THE PREVALENCE AND CORRELATES OF RECEIVING CONFIRMATORY HIV TEST RESULTS AMONG NEWLY DIAGNOSED HIV-POSITIVE INDIVIDUALS AT A COMMUNITY-BASED TESTING CENTER

Matthew Feldman, Elwin Wu, Moira Mendoza, Blakely Lowry, Lynnette Ford, and Ian Holloway

This study examined the prevalence and correlates of completing the HIV testing process—specifically receiving a confirmatory HIV test and returning for the results—in a sample of newly diagnosed HIV-positive individuals at an HIV testing center in New York City. Of the 213 individuals who received a reactive rapid HIV test result, 82% received a confirmatory HIV test. Of the 236 individuals who received a positive result on a rapid or traditional HIV test that was validated by a positive confirmatory HIV test, 65% returned for the confirmatory test results. Multivariate analyses revealed that being a non–U.S. citizen, homeless/living in transitional housing, being uninsured, and testing off-site were significantly associated with completing the HIV testing process. The findings indicate the need to explore strategies that address obstacles to receiving confirmatory HIV testing and returning for the results, in addition to the feasibility of a rapid confirmatory HIV test.

The “test and treat” model for reducing transmission of HIV infection at the population level involves increasing the number of people who become aware that they are HIV-positive through expanded testing efforts, linking these individuals to medical care, and initiating antiretroviral therapy (Dieffenbach & Fauci, 2009; Dodd, Garnett, & Hallert, 2010). The rationale behind the test and treat strategy is that the number of new HIV infections will decrease because viral loads in people living with HIV/AIDS on antiretroviral therapy will be lowered/suppressed, which will then reduce the sexual transmissibility of HIV infection through risk behavior (Cohen et al., 2011; Donnell et al., 2010). A study that used a mathematical model found that yearly universal voluntary HIV testing among all people older than 15 years, combined with immediate antiretroviral therapy after diagnosis, “could reduce HIV incidence and mortality to less than one case per 1000 people per year by 2016, or
within 10 years of full implementation of the strategy, and reduce the prevalence of HIV to less than 1% within 50 years” (Granich et al., 2009).

The criteria for the diagnosis for individuals over the age of 13 is a positive result from an HIV antibody screening test—for example, an enzyme-linked immunosorbent assay (ELISA)—that is confirmed by a positive result from a supplemental HIV antibody test, such as a Western blot analysis or indirect immunofluorescence assay test (Centers for Disease Control and Prevention [CDC], 2008). Advances in laboratory assays, particularly “rapid tests,” have facilitated an increase in the testing and detection of HIV infection, because rapid HIV tests enable individuals to receive their results during the same appointment as the sample collection. There is evidence that individuals who undergo rapid HIV testing are significantly more likely to receive their results than those who undergo the traditional HIV antibody ELISA test (Antonio-Gaddy et al., 2006; Guenter et al., 2008; Kassler, Dillon, Haley, Jones, & Goldman, 1997; Kelen, Shahan, Quinn, & The Project Educate Work Group, 1999; Lubelcheck et al., 2005; Spielberg et al., 2005; Wurcel, Zaman, Zhen, & Stone, 2005).

The rapid test, however, has not eliminated the need for an additional visit to the HIV testing site for those who receive a reactive result. Due to limitations in specificity, individuals who receive a reactive rapid test result must consent to a confirmatory HIV test to establish an HIV-positive diagnosis, typically via Western blot analysis, the results for which are usually available within one to two weeks (CDC, 2004). Individuals who take the traditional HIV antibody ELISA test can receive confirmation of an HIV-positive diagnosis when they return for their results because positive ELISA tests are validated by a confirmatory HIV test during the period of time between receiving the test and returning for the results.

The return visit represents a critical opportunity to provide newly diagnosed HIV-positive individuals with risk counseling and assistance with connecting to HIV medical care. Receiving confirmation of an HIV-positive diagnosis has particularly important implications in moving newly diagnosed HIV-positive individuals from the “test” phase to the “treat” phase. Indeed, many HIV medical and social service organizations require documentation of a confirmed HIV-positive diagnosis before services can be initiated. In a recent study that evaluated the implementation of rapid HIV testing in 65 CDC-funded state and local health departments, 56% reported that Ryan White clinics in their jurisdiction would not accept referred clients without confirmatory test results in hand (National Alliance of State and Territorial AIDS Directors, 2011). Therefore, in many states, newly diagnosed HIV-infected individuals cannot be linked to HIV medical care until they have received an HIV confirmatory test and returned for the results.

