

NYC CHAIN REPORT 2006-4



Housing Status and Entry into HIV Medical Care

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C.H.A.I.N. REPORT

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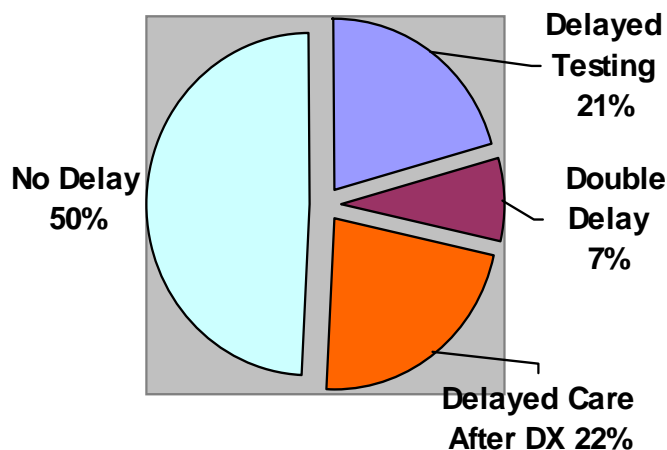
BACKGROUND

Entry into medical care as early after infection as possible is associated with improved clinical outcomes for infected persons and with reduction in risk behaviors that could transmit infection to others. However, even in the era of effective antiretroviral medications and increased life expectancy, substantial numbers of persons living with HIV and AIDS (PLWH/A) do not take advantage of medical evaluation and treatment available at the time of their HIV diagnosis. The aim of the present analysis is to examine the role of housing status and experience of housing instability during the year prior to diagnosis as they influence entry into HIV medical care. We define “entry to care” as presentation for evaluation and initial diagnostic work-up subsequent to HIV infection, regardless of what decisions are made about medication.

We examine two stages between HIV infection and entry into HIV medical care: 1) the time between infection and initial positive HIV test result; and 2) the time between awareness of serostatus and presentation to HIV care. Thus we will examine delayed testing - defined as receiving an AIDS diagnosis concurrent with diagnosis of HIV, or having a very low CD4 count (e.g. below 200) at the time of presentation for care, indicating an advanced state of disease even if no AIDS-defining illness has occurred. We also examine delayed entry into care operationally defined as waiting more than 3 months after the diagnostic HIV test to present for treatment evaluation. Based on CHAIN study and HIV surveillance estimates, half of all PLWH/A in New York City have delayed testing, delayed entry into HIV medical care, or both.

An examination of the relationship between housing and entry into HIV care will help inform policy and programs designed to ensure that all persons living with HIV enter into care in a timely and appropriate matter.

Figure 1. An Estimated Half of All HIV Infected Persons in NYC Are Delayers



Source: Delayed Care Seeking, CHAIN Fact Sheet (Summer 2004).

METHODOLOGY

Data for this study were obtained from the baseline interview with the NYC CHAIN II cohort. This cohort of 693 was originally recruited and first interviewed during 2002 and 2003. The CHAIN interviews collect detailed self-reported information on need for a wide range of medical and social service needs and service utilization during each interview period. In addition, study participants described how they became aware of their HIV status, when and how they first accessed medical care for HIV, and what was going on in their lives during the period just prior and following their HIV diagnosis.

One question asked about their living arrangements at the time they received diagnostic test results indicating HIV infection. Another question asked about experience with a range of housing situations during the year (12 months) prior to HIV diagnosis. Housing status at the time of diagnosis was classified as 1) stable housing, living in one's own apartment or house; 2) temporarily doubled up with others in somebody else's home; 3) living in an SRO or welfare hotel; 4) in transitional housing including residential drug treatment; 5) in jail or prison; 6) in a shelter for homeless persons; or 7) living on the streets, abandoned building, or other place not meant for sleeping. Past 12 month housing experience was indicated by whether or not respondents spent even one night in any of these situations.

SUMMARY

- More than half of all CHAIN Study Participants were homeless or unstably housed at the time that they became aware of their HIV diagnosis. Housing status at the time of diagnosis is associated with how, when, and where infected persons got tested for HIV and the process and timeliness of accessing HIV medical care.
- Substantial proportions of PLWH/A who were homeless or unstably housed at the time of diagnosis were tested in non-medical settings such as a housing program, drug treatment, a social service agency, or in jail.
- There were differences in rates of delayed testing associated with living situation at the time of diagnosis. Over one-third of the street homeless reported that they were sick or experiencing symptoms when tested indicating a more advanced stage of HIV disease; however rates were similar among those in more stable housing. Individuals who were in temporary or transitional housing programs were least likely to test when experiencing symptoms, most likely due to the 'capture' process by which residents of such programs are required or strongly encouraged to test.
- Persons who experienced the most severe housing need - who were sleeping on the streets or in a public place - were at greatest risk for delayed entry into HIV medical care. Forty-four percent (44%) delayed accessing medical care for more than four months after diagnosis and the delayers stayed unconnected to care for well over 2 years - typically until they began experiencing HIV related symptoms. The odds of delay are 2 times as high for

persons sleeping on the streets as for those with their own stable housing (OR 2.01, CI 1.10,3.70).

