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# Tri-County CHAIN

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*Report 2003\_6*

## Housing Assessment Summary

Barbara Bennet  
Tasha Stehling

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Columbia University  
Mailman School of Public Health  
In collaboration with Medical and Health  
Research Association of New York,  
the NYC Department of Health,  
the Westchester Department of Health,  
and the NYC Health & Human Services  
HIV Planning Council

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**C.H.A.I.N. Report**

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#### Tri-County CHAIN Project

Peter Messeri, PhD	Principal Investigator
David Abramson, MPH MPhil	Study Director
Barbara Bennet	Field Director
Tasha Stehling, MPH	Data Manager
Rachel Ferat	Office Manager & Research Assistant
Sandra Smartt & Dave Hunter	Data Editors
Narine Malcolm	Administrator

Interviewers: Sofia Luyando, Rose Rivera, Elizabeth Romero

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## **Background**

During 2001-2002 the Tri-County CHAIN Project recruited and interviewed a randomized sample of 398 HIV+ individuals living in Westchester, Putnam or Rockland County and engaged in the care system. Individuals were recruited from 32 sites of services among 28 medical or social service agencies in the three counties. The sample is considered representative of estimated 1,600 HIV+ individuals engaged in the Tri-County care system. Semi-structured face to face interviews were conducted at 12 month intervals with project participants by trained research staff. The data outlined in this assessment represent two sets of interviews, baseline or Wave 1, and the follow-up or Wave 2. At Wave 2 follow-up, 50 of the original 398 had died, moved, or were otherwise ineligible. Of the remaining 348 eligible participants 315 (91%) were interviewed for Wave 2 follow-up.

Stable and affordable housing continues to be a subject of concern for the HIV+ community and the agencies which serve them. Findings from the Tri-County CHAIN cohort provide a detailed picture of housing for the HIV+ population living in Westchester, Putnam and Rockland. For this assessment we describe housing arrangements for the cohort over two waves of interviewing. The analyses considered several housing questions and outcomes for both waves of interviewing. Included in the key findings for Wave 1 and Wave 2 are estimates and descriptions of housing type, housing need, both financial and permanent, and findings on factors associated with seeking agency help as expressed by the cohort. Key findings are also presented on the rent burden calculated for individuals paying privately for their housing. Lastly, a multi-variate model is illustrated to highlight the principal determinants of housing needs regardless of wave of interviewing.

## **Assessment of Housing Status and Types of Problems**

For the purpose of this report we defined different types of housing as reported by the cohort. We speculated that housing type could be divided into four main categories (see Table 3). Housing type was described as private, public, AIDS supportive, and other.

Private housing was defined as an individual privately owning or renting a house, apartment or room but receiving no permanent subsidy. These respondents may receive temporary or emergency help provided by an agency, however the assistance is not permanent.

Public housing was defined as an individual receiving section 8, living in public housing, or receiving some other permanent subsidy.

AIDS supportive housing included housing available only to PWA/HIV+ individuals, or a case manager lives on the premises, or rent is paid through an agency through a program specific to HIV+ individuals.

Other included all respondents who were described as doubled up with a friend or relative, living in drug treatment, shelter, nursing home, a hospital, jail, or homeless.

Tri-County CHAIN interviews collect housing data in more than one way. Respondents were asked open-ended questions about their problem and they are asked to describe what difficulties if any, they are experiencing. Assessments of housing problems are also obtained in closed ended questions which collect information on housing stability, rent burden, and financial need. Data were then coded

into three categories for analysis and need was separated into three domains defined as any need, financial need, and permanent need. Lastly, in efforts to estimate the portion of monthly income respondents paid towards rent, each was asked about their monetary contribution for monthly household rent. The concept of rent burden was assessed for the only for Wave 2 or the follow-up interviews.

Any housing need consisted of respondents who expressed any housing problem within the last six months. This category encompassed both permanent and financial need problems, and it was used to assess the problems on a larger, more general level. Problems were further separated into the categories of financial and permanent need.

Financial housing need was described as difficulty paying rent, or if a respondent experienced administrative difficulties securing a rental subsidy, or if the respondent was facing eviction.

Permanent Housing need was defined as being doubled up in a shelter or homeless, living in poor quality housing, having physical access or transportation problems, or if the respondent expressed a need to move.

Rent burden was described as the proportion of household income an individual paid toward his/her monthly rent. Burden was calculated for those respondents who lived in the private sector or paid a portion of his/her monthly rent. The percentages were broken into quartiles for analysis.

### **Subgroup Analyses and Definitions**

In further analyses, the cohort was split up into subgroups to provide a detailed picture of factors contributing to our outcomes of interest, housing type, housing need, agency help seeking, and rent burden. For each outcome several subgroups were compared. These groups included gender, race/ethnicity, risk category, housing stability, area of residence, T-Cell count, mental health – low MCS score and receiving MH treatment, household income, educational level, and household composition.

Risk category was separated into four groups, MSM, PDU, MSM&PDU, and Other. MSM consisted of men who reported having sex with men. PDU, or problem drug user, included respondents who reported ever using drugs 3 or more times per week for one month or more. MSM&PDU consisted of respondents who fell into both of the previous categories. Other was comprised primarily of the heterosexual risk group.