Prior studies have reported that between 50% and 100% of individuals who receive a reactive rapid HIV test take a confirmatory HIV test (Antonio-Gaddy et al., 2006; Begley et al., 2008; Brown et al., 2007; CDC, 2007; Guenter et al., 2008; Kelen et al., 1999) and between 49% and 100% of the individuals who receive a confirmatory HIV test return for the results (Antonio-Gaddy et al., 2006; Begley et al., 2008; Bucher et al., 2007; CDC, 2007; Delaney et al., 2011; Freeman, Sattin, Miller, Dias, & Wilde, 2009; Guenter et al., 2008, Kassler et al., 1997; Spielberg et al., 2005). To date, no studies have examined the predictors of returning for confirmatory HIV test results. Existing studies have examined the correlates of returning for results for the traditional HIV antibody test. There is evidence that demographic variables are associated with returning for HIV test results, including race (Duran et al., 2010; Hightow et al., 2003; Kinsler, Cunningham, Davis, & Wong, 2007;
CONFIRMATORY HIV TEST RESULTS 447

Lazebnik, Hermida, Szubski, Dietrich-Colon, & Grey, 2001; Molitor, Bell, Truax, Ruiz, & Sun, 1999; Reynolds, Fisher, Henry, & Perez, 2005; Slutsker, Klockner, & Fleming, 1992; Tao, Branson, Kassler, & Cohen, 1999; Valdiserri et al., 1993; Wiley, Frerichs, Ford, & Simon, 1998; Ziek, Goldstein, Beardsley, Deren, & Tortu, 2000), age (Desai & Rosenheck, 2004; Erbelding, Chung, & Zenilman, 2004; Hightow et al., 2003; Kinsler et al., 2007; Molitor et al., 1999; Slutsker et al., 1992; Tao et al., 1999; Valdiserri et al., 1993; Ziek et al., 2000), gender (Ellen, Liang, Jacob, Erbelding, & Christmeyer, 2004; Erbelding et al., 2004; Glick, Silva, Zun, & Whitman, 2004; Hightow et al., 2003; Kinsler et al., 2007; Molitor et al., 1999; Reynolds et al., 2005; Valdiserri et al., 1993), and education (Desai & Rosenheck, 2004; Sullivan, Lansky, & Drake, 2004; Ziek et al., 2000). Prior studies have also found that HIV testing related variables are associated with returning for HIV test results, including HIV testing history (Desai & Rosenheck, 2004; Ellen et al., 2004; Wiley et al., 1998) and test site type (Bowles et al., 2008; Molitor et al., 1999).

Understanding the predictors of returning for confirmatory HIV test results is an important issue to examine, particularly as the use of the rapid HIV test becomes a standard practice in HIV testing and counseling settings. Further, if an individual does not receive a confirmatory HIV test and return for the results, it is less likely that he will move from the “test” step to the “treat” step. This study aims to: (1) describe the prevalence of completing the HIV testing process, including receiving a confirmatory HIV test and returning for the results, among newly diagnosed HIV-positive individuals; and (2) examine the sociodemographic and psychosocial correlates of completing the HIV testing process among newly diagnosed HIV-positive individuals.

METHODS

STUDY DESIGN

A retrospective record review was conducted using data on individuals who tested for HIV between March 2008 and February 2011 with Gay Men’s Health Crisis (GMHC), a community-based AIDS service organization in New York City. This project was approved by the Institutional Review Board at GMHC.

Trained HIV testing counselors provide confidential HIV testing at GMHC’s on-site HIV testing and counseling center, off-site at community-based organizations or events (e.g., gay pride), and in a mobile testing unit. Informed consent is obtained from all individuals who receive an HIV-test, and pre- and post-test counseling is also provided. A finger stick rapid HIV test (Uni-Gold Recombigen; Trinity Biotech USA, Jamestown, NY) is used on-site and an oral HIV test (OraQuick Rapid HIV-1 Antibody Test, OraSure Technologies, Bethlehem, PA) is used for HIV testing conducted off-site or in the mobile testing unit.

