

CHAIN 2013-5b Report



Service Needs and Utilization
Tri-County
2012-2013

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C.H.A.I.N. REPORT

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Introduction

The CHAIN Project collects information on various aspects of an individual's life, including use of social and medical services, as well as demographic, behavioral and well-being measures relevant to need for those services. This CHAIN report updates an earlier series of service gaps and utilization reports (2004-1, 2005-3) and service needs and utilization reports (2008-1b, 2011-1b) with results from the most recent round of interviews (2011-2012). One to four measures of service need and a parallel measure of service utilization are defined for the following areas: health care, case management, mental health services, alcohol and drug (AOD) treatment, transportation, food and nutrition, and housing assistance. Home care has been added as a service category to the health care domain. This report includes three changes in definitions: ARV treatment support needs, permanent housing placement service utilization, and transportation needs. As in the previous analyses, sub-group differences are examined by gender, race/ethnicity, mental health, problem substance use, age, county of residence, HIV medical care setting, housing status, and place of birth.

The aims of this report are:

1. To examine levels of cohort need for and (among those with need) utilization of specific service categories fundable under Ryan White Part A;
2. To compare need and utilization of these services over time, for the current (2012-2013) interviews vs. the prior wave (2010-2012) of interviews;
3. To compare need and utilization of these services by population subgroup;
4. To identify service categories with high need and low utilization, for Ryan White planning purposes.

Key Findings

- From the 2010-2012 period to the 2012-013 period:
 - Service needs for rental assistance increased and needs for permanent housing placement decreased (see Table 1 for definitions and Table 4 for time trends).Service utilization increased for food service, permanent housing

placement, and transportation (Table 4). Service utilization declined for standard HIV medical care, AOD treatment, and rental assistance (Table 4).

- For the 2011-2013 period:
 - Standard HIV medical care, nutrition counseling, medical referral case management were identified as high need service areas with relatively low (below 50%) levels of utilization (see Table 5).
- For the 2012-2013 period:
 - Unstably housed participants stood out as a subgroup with above average need across multiple service areas (see Table 6). Participants with low mental health functioning reported below average levels of service utilization across multiple service categories (see Table 6).

Methodology

Tri-County CHAIN Cohort Study Samples

Data for this study come from 428 interviews completed with 350 Tri-County (TC) CHAIN cohort members between March 2010 and August 2013. To assess trends in service needs and utilization, we divided the interviews into two periods. The current period included 177 interviews completed between March 2012 and August 2013. The past period consisted of 251 interviews completed between March 2010 and February 2012. Seventy-eight individuals contributed interviews to both periods. Recruitment was conducted at 14 agencies for the 2010 cross-section and 13 agencies for the 2012 cross-section.

Study Variables

Service Need and Utilization Measures. NYC DOHMH and CHAIN staff developed thirteen pairs of service need and utilization measures for seven service domains: health care, case management, mental health, AOD treatment, transportation, food and nutrition services, and housing. After a review by Westchester DOH staff, a few of the need measures were revised to conform to the current policy environment in Tri-County. For this report, we have added to the health care domain a pair of measures related to home care, for which a need definition was recently developed as a part of CHAIN report (CHAIN Brief Report 2012-2) focused on that service category (and directed at informing local community planning

activities around providing home-based health care through Ryan White as a payer of last resort). Table 1 defines service needs and utilization measures used for Tri-County. A measure of need for a service often involved multiple criteria that took into account objective evidence based upon individual attributes such as health status and behavior, as well as an individual's perceived service need.

For some service categories, recent use of services was treated as a sufficient criterion—but not necessarily the only criterion—for recent need. Specifically, utilization was built into the need definition for service categories (such as rental assistance and food services) that based eligibility on recipients meeting objective need criteria. Utilization was also incorporated into the definition of need for service categories (such as professional mental health or AOD treatment) in which enrollment indicates the presence of a condition that is stigmatized to such a degree that individuals without the condition would generally not seek or accept the service. Utilization was also incorporated into the definition of need for ARV treatment support for which participation entails work for the client without any expected benefit to a client lacking the need. Finally, need definitions took into account whether a client would most likely revert to needing a service, in the event of termination/withdrawal of the service he or she had been receiving.

Current test and treat policy recommends that all HIV infected individuals should be on ARV treatment. However, the need definition in this CHAIN report for ARV treatment support service continues to allow for a delayed start of ARV treatment for persons with high CD4 counts (>350) to be consistent with treatment guidelines in effect during much of the study period.

Tri-County officials decided that all HIV seropositive individuals needed social service case management.

We instituted a few changes in definition of service needs and utilization from previous reports. Definition for transportation need was revised in to include individuals in need of home care services based on physical/mobility limitations, and utilization of service was

dropped as an indicator of need of transportation service to be comparable to the NYC definition. We simplified the need definition for permanent housing placement services by dropping “reported resolution of housing problem” as an indicator of service utilization, in line with the simpler utilization measure in other service areas.

Table 1: Measuring Needs and Utilization – Definitions

SERVICE AREA	Need	Utilization
HEALTH		
HIV Primary Care	Positive HIV serostatus	At least one visit to a primary care physician in the last six months
HIV Standard of Medical Care	Positive HIV serostatus	Six or more of the following services or procedures were received: (1) Visited HIV medical provider in last four months, in the last six months had (2) physical examination, (3) blood test, (4) CD4 test, (5) dental care, (6) received screening for ART adherence, (7) screened for risky sexual behavior, and (8) screened for substance abuse (where 2-8 are in the last six months)
ARV Treatment Support	(1) CD4 Count < 350 & not on ARV OR (2) incomplete adherence to ARV meds OR (3) adherence to ARV meds with support services	Support services for taking ARVs from professional providers in the last six months
Home Care	Report that (1) health limits a lot for moderate activities, like moving a table, carrying groceries, or pushing a vacuum cleaner AND (2) health limits a lot for climbing several flights of stairs	One or more of the following services in the last six months: (1) help or assistance at home including for medical problems, personal care, housekeeping, or other needs OR (2) services for home care to help with activities of daily living
CASE MANAGEMENT		
CM: Social Service	Positive HIV serostatus	One or more of the following services from a case manager in the last six months: (1) care plan development or revision for dealing with needs OR (2) referrals for social services OR (3) help filling out forms for benefits or entitlements
CM: Medical Referral	Positive HIV serostatus	Help from a case manager with access or referrals to medical services during the last six months

Table 1 (Continued): Measuring Needs and Utilization – Definitions

SERVICE AREA	Need	Utilization
MENTAL HEALTH (MH)		
Professional MH	(1) Poor mental health functioning (MCS≤37.0) OR (2) an inpatient, emergency room or mobile unit visit for psychiatric or mental health reason in the last six months OR (3) counseling from a mental health care professional or clinical social worker in the last six months.	Counseling from a mental health care professional or clinical social worker in the last six months
ALCOHOL OR DRUG (AOD)		
AOD Treatment	(1) Cocaine, crack or heroin use during the past year OR (2) heavy or problem drinking during the past six months OR (3) report that receiving AOD treatment was “considerably” or “extremely” important OR (4) any form of AOD treatment in last six months	Any form of AOD treatment in last six months
TRANSPORTATION		
Transportation	(1) Report of need for transportation assistance OR (2) report that a lack of transportation resulted in delayed or missed medical or social services in the past six months OR (3) need for home care services (see above definition based on physical limitations in ordinary activities)	Transportation services in the last six months
FOOD AND NUTRITION		
Food Services	(1) Not enough money in the household for food once in a while to very often in the last six months OR (2) a period without anything to eat in the last 30 days OR (3) receipt of food stamps OR (4) limited or no access to a kitchen OR (5) participation in a meal delivery program	One or more of the following services in the last six months: (1) Meals provided in a group setting, (2) prepared meals delivered to home, (3) food voucher or food from a food pantry
Nutrition counseling	Positive HIV serostatus	One-on-one food and nutrition counseling in the last six months

