percent) of all tests performed and the number of oral fluid conventional tests performed by health department programs has decreased by 30 percent since 2009.

Health departments support HIV testing in a wide variety of settings and continue to increase their investment in providing HIV testing in health care settings. Survey findings suggest that health departments planned to expand routine testing in health care settings in 2012. Seventy percent of health departments project that the volume of tests conducted in health care settings on a routine basis would increase "somewhat" or "a lot." Only 11 percent projected a decrease in routine testing in health care settings in 2012. At the same time, health departments appear to be planning to decrease their investment in targeted testing. Fifty-two percent of health departments project that the volume of tests conducted in targeted testing programs in 2012 will increase "somewhat" or "a lot" compared to 2011 and 27 percent project that test volume in targeted settings will "decrease somewhat" in 2012. It will be important to monitor the impact that the shift away from targeted testing and relatively greater investment in routine testing in health care settings have relative to identifying new infections.

Integrated Testing

Health departments have been successful to a large degree in integrating HIV testing with testing for sexually transmitted diseases (STDs) and hepatitis C (HCV). Nearly nine of 10 health departments report providing integrated HIV and STD testing in STD clinics; nearly two-thirds report supporting integrated HIV and STD testing through community-based organizations; and approximately one-half of health departments report integration of HIV and STD testing in community health centers, partner services and family planning clinics. Nearly one-half of health departments report integration of HIV and HCV testing in STD clinics; 39 percent reported integrated HIV and HCV testing in community-based organizations; and 36 percent in syringe access programs. Anecdotally, health departments leverage HIV prevention resources to support integrated testing efforts and thus shifts in federal funds may impact the ability of health departments to sustain, let alone expand, integrated screening efforts.

Reimbursement Practices

Financing HIV testing through third party reimbursement continues to be a significant challenge for health departments. Slightly more than one-half of health departments reported that HIV testing providers currently bill Medicaid and/or other third-party payers for HIV testing services. Very few health departments (14 percent) require HIV testing providers to seek reimbursement. Revenue obtained through reimbursement from third-party payers will increasingly become essential to sustaining health department HIV testing programs. Future assessments are needed to assess the barriers to obtaining reimbursement from third-party payers.

Medicaid reimbursement for routine HIV testing remains a significant barrier to HIV testing, specifically to building sustainable HIV testing in health care settings. Less than one-third of health departments reported that Medicaid pays for routine testing in some or all settings/populations. Thirty-two percent of health departments indicated that they had no knowledge as to whether Medicaid reimburses for HIV testing provided on a routine basis and the remaining 37 percent indicated that Medicaid does not reimburse for routine HIV testing. This suggests an important need to support health departments in building relationships with their state Medicaid offices in order to address this important issue.

Linkage to Care

Health departments are currently using a variety of approaches to facilitate and strengthen linkage to care. Nearly all (96 percent) reported that testers/counselors assist with referral; 91 percent reported partner services staff provide linkage assistance; 63 percent employ other prevention staff; and 55 percent use medical case management services to support linkage to care. Dedicated linkage staff such as peer navigators (21 percent) and linkage case managers (20 percent) received less frequent mention. It will be important to evaluate which models and approaches are effective relative to successfully linking and retaining HIV-infected individuals in care.

A key barrier to linking HIV-infected individuals with medical care continues to be the unwillingness of Ryan White-funded medical providers to accept clients who only have rapid test results. Forty-eight percent of health departments reported that Ryan White medical providers do not accept patients who only have rapid test results and an additional 27 percent said that only some providers accept patients with only rapid test results. Additional education about the Health Resources and Services Administrations' (HRSA) policies and diagnostic testing strategies is needed for both health departments and providers.

Nearly all health departments report that they use Centers for Disease Control and Prevention (CDC) HIV Prevention Cooperative Agreement funds to support linkage to care activities. Slightly more than two-thirds reported using Ryan White Part B funds, and about one-quarter reported using Ryan White Part A resources to support these activities. Of 26 states with Ryan White Part A grantees, only nine (35 percent) reported that Part A resources were used to support linkage to care activities. In order to optimize public funds for both prevention and care, it is important to explore how health departments allocate resources from various funding streams to support linkage to care activities and to identify any policy and operational barriers associated with use of federal care funds to support linkage to care activities.

Introduction

In 2009, the National Alliance of State and Territorial AIDS Directors (NASTAD) in conjunction with the Kaiser Family Foundation (KFF) released the first [National HIV Prevention Inventory: The State of HIV Prevention Across the U.S.](#) (NHPI). This seminal report provided the first, comprehensive inventory of HIV prevention efforts at the state and local levels. The document provided a baseline picture of how HIV prevention is delivered across the country in an effort to provide policymakers, public health officials, community organizations and others with a more in depth understanding of HIV prevention and the role played by health departments in its delivery.

The past several years have seen several critical developments in the field of HIV prevention. The release of the President's [National HIV/AIDS Strategy](#) (NHAS), the Centers for Disease Control and Prevention (CDC) funding opportunity announcement (FOA) *PS12-1201: Comprehensive HIV Prevention for Health Departments* and the introduction of "high impact prevention" (HIP) and the Affordable Care and Patient Protection Act of 2010 have compelled health departments to make significant steps to refocus their HIV prevention programming. Additionally, scientific breakthroughs in the area of treatment as prevention (TasP) and pre-exposure prophylaxis (PrEP) are leading towards changes in HIV prevention activities.

Throughout 2012-2013, NASTAD will be updating the NHPI to support policy makers, public health officials, community organizations and other stakeholders in better understanding the current state of U.S. HIV prevention. The updated NHPI will be produced as a series of modules examining various aspects of health department HIV prevention programs in the U.S.

The first survey in the planned series addresses HIV testing. This survey was designed as a follow-up to previous surveys conducted by NASTAD and will contribute to NASTAD's continuing efforts to monitor health department supported HIV testing programs. The findings from this survey will contribute to the development and prioritization of NASTAD's technical assistance activities and will also guide education and advocacy efforts.

Methods

In May of 2012, AIDS directors from each of the 67 Centers for Disease Control and Prevention (CDC)-funded state, territorial and city health departments were notified, via email, of the HIV testing survey. The email notification included information for accessing the on-line survey. Health departments were asked to complete the survey within a two-week period. A reminder email was sent three days prior to the submission deadline. After the response deadline had passed, health departments that had not responded to the survey were contacted via email and phone and encouraged to complete the survey.