- The risk for delay associated with housing status at time of diagnosis is substantially reduced when the testing experience included active linkage with care. The most important predictor of timely entry into HIV medical care is what happens at the testing site, controlling for client demographics, risk exposure group and current drug use, as well as housing status and other resources at the time of HIV diagnosis.
- There is no evidence that housing status at the time of diagnosis has become a less important influence on timely entry into HIV testing and care. If anything, housing status is more strongly associated with testing experience and entry into medical care among PLWH/A diagnosed since 1996 than it was among individuals diagnosed in earlier years.
- Findings suggest several points of intervention. Locating HIV services where persons with housing needs are likely to come for assistance (homeless shelters, soup kitchens, case management agencies, re-entry programs etc) will facilitate interception of untested HIVinfected persons where they go for non-HIV services. Outreach can attract those outside of care to the agency where they can establish a trusting relationship with service pro-fessionals who are then in a position to facilitate change in awareness, intention, and behaviors regarding HIV disease management and service utilization.
- For persons who test positive, active involvement by staff at the testing site to assist patients in locating and accessing HIV medical care is strongly advised. Onsite case management as well as patient navigator models have been used effectively in this regard.
- Aggressive expansion of testing and diagnosis without additional strong supports for linkage with care are likely to be counter-productive. A significant subset of CHAIN study participants avoided medical care after being tested in what they experienced as coercive situations and/or when they did not receive adequate treatment education and help with finding a suitable care provider.

Findings : HIV Testing Experience

- A majority (52%) of the CHAIN sample were currently or recently homeless or unstably housed at the time when they learned of their HIV diagnosis (Table 1).
- Housing status at the time of HIV diagnosis is associated with different patterns of getting tested. Most individuals in the sample got tested in a medical clinic. However, persons who were living on the streets or in a shelter or temporary or transitional housing program were more likely than persons more stably housed to get their diagnostic test in a non-medical setting such as a social service agency or drug treatment program. One in six street homeless learned of their HIV infection while an inpatient or in the emergency room. The great majority (87%) of persons who were in jail when they found out about their HIV were tested

in correctional settings. Many respondents reported they were tested as part of their jail admission process (Table 2).

- Despite histories of high risk behaviors (see prior CHAIN reports), over 80% of PLWH/A in all living arrangements except those currently in jail said that they did not think about getting tested prior to the time they received their diagnostic test. A substantial proportion of persons who were in jail as well as those in homeless or transitional living situations had been tested for HIV because it was required - e.g. part of drug treatment, housing or some other program eligibility or admission requirement (e.g. job corps).
- Doctor recommendation does not appear to have been a factor in motivating testing for HIV among those who were in unstable housing during the time they became aware of their serostatus. Only 6% of those who were in shelters or some other temporary housing program, and 9% of those in jail said that doctor's recommendation was a reason they got the HIV test when they did.
- About 30% of all CHAIN participants reported getting tested for HIV because they were sick or symptomatic at the time - our indicator of delayed testing. There were few differences among the sample based on their living situation at the time of diagnosis. Thirty-five percent (35%) of those who were street homeless reported that they were sick or experiencing symptoms or gave other indicators of testing at a more advanced stage of HIV disease. A similar proportion (31%) of respondents who were in their own stable housing described symptoms or health problems surrounding initial HIV diagnosis. Individuals who were in temporary or transitional housing programs were least likely to test when experiencing symptoms, most likely due to the 'capture' process by which residents or clients of such programs are required or strongly encouraged to test.
- Examining delayed testing by housing status and risk exposure group, we see that among MSM, those in their own housing or doubled up with others are somewhat more likely to get tested when symptomatic than those in more unstable situations. Persons in the heterosexual/ other risk group are less likely to delay testing if they are living with others or in a temporary or transitional housing program. These differences however are not statistically significant and caution must be exercised given small number of cases among subpopulation groups (Table 3).
- CHAIN Participants who were diagnosed earlier in the epidemic (prior to 1996) were somewhat less likely to delay testing than those diagnosed more recently. However, delayed testing appears to be more strongly associated with unstable housing during the later period, although differences are not statistically significant (Table 4).
- We examined the demographic composition of the housing status groups. More PLWH/A who were in shelters or temporary housing or doubled up with others were under 35 yrs old at diagnosis than the proportion seen in other living arrangements. Differences are not statistically significant but it is noteworthy that almost as many women (48%) as men report they were living on the streets when they found out they were HIV positive. White CHAIN

participants were found in greater proportion among those who had their own stable housing as well as at the other end of the housing spectrum, among those who were sleeping on the streets. African Americans comprise two thirds of persons who were in shelters or other temporary housing.