Table 1 (Continued): Measuring Needs and Utilization – Definitions

SERVICE AREA	Need	Utilization
HOUSING		
Permanent Housing Placement	Homelessness, temporary doubling up, or temporary/transitional housing for one or more days during the last 6 months	(1) Housing assistance or rental assistance during the past 6 months AND (2) current residence in stable housing
Rental Assistance	Stable housing at the previous interview AND (1) difficulty paying rent during the 6 months preceding the previous interview OR (2) eviction risk and insufficient income to secure housing (FMR>50% of income) in the 6 months preceding the previous interview OR (3) receipt of rental assistance (including living in public housing) at the time of the previous interview OR (4) insufficient money for rent during much of the 6 months preceding the previous interview OR (5) rent contribution over 50% of income at the time of the previous interview	(1) Rental assistance (including living in public housing) during the past 6 months AND (2) no difficulty paying rent in the past 6 months AND (3) report of “ never or only once in a while” lacking enough money for rent in the 6 months preceding the current interview.

Subgroup Variables. Table 2 lists the categories for subgroup analyses. These included gender, race/ethnicity, mental health, problem substance use, age, county of residence, HIV medical care setting (categorized into one of six types of primary care settings), housing stability, and place of birth. The gender variable represents CHAIN respondents' self-identified gender, rather than sex at birth as in previous CHAIN reports.

Mental health functioning was measured using the Medical Outcomes Study (MOS) SF-12v2 Mental Component Summary score (MCS; Ware, et al. 2002). Following Medical Outcomes Trust guidelines, we coded a score at or below 37 (range 0-100) as poor mental health functioning. Problem substance use was categorized as current, former, or no history. Former problem substance use was defined as use of heroin, cocaine, and/or crack five or more times in life (but not in the six months preceding the interview). Current problem substance use was defined as use of any of these drugs and/or problem drinking during the six months preceding the interview.

Housing status was measured as stable, unstable, or homeless, where stable was defined as residing in permanent housing. Unstable housing was defined as a report of staying for any part of the past six months in a transitional housing program, in AOD treatment housing, in jail, prison, or corrections housing with no other address, or "doubled-up" in someone else's housing. Individuals were considered homeless if they slept on the street or stayed in a shelter or an SRO or welfare hotel with no supportive services at any time during the past six months.

Table 2: Operationalization of Subgroup Variables

Subgroups	
Self-identified Gender:	Male, Female, Transgender
Race/Ethnicity:	White, Black, Hispanic/Latino, Other
Age Groups:	Age 19-39, age 40-49, age 50+
Mental Health:	(Using SF-12v2) MCS≤37(Poor/Mentally Ill), MCS>37(Good)
Problem Substance Use:	Never used crack/cocaine or heroin, Past use, Current use in the past 6 months
County of Residence:	Putnam, Rockland, Westchester
HIV Medical Care Setting:	HHC ^a , Non-HHC hospital, Freestanding community health clinic (CHC), AOD treatment/social service agencies, Private MD
Housing Status:	<ul style="list-style-type: none"> • Stable—individuals in permanent housing • Unstable—Individuals not currently in permanent housing but not literally homeless, including those in a transitional housing program, AOD treatment housing with no other address, or those temporarily doubled up with friends or family • Homeless—individuals who describe themselves as homeless or report sleeping on the street, in a shelter, or in an SRO or welfare hotel with no services in last six months
Place of Birth:	U.S., Puerto Rico, Other Country

^aHHC=Health and Hospitals Corporation

Table 3 displays sample size for subgroups listed in Table 2. In this and subsequent tables, findings are tabulated separately for the current (2012-2013) and past periods (2010-2012).

Table 3: Sample Characteristics

Sample	Past (2010-2012)	Current (2012-2013)
<i>Total Number of interviews</i>	N=251	N=177
Gender		
<i>Male</i>	42.6%	49.2%
RACE/ETHNICITY		
<i>Black</i>	55.8%	55.9%
<i>Hispanic/Latino</i>	27.9%	25.4%
<i>White</i>	13.9%	17.0%
MENTAL HEALTH		
<i>MCS≤37(Poor Mental Health)</i>	31.5%	27.1%
PROBLEM SUBSTANCE USE		
<i>Current</i>	15.1%	11.3%
<i>Past</i>	48.6%	46.3%
<i>Never</i>	36.3%	42.4%
AGE		
<i>19-39</i>	16.3%	13.6%
<i>40-49</i>	32.3%	26.7%
<i>50+</i>	51.4%	59.7%
COUNTY OF RESIDENCE		
<i>Putnam</i>	0.8%	1.1%
<i>Rockland</i>	12.0%	15.3%
<i>Westchester</i>	87.3%	83.6%
HIV MEDICAL CARE SETTING¹		
<i>No Primary Care</i>	0.4%	0.6%
<i>Voluntary Hospital</i>	74.2%	56.8%
<i>Community Health Center(CHC)/Clinic</i>	21.4%	33.0%
<i>AOD Treatment/Social Service Agency</i>	0.8%	0.6%
<i>Private MD</i>	3.6%	9.7%
HOUSING STABILITY		
<i>Stable</i>	77.3%	80.2%
<i>Unstable</i>	18.3%	16.4%
<i>Homeless</i>	4.4%	3.4%
PLACE OF BIRTH		
<i>U.S.</i>	79.3%	68.4%
<i>Puerto Rico</i>	5.6%	6.8%
<i>Other Country</i>	15.1%	24.9%

¹ Three (round 6) and One (round 7) participants reported receiving HIV medical care at New York City Health and Hospitals Corporation

Presentation of Findings and Analysis Plan

Table 4 presents the percentage of Tri-County CHAIN participants in need of each service and whether there was a significant difference between the current (2012-2013) and past (2010-2012) interviews. Additionally, Table 4 presents the percentage of service utilization among those in need, and whether there was a significant change between the current and recent past interviews. Table 5 cross-classifies service areas according to level of need and utilization. Service areas falling into the high need (>50%) and low utilization ($\leq 50\%$) category are of particular interest for more detailed investigation.

Subgroup differences were investigated through both tabular and regression methodologies. Table 6 presents a summary of these analyses and highlights subgroups with above average need for multiple services and below average service utilization. Tables with detailed findings that are the basis of Table 6 are placed in Appendix I of this report. The first series of tables in the Appendix, Tables 7A through 19A, display the percentages of each subgroup for each service area with need for the service and service utilization among those in need. Data are separately summarized for the current 2012-2013 interviews and recent past 2010-2012 interviews. Statistically significant ($p < .05$) subgroup differences are flagged with an asterisk (*). Shaded rows flag subgroups with sample sizes that are too small for permit reliable conclusions to be drawn from sample group differences and are therefore not interpreted.