A total of 56 health departments responded to this survey, including 49 states, the District of Columbia, Puerto Rico, and five cities funded directly by CDC for HIV prevention, for an overall response rate of 84 percent.²

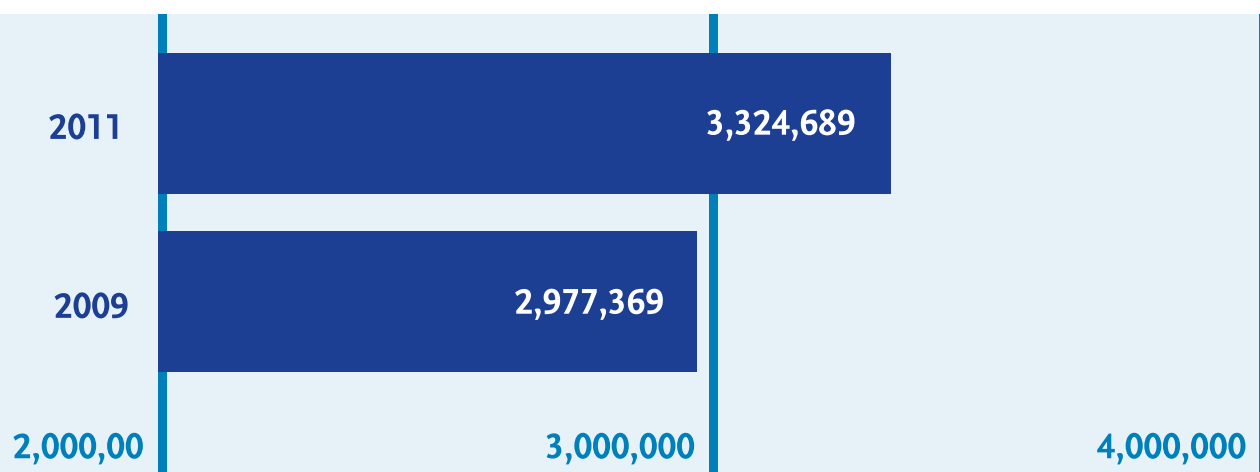
The survey included 16 questions that addressed: HIV testing services implemented by health department supported HIV testing providers; integration of HIV testing with testing for HCV and STDs; reimbursement practices; and referral and linkage to medical care for HIV-positive clients.

Findings

Testing Volume and Seropositivity:

Health departments were asked to provide information regarding the number of tests that were conducted in 2011 by health department supported³ programs. A total of 55 health departments responded to the question regarding the number of tests conducted. As illustrated in Figure 1, health departments report having conducted 3,324,689 tests in 2011. Also as illustrated in Figure 1, the number of tests performed by health department supported programs has increased since NASTAD's last survey, conducted in 2010, and which reflected 2009 testing activity. In the previous survey, health departments reported conducting 2,977,369 HIV tests in 2009. Thus, there was an increase in testing volume of 12 percent between 2009 and 2011.⁴

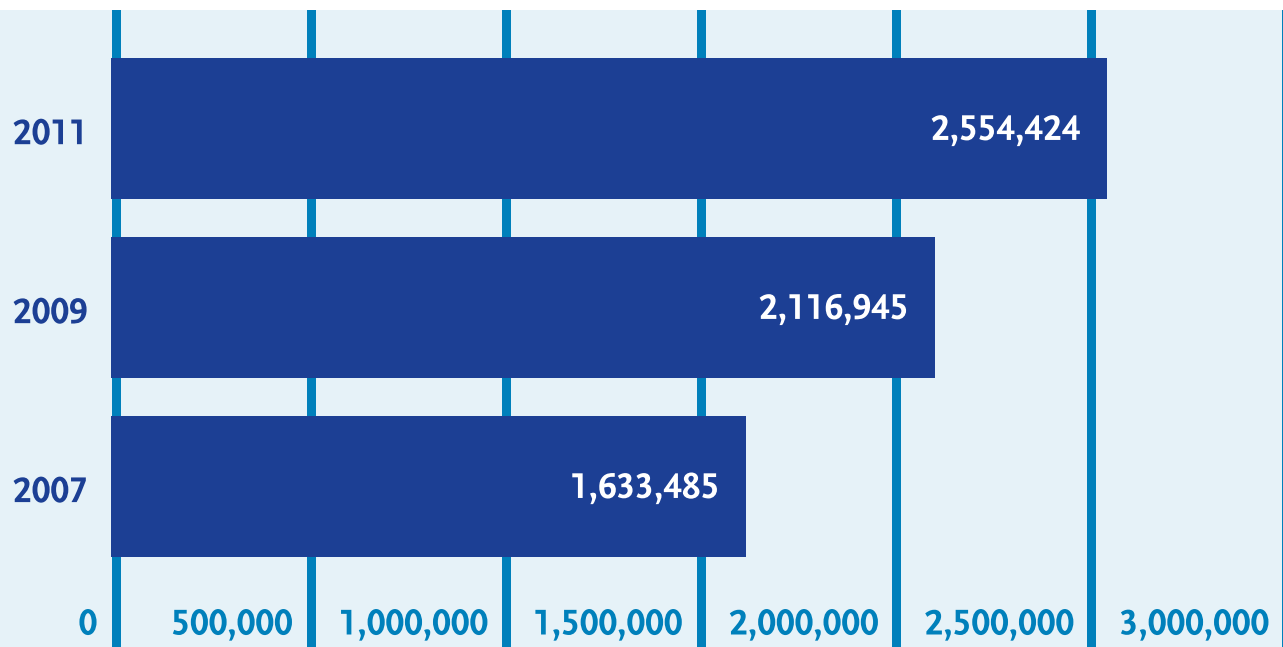
Figure 1: Number of HIV Tests Conducted by Health Department Supported Programs, 2009 and 2011 (N=55)



² Two of the CDC-directly funded cities that did not respond were funded for the first time by CDC in 2012 and therefore did not have federal funding for HIV testing in 2011.
³ Health departments were asked to provide data for programs that received any sort of support from the health department, including indirect support such as the provision of laboratory services, and purchase of test kits from all sources of funding.
⁴ In the previous survey conducted in 2010, 55 health departments responded to the question about volume of tests conducted in 2009.