Area of residence was divided into three locales. Rockland was considered as its own entity. Suburban Westchester and Putnam County were grouped into one category for analyses purposes. Urban Westchester was the third category and it was defined as the area south I287 in Westchester County.

T-cell count was assessed by self reported data, and separated out in this sub group were a number of respondents who did not know their T-Cell count for a variety of reasons.

Mental health was assessed by the Mental Health Component Summary Scale, or MCS, of the SF36. This is a nationally recognized scale consisting of a standardized set of questions that correlates with stages of disease. Scoring below 37 on the MCS is indicative of poor mental health. The cohort was divided into those scoring above 37 and those scoring 37 or less on the scale.

Mental health treatment was also considered a potential factor for housing related issues, and we

looked at those receiving mental health treatment compared those who were not receiving treatment regardless of their MCS score.

Housing status or stability was separated into two categories, stable and unstable. Unstably housed respondents reported at least one incidence of instability either doubled-up, in a shelter, jail or homeless in the six months prior to the interview.

## **Key Findings**

### Housing Arrangements - Table 1

Housing arrangements for the cohort, whether a respondent was renting, doubled-up or in an SRO, etc., did not vary from Wave 1 to Wave 2. The living arrangements for most of the Tri-County CHAIN participants remained stable from Wave 1 interviews in 2002 to Wave 2 interviews in 2003. There was a small increase in the proportion of people reporting they were renting an apartment, house, or room, and the percentage of respondents living in specialized AIDS housing also increased slightly from baseline to year 2. However, these changes were negligible. A decreased percentage of respondents indicated they were doubled-up, in a shelter, in drug treatment, homeless or, hospitalized over time. This decrease is probably associated with those who reported being doubled-up with a friend or relative in Wave 1 were now permanently living in those arrangements and felt stable about their housing.

### Housing Type by Subgroup - Tables 3 and 4

No differences were noted within the subgroups of race/ethnicity, T-Cell count, risk categories, or education level in the type of housing, either public, private, supportive or other housing arrangements, at the baseline interviews. There were some divisions among other sub groups for the first wave of interviewing. In the analyses of Wave 1, gender was associated with housing type. Significantly more men reported being in the private sector, doubled up, or in AIDS supportive housing. More women indicated they were in public or municipal housing. More urban residents reported they were in supportive AIDS housing, and higher proportions of private renters were found in Rockland and Suburban Westchester and Putnam County as compared to Urban Westchester.

Differences in housing types were noted among those receiving mental health services. Respondents living in supportive AIDS housing were more likely to report receiving MH treatment as compared to respondents living in other housing types in baseline interviews. Additionally, in Wave 1 or participants indicating their household income was between \$5,000 - \$10,000 were more likely to say they had been doubled up, in a shelter, jail or homeless within the last six months. Household composition also made a difference in the type of housing reported in the first wave. Adults living alone were most likely to be in supportive AIDS housing, and respondents with children more likely to report they lived in public housing.

Assessing the second round of interviews, no differences were found in the types of housing for the sub groups of race/ethnicity, T-Cell, risk category, educational level, mental health scores, or mental health treatment. More men in Wave 2, as in Wave 1, reported being in the private sector, and more women with children said they were living in public housing. Stable respondents compared to unstable were more likely to report they were private renters. Household income appeared to be associated with different housing types. The lowest income level was reported for those living in supportive AIDS

housing, and similar to Wave 1 findings, middle income level recipients, those earning \$5,000- \$10,000, were more likely to report being doubled-up or in a shelter (Table 3). Rockland and Suburban Westchester and Putnam residents more often reported they were in the private sector compared to those living in urban Westchester.

#### Need Analyses - Tables 5 and 6

The proportion of the cohort expressing any housing need remained stable across the two stages of interviews. In each wave 50% of the respondents expressed a housing need, either financial and or permanent. The proportions indicating respondents having either a financial or permanent need did not change over waves, 68% compared to 66% and 76% compared to 73% respectively.

Subgroup analyses of any housing need for Wave 1 shows no difference in housing problems within income levels, educational levels, area of residence, risk category, receipt of mental health services, or household income. However, differences were noted in gender race/ethnicity, T-Cell count, and mental health score. Women were more likely to say they had experienced any housing problems compared to men. White respondents were less likely to report having any housing needs compared to Black and Latino respondents.

Those respondents who did not know their T-Cell count or had a count less than 200 more often reported a housing need. Participants scoring less than 37 on the MCS , which indicated they were in poor mental health, reported housing problems more frequently than those with scores above 37. In Wave 2 interviews the variables area of residence, MH score, race/ethnicity were associated with reporting any housing problem during the six months prior to interviewing. Respondents residing in Rockland County were more to indicate they had a need for housing compared to residents of Westchester or Putnam. Black respondents compared to White or Latino respondents reported housing needs more often in the second round of interviews. Those with poor mental health scores again were more likely to report experiencing any housing need compared to respondents with better scores.