Bivariate and multiple logistic regression models were estimated for a more rigorous identification of important subgroup differences for the current round of interviews (2012-2013). When subgroup variables were part of the definition of the service need measure they were dropped from the regression model for that service need regression. For example, mental health, problem substance use, and housing stability were removed from the social service case management need regression model. Mental health was removed from the professional mental health service need regression; problem substance use was removed from the AOD treatment service need regression, and housing stability from the permanent housing placement need regression. Detailed results for the logistic regression subgroup

analysis are presented in the Series B tables in Appendix I that follow their respective Series A tables.

Caution should be taken when comparing findings for the current and past interviews. The percentages of service need and utilization analysis for the 2012-2013 and 2010-2012 were calculated for different samples, with minimal overlap (65 individuals completed interviews in both periods). Therefore, differences between the two periods of interviews are not average change for repeated interviews with the same individual. However, large differences between periods may be cautiously interpreted to indicate temporal changes since individuals interviewed during 2010-2012 and 2012-2013 were recruited from the same sites following the same procedures.

We included a second way to explore subgroup differences in service needs and the adequacy of services utilized. We constructed summary indices of need and underutilized service. The first was a count of the number of service areas in which each CHAIN participant met the need criteria. The second was a count of the number of times an individual with need for a service failed to meet the utilization criteria. These indices ranged between 0 to 12. For the current period (2012-2013) estimated multiple regression equations to identify subgroups most vulnerable in terms of needs and underutilized services across multiple service areas. The results of this analysis can be found in Appendix II.

Results

Discussion of results is restricted to the summary of findings presented in Tables 4 through 6. The interested reader will find more detailed results displayed in the report's Appendix I.

Overall Service Needs and Utilization

Aside from those services defined as having universal needs, need for services for the earlier 2010-2012 period ranged from 15% for home care services to 88% for food services (see Table 4).

Table 4: Trends in Service Need and Utilization: Tri-County (Past=2010-2012 Interviews and Current=2012-2013 interviews)

	Needs			Utilization ^a		
	Past	Current	Trend	Past	Current	Trend
HIV Primary Care	100%†	100%†	N/A	98.4%	97.1%	—
Standard of HIV Medical Care	100%†	100%†	N/A	44.6%	31.1%	↓*
ARV Treatment Support	32.0%	34.9%	—	63.5%	63.0%	—
Home Care	15.1%	17.0%	—	18.4%	23.3%	↑
Social Service CM^b	100%†	100%†	N/A	70.5%	70.6%	—
Medical Referral CM^b	100%†	100%†	N/A	46.3%	44.6%	—
Professional MH^c	55.0%	53.1%	—	73.2%	69.2%	—
AOD^d Treatment	33.9%	31.1%	—	48.2%	32.7%	↓
Transportation	24.3%	23.2%	—	45.9%	56.1%	↑
Food Services	87.5%	83.4%	—	56.0%	73.6%	↑*
Nutrition counseling	100%†	100%†	N/A	18.8%	26.9%	↑
Permanent Housing Placement	17.1%	10.2%	↓*	32.6%	44.4%	↑
Rental Assistance	84.9%	94.4%	↑*	73.7%	61.1%	↓*

* Statistically Significant trend

†By definition

^aAs a percentage of those with a need for the service^bCM=Case Management^cMH=Mental Health^dAOD=Alcohol or Drug

For the current 2012-2013 period, service needs ranged from 10% for permanent housing placement to 94% for rental assistance service. The only service areas to register statistically significant changes in need were a decline in need for permanent housing and an increase in need for rental assistance services. As previously cautioned, the change in need for these areas may reflect change in need for services over time, but it may also result from the changing composition of the cohort due to recruitment of a new, small overlapping sample for the 2012-2013 interviews.

Utilization of services for the 2010-2012 period ranges from 18% for home care to 98% for HIV primary care. For the 2012-2013 period, utilization of services ranges from a low of 23%

of those in need of home care to over 97% for HIV primary care. Table 4 indicates that utilization increased for home care, transportation, food, nutrition counseling, and permanent housing placement service areas with the statistically significant gains in food service. Utilization declined in AOD treatment and rental assistance with the statistically significant decrease in rental assistance.

Table 5 presents a cross classification of the service areas by level of need and utilization for the current period that is helpful in isolating service areas for closer scrutiny. Using cut points of 50% or greater for high need and 50% or lower for low utilization, standard of HIV medical care, nutrition counseling, and medical referral case management stand out as high need services with relatively low level of utilization. Level of utilization is particularly low for nutrition counseling (27%).

Table 5: Cross-Classification of Service Areas by Level of Need and Utilization: Tri-County CHAIN 2012-2013 Interviews

		Service Utilization Level	
		High (>50%)	Low (≤50%)
Service Needs	High (>50%)	HIV Primary Care Social Service CM ^a Professional MH ^b Food Services Rental Assistance	Standard of HIV Medical care Medical Referral CM^a Nutrition Counseling
	Low (≤50%)	ARV Treatment Support Transportation	Home Care AOD ^c Treatment Permanent Housing Placement

^aCM=Case Management

^bMH=Mental Health

^cAOD=Alcohol or Drug

Subgroup Differences

Subgroup differences reveal a complex pattern that is not easily summarized. The interested reader may review the detailed findings in Appendix I. Table 6 lists the subgroups with service needs substantially above cohort average or levels of utilization substantially below the cohort average by service areas for the current period. The table lists subgroups that

exhibit statistically significant departures from other groups based on the regression models presented in Series B tables. Table 6 also lists subgroups in which all members by definitions in Table 1 are in need of a service (e.g. all low functioning mental participants need mental health services). Finally, Table 6 lists a few subgroups showed substantial deviations in the observed percentages presented in the Series A tables that failed to achieve statistical significance in the regression equations. Some subgroups that exhibited large statistical differences in the Series A tables were excluded from Table 6 because of very small sample sizes.

Examination of Table 6 indicates that subgroup differences in service needs were minimal, with the exception of the unstably housed who exhibited above average levels of service needs across four service areas. Participants reported never having problem substance use and participants with low mental health functioning exhibited below average levels of service utilization across three service categories.

Number of Needs and Underutilized Services

CHAIN cohort members typically had need for services in multiple areas. Out of twelve service areas, participants for the current cohort (2012-2013) had need in an average of eight service areas, ranging from six to twelve.² Twenty-three percent (23%) of participants were found to have ten or more needs. This high multiple need group accounted for 28% of the total number of needs across all twelve service areas. Among those in need, participants were under-utilizing services in an average of three service areas, ranging from none to nine. Thirteen percent (13%) of individuals had six or more underutilized service areas and accounted for 23% of overall underutilization. See Appendix II for detailed findings.

² Everyone has at least five needs by definition (for HIV primary care, standard of HIV primary care, social service CM, medical referral CM, and nutrition counseling). Mentally ill individuals, current problem substance users, and homeless persons have 1 additional need, by definition, for mental health, AOD treatment, or permanent housing placement services (respectively).