A total of 38 health departments (34 state health departments and four city health departments) provided information on volume of tests conducted for each of the three most recent surveys conducted by NASTAD on HIV testing. These 38 health departments accounted for 77 percent (2,554,424 tests) of the testing volume reported for the current survey. Comparison of responses regarding testing volume reported by the health departments that provided data on the number of tests conducted over each of the three surveys conducted by NASTAD indicates a steady increase in testing volume since 2005, as illustrated in Figure 2, below. Between 2007 and 2011, there was a 56 percent increase in the number of tests conducted by these 38 health departments.

Figure 2: Test Volume Selected Health Departments, 2007 - 2011 (N=38)



Health departments were asked to report the percentage of new positive tests among all HIV tests conducted by health department supported programs in 2011. The median reported was 0.05 percent positivity, with a range of 0.01 percent to 2.0 percent.

Rapid and Conventional Testing:

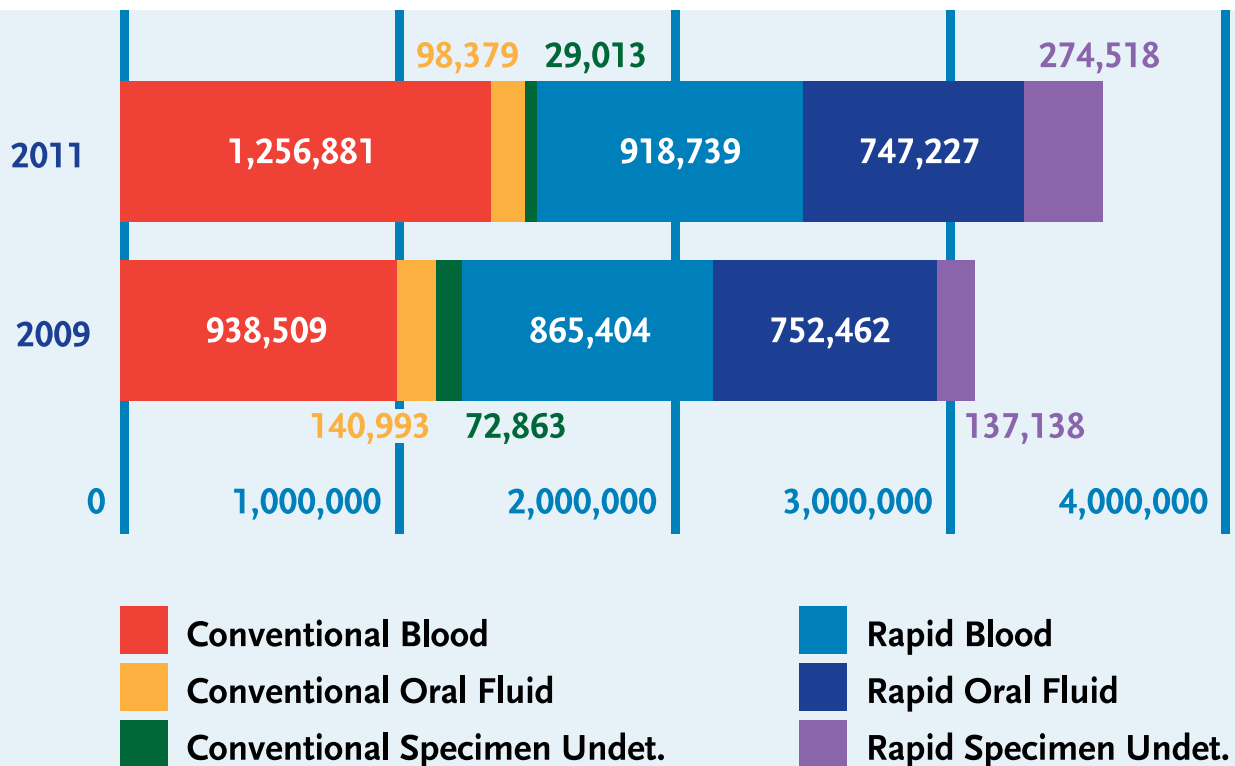
In 2011, a total of 1,940,484 rapid HIV tests were conducted in health department supported programs, accounting for 58 percent of all tests performed. By comparison, in 2009, 1,755,004 rapid HIV tests were conducted, accounting for 61 percent of tests performed in health department supported programs. Between 2009 and 2011 the total number of rapid tests conducted increased by 11 percent (185,480).

Use of Rapid Test Algorithms: One survey question addressed the use of rapid HIV tests in multi-test algorithms. Of the 56 health departments responding to this question, 12 (21 percent) reported that health department-supported HIV testing providers use two or more rapid HIV tests. Forty-three health departments (77 percent) do not use a multi-test algorithm for rapid testing. One health department reported that they “don’t know” whether or not health department supported HIV testing providers employ multi-test algorithms.

In 2011, a total of 1,384,205 conventional laboratory-based HIV tests were conducted in health department supported programs, accounting for 42 percent of all HIV tests. In 2009, 1,152,365 conventional HIV tests were performed, accounting for 39 percent of tests performed in health department supported programs. Between 2009 and 2011 the total number of conventional tests conducted increased by 20 percent (231,840).

Oral Fluid Testing: Oral fluid testing has been an important prevention tool in that it has facilitated health departments in accessing high risk populations through implementation of HIV testing in community-based and outreach venues. As illustrated in Figure 3, of the 3,324,689 tests performed in 2011, 98,379 tests were performed by conventional testing on oral fluid, representing three percent of all tests. Between 2009 and 2011, the number of conventional tests conducted on oral fluid decreased by nearly 30 percent (42,614).

**Figure 3: Testing Volume by Test and Specimen Type, 2009 and 2011 (N=55)
Settings In Which Health Departments Support Testing:**



In 2011, there were 747,227 rapid tests conducted on oral fluid which represented 23 percent of all tests and 39 percent of all rapid tests performed in 2011. Between 2009 and 2011, the number of rapid tests conducted on oral fluid decreased very slightly, by less than one percent (5,235).

Settings in Which Health Departments Support Testing

Health departments continue to support HIV testing in an wide variety of venues and settings. Two questions examined settings in which health department supported routine⁵ and targeted⁶ testing is performed. The first question addressed routine HIV testing in health care settings. Responses to this question are presented in Table 1, below.