- A series of questions asked about resources and relationships "during the time you first became aware you were HIV positive." As Table 5 shows, there are substantial differences by housing status groups. For most indicators, the street homeless were the worst off but in many cases, their profile is similar to those who were in jail at the time of diagnosis. For example, over half of the street homeless had no regular source of income, had less than a high school education, and had no close friends or family in their lives. Almost 60% (57%) had no medical insurance and about three-fourths (72%) did not have any source of regular medical care prior to HIV diagnosis.
- Rates of active substance use were high during the year of diagnosis. Again, the highest rate is found among persons sleeping on the street or people who were in jail or corrections housing at the time of diagnosis: 46% of the street homeless said that they were drinking a lot during the time before their diagnostic test; 76% said they were using drugs regularly
- Logistic regression was used to examine predictors of delayed HIV testing. We considered socio-demographic characteristics, risk exposure, medical (medical insurance, regular source of medical care) and social support resources (not having any close friends) just prior to testing, as well as housing situation at the time of diagnosis. In the unadjusted model, younger age was associated with increased odds, and active drug use and later date of HIV diagnosis (post 1996) were associated with lower odds of delayed testing. Risk exposure group, and living in temporary or transitional housing compared to one's own, stable housing, had marginally significant associations with lower odds of advanced stage of infection at diagnosis. In the adjusted model, age, MSM risk group, and current drug use remain statistically significant predictors (Table 6).
- The negative association of lower odds of delayed testing with both history of IDU and current, heavy drug involvement at the time of HIV diagnosis is worthy of note. These findings as well as narrative discussions of testing experiences point to the success of many drug treatment facilities as sources of testing, and as we will see in the next section, support for entry into medical care, for populations otherwise at high risk of delay.
- Although not statistically significant, the lower odds of delayed testing found among CHAIN participants who were in shelters or other temporary or transitional housing during the year they were diagnosed is consistent with narrative discussions of the process of getting tested. Homeless service providers have also become more assertive in encouraging HIV testing and providing counseling and testing at sites where homeless are served (e.g. Health Care for the Homeless teams at soup kitchens or homeless shelters) or facilitating testing by service partners (e.g. SRO outreach programs).

Findings: Entry into HIV Medical Care

- There were differences in medical service sites, pathways to care, and timeliness of entering HIV medical care associated with differences in housing status at the time of HIV diagnosis (Table 7). Social service agencies and drug treatment providers were sites of first visit for HIV medical care for 11-12% of CHAIN participants who were homeless or in temporary/transitional housing at the time of their diagnosis. Not quite half (48%) of PLWH/A who were in jail received their first HIV care from a correctional facility. Over 90% of those who were in their own stable housing or doubled up with others got their first care at a medical clinic - most often a hospital-based HIV or infectious disease clinic.
- Individuals in stable housing or doubled up with family or friends were more likely than others to seek care from a medical provider who had been a regular source of care for them prior to HIV diagnosis. Referrals from social service providers as well as from family and friends vary and were more likely among those with history of housing difficulties. The street homeless had a relatively high rate of medical referral to their first HIV doctor; 31% were referred by another medical provider. Part of the explanation is that individuals with the most severe housing difficulties at the time they learned of their HIV diagnosis are especially likely to delay entering medical care until they begin experiencing symptoms. Doctors in emergency rooms, general clinics, or drug treatment settings often are the point of contact for referral to HIV specialty care.
- Housing status at time of diagnosis is associated with differential risk for delayed entry into HIV medical care. Forty-four (44%) of PLWH/A who were on the streets when they learned of their HIV infection delayed entry into medical care for four or more months (mean delay for street homeless was well over 2 years). Delay is also common among those who were in jail; 40% had delayed care. This compares to 23% - 27% delayers among those in other housing situations (Table 7). The same general pattern remains when we limit our analysis to those who were not ill at the time of their initial diagnosis, i.e. excluding those who received care in response to symptoms that resulted in the initial HIV diagnosis. It is instructive to note however that even among street homeless who were experiencing symptoms at the time of their diagnosis, close to 40% delayed initial visit for HIV medical care (data not shown).
- The finding that individuals who were in shelters, or any temporary or transitional housing program were the least likely to delay entry into medical care suggests that these programs have increased their effectiveness in recognizing and facilitating service linkages among residents who are known to be HIV positive. Care should be taken however to understand the role of such facilities for outreach to persons at risk of delaying entry into care. A significant subset of CHAIN study participants avoided medical care after being tested in what they experienced as coercive situations and/or when they did not receive adequate information about the disease and about the medications related to HIV. This was a common complaint associated with being tested in prison and to a lesser extent being tested as part of drug treatment program.

- In both qualitative as well as quantitative analyses, the importance of the actual testing experience is clear. What happened at the testing site is strongly associated with timely entry into HIV medical care or with delay or avoidance of care. Among street homeless who received only cursory referral information (or none at all), 53% were delayers - their first visit for HIV care was well beyond the recommended three months after diagnosis. In contrast, among street homeless who were tested in sites with active case management and/or patient navigation programs that actively linked positive individuals with appropriate medical care, only 21% delayed entry into HIV medical care. Sixty-two percent (62%) of PLWH/A who were in jail at the time of diagnosis and who received, by their description, only cursory information about medical care, delayed accessing care, even though it may have been available in the correctional setting (Table 7)
- Examining delayed entry into medical care by housing status among different risk exposure groups suggests that temporary or transitional housing reduces risk for delay especially for among the 'heterosexual/ other' group (Table 8).
- The overall rates of delayed entry into HIV medical care are lower for PLWH/A diagnosed post 1996 compared to those diagnosed earlier. However, the association between housing status and delay appears to be stronger in the more recent period with the street homeless and those with jail experience two to three times as likely to delay as those in more stable housing. (Table 9).
- We again used logistic regression in the attempt to better understand the role of housing status controlling for other factors that prior research has shown to be associated with medical care utilization (Table 10). When we consider each factor separately, older age, Black race/ethnic group, and especially test site active referral to care are associated with reduced odds of delayed entry into care. IDU risk exposure, actively using drugs, not experiencing symptoms at the time of HIV diagnosis, and being diagnosed prior to 1996, are associated with higher odds of delayed entry into care. Housing situation at the time of diagnosis is associated with delayed entry into care. The odds of delay are 2 times as high for persons sleeping on the streets as for those with their own stable housing (OR 2.01, CI 1.10,3.70).
- Only age, current drug use, and test site activity are statistically significant predictors of delayed entry to medical care in the full, adjusted model (Table 10). Associations with housing status are marginally significant. Being in jail or corrections housing at time of diagnosis is associated with increased odds of delay, and being doubled up with others, decreased odds, compared to persons in their own, stable housing. Controlling for the other factors in the model, especially controlling for help linking with care provided by the testing site, street homelessness as such is not associated with delayed entry into HIV medical care in the most recent CHAIN cohort.
- The most important predictor of timely entry into HIV medical care is what happens at the testing site. Again we see the importance of active service linkage for facilitating access to care and follow through. The significance of site activity remains controlling for client