Table 6: Summary of Subgroups with Above Average Service Needs & Below Average Utilization: Tri-County Interviews (2012-2013)

SERVICE AREA	Service Need Subgroups with substantially higher than average levels of service need	Utilization Subgroups with substantially below average levels of utilization
HEALTH		
HIV Primary Care	By definition need is universal	[Too few individuals lacked utilization for reliable subgroup analysis]
Standard of HIV Medical Care	By definition need is universal	<ul style="list-style-type: none"> • Males • Whites/Blacks • Rockland residents • US-born participants
ARV Treatment Support	<ul style="list-style-type: none"> • Females* • Latinos • Unstably housed 	<ul style="list-style-type: none"> • Blacks • Age 50+ • US-born participants
Home Care	<ul style="list-style-type: none"> • Whites • Rockland residents • US-born participants* 	[Sample too small for reliable comparisons]
CASE MANAGEMENT (CM)		
CM: Social Service	By definition need is universal	
CM: Medical Referral	By definition need is universal	<ul style="list-style-type: none"> • Latinos • Never problem substance users* • 40-49-year-olds
MENTAL HEALTH (MH)		
Professional MH	<ul style="list-style-type: none"> • Whites*, Latinos • Mentally ill participants† • Unstably housed 	<ul style="list-style-type: none"> • Mentally ill participants* • CHC/ Clinic HIV care clients
ALCOHOL OR DRUG (AOD)		
AOD Treatment	<ul style="list-style-type: none"> • Males • Past problem substance users • CHC/Clinic HIV care clients • Unstably housed* • Current problem substance users† 	<ul style="list-style-type: none"> • Stably housed
TRANSPORTATION		
Transportation		[Sample too small for reliable comparisons]

Table 6 (Continued): Summary of Subgroups with Above Average Service Needs & Below Average Utilization: Tri-County Interviews (2012-2013)

SERVICE AREA	Service Need Subgroups with substantially higher than average levels of service need	Utilization Subgroups with substantially below average levels of utilization
FOOD AND NUTRITION		
Food Services	[Too few individuals lacked need for reliable subgroup analysis]	<ul style="list-style-type: none"> • Latinos • Mentally ill participants • Never problem substance users • Foreign born
Nutrition Counseling	By definition need is universal	<ul style="list-style-type: none"> • Males* • Whites/Blacks
HOUSING		
Permanent Housing Placement	<ul style="list-style-type: none"> • CHC/ clinic HIV care clients* • Unstably housed, Homeless individuals† 	[Sample too small for reliable comparisons]
Rental Assistance	[Too few individuals lacked need for reliable subgroup analysis]	<ul style="list-style-type: none"> • Whites, Latinos* • Mentally ill participants • Never problem substance users • Rockland county residents • CHC/ clinic HIV care clients

* Statistically significant subgroup difference

†By definition all subgroup members have need for this service

Appendix I

Series A Tables for Subgroup Differences in Service Needs and Utilization for Recent Past (2010-2012) and Current (2012-2013) Interviews.

An asterisk in the “total” row in the Series A tables indicates statistically significant differences ($<.05$) between the past and current time periods. An asterisk in the first row for a subgroup variable indicates statistically significant ($<.05$) subgroup differences for that variable.

Gray shaded cells indicate that caution should be taken when interpreting proportions of these independent variables because of very small sample size.

Series B Tables: Subgroup Logistic Regression Analysis for Current Interviews (2012-2013).

Series B tables (7B to 19B) report odds ratios for single and multiple logistic regressions. The reference category for an independent variable is noted with a “1.”

Table 7A: Tri-County Subgroup Differences, Ambulatory Health Care/ HIV Primary

	Past (2010-2012)		Current (2012-2013)	
	Need	Utilization	Need	Utilization
Total	ALL	98.4%	ALL	97.1%
Sex				
<i>Male</i>	ALL	98.1%	ALL	97.7%
<i>Female</i>	ALL	98.6%	ALL	96.6%
Race/ Ethnicity				
<i>White</i>	ALL	97.1%	ALL	96.7%
<i>Black</i>	ALL	97.8%	ALL	95.9%
<i>Hispanic/Latino</i>	ALL	100%	ALL	100%
<i>Other</i>	ALL	100%	ALL	100%
Mental Health				
<i>Poor</i>	ALL	98.7%	ALL	97.9%
<i>Good</i>	ALL	98.2%	ALL	96.9%
Problem Substance Use				
<i>Never Used</i>	ALL	96.7%	ALL	97.3%
<i>Past User</i>	ALL	99.2%	ALL	96.3%
<i>Current User</i>	ALL	100%	ALL	100%
Age Group				
<i>Age 19-39</i>	ALL	95.1%	ALL	95.7%
<i>Age 40-49</i>	ALL	100%	ALL	93.5%
<i>Age 50+</i>	ALL	98.4%	ALL	99.0%
County of Residence				
<i>Putnam</i>	ALL	100%	ALL	100%
<i>Rockland</i>	ALL	96.6%	ALL	92.6%
<i>Westchester</i>	ALL	98.6%	ALL	97.9%
HIV Medical Care				
<i>No HIV Provider</i>	ALL	N/A	ALL	N/A
<i>Have HIV Provider</i>	ALL	98.8%	ALL	97.7%
HIV Medical Care Setting				
<i>Voluntary Hospital</i>	ALL	99.5%	ALL	98.0%
<i>CHC/Clinic</i>	ALL	96.2%	ALL	98.2%
<i>AOD Treatment / Social Service</i>	ALL	100%	ALL	100%
<i>Private MD</i>	ALL	100%	ALL	94.1%
Housing Status				
<i>Stable</i>	ALL	99.0%	ALL	97.2%
<i>Unstable</i>	ALL	95.7%	ALL	96.4%
<i>Homeless</i>	ALL	100%	ALL	100%
Place of Birth				
<i>U.S.</i>	ALL	99.0%	ALL	97.5%
<i>Puerto Rico</i>	ALL	100%	ALL	100%
<i>Other Country</i>	ALL	94.7%	ALL	95.2%

Table 7B: Logistic Regression, Tri-County 2012-2013 Ambulatory Health Care/ HIV Primary Care

	Service Needs: Odds Ratios		Service Utilization: Odds Ratios	
	Bivariate	Multivariate	Bivariate	Multivariate
Gender			<i>p</i> =.681	
<i>Male</i>			1.465	2.895
<i>Female</i>			1	1
Race/ Ethnicity			<i>p</i> =.854	
<i>White</i>			1	1
<i>Black</i>			0.810	3.587
<i>Hispanic/Latino</i>			--	--
<i>Other</i>			--	--
Mental Health			<i>p</i> =.728	
<i>Poor</i>			1.484	1.230
<i>Good</i>			1	1
Problem Substance Use			<i>p</i> =.748	
<i>Never Used</i>			1	1
<i>Past User</i>			0.742	0.000***
<i>Current User</i>			--	--
Age Group			<i>p</i> =.239	
<i>Age 19-39</i>			0.212	0.000***
<i>Age 40-49</i>			0.138	0.194
<i>Age 50+</i>			1	1
Geographic Area			<i>p</i> =.155	
<i>Putnam</i>			--	--
<i>Rockland</i>			1	1
<i>Westchester</i>			3.813	8.013
HIV Medical Care				
<i>No HIV Provider</i>				
<i>Have HIV Provider</i>				
HIV Medical Care Setting			<i>p</i> =.618	
<i>Voluntary Hospital</i>			3.031	2.619
<i>CHC/Clinic</i>			3.500	1.621
<i>AOD Treatment / Social Service</i>			--	--
<i>Private MD</i>			1	1
Housing Status			<i>p</i> =.835	
<i>Stable</i>			1	--
<i>Unstable</i>			0.788	--
<i>Homeless</i>			--	--
Place of Birth			<i>p</i> =.469	
<i>U.S.</i>			1.967	0.954
<i>Puerto Rico</i>			--	--
<i>Other Country</i>			1	1

*Multivariate Model not estimated due to absence of variability in outcome (See Table 7A).