Table 1: Health Care Settings in Which Health Departments Support Routine HIV Testing	Percent (Number) (N=56)
Sexually transmitted disease clinics	61% (34)
Community health centers	54% (30)
Hospital emergency departments	52% (29)
Correctional settings	50% (28)
Family planning clinics	45% (25)
Substance abuse treatment centers	36% (20)
TB clinics	34% (19)
Prenatal/obstetrical clinics	25% (14)
Labor and delivery settings	25% (14)
Primary care settings	23% (13)
Urgent care clinics	20% (11)
Dental care settings	16% (9)
Hospital inpatient settings	14% (8)
Hospital outpatient settings	14% (8)
Other	7% (4)

Of 56 health departments responding to this question, 47 (84 percent) reported implementing routine HIV testing in health care settings. Only nine health departments (16 percent) indicated that they are not currently supporting routine testing in health care settings. This should not be taken to mean that these health departments are not supporting testing in health care settings only that testing in such settings is not performed on a routine basis.

NASTAD included a comparable question on its 2010 [Assessment of Health Department Efforts to Implement HIV Testing in Health Care Settings](#). In that survey, 43 (75 percent) of the 57 responding health departments reported

⁵ Routine testing was defined as HIV testing recommended to every patient in a clinic population, regardless of clinical or behavioral risk.

⁶ Targeted testing was defined as HIV testing recommended to clients on the basis of behavioral and/or clinical risk for HIV.

⁷ The 14 health departments that did not report supporting routine HIV testing in health care settings did not receive funding under CDC's expanded HIV testing initiative.

supporting routine HIV testing in health care settings.⁷ Thus, there appears to have been a slight increase since the 2010 survey in the number of health departments that have implemented routine HIV testing in health care settings.

With respect to the current survey, a majority of health departments reported supporting routine HIV testing in sexually transmitted disease (STD) clinics, community health centers (CHCs), hospital emergency departments (EDs), and correctional settings. Six health departments indicated providing routine HIV testing in other settings including community-based organizations (2); faith-based organizations (1); school and university clinics (1); and public health nursing centers (1).

Compared with responses to the question included on the 2010 [Assessment of Health Department Efforts to Implement HIV Testing in Health Care Settings](#), increases were seen in the number of health departments that reported supporting routine HIV testing in the following settings: correctional settings (from 22 to 28); community health centers (from 26 to 30); family planning clinics (from 22 to 25) and hospital emergency departments (from 26 to 29).

Another question addressed the settings in which health departments are supporting targeted HIV testing. Responses are presented in Table 2, below.

Table 2: Settings in Which the Health Department Supports Targeted Testing	Percent (Number) (N=56)
Community-based organizations	96% (54)
Outreach (e.g., bars, health fairs)	93% (52)
Mobile van	66% (37)
Sexually transmitted disease clinics	61% (34)
Substance abuse treatment centers	59% (33)
Correctional settings	55% (31)
Community health centers	50% (28)
Syringe access programs	50% (28)
Family planning clinics	39% (22)
Hospital emergency departments	20% (11)
TB clinics	18% (10)
Prenatal/obstetrical clinics	14% (8)
Primary care settings	13% (7)
Hospital outpatient settings	9% (5)
Dental care settings	5% (3)
Hospital outpatient settings	5% (3)
Hospital inpatient settings	4% (2)
Urgent care clinics	4% (2)
Labor and delivery settings	2% (1)
Other	29% (16)

All 56 health departments report implementation of targeted HIV testing in one or more of the settings presented in Table 2. Nearly all health departments support community-based organizations to provide targeted HIV testing and/or support HIV testing in outreach venues. A majority of health departments report supporting targeted HIV testing through use of mobile testing units, and in STD clinics, substance abuse treatment centers and correctional settings. One-half provide targeted HIV testing in conjunction with syringe access programs.

Health departments also support targeted HIV testing in a variety of health care settings. Other settings in which health departments support HIV testing include local health department clinics, partner services field visits, partner testing in HIV medical clinics, commercial sex venues, shelters, mental health facilities, student health centers, college/university clinics, tribal health clinics, health fairs and other events, and migrant/seasonal worker clinics. Comparable questions were not included on previous surveys therefore it is not possible to compare, over time, the types of health care settings in which targeted testing was provided.

Integrated Testing:

Integration of HIV testing with testing for other communicable diseases is an important prevention strategy and one which also increases the efficiency and effectiveness of public health efforts. Two questions examined integrated testing. The first question examined the settings in which health departments support integrated⁸ HIV and STD testing. Results are presented in Table 3.

⁸ Integration was defined as clients provided with an HIV test also received testing for one or more STDs.

Table 3: Settings in Which the Health Department Supports Integrated HIV and STD Testing	Percent (Number) (N=56)
Sexually transmitted disease clinics	89% (50)
Community-based organizations	63% (35)
Community health centers	50% (28)
Partner services	48% (27)
Family planning clinics	45% (25)
Outreach (e.g., bars, health fairs)	41% (23)
Correctional settings	34% (19)
Mobile van	34% (19)
Substance abuse treatment centers	21% (12)
Prenatal/obstetrical clinics	14% (8)
Syringe access programs	14% (8)
TB clinics	14% (8)
Hospital emergency departments	9% (5)
Hospital outpatient settings	7% (4)
Primary care settings	7% (4)
Urgent care clinics	5% (3)
Labor and delivery settings	4% (2)
Dental care settings	2% (1)
Hospital inpatient settings	0% (0)
Other	12% (7)

Nearly nine of 10 health departments report providing integrated HIV and STD testing in STD clinics. Nearly two-thirds report supporting integrated HIV and STD testing through community-based organizations. Integrated testing was reported by approximately one-half of health departments in community health centers, partner services and family planning clinics. A substantial percentage of health departments reported integrated HIV and STD testing in outreach venues and through mobile testing programs. A relatively small proportion of health departments report supporting integrated HIV and STD testing in other clinical settings such as EDs, urgent care clinics, and dental settings. Other venues in which health departments support integrated HIV and STD screening include: public sex environments, such as bathhouses (2); colleges and student health centers (2); local public health clinics (1); and community nursing programs (1). One health department reported making referrals to STD testing for clients tested in outreach and community settings. Only two health departments (four percent) reported not supporting integrated HIV and STD testing.