Individuals who receive a reactive rapid HIV test result are asked to take a confirmatory HIV test to establish an HIV-positive diagnosis. Onsite, preliminary positive results are confirmed by an enzyme immunoassay (HIV-1/2 Antibody Plus EIA; Quest Diagnostics, San Jose, CA) and a Western blot (HIV-1 Western Blot; Unilab, Tarzana, CA), while off-site an oral confirmatory test (OraSure HIV-1 Western Blot, OraSure Technologies, Bethlehem, PA) is used. HIV testing counselors make an appointment to meet with all individuals who receive a confirmatory HIV test to return for their results within approximately one week. The traditional HIV antibody
(ELISA) test is still available to individuals who test on-site at GMHC and specifically request this test instead of the rapid HIV test.

**SAMPLE**

A total of 9,234 individuals were tested for HIV between March 1, 2008, and February 28, 2011 (Figure 1). The majority of these individuals received a rapid HIV test (97%, \( n = 8,978 \)), although a small proportion of individuals elected to take the ELISA test (3%, \( n = 256 \)). Of the individuals who received a reactive rapid test result (\( n = 232 \)), 92% (\( n = 213 \)) were newly diagnosed and 8% (\( n = 19 \)) were “known positives,” in that they knew they were HIV-positive prior to testing. Of the 213 newly HIV-infected clients who received a reactive rapid HIV test result, 82% (\( n = 174 \)) received a confirmatory HIV test. Confirmatory HIV tests yielded predominantly positive results (96%, \( n = 167 \)). Of the individuals who received a positive ELISA test (\( n = 147 \)), 47% (\( n = 69 \)) were newly diagnosed and 53% (\( n = 78 \)) were known positives.

Known positives typically present for HIV testing because they need documentation of a confirmatory HIV test result in order to access HIV-related medical and/or social services, which would explain why a larger proportion of known positives elected to take the ELISA test instead of the rapid HIV test. We excluded the 97
individuals who knew they had a positive HIV status prior to testing so that the sample could represent newly diagnosed HIV-infected individuals who had no previous experience with the test-related activities (e.g., confirmatory HIV testing) that are necessary prerequisites to initiating HIV medical care. We also excluded the 9 individuals who received indeterminate or negative confirmatory HIV test results because they would need to return to the test step rather than moving on to the treatment step, or initiating HIV medical care.

Our analyses were based on the 275 newly HIV-infected individuals who: (1) received a reactive rapid HIV test result and refused the confirmatory HIV test \((n = 39)\); (2) received a reactive rapid HIV test result and a positive confirmatory HIV test result \((n = 167)\); and (3) received an ELISA test that yielded a positive confirmatory HIV test result \((n = 69)\). The sample is represented by the three shaded boxes in Figure 1.

MEASURES

The charts of all individuals who received an HIV test consist of a standardized record containing information, including client demographics (age, sex, race, sexual orientation, education, marital status, citizenship status, housing, health insurance), the location of the test (on-site; off-site), and the individual's HIV testing history. The outcome variable was whether or not a client completed the HIV testing process, which was operationalized as receiving a confirmatory HIV test and returning for the results (0 = refused confirmatory test or did not return for confirmatory HIV test results; 1 = returned for confirmatory HIV test results).

STATISTICAL ANALYSES

Bivariate analyses of the relationship between each of the variables and completing the HIV testing process were conducted using logistic regression to estimate odds ratios. A multivariate logistic regression model was used to identify the variables independently associated with completing the HIV testing process when adjusting for all other variables in the model. Criteria for including variables in the multivariate model included statistical significance \((P < 0.10)\) in the bivariate analyses. These results are shown as adjusted odds ratios (AOR) with their corresponding 95% confidence intervals (CIs). Data were analyzed using SPSS statistical software (Version 15.0).

RESULTS

The sample consisted of 275 newly diagnosed HIV-infected individuals, of whom 14% \((n = 39)\) received a reactive rapid HIV test result and refused the confirmatory HIV test, 61% \((n = 167)\) received a reactive rapid HIV test result and a positive confirmatory HIV test result, and 39% \((n = 69)\) received an ELISA test that yielded a positive confirmatory HIV test result. Of the 236 individuals who received a positive rapid HIV test or a positive ELISA test that was validated by a confirmatory HIV test, 65% \((n = 153)\) returned for the confirmatory results.