Table 8A: Tri-County Subgroup Differences, Standard of HIV Medical Care

	Past (2010-2012)		Current (2012-2013)	
	Need	Utilization	Need	Utilization
Total	ALL	44.6%	ALL	31.1%*
Gender				
<i>Male</i>	ALL	52.3%	ALL	24.1%
<i>Female</i>	ALL	38.9%	ALL	37.8%
Race/ Ethnicity				
<i>White</i>	ALL	54.3%	ALL	23.3%
<i>Black</i>	ALL	43.6%	ALL	24.2%
<i>Hispanic/Latino</i>	ALL	41.4%	ALL	48.9%
<i>Other</i>	ALL	50.0%	ALL	66.7%
Mental Health				
<i>Poor</i>	ALL	43.0%	ALL	41.7%
<i>Good</i>	ALL	45.3%	ALL	27.1%
Problem Substance Use				
<i>Never Used</i>	ALL	37.4%	ALL	30.7%
<i>Past User</i>	ALL	46.7%	ALL	29.3%
<i>Current User</i>	ALL	55.3%	ALL	40.0%
Age Group				
<i>Age 19-39</i>	ALL	41.5%	ALL	50.0%
<i>Age 40-49</i>	ALL	42.0%	ALL	29.8%
<i>Age 50+</i>	ALL	47.3%	ALL	26.7%
County of Residence				
<i>Putnam</i>	ALL	50.0%	ALL	100%
<i>Rockland</i>	ALL	40.0%	ALL	25.9%
<i>Westchester</i>	ALL	45.2%	ALL	31.1%
HIV Medical Care				
<i>No HIV Provider</i>	ALL	N/A	ALL	N/A
<i>Have HIV Provider</i>	ALL	44.8%	ALL	31.3%
HIV Medical Care Setting				
<i>Voluntary Hospital</i>	ALL	47.3%	ALL	28.0%
<i>CHC/Clinic</i>	ALL	39.6%	ALL	36.2%
<i>AOD Treatment / Social Service</i>	ALL	50.0%	ALL	100%
<i>Private MD</i>	ALL	33.3%	ALL	29.4%
Housing Status				
<i>Stable</i>	ALL	46.9%	ALL	27.5%
<i>Unstable</i>	ALL	32.6%	ALL	48.3%
<i>Homeless</i>	ALL	54.5%	ALL	33.3%
Place of Birth				
<i>U.S.</i>	ALL	44.2%	ALL	24.8%
<i>Puerto Rico</i>	ALL	61.5%	ALL	66.7%
<i>Other Country</i>	ALL	41.0%	ALL	38.6%

Table 8B: Logistic Regression, Tri-County 2012-2013 Standard of HIV Medical Care

	Service Needs: Odds Ratios		Service Utilization: Odds Ratios	
	Bivariate	Multivariate	Bivariate	Multivariate
Gender			<i>p</i> =.052	
<i>Male</i>			0.524	0.441
<i>Female</i>			1	1
Race/ Ethnicity			<i>p</i> =.013	
<i>White</i>			1	1
<i>Black</i>			1.051	0.975
<i>Hispanic/Latino</i>			3.143*	1.589
<i>Other</i>			6.571	7.508
Mental Health			<i>p</i> =.066	
<i>Poor</i>			1.918	1.301
<i>Good</i>			1	1
Problem Substance Use			<i>p</i> =.651	
<i>Never Used</i>			1	1
<i>Past User</i>			0.936	2.319
<i>Current User</i>			1.507	2.673
Age Group			<i>p</i> =.057	
<i>Age 19-39</i>			2.750*	2.345
<i>Age 40-49</i>			1.167	1.168
<i>Age 50+</i>			1	1
County of Residence			<i>p</i> =.594	
<i>Putnam</i>			--	--
<i>Rockland</i>			1	1
<i>Westchester</i>			1.289	1.452
HIV Medical Care				
<i>No HIV Provider</i>				
<i>Have HIV Provider</i>				
HIV Medical Care Setting			<i>p</i> =.558	
<i>Voluntary Hospital</i>			0.933	0.957
<i>CHC/Clinic</i>			1.362	1.345
<i>AOD Treatment / Social Service</i>			--	--
<i>Private MD</i>			1	1
Housing Status			<i>p</i> =.096	
<i>Stable</i>			1	1
<i>Unstable</i>			2.465*	2.285
<i>Homeless</i>			1.321	0.783
Place of Birth			<i>p</i> =.010	
<i>U.S.</i>			0.524	0.469
<i>PR</i>			3.176	2.579
<i>Other Country</i>			1	1

Table 9A: Tri-County Subgroup Differences, Treatment Support

	Past (2010-2012)		Current (2012-2013)	
	Need	Utilization	Need	Utilization
Total	32.0%	63.5%	34.9%	63.0%
Gender				
<i>Male</i>	23.8%	66.7%	22.0%	56.3%
<i>Female</i>	38.1%	62.0%	47.6%	65.8%
Race/ Ethnicity				
<i>White</i>	31.3%	90.0%	11.5%	100%
<i>Black</i>	32.4%	56.1%	31.6%	35.7%
<i>Hispanic/Latino</i>	34.3%	65.2%	54.8%	90.9%
<i>Other</i>	0.0%	--	66.7%	100%
Mental Health				
<i>Poor</i>	34.2%	59.3%	38.1%	69.2%
<i>Good</i>	30.9%	66.0%	33.9%	61.0%
Problem Substance Use				
<i>Never Used</i>	35.2%	66.7%	34.8%	73.9%
<i>Past User</i>	29.7%	55.9%	32.9%	62.5%
<i>Current User</i>	31.6%	80.0%	44.4%	28.6%
Age Group				
<i>Age 19-39</i>	19.5%	57.1%	33.3%	85.7%
<i>Age 40-49</i>	34.2%	65.4%	27.9%	63.6%
<i>Age 50+</i>	34.7%	63.4%	37.6%	57.1%
County of Residence				
<i>Putnam</i>	50.0%	100%	50.0%	100%
<i>Rockland</i>	23.3%	100%	20.0%	80.0%
<i>Westchester</i>	33.0%	59.1%	37.4%	60.4%
HIV Medical Care				
<i>No HIV Provider</i>	0.0%	--	100%	0.0%
<i>Have HIV Provider</i>	32.1%	63.5%	34.5%	64.2%
HIV Medical Care Setting				
<i>Voluntary Hospital</i>	32.4%	65.5%	38.3%	60.0%
<i>CHC/Clinic</i>	29.4%	71.4%	34.5%	68.8%
<i>AOD Treatment / Social Service</i>	50.0%	100%	0.0%	--
<i>Private MD</i>	33.3%	0.0%	13.3%	100%
Housing Status				
<i>Stable</i>	32.1%	63.2%	33.6%	63.4%
<i>Unstable</i>	28.3%	58.3%	46.2%	66.7%
<i>Homeless</i>	45.5%	80.0%	16.7%	0.0%
Place of Birth				
<i>U.S.</i>	32.3%	60.3%	29.2%	50.0%
<i>PR</i>	46.2%	66.7%	90.9%	80.0%
<i>Other Country</i>	25.6%	80.0%	35.7%	78.6%