demographics, risk exposure group and current drug use, as well as housing status and other resources at the time of HIV diagnosis, The odds of delayed entry to medical care for those tested in places that provide not only patient education but active linkage with medical care are far less than the odds for those who get no or little site help (AOR 0.11, CI 0.06,0.21).

Findings: Reasons Given for Delayed Entry into Medical Care

Answers to open-ended questions about reasons for delayed entry into HIV medical care offer insight into individual motivations and rationales to remain outside of care. CHAIN Participants who did not seek medical care for HIV within three months of diagnosis were asked: "After finding out their HIV status, some people go to get services right away while others let some time go by. Why did you delay in getting medical services?" Answers were transcribed and coded according to themes that emerged from respondent narratives (Table 11).

- The full analysis of these data is presented in a prior CHAIN report, "In Care, Out of Care, Marginal and Unconnected" (Aidala et al.2005). Here we will note that the role of housing - or lack of housing - was mentioned by respondents themselves as a barrier to accessing HIV medical care.
- Competing life concerns - especially dealing with homelessness or unstable housing are described as explanations for delaying, dropping out, or remaining outside of HIV medical care: *"Got locked up 2000-2001... Got out, moved in with Dad - running the streets, staying w/friends, never followed up... restricted Medicaid."* Others point to loss of housing as a triggering event, diminishing time and resources needed to deal with treatment *"I just stopped going 8-9 months ago - had rats in the apartment so left that apartment. Now it's cold [out here]."*
- Decline in physical functioning - beginning to experience symptoms - rather than any understanding of underlying disease processes and the benefits of antiretroviral treatment was the primary motivation for eventually seeking medical care among delayers.

RECOMMENDATIONS

Not surprisingly, housing instability at the time of HIV diagnosis is associated with a constellation of factors known to present barriers to accessing care: poverty, low educational level, social isolation, substance abuse, history of incarceration and lack of medical care prior to HIV infection. With the data at hand, we are not able to untangle the multiplicity of causal influences placing so many individuals with housing need at increased risk for delayed testing and/or delayed entry into medical care.

Nonetheless, findings suggest several points of intervention. Locating HIV services where homeless persons are likely to come for assistance and services (homeless shelters, soup kitchens, case

management agencies, re-entry programs etc) will facilitate interception of HIV positive persons where they go for non-HIV services. Outreach and provision of services that address basic survival needs are necessary intermediate and enabling services. These services can attract those outside of care to the agency where they can receive information and establish a trusting relationship with service professionals who are then in a position to facilitate change in awareness, intention, and behaviors regarding HIV disease management and service utilization.

In such a model, testing would be considered one element of an overall program of 'service readiness' that would address housing and other concrete problems in a supportive way and provide realistic culturally appropriate information about management of HIV (and health enhancing behaviors generally) in advance of testing or diagnosis. In addition, for persons who test positive, active involvement by staff at the testing site to assist patients in locating and accessing HIV medical care would be necessary. Enhanced outreach and case management, as well as peer based patient navigator models have been used effectively in this regard.

Our findings on testing experience are important to keep in mind when considering policies to expand mandatory or aggressively promoted HIV testing. We saw that many drug treatment and homeless service as well as correctional facilities require or strongly urged testing which seems to have reduced late testing among their clients. There is some indication that such programs can also facilitate timely entry into HIV medical care if active referral is implemented. However testing and diagnosis without additional strong supports captured by our measure of 'site help' are likely to be counter productive. The interviews clearly indicate that many clients who were tested without freely and deliberately seeking to know their HIV status consider this a negative experience and this in combination with lack of any real help in understanding HIV disease management deterred them from seeking services once they left the institution where they tested. The following description is representative: *"I took the test because I had to. They took the test and told me. It was awful. I am never going back to [the program] again."*

We find little evidence that housing status at the time of diagnosis has become a less important influence on timely entry into HIV testing and care. Overall, fewer HIV infected persons delay entering medical care than at prior stages of the epidemic. However, housing status appears to be more strongly associated with testing and entry into care among PLWH/A diagnosed since 1996 than it was among individuals diagnosed in earlier years.