Newly diagnosed HIV-positive individuals were predominantly male (94%, \(n = 259\)), nonwhite (73%, \(n = 200\)), and gay/bisexual (90%, \(n = 248\)). Almost three-fourths had previously tested for HIV (Table 1). Unadjusted and adjusted odds ratios for completing the HIV testing process are presented in Table 2. In the bivariate analyses, gender, sexual orientation, citizenship status, insurance status, living
situation, education, testing history, and location of HIV test were associated with completing the HIV testing process. In the multivariate analysis, being a non–U.S. citizen (AOR = 2.9, CI = 1.1, 7.9), being homeless or living in transitional housing (AOR = 5.1, CI = 1.3, 19.1), and being uninsured (AOR = 0.4, CI = 0.2, 0.9) were independently associated with increased odds of completing the HIV testing process, while testing at an off-site location (AOR = 0.2, CI = 0.1, 0.6) was independently associated with decreased odds of completing the HIV testing process.

**DISCUSSION**

This study examined the prevalence and correlates of completing the HIV testing process, including receiving a confirmatory HIV test and returning for the results among newly diagnosed HIV-positive individuals at a community-based HIV testing and counseling center in New York City. We found that 65% of individuals who received a positive rapid test or a positive ELISA test that was validated by a confirma-
CONFIRMATORY HIV TEST RESULTS

We also found that citizenship status, housing status, and health insurance status were independently associated with receiving a confirmatory HIV test and returning for the results. One possible explanation for our findings is that uninsured individuals, homeless individuals, and non-U.S. citizens may have been more likely to return for their confirmatory HIV test results because they need to access assistance from AIDS service organizations (e.g., housing, legal advocacy) or public benefits for which documentation of a positive confirmatory HIV test result is required. For

- **TABLE 2. Unadjusted and Adjusted Odds Ratios for Completing the HIV Testing Process Among 275 Newly Diagnosed HIV-Positive Individuals**

<table>
<thead>
<tr>
<th>Did not complete the HIV testing process (n = 122)</th>
<th>Completed the HIV testing process (n = 153)</th>
<th>Unadjusted OR (95% CI)</th>
<th>Adjusted OR (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (yrs.)</td>
<td>35.9 (10.9)</td>
<td>33.7 (10.1)</td>
<td>1.0 (1.0, 1.0)</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>110 (42.5)</td>
<td>149 (57.5)</td>
<td>4.1 (1.3, 12.9)*</td>
</tr>
<tr>
<td>Female</td>
<td>12 (75)</td>
<td>4 (25)</td>
<td>Ref.</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black/African American</td>
<td>37 (43.5)</td>
<td>48 (56.5)</td>
<td>0.9 (0.5, 1.6)</td>
</tr>
<tr>
<td>Latino/a</td>
<td>48 (49.0)</td>
<td>50 (51.0)</td>
<td>0.7 (0.4, 1.3)</td>
</tr>
<tr>
<td>Other</td>
<td>7 (41.2)</td>
<td>10 (58.8)</td>
<td>1.0 (0.33, 2.78)</td>
</tr>
<tr>
<td>White</td>
<td>30 (40)</td>
<td>45 (60)</td>
<td>Ref.</td>
</tr>
<tr>
<td>Sexual Orientation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Heterosexual</td>
<td>100 (40.3)</td>
<td>148 (59.7)</td>
<td>6.5 (2.4, 17.8)**</td>
</tr>
<tr>
<td>Heterosexual</td>
<td>22 (81.5)</td>
<td>5 (18.5)</td>
<td>Ref.</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; High School Diploma/GED</td>
<td>67 (37.9)</td>
<td>110 (62.1)</td>
<td>2.6 (1.3, 5.1)**</td>
</tr>
<tr>
<td>High School Diploma/GED</td>
<td>25 (50)</td>
<td>25 (50)</td>
<td>1.6 (0.7, 3.6)</td>
</tr>
<tr>
<td>&lt; High School Diploma/GED</td>
<td>27 (61.4)</td>
<td>17 (38.6)</td>
<td>Ref.</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married/domestic partnership</td>
<td>27 (44.3)</td>
<td>34 (55.7)</td>
<td>1.0 (0.6, 1.8)</td>
</tr>
<tr>
<td>Divorced/separated/widowed</td>
<td>7 (43.8)</td>
<td>9 (56.3)</td>
<td>1.0 (0.4, 2.9)</td>
</tr>
<tr>
<td>Single, never married</td>
<td>84 (44.2)</td>
<td>106 (55.8)</td>
<td>Ref.</td>
</tr>
<tr>
<td>Citizenship</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non–U.S. citizen</td>
<td>10 (25.0)</td>
<td>30 (75.0)</td>
<td>2.7 (1.3, 5.8)*</td>
</tr>
<tr>
<td>U.S. Citizen</td>
<td>111 (47.4)</td>
<td>123 (52.6)</td>
<td>Ref.</td>
</tr>
<tr>
<td>Housing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homeless/Transitional housing</td>
<td>8 (33.3)</td>
<td>16 (66.7)</td>
<td>1.9 (0.8, 4.6)</td>
</tr>
<tr>
<td>Family or friends home/apt.</td>
<td>13 (31.0)</td>
<td>29 (69.0)</td>
<td>2.1 (1.0, 4.2)*</td>
</tr>
<tr>
<td>Own home/apt.</td>
<td>101 (48.3)</td>
<td>108 (51.7)</td>
<td>Ref.</td>
</tr>
<tr>
<td>Health Insurance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insured</td>
<td>74 (54.4)</td>
<td>62 (45.6)</td>
<td>0.4 (0.2, 0.7)**</td>
</tr>
<tr>
<td>Uninsured</td>
<td>22 (29.7)</td>
<td>52 (70.3)</td>
<td>Ref.</td>
</tr>
<tr>
<td>Test Location</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Off-site</td>
<td>37 (82.2)</td>
<td>8 (17.8)</td>
<td>0.1 (0.1, 0.3)**</td>
</tr>
<tr>
<td>On-site</td>
<td>85 (37)</td>
<td>145 (63.0)</td>
<td>Ref.</td>
</tr>
<tr>
<td>HIV Testing History</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Previously Tested</td>
<td>82 (40.8)</td>
<td>119 (59.2)</td>
<td>1.9 (1.1, 3.5)*</td>
</tr>
<tr>
<td>Unknown</td>
<td>8 (44.4)</td>
<td>10 (55.6)</td>
<td>1.7 (0.6, 4.9)</td>
</tr>
<tr>
<td>Not Previously Tested</td>
<td>32 (57.0)</td>
<td>24 (42.9)</td>
<td>Ref.</td>
</tr>
<tr>
<td>Months since most recent HIV test</td>
<td>32.0 (49.7)</td>
<td>22.7 (29.7)</td>
<td>1.0 (1.0, 1.0)</td>
</tr>
</tbody>
</table>