Table 9B: Logistic Regression, Tri-County 2012-2013 Treatment Support

	Service Needs: Odds Ratios		Service Utilization: Odds Ratios	
	Bivariate	Multivariate	Bivariate	Multivariate
Gender	<i>p</i> =.001		<i>p</i> =.513	
Male	0.309***	0.242**	0.669	
Female	1	1	1	
Race/ Ethnicity	<i>p</i> =.004		<i>p</i> =.001	
White	1	1	--	
Black	3.538	2.350	0.056***	
Hispanic/Latino	9.281**	3.234	1	
Other	15.333*	19.226*	--	
Mental Health	<i>p</i> =.621		<i>p</i> =.596	
Poor	1.201	0.690	1.440	
Good	1	1	1	
Problem Substance Use	<i>p</i> =.656		<i>p</i> =.131	
Never Used	1	1	1	
Past User	0.920	1.380	0.588	
Current User	1.500	3.461	0.141*	
Age Group	<i>p</i> =.533		<i>p</i> =.414	
Age 19-39	0.947	0.482	4.500	
Age 40-49	0.642	0.629	1.313	
Age 50+	1	1	1	
County of Residence	<i>p</i> =.238		<i>p</i> =.409	
Putnam	4.000	--	--	
Rockland	1	1	1	
Westchester	2.391	2.841	0.382	
HIV Medical Care				
No HIV Provider				
Have HIV Provider				
HIV Medical Care Setting	<i>p</i> =.208		<i>p</i> =.554	
Voluntary Hospital	4.034	6.806	0.682	
CHC/Clinic	3.431	6.036	1	
AOD Treatment / Social Service	--	--	--	
Private MD	1	1	--	
Housing Status	<i>p</i> =.314		<i>p</i> =.838	
Stable	1	1	1	
Unstable	1.695	2.223	1.154	
Homeless	0.396	0.000***	--	
Place of Birth	<i>p</i> =.011		<i>p</i> =.104	
U.S.	0.742	0.644	0.273	
PR	18.000***	3.93e+07***	1.091	
Other Country	1	1	1	

Table 10A: Tri-County Subgroup Differences, Home Care

	Past (2010-2012)		Current (2012-2013)	
	Need	Utilization	Need	Utilization
Total	15.1%	18.4%	17.0%	23.3%
Gender				
<i>Male</i>	12.1%	23.1%	14.9%	23.1%
<i>Female</i>	17.4%	16.0%	18.9%	23.5%
Race/ Ethnicity				
<i>White</i>	28.6%	30.0%	23.3%	28.6%
<i>Black</i>	12.9%	22.2%	16.2%	25.0%
<i>Hispanic/Latino</i>	10.0%	0.0%	13.3%	0.0%
<i>Other</i>	50.0%	0.0%	33.3%	100%
Mental Health				
<i>Poor</i>	12.7%	20.0%	10.4%	20.0%
<i>Good</i>	16.3%	17.9%	19.4%	24.0%
Problem Substance Use				
<i>Never Used</i>	17.6%	25.0%	13.3%	30.0%
<i>Past User</i>	13.9%	11.8%	20.7%	23.5%
<i>Current User</i>	13.2%	20.0%	15.0%	0.0%
Age Group				
<i>Age 19-39</i>	9.8%	0.0%	16.7%	50.0%
<i>Age 40-49</i>	8.6%	14.3%	14.9%	0.0%
<i>Age 50+</i>	20.9%	22.2%	18.1%	26.3%
County of Residence				
<i>Putnam</i>	0.0%	--	0.0%	--
<i>Rockland</i>	13.3%	50.0%	22.2%	16.7%
<i>Westchester</i>	15.5%	14.7%	16.2%	25.0%
HIV Medical Care				
<i>No HIV Provider</i>	0.0%	--	0.0%	--
<i>Have HIV Provider</i>	15.2%	18.4%	17.0%	23.3%
HIV Medical Care Setting				
<i>Voluntary Hospital</i>	16.8%	19.4%	17.0%	29.4%
<i>CHC/Clinic</i>	11.3%	0.0%	17.2%	20.0%
<i>AOD Treatment / Social Service</i>	50.0%	100%	0.0%	--
<i>Private MD</i>	0.0%	--	17.6%	0.0%
Housing Status				
<i>Stable</i>	14.4%	25.0%	16.2%	21.7%
<i>Unstable</i>	17.4%	0.0%	17.2%	40.0%
<i>Homeless</i>	18.2%	0.0%	33.3%	0.0%
Place of Birth				
<i>U.S.</i>	15.6%	19.4%	22.3%	25.9%
<i>Puerto Rico</i>	7.7%	0.0%	16.7%	0.0%
<i>Other Country</i>	15.4%	16.7%	2.3%	0.0%

Table 10B: Logistic Regression, Tri-County 2012-2013 Home Care

	Service Needs: Odds Ratios		Service Utilization: Odds Ratios	
	Bivariate	Multivariate	Bivariate	Multivariate
Gender	<i>p</i> =.486		<i>p</i> =.977	
<i>Male</i>	0.754	0.502	0.975	0.087
<i>Female</i>	1	1	1	1
Race/ Ethnicity	<i>p</i> =.608		<i>p</i> =.861	
<i>White</i>	1	1	1	1
<i>Black</i>	0.633	0.541	0.833	1.000
<i>Hispanic/Latino</i>	0.505	0.605	--	--
<i>Other</i>	1.643	4.990	--	--
Mental Health	<i>p</i> =.166		<i>p</i> =.850	
<i>Poor</i>	0.484	0.692	0.792	7.913
<i>Good</i>	1	1	1	1
Problem Substance Use	<i>p</i> =.460		<i>p</i> =.717	
<i>Never Used</i>	1	1	1	1
<i>Past User</i>	1.700	0.910	0.718	1.162
<i>Current User</i>	1.147	0.583	--	--
Age Group	<i>p</i> =.889		<i>p</i> =.372	
<i>Age 19-39</i>	0.905	1.077	2.800	
<i>Age 40-49</i>	0.792	0.723	--	
<i>Age 50+</i>	1	1	1	
County of Residence	<i>p</i> =.450		<i>p</i> =.674	
<i>Putnam</i>	--	--	--	--
<i>Rockland</i>	1	1	1	1
<i>Westchester</i>	0.677	0.417	1.667	0.181
HIV Medical Care				
<i>No HIV Provider</i>				
<i>Have HIV Provider</i>				
HIV Medical Care Setting	<i>p</i> =.998		<i>p</i> =.599	
<i>Voluntary Hospital</i>	0.956	1.139	1.667	0.488
<i>CHC/Clinic</i>	0.972	1.626	1	1
<i>AOD Treatment / Social Service</i>	--	--	--	--
<i>Private MD</i>	1	1	--	--
Housing Status	<i>p</i> =.571		<i>p</i> =.410	
<i>Stable</i>	1	1	1	1
<i>Unstable</i>	1.078	1.536	2.400	1.762
<i>Homeless</i>	2.587	3.683	--	--
Place of Birth	<i>p</i> =.051			
<i>U.S.</i>	12.351*	21.546*		
<i>Puerto Rico</i>	8.600	11.901		
<i>Other Country</i>	1	1		