Financial need was expressed more often by men compared to women (see Table 6). Those respondents who were unstably housed, either doubled-up, in a shelter, or in jail within the six months prior to interviewing were more likely to express a financial housing need compared to those who were living in stable housing. Financial need was more often indicated by those at the lowest income level compared to the middle and upper income levels. Respondents earning less than \$5,000 per year were most often in need of financial help with their housing arrangements. Respondents with low MCS scores were more apt to report a financial housing need compared to respondents with better MCS scores.

Wave 2 data on financial need indicated the differences within sub groups were in MH scores and area of residence. As noted in Wave 1, low MH scores were associated with financial housing need and any housing problem. This difference was consistent in the follow-up interview. In Wave 2, Rockland residents were more likely to report a financial housing problem compared with residents in the other two counties. This finding was not indicated for Wave 1 data and could be a result of follow-up bias.

#### Permanent Need - Table 7

In the analysis of permanent housing needs more sub group differences were found in comparison to financial housing needs regardless of stage of interviewing. Respondents were more likely to report a housing need associated with being unstably housed or living in poor quality housing

compared to a housing need associated with inability to meet rent demands. In Wave 1 interviews, women compared to men and Black and Latino compared to White respondents were more likely to say they had a need for permanent housing.

Reporting a household income below \$5,000 and low MH were associated with permanent housing problems and these results mimic the sub group differences noted for those expressing any housing need. Within their sub groups, respondents whose T-Cells were over 500 were the least likely to report having a need for permanent housing. Among the different risk group categories, MSM were the least likely to indicate they had a need for permanent housing in Wave 1 interviews.

Permanent housing needs in Wave 2 interviews were more apparent in women compared to men, and in Black compared to White or Latino respondents. Other differences were seen in household income and educational level. Having less than a high school diploma was associated with permanent need and having a household income below \$5,000 compared to other income levels.

#### Agency Help Seeking -Table 8

Across waves there were no notable differences in proportions of the cohort seeking agency help with housing. None of the sub groups mentioned demonstrated significant changes in seeking agency help from Wave 1 to Wave 2. At baseline 41% of respondents said they sought agency help with their housing in the last six months compared to 46% of the cohort in Wave 2. Factors associated with seeking agency help in Wave 1 were having a household income below \$5,000 per year, living alone as compared to living with children and/or other adults, and gender. Women more than men responded they sought help from an agency for their housing in the last six months. In Wave 2, women were again more likely than men to report agency help regarding a housing problem. Respondents who said they did not have a high school diploma more often said they had sought agency help to resolve a housing issue compared to those with a high school diploma. The last factor noted to be associated with seeking agency help was receiving mental health services regardless of MCS score. Respondents who were engaged in mental health treatment were more likely to seek out an agency for help with a current housing problem.

#### Rent Burden - Table 9

Rent burden was expressed as the percentage of the respondent's household income which was devoted to their monthly rent, and it was assessed solely in Wave 2 interviews. No differences were seen in the rent burden among race/ethnicity, area of residence, housing stability, T-Cell count, educational level or household composition. Differences were noted in a few sub groups. Women were more likely to report a higher rent burden than men. Female respondents indicated they paid a higher proportion of their monthly income towards housing. Among the risk categories, MSM had the least rent burden compared to the other sub groups. Those respondents who were receiving mental health services tended to have 50-75% of their monthly income reserved for rent. Household income appeared to be associated with rent burden. Those respondents in the middle income level had a higher rent burden compared to respondents in the other income categories.

#### Housing Assessment Multi-Variate Model

In previous analyses as described above factors were examined individually to assess their potential to influence on housing arrangements, types of need, or the tendency to seek agency help for each wave of interviewing. These observations did not consider the possibility of other factors which drive the outcomes. For example, if living with children is associated with having a financial housing need it can not be determined if gender influences this outcomes more than household composition. In

other terms, because women are more likely to be living with children is the financial need associated with being or truly associated with living with children. A multi-variate analyses can eliminate confounding factors, and assess the effect of each variable alone. In the multi-variate model all of the sub groups are considered without the influence or confounding effects of the other variables. In other words, each variable is examined as if the others are all equal or held constant.

Three models were assessed to determine which attributes or circumstances had a significant influence on determining housing problems across both waves of interviewing. Each model considered the same variables or sub groups looked at in the previous analysis with some additions.

The multi-variate analyses asks the question in determining any housing need, whether permanent or financial, which factors had the most significant influence? There were five decisive factors in determining a housing need across waves. In the preceding analysis CD4 count, living in Rockland County, seeking agency help, having a low MH score, and living alone were the significant variables associated with reporting any housing need. The model presented here is examining financial housing problems indicates only four factors to have a significant influence. In our model, living in Rockland County, seeking out agency help, having a low MH scores, and being Black were the attributes which had the most impact on reporting a financial housing need. The last model determined which factors were most significantly associated with reporting a permanent housing need. Having a household income below \$5,000, being the only adult in the household, seeking agency help, and not knowing current CD4 counts were the elements most closely associated with permanent housing problems.