Table 1. Housing Status and Recent Housing Experience at Time of HIV Diagnosis

| | N | % |
|---|-------|------|
| Total sample (n=) | (690) | 100% |
| Housing at Time of HIV Diagnosis | | |
| Own apartment/ house | 372 | 54% |
| Doubled up with others | 123 | 18 |
| SRO or welfare hotel | 31 | 5 |
| Drug treatment | 29 | 4 |
| In jail or prison | 55 | 8 |
| In a shelter for homeless persons | 32 | 5 |
| On the streets, no regular place | 46 | 7 |
| Housing Experience Year Prior to HIV Diagnosis | | |
| <i>Year prior to HIV diagnosis spent at least one night:</i> | | |
| Doubled up with others | 183 | 26% |
| SRO or welfare hotel | 46 | 7 |
| Drug treatment | 37 | 5 |
| Jail or prison | 74 | 11 |
| Homeless shelter | 53 | 8 |
| On the streets | 72 | 10 |
| Other temporary or unstable situation | 5 | 1 |
| Any History of Housing Instability Year Prior to HIV Diagnosis | | |
| <i>Year prior to HIV diagnosis spent at least one night:</i> | | |
| On the streets, in a homeless shelter, SRO or welfare hotel, drug treatment, jail or other temporary housing, or doubled up with others, in somebody else's home. | 356 | 52% |

Table 2. HIV Testing Experience by Housing Status at Time of Diagnosis

| | Housing Status at Time of HIV Diagnosis | | | | | |
|--|---|---------------|--------------------------------------|-----------------|------------------|-----|
| | Stable, Own Place | Doubled Up | Shelter/Temp Housing ^a | Jail/ Prison | On the Street | |
| <i>Total n=</i> | (372) | (123) | (94) | (55) | (46) | |
| Date Tested | | | | | | |
| Before 1995 | 64% | 67% | 61% | 73% | 78% | |
| 1996 or later | 36 | 33 | 39 | 27 | 22 | |
| Where Tested | | | | | | |
| Medical Clinic/office | 83% | 82% | 55% | 7% | 61% | *** |
| Inpatient/ ER | 7 | 3 | 6 | 0 | 17 | |
| Non-Medical Agency | 7 | 8 | 30 | 6 | 17 | |
| Jail or Prison | 2 | 7 | 9 | 87 | 4 | |
| Prior Testing Experience | | | | | | |
| Never thought about it | 81% | 76% | 81% | 66% | 85% | # |
| Mean # prior tests (sd) | 1.47(3.0) | 1.47(2.7) | 3.06(3.7) | 2.15(3.2) | 3.76(7.8) | |
| Reasons for HIV Test^b | | | | | | |
| Engaged in risky behavior | 29% | 32% | 39% | 27% | 54% | ** |
| Doctor recommended | 22 | 13 | 6 | 9 | 13 | *** |
| Was sick | 22 | 21 | 13 | 16 | 26 | |
| Test was required | 7 | 12 | 19 | 45 | 11 | *** |
| Partner was HIV+ | 14 | 12 | 4 | 9 | 17 | # |
| Others recommended | 5 | 4 | 4 | 4 | 4 | |
| Pregnancy reasons | 4 | 7 | 4 | 0 | 4 | |
| Other reason(s) | 29 | 33 | 32 | 24 | 26 | |
| Delayed Testing | | | | | | |
| Tested because sick or reported symptoms at time of diagnosis ^c | 31% | 29% | 20% | 24% | 35% | |

^a In a shelter, SRO, drug treatment or other temporary or transitional housing.

^b Multiple responses possible

^c Respondent reported that being sick was the reason to get tested or separately reported that s/he was very sick or had 'major health problems,' or described HIV symptoms at the time of diagnosis.

p ≤ .10 *p ≤ .05 **p ≤ .01 ***p ≤ .001

Table 3. Delayed HIV Testing by Housing Status at Time of Diagnosis by HIV Exposure Group

| | Housing Status at Time of HIV Diagnosis | | | | |
|--|---|---------------|--------------------------------------|-----------------|------------------|
| | Stable, Own Place | Doubled Up | Shelter/Temp Housing ¹ | Jail/ Prison | On the Street |
| <i>Total (n=)</i> | (372) | (123) | (94) | (55) | (46) |
| Delayed Testing | | | | | |
| Tested because sick or reported symptoms at time of diagnosis ² | 31% | 29% | 20% | 24% | 35% |
| <i>Among MSM (n=)</i> | (111) | (38) | (26) | (8) | (7) |
| % Delayed Testing | 23 | 37 | 12 | 13 | 14 |
| <i>Among Drug Users (n=)</i> | (146) | (59) | (60) | (46) | (32) |
| % Delayed Testing | 28 | 24 | 20 | 22 | 34 |
| <i>Among Hetero/ Other n=</i> | (139) | (36) | (21) | (7) | (18) |
| % Delayed Testing | 39 | 28 | 29 | 43 | 40 |

¹ In a shelter, SRO, drug treatment or other temporary or transitional housing.