Table 11A: Tri-County Subgroup Differences, Social Services Case Management

	Past (2010-2012)		Current (2012-2013)	
	Need	Utilization	Need	Utilization
Total	ALL	70.5%	ALL	70.6%
Gender				
<i>Male</i>	ALL	75.7%	ALL	70.1%
<i>Female</i>	ALL	66.7%	ALL	71.1%
Race/ Ethnicity				
<i>White</i>	ALL	81.8%	ALL	66.7%
<i>Black</i>	ALL	72.3%	ALL	66.7%
<i>Hispanic/Latino</i>	ALL	63.2%	ALL	80.0%
<i>Other</i>	ALL	50.0%	ALL	100%
Mental Health				
<i>Poor</i>	ALL	75.3%	ALL	77.1%
<i>Good</i>	ALL	68.3%	ALL	68.2%
Problem Substance Use				
<i>Never Used</i>	ALL	72.7%	ALL	70.7%
<i>Past User</i>	ALL	67.2%	ALL	69.5%
<i>Current User</i>	ALL	75.7%	ALL	75.0%
Age Group				
<i>Age 19-39</i>	ALL	72.5%	ALL	79.2%
<i>Age 40-49</i>	ALL	65.0%	ALL	66.0%
<i>Age 50+</i>	ALL	73.4%	ALL	70.5%
County of Residence				
<i>Putnam</i>	ALL	100%	ALL	100%
<i>Rockland</i>	ALL	82.8%	ALL	81.5%
<i>Westchester</i>	ALL	68.5%	ALL	68.2%
HIV Medical Care				
<i>No HIV Provider</i>	ALL	100%	ALL	0.0%
<i>Have HIV Provider</i>	ALL	70.4%	ALL	71.0%
HIV Medical Care Setting				
<i>Voluntary Hospital</i>	ALL	68.5%	ALL	70.0%
<i>CHC/Clinic</i>	ALL	75.0%	ALL	75.9%
<i>AOD Treatment / Social Service</i>	ALL	100%	ALL	100%
<i>Private MD</i>	ALL	88.9%	ALL	58.8%
Housing Status				
<i>Stable</i>	ALL	69.3%	ALL	69.0%
<i>Unstable</i>	ALL	77.3%	ALL	75.9%
<i>Homeless</i>	ALL	63.6%	ALL	83.3%
Place of Birth				
<i>U.S.</i>	ALL	73.6%	ALL	66.1%
<i>Puerto Rico</i>	ALL	76.9%	ALL	83.3%
<i>Other Country</i>	ALL	52.6%	ALL	79.5%

Table 11B: Logistic Regression, Tri-County 2012-2013 Social Services Case Management

	Service Needs: Odds Ratios		Service Utilization: Odds Ratios	
	Bivariate	Multivariate	Bivariate	Multivariate
Gender			<i>p</i> =.885	
<i>Male</i>			0.953	0.906
<i>Female</i>			1	1
Race/ Ethnicity			<i>p</i> =.253	
<i>White</i>			1	1
<i>Black</i>			1.000	1.147
<i>Hispanic/Latino</i>			2.000	1.791
<i>Other</i>			--	--
Mental Health			<i>p</i> =.253	
<i>Poor</i>			1.567	1.236
<i>Good</i>			1	1
Problem Substance Use			<i>p</i> =.891	
<i>Never Used</i>			1	1
<i>Past User</i>			0.946	1.494
<i>Current User</i>			1.245	1.506
Age Group			<i>p</i> =.521	
<i>Age 19-39</i>			1.592	1
<i>Age 40-49</i>			0.812	1.071
<i>Age 50+</i>			1	0.748
County of Residence			<i>p</i> =.174	
<i>Putnam</i>			--	--
<i>Rockland</i>			1	1
<i>Westchester</i>			0.488	0.455
HIV Medical Care				
<i>No HIV Provider</i>				
<i>Have HIV Provider</i>				
HIV Medical Care Setting			<i>p</i> =.389	
<i>Voluntary Hospital</i>			1.633	1.797
<i>CHC/Clinic</i>			2.200	2.077
<i>AOD Treatment / Social Service</i>			--	--
<i>Private MD</i>			1	1
Housing Status			<i>p</i> =.607	
<i>Stable</i>			1	1
<i>Unstable</i>			1.411	1.3406
<i>Homeless</i>			2.245	1.634
Place of Birth			<i>p</i> =.159	
<i>U.S.</i>			0.502	1
<i>Puerto Rico</i>			1.286	0.518
<i>Other Country</i>			1	0.697

Table 12A: Tri-County Subgroup Differences, Medical Referral Case Management

	Past (2010-2012)		Current (2012-2013)	
	Need	Utilization	Need	Utilization
Total	ALL	46.3%	ALL	44.6%
Gender				
<i>Male</i>	ALL	52.4%	ALL	42.5%
<i>Female</i>	ALL	41.8%	ALL	46.7%
Race/ Ethnicity				
<i>White</i>	ALL	54.5%	ALL	56.7%
<i>Black</i>	ALL	48.2%	ALL	47.5%
<i>Hispanic/Latino</i>	ALL	42.6%	ALL	26.7%
<i>Other</i>	ALL	0.0%	ALL	100%
Mental Health				
<i>Poor</i>	ALL	49.4%	ALL	54.2%
<i>Good</i>	ALL	44.9%	ALL	41.1%
Problem Substance Use				
<i>Never Used</i>	ALL	51.1%	ALL	37.3%
<i>Past User</i>	ALL	44.5%	ALL	51.2%
<i>Current User</i>	ALL	40.5%	ALL	45.0%
Age Group				
<i>Age 19-39</i>	ALL	45.0%	ALL	58.3%
<i>Age 40-49</i>	ALL	43.8%	ALL	38.3%
<i>Age 50+</i>	ALL	48.4%	ALL	44.8%
County of Residence				
<i>Putnam</i>	ALL	50.0%	ALL	100%
<i>Rockland</i>	ALL	44.8%	ALL	55.6%
<i>Westchester</i>	ALL	46.5%	ALL	41.9%
HIV Medical Care				
<i>No HIV Provider</i>	ALL	0.0%	ALL	0.0%
<i>Have HIV Provider</i>	ALL	46.5%	ALL	44.9%
HIV Medical Care Setting				
<i>Voluntary Hospital</i>	ALL	45.5%	ALL	42.0%
<i>CHC/Clinic</i>	ALL	53.8%	ALL	50.0%
<i>AOD Treatment / Social Service†</i>	ALL	50.0%	ALL	100%
<i>Private MD</i>	ALL	33.3%	ALL	41.2%
Housing Status				
<i>Stable</i>	ALL	45.0%	ALL	43.7%
<i>Unstable</i>	ALL	50.0%	ALL	48.3%
<i>Homeless</i>	ALL	54.5%	ALL	50.0%
Place of Birth				
<i>U.S.</i>	ALL	45.1%	ALL	49.6%
<i>Puerto Rico</i>	ALL	61.5%	ALL	8.3%
<i>Other Country</i>	ALL	47.4%	ALL	40.9%

Table 12B: Logistic Regression, Tri-County 2012-2013 Medical Referral Case Management