Integration of HIV and Hepatitis C Testing: A second question addressed integration of testing for HIV and hepatitis C (HCV). The settings in which health departments support integrated HIV and HCV testing are presented in Table 4. Nearly one-half of health departments report integration of HIV and HCV testing in STD clinics. Community-based organizations and syringe access programs received frequent mention as settings in which integrated HIV and HCV testing is provided, reported by 39 percent and 36 percent of health departments, respectively. Integrated HIV and HCV testing in substance abuse treatment centers, community health centers and correctional settings were reported by nearly one-third of health departments. Eight health departments support integrated HIV and HCV screening in other settings including local health departments (4), early intervention services programs (1), community nursing programs (1) and other clinic types (2). Of 56 health departments responding to this question, only nine (16 percent) indicated that they do not support integrated HIV and HCV testing in any setting.

Table 4: Settings in Which the Health Department Supports Integrated HIV and HCV Testing	Percent (Number) (N=56)
Sexually transmitted disease clinics	45% (25)
Community-based organizations	39% (22)
Syringe access programs	36% (20)
Community health centers	30% (17)
Correctional settings	30% (17)
Substance abuse treatment centers	30% (17)
Outreach (e.g., bars, health fairs)	18% (10)
Mobile van	16% (9)
Partner services	16% (9)
Family planning clinics	9% (5)
TB clinics	7% (4)
Hospital emergency departments	5% (3)
Hospital outpatient settings	4% (2)
Urgent care clinics	2% (1)
Dental care settings	0% (0)
Hospital inpatient settings	0% (0)
Labor and delivery settings	0% (0)
Prenatal/obstetrical clinics	0% (0)
Primary care settings	0% (0)
Other	14% (8)

2012 Projections for HIV Testing:

Health departments were asked to respond to two questions about volume of tests projected to be performed in 2012. The figures below illustrate anticipated changes in 2012.

Figure 4:
Projected Change in Volume:
Routine Testing Programs in
Health Care Settings (N=56)

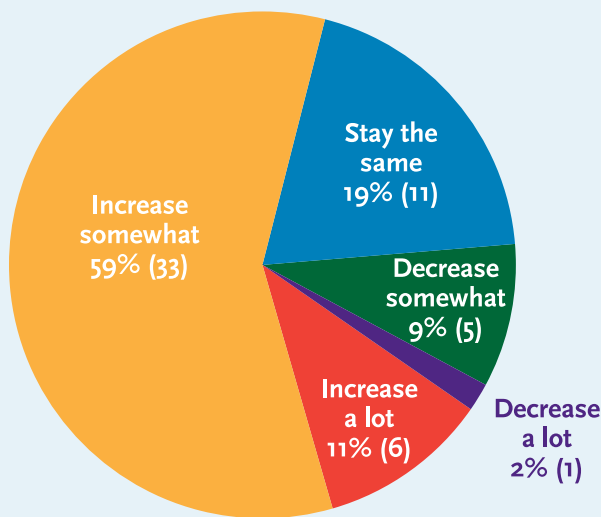
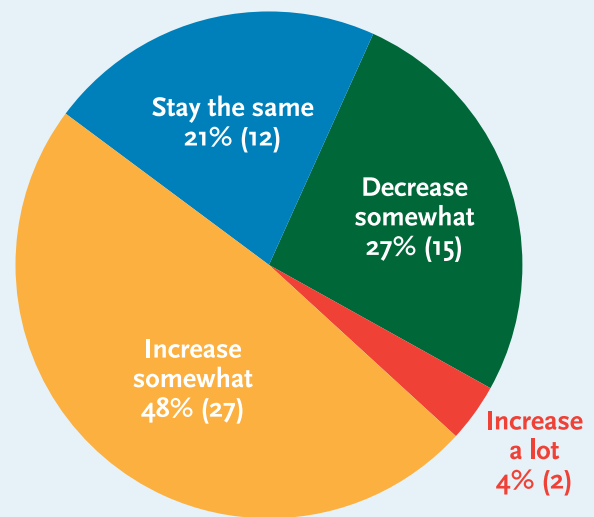


Figure 5:
Projected Change in Test Volume:
Targeted Testing Programs in
All Settings (N=56)



Routine HIV Testing in Health Care Settings: Of 56 health departments, 39 (70 percent) project that the volume of tests conducted in health care settings on a routine basis in 2012 would increase “somewhat” or “a lot.” Eleven (19 percent) health departments project that the volume will remain level in 2012. Only six health departments (11 percent) project a decrease in routine testing in health care settings in 2012, compared with 2011.

Targeted HIV Testing: Of 56 health departments, 29 (52 percent) project that the volume of tests conducted in targeted testing programs in 2012 will increase “somewhat” or “a lot” compared to 2011. Twelve health departments (21 percent) project that the volume of tests will remain level in 2012. Fifteen health departments (27 percent) project that test volume in targeted settings will “decrease somewhat” in 2012. None of the health departments project that the volume of targeted testing will decrease “a lot” in 2012, compared with 2011.

Reimbursement for HIV Testing:

Three questions were included on the survey that addressed reimbursement for HIV testing. The first question asked “Do any health department supported HIV testing providers currently bill Medicaid or other third party payers for HIV testing?” As illustrated in Figure 6, below, over one-half (34) of health departments reported that HIV testing providers currently bill Medicaid and/or other third-party payers for HIV testing services. Nearly one-third (17) of health departments report that providers in their jurisdiction do not bill Medicaid or other carriers for HIV testing services.

Figure 6: Current Provider Practices Regarding Seeking Reimbursement for HIV Testing Services from Medicaid or Other Third-Party Payers (N=56)