² Respondent reported that being sick was the reason to get tested or separately reported that s/he was very sick or had 'major health problems' or described HIV symptoms at the time of diagnosis.

p ≤ .10 *p ≤ .05 **p ≤ .01 ***p ≤ .001

Table 4. Delayed HIV Testing by Housing Status at Time of Diagnosis by Year of Diagnosis

| | Housing Status at Time of HIV Diagnosis | | | | |
|--|---|---------------|--------------------------------------|-----------------|------------------|
| | Stable, Own Place | Doubled Up | Shelter/Temp Housing ¹ | Jail/ Prison | On the Street |
| <i>Total (n=)</i> | (372) | (123) | (94) | (55) | (46) |
| Delayed Testing | | | | | |
| Tested because sick or reported symptoms at time of diagnosis ² | 31% | 29% | 20% | 24% | 35% |
| <i>Diagnosed 1996 or later(n=)</i> | (134) | (41) | (37) | (15) | (10) |
| % Delayed Testing | 37 | 37 | 27 | 47 | 40 |
| <i>Diagnosed 1995 or earlier (n=)</i> | (146) | (82) | (57) | (40) | (35) |
| % Delayed Testing | 27 | 24 | 16 | 15 | 33 |

¹ In a shelter, SRO, drug treatment or other temporary or transitional housing.

² Respondent reported that being sick was the reason to get tested or separately reported that s/he was very sick or had 'major health problems' or described HIV symptoms at the time of diagnosis.

p ≤ .10 *p ≤ .05 **p ≤ .01 ***p ≤ .001

Table 5. Demographics and Resources by Housing Status at Time of Diagnosis

| | Housing Status at Time of HIV Diagnosis | | | | | |
|---|---|---------------|--------------------------------------|-----------------|------------------|-----|
| | Stable, Own Place | Doubled Up | Shelter/Temp Housing ¹ | Jail/ Prison | On the Street | |
| <i>Total n=</i> | (372) | (123) | (94) | (55) | (46) | |
| Age at HIV Diagnosis | | | | | | |
| < 35yr old | 41% | 56% | 54% | 46% | 48% | * |
| 36 - 49 yrs | 50 | 42 | 42 | 49 | 50 | |
| 50+ yrs | 9 | 2 | 4 | 6 | 2 | |
| Gender | | | | | | |
| % Female | 41% | 41% | 37% | 26% | 48% | |
| Race/ Ethnicity | | | | | | |
| White | 12% | 5% | 2% | 4% | 15% | ** |
| Black | 47 | 55 | 65 | 55 | 54 | |
| Latino | 40 | 37 | 31 | 40 | 30 | |
| Other | 1 | 2 | 2 | 2 | 0 | |
| Personal Resources | | | | | | |
| No regular source of income | 8% | 16% | 21% | 67% | 52% | *** |
| Less than HS education | 35% | 42% | 50% | 36% | 57% | * |
| No friends or family | 17% | 26% | 36% | 27% | 52% | *** |
| Medical Resources | | | | | | |
| No medical insurance | 22% | 34% | 26% | 55% | 57% | *** |
| No regular source med care ² | 55% | 53% | 65% | 71% | 72% | * |
| Substance Use | | | | | | |
| Drinking a lot | 22% | 25% | 22% | 29% | 46% | ** |
| Using drugs regularly | 32% | 41% | 40% | 55% | 76% | *** |

Note: Resources and substance use behaviors "during the time you first became aware you were HIV positive"

¹ In a shelter, SRO, drug treatment or other temporary or transitional housing.

² Prior to HIV diagnosis

p ≤ .10 *p ≤ .05 **p ≤ .01 ***p ≤ .001

Table 6. Unadjusted and Adjusted Regression of Delayed HIV Testing

| | Delayed Testing ¹ | |
|---|------------------------------|----------------------------|
| | Unadjusted OR (95% CI) | Adjusted OR (95% CI) |
| Socio-demographic Characteristics | | |
| Age at diagnosis ² | 1.03 (1.02, 1.05)** | 1.03 (1.00, 1.05) * |
| Male | 0.96 (0.68, 1.34) | 1.41 (0.90, 2.20) |
| Black | 1.22 (0.88, 1.71) | 1.15 (0.63, 2.10) |
| Latino | 0.84 (0.60, 1.19) | 1.18 (0.61, 2.28) |
| Foreign Born | 0.89 (0.60, 1.32) | 0.71 (0.43, 1.15) |
| Less than HS grad | 1.10 (0.79, 1.54) | 1.09 (0.75, 1.56) |
| Risk Exposure³ | | |
| MSM | 0.69 (0.47, 1.02)# | 0.53 (0.32, 0.88) * |
| IDU | 0.74 (0.52, 1.06)# | 0.76 (0.49, 1.20) |
| Resources at time of Diagnosis | | |
| Did not have medical insurance | 0.99 (0.69, 1.42) | 1.04 (0.70, 1.55) |
| No regular source of medical care ⁴ | 0.84 (0.60, 1.17) | 0.89 (0.62, 1.29) |
| No close friends | 0.96 (0.65, 1.42) | 0.96 (0.63, 1.45) |
| Substance use at time of Diagnosis | | |
| Drinking a lot | 1.03 (0.70, 1.51) | 1.13 (0.74, 1.73) |
| Using drugs regularly | 0.63 (0.45, 0.90)** | 0.62 (0.41, 0.94) * |
| Housing at time of Diagnosis⁵ | | |
| Doubled up with others | 0.97 (0.63, 1.49) | 1.00 (0.62, 1.61) |
| Shelter or temp/transitional housing ⁶ | 0.61 (0.36, 1.05)# | 0.60 (0.33, 1.07)# |
| Jail / Prison | 0.76 (0.40, 1.45) | 0.74 (0.36, 1.50) |
| On the street | 1.36 (0.73, 2.56) | 1.54 (0.75, 3.13) |
| Year of Diagnosis | | |
| Before 1996 | 0.57 (0.41, 0.80) *** | 0.75 (0.51, 1.11) |