*P < .05; **P < .01; ***P < .001
example, documentation of confirmed HIV-positive diagnosis is required to become a beneficiary of the New York State AIDS Drug Assistance Program (prescription drug coverage for uninsured HIV-positive individuals).

Our findings are not consistent with prior studies on returning for traditional HIV antibody tests. In a sample of adolescent girls who received anonymous testing at a clinic in Cleveland, Ohio, participants with private insurance were significantly more likely to return for HIV test results (Lazebnik et al., 2001). Ziek and colleagues (2000) found that out-of-treatment intravenous and crack users in New York City who considered themselves homeless were less likely to return for HIV test results, although this association was only significant at the bivariate level.

Although the inconsistency in the findings of the current study with those of prior studies may be due to differences in sample composition and methodology, another possibility is the time period in which the studies were conducted. For example, Ziek and colleagues (2000) recruited study participants from 1992 to 1995, which was prior to the introduction of anti-retroviral medications. There may have been less incentive to return for results and connect with medical and social services in the face of hopelessness about treatment possibilities. Since then, there has been incredible progress both in terms of medical treatment for HIV and increased promotion and awareness of the services that are available for people living with HIV/AIDS, particularly in New York City where the current study was conducted.

We also found that individuals tested off-site at a community event or in the mobile testing unit were less likely to return for confirmatory HIV test results, which is consistent with the findings of prior studies. Bowles and colleagues (2008) reported that the proportion of people with preliminary positive results who returned for confirmatory results was lowest among those tested in outreach settings (e.g., street corners, community events). Fewer than half of those tested during street outreach or at special events received their confirmatory HIV test results, compared to those tested at community clinics and social service organizations.