**Table 1 Housing Arrangements for the Tri-County CHAIN Cohort by Wave**

Type of Housing	Wave 1	Wave 2
N	398	315
<i>Owns apartment or house</i>	41 (10%)	33 (10%)
<i>Rents apartment or house</i>	250 (63%)	209 (66%)
<i>Doubled up</i>	28 (7%)	15 (5%)
<i>SRO, welfare motel,</i>	5 (1%)	4 (1%)
<i>Specialized AIDS housing</i>	44 (11%)	40 (13%)
<i>Drug treatment facility</i>	4 (1%)	1 (>1%)
<i>Shelter</i>	7 (2%)	3 (>1%)
<i>Nursing Home</i>	7 (2%)	3 (>1%)
<i>Hospital</i>	1(>1%)	3 (>1%)
<i>Jail</i>	1 (>1%)	0
<i>Other</i>	10 (3%)	3 (>1%)

**Table 2. Analysis of Housing Categories by Wave**

Type of Housing	Wave 1	Wave 2
N	398	315
Private Housing		

<i>Owns home</i>	41 (10%)	33 (10%)
<i>Rents private apt./room</i>	171 (43%)	117 (37%)
<i>Public housing</i>	89 (22%)	103 (33%)
<i>AIDS supportive housing</i>	44 (12%)	40 (13%)
<i>Other</i>	53 (13 %)	22 (7%)

**Table 3. Assessment of Housing Type and Characteristics For Wave 1 (2002)**

	<b>Private</b>	<b>Public</b>	<b>Supportive</b>	<b>Other</b>
<b>Gender**</b>				
<i>Female</i>	96 (45%)	60(67%)	18(41%)	20 (37%)
<i>Male</i>	116 (55%)	29 (33%)	26 (59%)	33 (62%)
<b>Race/ Ethnicity</b>				
<i>White</i>	53 (26%)	16 (19% )	6 (14%)	7 (13%)
<i>Black</i>	98 (48%)	45 (52%)	25 (57%)	29 (55%)
<i>Latino</i>	55 (27%)	25 (29%)	13 (30%)	17 (32%)
<b>Housing Status **</b>				
<i>Stable</i>	197 (93%)	85 (96%)	33 (75%)	13 (25%)
<i>Unstable</i>	15 (7%)	4 (4%)	11 (25%)	40 (75%)
<b>T-Cell count</b>				
<i>Below 200</i>	47 (22%)	14 (16%)	13 (30%)	7 (13%)
<i>201 - 350</i>	38 (18%)	11 (12%)	7 (16%)	6 (11%)
<i>351- 500</i>	39 (18%)	17 (19%)	9 (20%)	12 (23%)
<i>501 +</i>	69 (33%)	36 (40%)	12 (27%)	15 (28%)
<i>Don't know</i>	19 (9%)	11 (12%)	3 (7%)	13 (25%)
<b>Location***</b>				
<i>Urban Westchester</i>	103 (49%)	46 (52%)	34 (77%)	30 (57%)
<i>Suburban West/Putnam</i>	71 (33%)	18 (20%)	9 (20%)	14 (26%)
<i>Rockland</i>	38 (18%)	25 (28%)	1 (2%)	9 (17%)
<b>Risk Category</b>				
<i>MSM</i>	35 (17%)	10 (11%)	9 (20%)	8 (15%)

	<b>Private</b>	<b>Public</b>	<b>Supportive</b>	<b>Other</b>
<i>Problem drug use</i>	90 (42%)	34 (38%)	23 (52%)	17 (32%)
<i>MSM &amp; PDU</i>	8 (4%)	4 (4%)	1 (2%)	6 (11%)
<i>Other</i>	79 (37%)	41 (46%)	11 (25%)	22 (41%)
<b>Mental Health*</b>				
<i>Below 37 MCS</i>	66 (32%)	30 (34%)	15 (34%)	20 (38%)
<i>37 and above MCS</i>	146 (69%)	59 (66%)	39 (66%)	33 (62%)
<i>Receiving MH services</i>	84 (40%)	29 (33%)	24 (55%)*	15 (28%)
<i>Not receiving MH</i>	128 (60%)	60 (67%)	20 (45%)	38 (72%)
<b>Household Income***</b>				
<i>Below \$4,999</i>	18 (8%)	21 (24%)	12 (27%)	12 (24%)
<i>\$5,000 - 9,999</i>	60 (29%)	34 (39%)	23 (52%)	23 (45%)
<i>Above \$10,000</i>	131(63%)	33 (38%)	9 (20%)	16( 31%)
<b>Education</b>				
<i>Less than High School</i>	80 (38%)	44 (49%)	18 (41%)	23 (43%)
<i>High School diploma</i>	132 (62%)	45 (51%)	26 (59%)	30 (57%)
<b>Household composition***</b>				
<i>Alone</i>	62 (29%)	25 (28%)	37 (84%)	23 (46%)
<i>Adults only</i>	75 (35%)	15 (17%)	00	17 (34%)
<i>Lives w/ kids</i>	75 (35%)	48 (55%)	7 (16%)	10 (20%)