p ≤ .10 *p ≤ .05 **p ≤ .01 ***p ≤ .001

1. Respondent answered that being sick was the reason to get tested or separately reported that s/he was very sick or had 'major health problems' or described AIDS symptoms indicating relatively advanced stage of disease at diagnosis
2. Continuous variable
3. Heterosexual/ Other is reference category
4. Prior to HIV diagnosis
5. Own place, stable housing is reference category
6. In a shelter, SRO, drug treatment or other temporary or transitional housing

Table 7. Entry into HIV Medical Care by Housing Status at Time of Diagnosis

| | Housing Status at Time of HIV Diagnosis | | | | | |
|---|---|-----------------|-----------------------------------|----------------|----------------|-----|
| | Stable, Own Place | Doubled Up | Shelter/Temp Housing ¹ | Jail/ Prison | On the Street | |
| <i>Total n=</i> | (372) | (123) | (94) | (55) | (46) | |
| Date Tested | | | | | | |
| Before 1995 | 64% | 67% | 61% | 73% | 78% | |
| 1996 or later | 36 | 33 | 39 | 27 | 22 | |
| Site of First HIV Medical Care | | | | | | |
| Medical Clinic/office | 92% | 93% | 87% | 48% | 88% | *** |
| Non-Medical Agency | 7 | 5 | 12 | 4 | 11 | |
| Jail or Prison | 2 | 2 | 1 | 48 | 0 | |
| Path to First HIV Medical Care | | | | | | |
| Went to prior provider ² | 30% | 27% | 10% | 12% | 6% | *** |
| Went to new doc on my own | 32 | 27 | 43 | 30 | 34 | |
| Referred by family/ friends | 12 | 15 | 11 | 24 | 16 | |
| Referred by social svc provider | 8 | 4 | 19 | 33 | 13 | |
| Referred by other med provider | 17 | 28 | 17 | 0 | 31 | |
| Delayed Entry into Care | | | | | | |
| Delay 4+ months after HIV diagnosis | 27% | 26% | 23% | 40% | 44% | * |
| Time to Care among Delayers³ | | | | | | |
| Mean # months (sd) | 44.62 (43.8) | 47.16 (42.7) | 41.1 (32.2) | 28.8 (23.0) | 46.5 (40.4) | |
| Delayed Entry into Care by Test Site Linking with Care⁴ | | | | | | |
| No referral or passive referral only | 35% | 33% | 30% | 62% | 53% | ** |
| Active linking with medical care | 7% | 6% | 7% | 5% | 21% | |

¹ In a shelter, SRO, drug treatment or other temporary or transitional housing

² Regular medical provider prior to HIV diagnosis

³ Among those who delayed 4+ months, N=102 stable/own; 32 doubled-up; 22 shelt/ temp; 22 jail/ prison; 20 street.

⁴ Percent delayed entry into care by whether or not test site actively facilitated accessing medical cae - made appointment, escorted to medical provider, etc.

p≤ .10 *p≤ .05 **p≤ .01 ***p≤ .001

Table 8. Delayed Entry into HIV Medical Care by Housing Status at Time of Diagnosis by HIV Exposure Group

| | Housing Status at Time of HIV Diagnosis | | | | |
|---|---|-----------------|-----------------------------------|-------------|---------------|
| | Stable, Own Place | Temp Doubled Up | Shelter/Temp Housing ¹ | Jail/Prison | On the Street |
| <i>Total (n=)</i> | (372) | (123) | (94) | (55) | (46) |
| Delayed Entry to Care Delayed 4+ months after diagnosis before first visit for HIV medical care | 27% | 26% | 23% | 40% | 44% * |
| <i>Among MSM (n=)</i> | (111) | (38) | (26) | (8) | (7) |
| % Delayed Entry to Care | 33 | 24 | 23 | 38 | 14 |
| <i>Among Drug Users (n=)</i> | (146) | (59) | (60) | (46) | (32) |
| % Delayed Entry to Care | 34 | 29 | 30 | 39 | 44 |
| <i>Among Hetero/ Other n=</i> | (139) | (36) | (21) | (7) | (10) |
| % Delayed Entry to Care | 19 | 25 | 5 | 43 | 50 * |

¹ In a shelter, SRO, drug treatment or other temporary or transitional housing

^b Respondent reported that being sick was the reason to get tested or separately reported that s/he was very sick or had 'major health problems' or described HIV symptoms at the time of diagnosis.