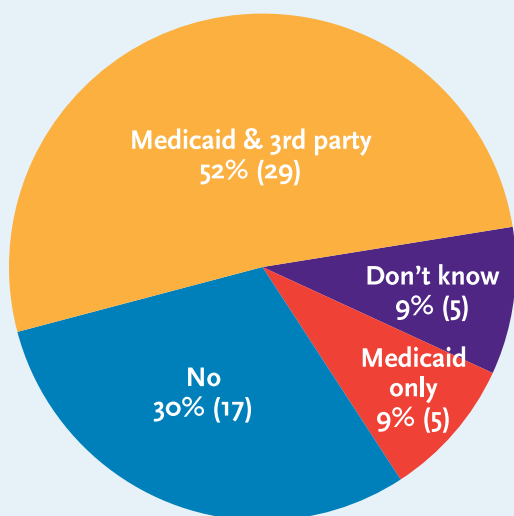
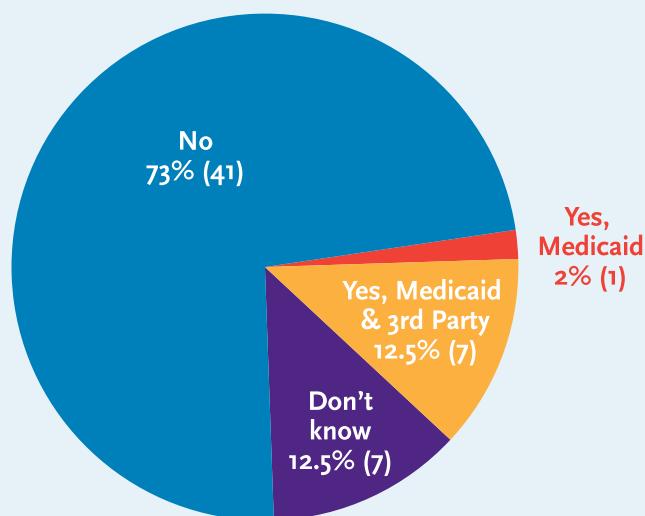


Figure 7: Health Department Requirements Regarding Reimbursement for HIV Testing from Medicaid and/or Other Third-Party Payers (N=56)

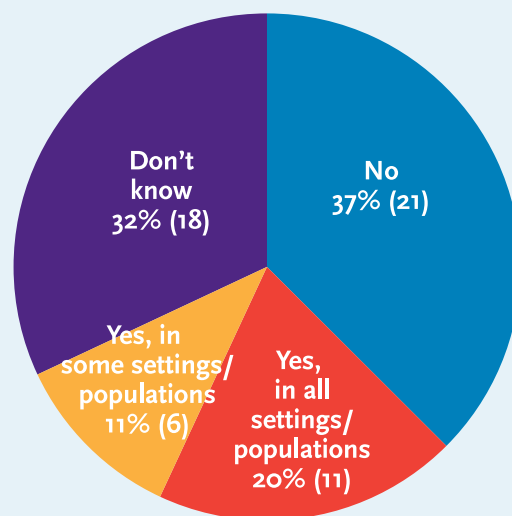


A second question asked whether health departments require HIV testing providers to seek reimbursement for HIV testing from Medicaid and/or other third-party payers. As illustrated in Figure 7, of the 56 health departments responding to this question, nearly three-quarters (73 percent) do not require HIV testing providers to seek reimbursement. Only eight health departments require HIV testing providers to bill Medicaid and/or other third-party payers for HIV testing services.

One health department reported “other” in response to this question and indicated that they encourage providers to seek reimbursement for HIV testing from Medicaid and other third-party payers. Seven health departments (13 percent) reported that they “don’t know” whether or not health department supported HIV testing providers are required to seek reimbursement.

Another question addressed reimbursement of routine HIV testing (i.e., testing recommended for every patient in a clinic population, without regard to risk or clinical symptoms). As presented in Figure 8, 21 health departments (37 percent) reported that Medicaid does not reimburse for routine HIV testing. Eleven health departments (20 percent) reported that Medicaid reimburses for routine HIV testing in all settings/populations and an additional six health departments (11 percent) reported reimbursement for routine testing in at least some settings and/or populations. Four of these health departments described the settings and/or populations in which Medicaid reimburses for routine HIV testing and of these four, two reported reimbursement for routine HIV testing in primary care clinics. “AIDS clinics,” STD clinics and prenatal care each received one mention. One health department reported that routine HIV testing was reimbursed by Medicaid only in “clinical sites.” Eighteen health departments reported that they “don’t know” whether Medicaid reimburses for routine HIV testing.

Figure 8: Medicaid Reimbursement of Routine HIV Testing (N=56)



NASTAD included a similar question on its [2010 Assessment of Health Department Efforts to Implement HIV Testing in Health Care Settings](#). In that survey, 20 health departments reported that Medicaid did not reimburse for routine HIV testing. Eight health departments reported that Medicaid reimbursed for routine HIV testing in all settings and populations and nine health departments reported reimbursement in some settings and/or populations.

Linkage to Care:

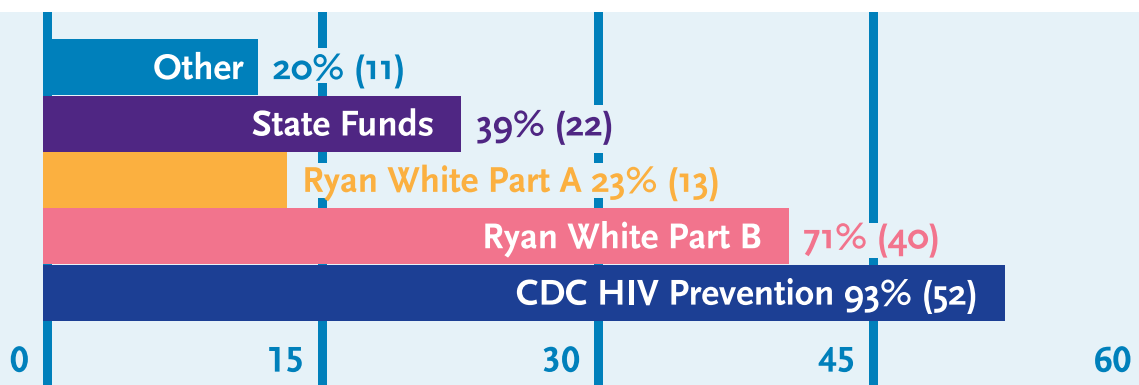
As illustrated in Table 5, health departments employ a variety of strategies to facilitate linkage to HIV medical care.

Table 5: Percentage of Health Departments Reporting Use of Various Linkage Strategies	Percent (Number) (N=56)
Assisted by counselor/tester	96% (54)
Assisted by partner services	91% (51)
Assisted by other staff (e.g. Comprehensive Risk Counseling and Services (CRCS))	63% (35)
Medical case management	55% (31)
Linkage case management provided by Partner Services (PS)	48% (27)
Outreach/peer support (e.g., patient advocates)	29% (16)
System navigation provided by peer navigators	21% (12)
Linkage case management (Anti-Retroviral Treatment and Access to Services (ARTAS) model)	20% (11)
Linkage case management – other model	20% (11)
System navigation by non-peer navigators	11% (6)
Other	7% (4)

Health departments are currently using a variety of approaches to facilitate and strengthen linkage to care. Nearly all (96 percent) reported that testers/counselors assist with referral; 91 percent reported partner services staff provide linkage assistance; 63 percent employ others prevention staff; and 55 percent use medical case management services to support linkage to care. Dedicated linkage staff such as peer navigators (21 percent); and linkage case managers (20 percent) received less frequent mention. Of the four health departments that reported “other,” two described dedicated linkage staff including “bridge counselors,” and “care coordinators.” A third health department indicated that at the time of the survey, a model for peer navigation was under development.