\* p < 0.05    \*\*p < 0.01    \*\*\* p < 0.001

**Table 4. Assessment of Housing Type and Characteristics For Wave 2 (2003)**

	Private	Public	Supportive	Other
<b>Gender***</b>				
<i>Female</i>	63 (42%)	71(69%)	18 (45%)	10 (45%)
<i>Male</i>	87 (58%)	32 (31%)	22 (55%)	12 (55%)
<b>Race/ Ethnicity</b>				
<i>White</i>	40 (28%)	15 (15%)	6 (15%)	2 (9%)
<i>Black</i>	65 (45%)	56 (55%)	24 (60%)	12 (57%)
<i>Latino</i>	39 (27%)	31 (30%)	10 (25%)	7 (33%)
<b>Housing Status **</b>				
<i>Stable</i>	147 (98%)	98 (95%)	33 (83%)	4 (18%)
<i>Unstable</i>	3 (2%)	5 (5%)	7 (18%)	18 (82%)
<b>T-Cell count</b>				
<i>Below 200</i>	23 (15%)	14 (14%)	8 (20%)	2 (9%)
<i>201 - 350</i>	29 (19%)	13 (13%)	6 (15%)	3 (14%)
<i>351- 500</i>	32 (21%)	21 (20%)	14 (35%)	3 (14%)
<i>501 +</i>	45 (30%)	34 (33%)	7 (18%)	8 (36%)
<i>Don't know</i>	19 (9%)	11 (12%)	3 (7%)	13 (25%)
<b>Location***</b>				
<i>Urban Westchester</i>	68 (46%)	67 (66%)	32 (80%)	13 (65%)
<i>Suburban West/Putnam</i>	56 (38%)	19 (19%)	7 (18%)	3 (15%)
<i>Rockland</i>	24 (16%)	16 (16%)	1 (3%)	4 (20%)
<b>Risk Category</b>				
<i>MSM</i>	32 (21%)	6 (61%)	8 (20%)	4 (18%)
<i>Problem drug use</i>	57 (38%)	44 (43%)	18 (45%)	10 (45%)
<i>MSM &amp; PDU</i>	5 (3%)	5 (5%)	2 (5%)	2 (9%)
<i>Other</i>	56 (37%)	48 (47%)	12 (30%)	6 (27%)
<b>Mental Health*</b>				
<i>Below 37 MCS</i>	46 (31 %)	44 ( 34%)	17 (43%)	7 (32%)
<i>37 and above MCS</i>	104 (69%)	59 (57%)	23 (58%)	15 (68%)
<i>Receiving MH services</i>	64 (43%)	45 (44%)	24 (60%)*	8 (36%)
<i>Not receiving MH</i>	86 (57%)	58 (56%)	16 (40%)	14 (64%)

	Private	Public	Supportive	Other
<b>Household Income***</b>				
<i>Below \$4,999</i>	6 (4%)	28 (27%)	8 (21%)	2 (10%)
<i>\$5,000 - 9,999</i>	41 (28%)	39 (38%)	23 (59%)	12 (57%)
<i>Above \$10,000</i>	102(68%)	35 (34%)	8 (21%)	7( 33%)
<b>Education</b>				
<i>Less than High School</i>	49 (33%)	49 (48%)	17 (43%)	10 (45%)
<i>High School diploma</i>	101 (67%)	54 (52%)	23 (58%)	12 (55%)
<b>Household composition***</b>				
<i>Alone</i>	50 (34%)	37 (37%)	33 (83%)	4 (18%)
<i>Adults only</i>	54 (37%)	13 (13%)	4 (10%)	14 (64%)
<i>Lives w/ kids</i>	42 (29%)	49 (50%)	3 (86%)	4 (18%)

\* p < 0.05    \*\*p < 0.01    \*\*\* p < 0.001

**Table 5. Analysis of Need by Wave**

Type of Housing Need	Wave 1	Wave 2
<b>Any housing need</b>	<b>198 (50%)</b>	<b>158 (39%)</b>
<b>Financial Problems</b>	<b>135 (68%)</b>	<b>105 (66%)</b>
<i>Difficulty paying rent</i>	120 (89%)	98 (93%)
<i>Administrative difficulties with subsidy</i>	2 (<1%)	0
<i>Facing eviction</i>	13 (10%)	7(7%)
<b>Permanent Problems</b>	<b>150 (76%)</b>	<b>116 (73%)</b>
<i>Unstable Housing/ doubled up</i>	43 (28%)	33 (28%)
<i>poor quality/ problems with neighborhood</i>	94 (61%)	74 (64%)
<i>physical access problems</i>	5 (3%)	3 (3%)
<i>Homeless</i>	13 (8%)	6 (5%)
<i>need to move</i>	25 (16%)	35 (30%)
<i>Transportation</i>	5 (3%)	0