Engaging clients who do not return for confirmatory HIV test results can be difficult. In a study that examined staff perspectives about the implementation of rapid HIV testing in community and outreach settings, the most commonly reported challenge was locating people who had reactive tests to inform them of their confirmatory test results. The specific challenges staff reported included receiving false contact information from clients and successfully engaging with high-risk individuals who test positive (e.g., homeless, substance users) so that they return for their confirmatory HIV test results and connect to medical care (Clark, Bowles, Song, & Heffelfinger, 2008). One of the other reasons individuals who test at off-site locations do not return for their confirmatory HIV test results could be related to motivation and/or preparedness for HIV testing. Individuals who come to GMHC for an HIV test have usually determined that they are at least ready to take an HIV test, while individuals who test off-site may have decided to test spontaneously, and therefore may not be prepared to face the possibility of an HIV-positive diagnosis. Future studies should examine motivation and readiness for HIV testing, particularly in terms of the differences between individuals who test off-site versus on-site at a facility. Finally, while individuals who receive a reactive rapid result in an off-site testing venue can take an oral confirmatory HIV test at that time, the individual is asked to come to GMHC’s testing and counseling center to receive these results. Individuals who test off-site may not feel comfortable coming to an AIDS-service organization because of perceived stigma, or they may not have the ability or means to travel to GMHC. HIV testing programs might consider offering off-site testing clients the option of
receiving their confirmatory HIV test results in the same location or area at which
the test was originally provided.

The findings of this study should be considered within the context of several
limitations. First, some of the cells in these data (e.g., women) were relatively small,
which impacted the sample’s power. Second, observed correlations should not be
inferred as causation. Third, although the sample represented a diverse population
of individuals who tested for HIV at a community-based organization in New York
City, the findings may not be generalizable to other settings.

We found that a substantial proportion of newly HIV-infected individuals
(44%) in this sample would not have completed the HIV testing process because
they either refused to take a confirmatory HIV test or they did not return for the
confirmatory test results. If the “test and treat” initiative is to be truly realized, all of
the gaps in which newly HIV-infected individuals could become “lost to follow-up”
must be closed, including the time between receiving a reactive positive test and tak-
ing a confirmatory HIV test and receiving the results.

More research should examine the prevalence and predictors of receiving con-
firmatory HIV testing and returning for the results. This research may inform the
development of interventions that address the psychosocial obstacles related to suc-
cessfully moving newly HIV-infected individuals from “test” to “treat.” There is also
a need to better understand the reasons people fail to return for confirmatory test
results. With some exceptions (Grusky, Roberts, & Swanson, 2007; Sullivan et al.,
2004), few studies have examined reasons for not returning for results.

There are some promising developments that may contribute to decreasing the
gap between testing and treatment. There is preliminary evidence that supports the
sensitivity of a dual or triple immunoassay sequence for both screening and con-
firmaing a positive HIV diagnosis that does not require a Western blot analysis for
confirmation (Torian, Forgione, Punsalang, Pirillo, & Oleszko, 2011). Linkage to
care could therefore begin immediately, rather than one week following a reactive
rapid HIV test when an individual typically receives confirmation of an HIV-positive
diagnosis.

There is also promising evidence that supports the use an alternative rapid HIV
test testing algorithm in which individuals with reactive results on more than one
rapid test are considered HIV-positive and immediately referred for HIV care. Recent
studies have demonstrated that a single-visit two test rapid HIV testing algorithm
allows for the identification of HIV-positive individuals with greater certainty, com-
pared to using a single test (Delaney et al., 2011; Martin, Salaru, Paul, & Cadoff,
2011). A two-test algorithm may also improve linkage to care. Delaney and col-
leagues (2011) evaluated a two-test rapid HIV testing algorithm in which individuals
with reactive results on more than one rapid test were considered HIV-positive and
received a referral for HIV care on the same day. Persons who received a referral
were more likely (67%) to be in care within 90 days than those who received a
preliminary-positive result but did not return for their confirmatory HIV test results
and referrals to medical care (49%).

Policy-level changes also have the potential to facilitate linking newly diagnosed
HIV-infected individuals to medical care. A little over half of the state and local
health departments that participated in the survey by the National Alliance of State
and Territorial AIDS Directors (NASTAD) reported that confirmation of an HIV-
positive diagnosis is required to initiate care at a Ryan White clinic. Further, despite
the promising evidence for the use of a single-visit two-test HIV rapid testing al-
gorithm, only 4% of health departments reported that Ryan White clinics in their
jurisdiction would accept a client based on two reactive rapid test results (NASTAD, 2011). These policies may discourage newly diagnosed HIV-infected individuals from initiating care because of the additional step that is imposed between the initial diagnosis and starting treatment. State and local health departments should examine the possibility of revising these policies, which could result in increasing linkage to care rates among newly diagnosed HIV-infected individuals.

REFERENCES


CONFIRMATORY HIV TEST RESULTS