One survey question explored the source of funds used to support linkage to care activities. The responses to this question are presented in Figure 9, below:

Figure 9: Source of Funding Supporting Linkage to Care Activities (N=56)



Nearly all health departments use CDC HIV Prevention Cooperative Agreement funds to support linkage to care activities. The majority also reported using Ryan White funds for this purpose. Use of state funds for linkage to care activities was reported by nearly four in 10 health departments. Eleven health departments reported use of “other” sources of funds to support linkage to care activities. Of these 11, three reported uses of CDC funding for STD services, three reported use of city or county funds, two reported use of Enhanced Comprehensive HIV Prevention Planning (ECHPP) funding, two reported other federal funding sources (e.g., HRSA SPNS, NIH), and one reported private sources of funds.

Accountability for Linkage to Care:

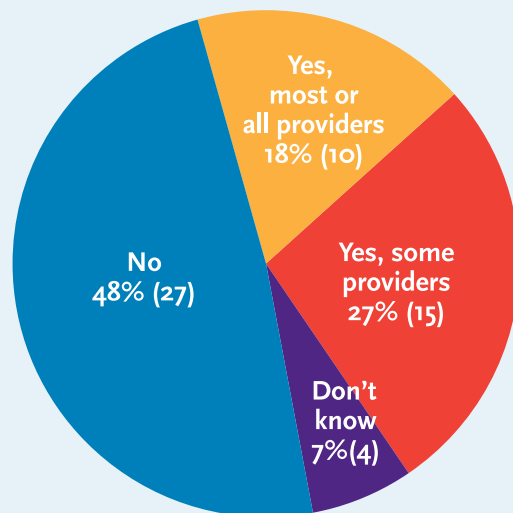
One question asked whether health departments hold HIV testing providers accountable for linking HIV-positive clients to HIV medical care. Of 56 health departments, all but two health departments (96 percent) responded in the affirmative. Of the remaining two health departments, one indicated “no” to this question and indicated that linkage to care is facilitated by health department partner services staff. The other indicated that they “don’t know” whether the health department holds HIV testing providers accountable for linkage to care.

Health departments were asked to describe how HIV testing providers are held accountable for linkage to HIV medical care for HIV-infected clients. Fifty-four health departments responded to this question. Of these 54, 21 (39 percent) reported that health department supported HIV testing providers are contractually obligated to meet specific performance indicators or objectives related to linkage to care. Sixteen (30 percent) require HIV testing providers to submit implementation plans for referral and linkage activities. Four (seven percent) health departments require evidence of collaboration with care providers, such as memoranda of agreement. Use of performance-based payment strategies which include linkage to care among the criteria for determining payment was reported by four (seven percent) health departments. One health department reported that linkage to care is a required standard of service, operationalized through public health nursing standing orders.

Barriers to Linkage to Care:

Health departments have reported that a barrier to linking HIV-positive clients to care relates to Ryan White care providers being unwilling to accept clients who have a reactive rapid test result, but who have not had supplemental testing to confirm HIV infection. One survey question examined whether Ryan White providers accept clients without supplemental test results. As illustrated in Figure 10, nearly one-half (27) of health departments report that Ryan White providers do not accept clients who have not had supplemental testing.

Figure 10: Ryan White Provider Acceptance of Clients without Supplemental Tests to Confirm HIV Infection (N=56)



NASTAD included a similar question on its 2010 [Rapid HIV Testing Update Survey](#). In response to the 2010 survey, 31 health departments (56 percent) reported, “no” to the question “Will Ryan White clinics accept clients who are referred to them without confirmatory test results, i.e., on the basis of a single or dual reactive rapid test result?” Eleven health departments (14 percent) reported that Ryan White clinics will accept clients on the basis of reactive rapid test results.

Discussion

The findings from this survey document a continuing upward trend in the volume of HIV testing performed by health department supported programs. Among 38 health departments that provided data on testing volume for each of the most recent surveys conducted in 2007, 2009 and 2011 there was an increase of at least 56 percent in the number of tests performed. The increase in testing is likely attributable to a number of factors including CDC's expanded HIV testing initiative, implemented in 2007, and uptake of rapid HIV testing.

Health departments are heavily reliant on federal funds for HIV prevention efforts. CDC's Funding Opportunity Announcement (FOA) *12-1201 Comprehensive HIV Prevention for Health Departments* was accompanied by a substantial shift in how resources are allocated across jurisdictions. At the same time, health departments continue to report reductions in state funds for HIV prevention. It will be important to monitor how shifts in federal funding and reductions in state funds impact HIV testing in terms of the volume of tests conducted as well the yield of HIV-positive test results.

Between 2009 and 2011, the total number of tests conducted by health department supported programs increased by 12 percent. Sixty-seven percent of the increase in the number of tests between 2009 and 2011 was due to conventional tests. The disproportionate increase in the volume of conventional tests performed may be at least partially attributable to expansion of HIV testing in clinical settings where conventional testing is generally more feasible, less expensive, and is often associated with bundled screening tests, such as in STD clinics in which testing for HIV may be accompanied by testing for other sexually transmitted diseases.

This survey documents an apparent increase in emphasis on providing HIV testing in health care settings, and a relative de-emphasis on testing in community-based and other non-clinical settings. For this reason, it is likely that there will continue to be an upward trend in use of conventional testing. Contemporary laboratory-based HIV test algorithms allow for identification of acute infection, facilitate screening for other communicable diseases, and may be relatively cost saving. As health departments adopt more advanced diagnostic HIV test algorithms, use of rapid tests may level-off or decrease.

Use of conventional oral fluid testing has decreased substantially. Conventional oral fluid testing permitted HIV testing in community-based, outreach and other settings where it was less feasible to collect blood. The decrease in use of conventional oral fluid testing is likely attributable, in part, to the expanded use of rapid HIV testing in community-based and outreach settings.