**Table 5. Sub Group Differences for Any Housing Need**

Characteristic	Wave 1	Wave 2
N	198	158
<b>Gender</b>		
<i>Women</i>	110 (56%)**	89 (56%)
<i>Men</i>	88 (44%)	69 (44%)
<b>Race/Ethnicity</b>		
<i>White</i>	27 (14%)**	27 (18%)**
<i>Black</i>	107 (55%)	94 (61%)
<i>Latino</i>	61 (31%)	33 (21%)
<b>Housing Status</b>		
<i>Stable</i>	128 (65%***)	125 (79%***)
<i>Double /unstable</i>	70 (35%)	33 (21%)
<b>T-Cell count</b>		
<i>Below 200</i>	41 (21%)*	25 (16%)
<i>200- 350</i>	28 (14%)	22 (14%)
<i>350- 500</i>	45 (23%)	42 (27%)
<i>500 +</i>	54 (27%)	39 (25%)
<i>Don't know</i>	30 (15%)	29 (18%)
<b>Location</b>		
<i>Urban Westchester</i>	107 (54%)	91 (58%)*
<i>Suburban West/Putnam</i>	51 (26%)	35 (22%)
<i>Rockland</i>	40 (20%)	30 (19%)
<b>Risk Category</b>		
<i>MSM</i>	25 (13%)	19 (12%)
<i>Problem drug use</i>	80 (40%)	64 (40%)
<i>MSM &amp; PDU</i>	9 (5%)	7 (4%)
<i>Other</i>	84 (42%)	68 (43%)
<b>Mental Health</b>		
<i>Below 37 MCS</i>	78 (39%)**	66 (42%)*
<i>37 and above MCS</i>	120 (61%)	92 (58%)
<i>Receiving MH services</i>	75 (38%)	63 (40%)
<i>Not receiving MH services</i>	123 (62%)	95 (60%)

Characteristic	Wave 1	Wave 2
<b>Household Income</b>		
<i>Below \$4,999</i>	46 (24%)	26 (17%)
<i>\$5,000 - 9,999</i>	75 (39%)	58 (37%)
<i>Above \$10,000</i>	73 (38%)	73 (46%)
<b>Education</b>		
<i>Less than High School</i>	87 (44%)	69 (44%)
<i>High School diploma</i>	111 (56%)	89 (56%)
<b>Household composition</b>		
<i>Alone</i>	70 (36%)	64 (41%)
<i>Adults only</i>	48 (25%)	41 (26%)
<i>Lives w/ kids</i>	76 (40%)	50 (32%)

\* p < 0.05    \*\*p < 0.01    \*\*\* p < 0.001

**Table 6. Sub Group Differences for Financial Need**

	Wave 1	Wave 2
<b>N</b>	<b>135</b>	<b>105</b>
<b>Gender</b>		
<i>Women</i>	76 (56%)*	58 (55%)
<i>Men</i>	59 (44%)	47 (45%)
<b>Race/Ethnicity</b>		
<i>White</i>	19 (14%)	19 (18%)
<i>Black</i>	73 (55%)	60 (58%)
<i>Latino</i>	41(31%)	24 (23%)
<b>Housing Status</b>		
<i>Stable</i>	100 (74%)**	91 (87%)
<i>Double</i>	35 (26%)	14 (13%)
<b>T-Cell count</b>		
<i>Below 200</i>	29(21%)	15 (14%)
<i>200- 350</i>	17(13%)	13 (13%)
<i>350- 500</i>	32(24%)	28 (27%)
<i>500 +</i>	41(30%)	28 (27%)

	Wave 1	Wave 2
<i>Don't know</i>	16(12%)	20 (19%)
<b>Location</b>		
<i>Urban Westchester</i>	64 (47%)	58 (55%)*
<i>Suburban West/Putnam</i>	40(30%)	21 (20%)
<i>Rockland</i>	31(23%)	26 (25%)
<b>Risk Category</b>		
<i>MSM</i>	22 (12%)	14 (13%)
<i>Problem drug use</i>	73 (41%)	42 (40%)
<i>MSM &amp; PDU</i>	5 (3%)	5 (5%)
<i>Other</i>	78 (44%)	44 (42%)
<b>Mental Health</b>		
<i>Below 37 MCS*</i>	81 (60%)*	47 (45%)*
<i>37 and above MCS</i>	54 (40%)	58 (55%)
<i>Receiving MH services</i>	81 (60%)	43 (41%)
<i>Not receiving MH services</i>	54 (40%)	62 (59%)
<b>Household Income</b>		
<i>Below \$4,999</i>	32 (24%)*	14 (13%)
<i>\$5,000 - 9,999</i>	47 (34%)	35 (34%)
<i>Above \$10,000</i>	18 (13%)	55 (53%)
<b>Education</b>		
<i>Less than High School</i>	54 (40%)	42 (40%)
<i>High School diploma</i>	81(60%)	63 (60%)
<b>Household composition</b>		
<i>Alone</i>	48 (36%)	41 (40%)
<i>Adults only</i>	29 (60%)	29 (28%)
<i>Lives w/kids</i>	56 (42%)	33 (32%)