p ≤ .10 *p ≤ .05 **p ≤ .01 ***p ≤ .001

Table 9. Delayed Entry into HIV Medical Care by Housing Status at Time of Diagnosis by Year of Diagnosis

| | Housing Status at Time of HIV Diagnosis | | | | |
|---|---|-----------------|-----------------------------------|-------------|---------------|
| | Stable, Own Place | Temp Doubled Up | Shelter/Temp Housing ¹ | Jail/Prison | On the Street |
| <i>Total (n=)</i> | (372) | (123) | (94) | (55) | (46) |
| Delayed Entry to Care | | | | | |
| Delayed 4+ months after diagnosis before first visit for HIV medical care | 27% | 26% | 23% | 40% | 44% * |
| <hr/> | | | | | |
| <i>Diagnosed 1996 or later (n=)</i> | (134) | (41) | (37) | (15) | (10) |
| % Delayed Entry to Care | 15 | 10 | 14 | 33 | 40 # |
| <hr/> | | | | | |
| <i>Diagnosed 1995 or earlier (n=)</i> | (238) | (82) | (57) | (40) | (36) |
| % Delayed Entry to Care | 35 | 34 | 30 | 43 | 44 |

¹ In a shelter, SRO, drug treatment or other temporary or transitional housing

^b Respondent reported that being sick was the reason to get tested or separately reported that s/he was very sick or had 'major health problems' or described HIV symptoms at the time of diagnosis.

p ≤ .10 *p ≤ .05 **p ≤ .01 ***p ≤ .001

Table 10. Unadjusted and Adjusted Regression of Delayed Entry into HIV Medical Care

| | Delayed Entry into Care ¹ | |
|--|--------------------------------------|-----------------------------|
| | Unadjusted OR (95% CI) | Adjusted OR (95% CI) |
| Socio-demographic Characteristics | | |
| Age at diagnosis ² | 0.94 (0.92, 0.95)*** | 0.93 (0.91, 0.96)*** |
| Male | 1.17 (0.83, 1.64) | 1.12 (0.68, 1.85) |
| Black | 0.69 (0.50, 0.97) * | 0.66 (0.35, 1.23) |
| Latino | 1.23 (0.89, 1.76) | 0.61 (0.31, 1.22) |
| Foreign Born | 0.99 (0.67, 1.46) | 1.18 (0.70, 2.00) |
| Less than HS grad | 1.21 (0.87, 1.69) | 1.31 (0.87, 1.97) |
| Risk Exposure³ | | |
| MSM | 1.05 (0.73, 1.52) | 1.17 (0.69, 2.01) |
| IDU | 1.68 (1.20, 2.36)** | 1.41 (0.88, 2.26) |
| Resources at time of Diagnosis | | |
| Did not have medical insurance | 1.36 (0.96, 1.94)# | 1.02 (0.66, 1.57) |
| No regular source of medical care ⁴ | 1.25 (0.88, 1.76) | 1.15 (0.76, 1.73) |
| No close friends | 1.35 (0.93, 1.97) | 1.22 (0.78, 1.91) |
| Substance use at time of Diagnosis | | |
| Drinking a lot | 1.14 (0.78, 1.67) | 0.93 (0.58, 1.49) |
| Using drugs regularly | 2.12 (1.51, 2.96)*** | 1.94 (1.25, 3.01)** |
| Housing at time of Diagnosis⁵ | | |
| Doubled up with others | 0.83 (0.53, 1.29) | 0.62 (0.36, 1.05)# |
| Shelter or temp/ transitional housing ⁶ | 0.75 (0.45, 1.23) | 0.61 (0.33, 1.14) |
| Jail/ Prison | 1.74 (0.99, 3.06)# | 1.87 (0.91, 3.84)# |
| On the street | 2.01 (1.10, 3/70) * | 1.59 (0.74, 3.45) |
| Testing Situation | | |
| No symptoms at time of testing | 1.46 (1.00, 2.14)* | 0.87 (0.56, 1.37) |
| Test site actively linked to medical care | 0.13 (0.08, 0.24)*** | 0.11 (0.06, 0.20)*** |
| Year of Diagnosis | | |
| Before 1996 | 2.88 (1.94, 4.29)*** | 1.48 (0.92, 2.38) |

p ≤ .10 *p ≤ .05 **p ≤ .01 ***p ≤ .001

1. Delayed 4 or more months after becoming aware of HIV diagnosis before first medical visit for HIV
2. Continuous variable
3. Heterosexual/ Other is reference category
4. Prior to HIV diagnosis
5. Own place, stable housing is reference category
6. In a shelter, SRO, drug treatment or other temporary or transitional housing

Table 11. Thematic Coding of Open-Ended Descriptions of Reasons for Delayed Entry into HIV Medical Care

| Reasons for Delayed Entry into HIV Medical Care¹ | |
|---|--------------|
| <i>Total Sample of Delayers (n=)</i> | <i>(157)</i> |
| In denial about HIV - couldn't/ didn't want to believe was infected | 33% |
| Was doing drugs; relapsed | 18% |
| Felt fine, wasn't sick, no symptoms | 14% |
| Fatalism - believed was going to die anyway | 9% |
| Was homeless / had no money (competing needs) | 7% |
| Fear, uncertainty | 7% |
| Did not want HIV medications | 6% |
| Did not know where to go | 6% |

1. Multiple responses possible. Answers to the question: After finding out their HIV status, some people go to get services right away while others let some time go by. Why did you delay in getting medical services?