In 2011, rapid testing conducted on oral fluid accounted for approximately one-quarter of all tests performed in health department supported HIV testing programs. The sensitivity and specificity of this test is lower when used with oral fluid when compared with blood specimens. Contemporary HIV tests which use blood specimens can identify acute infection and thereby facilitate earlier entry

to care and treatment. Thus, public health programs will need to carefully weigh the expected benefits of oral fluid testing relative to the drawbacks, the needs of communities, and the capacities of testing providers.

Health departments report supporting HIV testing in a wide variety of settings and since the last survey, appear to have increased their investment in providing HIV testing in health care settings. Findings from the current survey suggested that health departments plan to focus efforts on further expanding routine HIV testing in health care settings during 2012. At the same time, health departments appear to be actually planning to decrease their investment in targeted testing. This may reflect the parameters and requirements of federal HIV prevention funding. Research⁹ has suggested that in comparison with routine testing, targeted testing approaches may diagnose more HIV infections, prevent more infections, and do so at a lower cost per infection. Given this, it will be important to monitor, over the longer term, the impact that this shift has relative to identifying new infection.

The survey indicated that health departments have to a large degree been successful in integrating HIV testing with testing for STDs and HCV. Integrated testing is provided in a range of health care and community-based settings. Comparatively, STD and HCV prevention receive less federal and state funding than HIV. Anecdotally, health departments leverage HIV prevention resources to support integrated testing efforts. Shifting allocation of federal resources across jurisdictions and continued reductions in state resources for HIV, STD and HCV will undoubtedly impact the ability of health departments to sustain, let alone expand, integrated screening efforts. It will be important to gain a fuller understanding of how health departments finance communicable disease testing in order to project how changes in funding is likely to impact integrated services.

Health departments are currently using a variety of approaches to facilitate and strengthen linkage to care. Given this array and increasingly constrained resources, it will be important to support health departments in evaluating which models and approaches are effective relative to successfully linking and retaining HIV-infected individuals in care.

Findings from the current survey indicate that a key barrier to linking HIV-infected individuals with medical care continues to be the unwillingness of Ryan White-funded medical providers to accept clients who have rapid test results only. HRSA policy requires clients to have a diagnosis of HIV infection documented in their medical chart in order to be eligible to receive services funded under Ryan White. HRSA does not prohibit Ryan White funded medical providers from accepting for medical evaluation and additional testing, clients who have received a “preliminary positive” rapid HIV test result, but who have not had supplemental testing to confirm diagnosis with HIV prior to their first medical appointment. Ryan White funds may be used to conduct diagnostic testing.¹⁰ In order to address this barrier, health departments may need addi-

⁹ Holtgrave DR (2007) Cost and consequences of the US Centers for Disease Control and Prevention's recommendation for opt-out HIV testing. *PLoS Med* 4(6): e194.

¹⁰ This includes any tests (or sequence of tests) approved for diagnosis of HIV infection. HRSA does not specifically require testing by Western blot to confirm diagnosis with HIV infection. Forthcoming guidelines and testing algorithms may impact this as well.

tional information about HRSA policies as well as tools to help educate providers in their jurisdictions. Health departments which have already initiated provider education efforts may provide guidance and model tools for the majority of health departments which are still experiencing this as a barrier to care.

Nearly all health departments report that they use CDC HIV Prevention Cooperative Agreement funds to support linkage to care activities. Slightly greater than two-thirds reported using Ryan White Part B funds and about one-quarter reported using Ryan White Part A resources to support these activities. Of 26 states with Ryan White Part A grantees that responded to this survey, only nine (35 percent) reported that Ryan White Part A resources were used to support linkage to care. Three of five cities (all Part A grantees) also reported use of Ryan White Part A resources. State health departments that reported use of Ryan White Part A resources were contacted to better understand how use of Part A resources by the state health department was operationalized. State health departments reported a variety of approaches including collaborative planning for linkage to care activities; joint funding/allocation processes; coordinated funding/allocation processes; and administration of Part A resources by the state health department. In order to optimize public funds for both prevention and care, it is important to examine how health departments allocate resources from various funding streams to support linkage to care activities and to identify any policy and operational barriers associated with use of federal care funds to support linkage to care activities.

Financing HIV testing through third party reimbursement continues to be a significant challenge for health departments. Slightly more than one-half of health departments reported that HIV testing providers currently bill Medicaid and/or other third-party payers for HIV testing services. While the survey did not assess which provider types (e.g., clinical or community-based) were seeking reimbursement, it is likely that only clinical providers are doing so. Even so, it will be important to gain additional information about this in future surveys and to assess the extent to which providers are successful in obtaining reimbursement.

Even though a majority of health departments report that some testing providers are currently seeking reimbursement, very few (14 percent) actually require HIV testing providers to seek reimbursement. Revenue obtained through reimbursement from third-party payers may increasingly become essential to sustaining health department HIV testing programs. In order to maximize revenue, health departments need the knowledge and tools necessary to support HIV testing providers in seeking and obtaining reimbursement. Future surveys should seek to assess the barriers that are preventing the majority of health departments from requiring HIV testing providers to seek reimbursement from third-party payers.

Medicaid reimbursement for routine HIV testing remains a significant barrier to HIV testing, specifically to building sustainable HIV testing in health care settings. Less than one-third of health departments reported that Medicaid pays for routine testing in some or all settings/populations. One-third of health

departments indicated that they had no knowledge as to whether Medicaid reimburses for HIV testing provided on a routine basis. This suggests a need to support health departments in building relationships with their state Medicaid offices in order to make routine HIV testing reimbursable and to ensure that the reimbursement rates are acceptable to providers. Learning from states that have been successful in working with their state Medicaid programs around these issues may be an important strategy for addressing this critical financing issue.

Limitations

There are several limitations to these findings. All data were self-reported and are subject to the knowledge of the individual(s) who completed the survey. The survey included questions that asked respondents to quantify test volume by type of test and specimen. Several health departments were not able to provide these data, although they were able to provide total number of tests. Selected comparisons are made with prior surveys. In some cases there was slight variation in the questions; therefore comparison should be made with some caution.

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National Alliance of State and Territorial AIDS Directors
444 North Capitol Street, NW, Suite 339
Washington, DC 20001-1512
(202) 434-8090 (phone)
(202) 434-8092 (fax)

www.NASTAD.org

Julie M. Scofield, Executive Director
Randy Mayer (Iowa), Chair