\* p < 0.05    \*\*p < 0.01    \*\*\* p < 0.001

**Table 7. Sub Group Differences for Permanent Need**

	Wave 1	Wave 2
N	150(38%)	116 (37%)
<b>Gender</b>		
<i>Women</i>	83 (55%)*	68 (59%)
<i>Men</i>	67 (45%)	48 (41%)
<b>Race/Ethnicity</b>		
<i>White</i>	18 (12%)**	17 (15%)*
<i>Black</i>	83 (56%)	69 (62%)
<i>Latino</i>	47(32)	26 (23%)
<b>Housing Status</b>		
<i>Stable</i>	80 (53%***)	83 (72%***)
<i>Double / Unstable</i>	70 (47%)	33 (28%)
<b>T-Cell count</b>		
<i>Below 200</i>	33 (22%)**	17 (15%)
<i>200- 350</i>	22 (15%)	16 (14%)
<i>350- 500</i>	33 (22%)	31 (27%)
<i>500 +</i>	36 (24%)	26 (23%)
<i>Don't know</i>	26 (17%)	25 (22%)
<b>Location</b>		
<i>Urban Westchester</i>	87 (58%)	71 (62%)
<i>Suburban West/Putnam</i>	37 (25%)	23 (20%)
<i>Rockland</i>	26 (17%)	20 (18%)
<b>Risk Category</b>		
<i>MSM</i>	13 (9%)*	12 (10%)
<i>Problem drug use</i>	64 (43%)	47 (41%)
<i>MSM &amp; PDU</i>	9 (6%)	5 (4 %)
<i>Other</i>	64 (43%)	52 (45%)
<b>Mental Health</b>		
<i>Below 37 MCS*</i>	59 (39%)*	47 (41%)
<i>37 and above MCS</i>	91 (61%)	69 (59%)

	Wave 1	Wave 2
<i>Receiving MH services</i>	56 (37%)	48 (41%)
<i>Not receiving MH services</i>	94 (63%)	68 (59%)
<b>Household Income</b>		
<i>Below \$4,999</i>	37 (25%)*	22 (19%)*
<i>\$5,000 - 9,999</i>	62 (42%)	46 (40%)
<i>Above \$10,000</i>	47 (32%)	47 (41%)
<b>Education</b>		
<i>Less than High School</i>	54 (40%)	55 (47%)*
<i>High School diploma</i>	81(60%)	61 (53%)
<b>Household composition</b>		
<i>Alone</i>	53 (36%)	49 (43%)
<i>Adults only</i>	36 (25%)	31 (27%)
<i>Lives w/kids</i>	57 (39%)	34 (30%)

\* p < 0.05    \*\*p < 0.01    \*\*\* p < 0.001

**Table 8. Sub Group Differences for Agency Help with Housing**

	Wave 1	Wave 2
<b>N</b>	<b>162</b>	<b>146</b>
<b>Gender</b>		
<i>Women</i>	95 (59%)*	87 (60%)*
<i>Men</i>	67 (41%)	59 (40%)
<b>Race/Ethnicity</b>		
<i>White</i>	30 (19%)	27 (19%)
<i>Black</i>	89 (56%)	74 (52%)
<i>Latino</i>	40 (25%)	42 (29%)
<b>Housing Status</b>		
<i>Stable</i>	130 (80%)	132 (90%)
<i>Double / Unstable</i>	32 (20%)	14 (10%)
<b>T-Cell count</b>		
<i>Below 200</i>	35 (22%)	23 (16%)
<i>201 - 350</i>	18 (11%)	22 (15%)

	Wave 1	Wave 2
<i>350- 500</i>	37 (23%)	34 (23%)
<i>500 +</i>	53 (33%)	41 (28%)
<i>Don't know</i>	19 (12%)	25 (17 %)
<b>Location</b>		
<i>Urban Westchester</i>	85 (52%)	82 (57%)
<i>Suburban West/Putnam</i>	41 (25%)	36 (25%)
<i>Rockland</i>	36 (22%)	26 (18%)
<b>Risk Category</b>		
<i>MSM</i>	17 (11%)	15 (10%)
<i>Problem drug use</i>	70 (43%)	68 (47%)
<i>MSM &amp; PDU</i>	6 (4%)	7 (5 %)
<i>Other</i>	69 (43%)	56 (38%)
<b>Mental Health</b>		
<i>Below 37 MCS*</i>	59 (36%)	61 (42%)
<i>37 and above MCS</i>	103 (64%)	85 (58%)
<i>Receiving MH services</i>	67 (41%)	76 (52%)*
<i>Not receiving MH services</i>	95 (59%)	70 (48%)
<b>Household Income</b>		
<i>Below \$4,999</i>	35 (22%)*	29 (20%)*
<i>\$5,000 - 9,999</i>	65 (40%)	59 (41%)
<i>Above \$10,000</i>	61 (38%)	56 (39%)
<b>Education</b>		
<i>Less than High School</i>	76 (47%)	73 (50%)*
<i>High School diploma</i>	86 (53%)	73 (50%)
<b>Household composition</b>		
<i>Alone</i>	65 (40%)*	63 (44%)
<i>Adults only</i>	26 (16%)	26 (18%)

	Wave 1	Wave 2
<i>Lives w/kids</i>	70 (44%)	54 (38%)

\* p < 0.05    \*\*p < 0.01    \*\*\* p < 0.001

**Table 9. Rent Burden - Percentage of household income**

	<25%	25-50%	50-75%	>75%
<b>Gender**</b>				
<i>Female</i>	8 (28%)	23(41%)	17(53%)	50 (64%)
<i>Male</i>	21 (72%)	33 (59%)	15 (47%)	28 (36%)
<b>Race/ Ethnicity</b>				
<i>White</i>	7 (25%)	11 (20%)	7 (23%)	8 (10%)
<i>Black</i>	10 (36%)	29 (52%)	15 (50%)	51 (66%)
<i>Latino</i>	11 (39%)	16 (29%)	8 (27%)	18 (23%)
<b>Housing Status</b>				
<i>Stable</i>	27 (93%)	52 (93%)	28 (88%)	73 (94%)
<i>Unstable</i>	2 (7%)	4 (7%)	4 (12%)	5 (6%)
<b>T-Cell count</b>				
<i>Below 200</i>	5 (17%)	10 (18%)	4 (12%)	9 (12%)
<i>201 - 350</i>	4 (14%)	12 (21%)	6 (19%)	7 (9%)
<i>351- 500</i>	8 (28%)	5 (9%)	13 (41%)	21 (27%)
<i>501 +</i>	9 (31%)	19 (34%)	5 (16%)	25 (32%)
<i>Don't know</i>	3 (10%)	10 (18%)	4 (12%)	15 (19%)
<b>Location</b>				
<i>Urban Westchester</i>	13 (46%)	30 (54%)	13 (42%)	52 (68%)
<i>Suburban West/Putnam</i>	11 (39%)	15 (27%)	9 (29%)	18 (23%)
<i>Rockland</i>	4 (14%)	11 (20%)	9 (29%)	7 (9%)
<b>Risk Category*</b>				
<i>MSM</i>	12 (41%)	6 (11%)	5 (16%)	7 (9%)
<i>Problem drug use</i>	8 (28%)	21 (38%)	12 (38%)	33 (42%)

	<25%	25-50%	50-75%	>75%
<i>MSM &amp; PDU</i>	2 (7%)	1 (2 %)	1 (3%)	3 (4%)
<i>Other</i>	7 (24%)	28 (50%)	14 (44%)	35 (45%)
<b>Mental Health</b>				
<i>Below 37 MCS</i>	11 (38 %)	21 (38%)	15 (47%)	23 (29%)
<i>37 and above MCS</i>	18 (62%)	35 (63%)	17 (53%)	55 (71%)
<i>Receiving MH services</i>	12 (41%)	17 (30%)	8 (25%)*	33 (42%)
<i>Not receiving MH</i>	17 (59%)	39 (70%)	24 (75%)	45 (58%)
<b>Household Income***</b>				
<i>Below \$4,999</i>	1 (3%)	0 (0%)	0 (0%)	17 (22%)
<i>\$5,000 - 9,999</i>	4 (14%)	20 (36%)	13 (41%)	37 (47%)
<i>Above \$10,000</i>	24(83%)	36 (64%)	19 (59%)	24( 31%)
<b>Education</b>				
<i>Less than High School</i>	6 (21%)	19 (34%)	13 (41%)	36 (46%)
<i>High School diploma</i>	23 (79%)	37 (66%)	19 (59%)	42 (54%)
<b>Household composition</b>				
<i>Alone</i>	13 (45%)	19 (35%)	16 (52%)	30 (40%)
<i>Adults only</i>	9 (31%)	19 (35%)	7 (23%)	16 (21%)
<i>Lives w/ kids</i>	7 (24%)	16 (30%)	8 (26%)	29 (39%)

\* p < 0.05    \*\*p < 0.01    \*\*\* p < 0.001

### Housing Assessment Multivariate Analysis

**Preface:** In considering sub-group differences, readers should consider that certain group characteristics may cluster together, thus making a determination of the most significant effect difficult to establish. For example, if most Latino men in the Tri-County CHAIN cohort live in Urban Westchester, and they tend to be healthier with t-cell counts over 500, than when one looks at self-reported health status and sees “men,” “Latinos,” and people living in Urban Westchester, one cannot tell if all men in the cohort are healthier than women, or if this is being driven by the preponderance of healthier Latino men in Urban Westchester. In order to estimate the individual effects more accurately, we have conducted a multivariate regression analysis, which looks at all the effects together. What this analysis does is look at each effect as if all the other factors are equal. In our example, the analysis would look at men, controlling for such other effects as being Latino, living in Urban Westchester, or having a high t-cell count. If after conducting this analysis men are still significantly healthier, this holds regardless as to whether the men are Latinos, live in Urban Westchester, or have high t-cell counts. The following illustrates the major factors associated with reporting housing problems over both waves of interviewing.

Factors most significantly associate with...		
Having any housing problems	Financial housing problems	Permanent housing problems
<ul style="list-style-type: none"> <li>- CD4 count</li> <li>- Living in Rockland</li> <li>- Seeking Agency help</li> <li>- Low mental health score</li> <li>- Living alone</li> </ul>	<ul style="list-style-type: none"> <li>- Being Black</li> <li>- Living in Rockland</li> <li>- Seeking agency help</li> <li>- Low mental health score</li> </ul>	<ul style="list-style-type: none"> <li>- Not knowing CD4 count</li> <li>- Seeking agency help</li> <li>- Household income below \$5,000</li> <li>- Being the only adult in the household</li> </ul>

*Considered in this analysis were the following variables: gender, race / ethnicity, housing stability, CD4 count, having comprehensive medical care, risk category, county of residence, agency help, mental health score, mental health services, household composition, educational level, household income, drug use history, and having children*