	Service Needs: Odds Ratios		Service Utilization: Odds Ratios	
	Bivariate	Multivariate	Bivariate	Multivariate
Gender			<i>p</i> =.581	
<i>Male</i>			0.846	0.516
<i>Female</i>			1	1
Race/ Ethnicity			<i>p</i> =.023	
<i>White</i>			1	1
<i>Black</i>			0.691	0.813
<i>Hispanic/Latino</i>			0.278*	0.490
<i>Other</i>			--	--
Mental Health			<i>p</i> =.122	
<i>Poor</i>			1.695	2.203
<i>Good</i>			1	1
Problem Substance Use			<i>p</i> =.221	
<i>Never Used</i>			1	1
<i>Past User</i>			1.762	2.793*
<i>Current User</i>			1.373	1.250
Age Group			<i>p</i> =.284	
<i>Age 19-39</i>			1.728	1
<i>Age 40-49</i>			0.766	1.963
<i>Age 50+</i>			1	0.622
County of Residence			<i>p</i> =.193	
<i>Putnam</i>			--	--
<i>Rockland</i>			1	1
<i>Westchester</i>			0.577	0.443
HIV Medical Care				
<i>No HIV Provider</i>				
<i>Have HIV Provider</i>				
HIV Medical Care Setting			<i>p</i> =.598	
<i>Voluntary Hospital</i>			1.034	1.672
<i>CHC/Clinic</i>			1.429	3.391
<i>AOD Treatment / Social Service</i>			--	--
<i>Private MD</i>			1	1
Housing Status			<i>p</i> =.870	
<i>Stable</i>			1	1
<i>Unstable</i>			1.204	1.073
<i>Homeless</i>			1.290	2.279
Place of Birth			<i>p</i> =060	
<i>U.S.</i>			1.421	1.360
<i>Puerto Rico</i>			0.131	0.090*
<i>Other Country</i>			1	1

Table 13A: Tri-County Subgroup Differences, Mental Health - Professional

	Past (2010-2012)		Current (2012-2013)	
	Need	Utilization	Need	Utilization
Total	55.0%	73.2%	53.1%	69.2%
Gender				
<i>Male</i>	51.4%	67.3%	49.4%	65.1%
<i>Female</i>	57.6%	77.1%	56.7%	72.5%
Race/ Ethnicity				
<i>White</i>	57.1%	90.0%	63.3%	68.4%
<i>Black</i>	46.4%	73.8%	42.4%	64.3%
<i>Hispanic/Latino</i>	71.4%	64.0%	71.1%	75.0%
<i>Other</i>	50.0%	100%	33.3%	100%
Mental Health				
<i>Poor</i>	ALL	58.2%	ALL	47.9%
<i>Good</i>	34.3%	93.2%	35.7%	91.3%
Problem Substance Use				
<i>Never Used</i>	53.8%	63.3%	50.7%	68.4%
<i>Past User</i>	54.1%	83.3%	51.2%	71.4%
<i>Current User</i>	60.5%	65.2%	70.0%	64.3%
Age Group				
<i>Age 19-39</i>	68.3%	67.9%	58.3%	42.9%
<i>Age 40-49</i>	61.7%	72.0%	51.1%	70.8%
<i>Age 50+</i>	46.5%	76.7%	52.4%	76.4%
County of Residence				
<i>Putnam</i>	100%	50.0%	100%	50.0%
<i>Rockland</i>	36.7%	54.5%	44.4%	25.0%
<i>Westchester</i>	57.1%	75.2%	54.1%	76.2%
HIV Medical Care				
<i>No HIV Provider</i>	0.0%	--	0.0%	--
<i>Have HIV Provider</i>	55.2%	73.2%	53.4%	69.1%
HIV Medical Care Setting				
<i>Voluntary Hospital</i>	57.6%	75.5%	55.0%	80.0%
<i>CHC/Clinic</i>	47.2%	64.0%	48.3%	53.6%
<i>AOD Treatment / Social Service</i>	50.0%	100%	100%	0.0%
<i>Private MD</i>	66.7%	66.7%	58.8%	60.0%
Housing Status				
<i>Stable</i>	52.6%	78.4%	50.7%	70.8%
<i>Unstable</i>	60.9%	50.0%	62.1%	61.1%
<i>Homeless</i>	72.7%	87.5%	66.7%	75.0%
Place of Birth				
<i>U.S.</i>	52.8%	78.1%	50.4%	77.0%
<i>Puerto Rico</i>	76.9%	60.0%	83.3%	80.0%
<i>Other Country</i>	59.0%	56.5%	52.3%	43.5%

Table 13B: Logistic Regression, Tri-County 2012-2013 Mental Health - Professional

	Service Needs: Odds Ratios		Service Utilization: Odds Ratios	
	Bivariate	Multivariate	Bivariate	Multivariate
Gender	<i>p</i> =.336		<i>p</i> =.440	
<i>Male</i>	0.747	0.630	0.706	1.622
<i>Female</i>	1	1	1	1
Race/ Ethnicity	<i>p</i> =.009		<i>p</i> =.620	
<i>White</i>	1	1	1	1
<i>Black</i>	0.427*	0.290*	0.831	0.472
<i>Hispanic/Latino</i>	1.425	0.809	1.385	0.963
<i>Other</i>	0.289	0.173	--	--
Mental Health			<i>p</i> =.000	
<i>Poor</i>			0.088***	0.060**
<i>Good</i>			1	1
Problem Substance Use	<i>p</i> =.290		<i>p</i> =.877	
<i>Never Used</i>	1	1	1	1
<i>Past User</i>	1.022	1.173	1.154	0.135*
<i>Current User</i>	2.272	3.705	0.831	0.154
Age Group	<i>p</i> =.837		<i>p</i> =.067	
<i>Age 19-39</i>	1.273	1	0.232*	1
<i>Age 40-49</i>	0.949	1.497	0.752	0.336
<i>Age 50+</i>	1	1.167	1	2.773
County of Residence	<i>p</i> =.361		<i>p</i> =.006	
<i>Putnam</i>	--	--	3.000	--
<i>Rockland</i>	1	1	1	1
<i>Westchester</i>	1.471	1.365	9.632**	48.089***
HIV Medical Care				
<i>No HIV Provider</i>				
<i>Have HIV Provider</i>				
HIV Medical Care Setting	<i>p</i> =.637		<i>p</i> =.042	
<i>Voluntary Hospital</i>	0.856	0.915	2.667	3.032
<i>CHC/Clinic</i>	0.653	0.542	0.769	0.865
<i>AOD Treatment / Social Service</i>	--	--	--	--
<i>Private MD</i>	1	1	1	1
Housing Status	<i>p</i> =.433		<i>p</i> =.708	
<i>Stable</i>	1	1	1	1
<i>Unstable</i>	1.591	1.467	0.647	1.564
<i>Homeless</i>	1.944	0.850	1.235	7.904
Place of Birth	<i>p</i> =.136		<i>p</i> =.013	
<i>U.S.</i>	0.928	0.800	4.364**	12.262*
<i>Puerto Rico</i>	4.565	2.734	5.200	24.999*
<i>Other Country</i>	1	1	1	1

Table 14A: Tri-County Subgroup Differences, AOD Treatment

	Past (2010-2012)		Current (2012-2013)	
	Need	Utilization	Need	Utilization
Total	33.9%	48.2%	31.1%	32.7%
Gender				
<i>Male</i>	42.1%	35.6%	36.8%	34.4%
<i>Female</i>	27.8%	62.5%	25.6%	30.4%
Race/ Ethnicity				
<i>White</i>	48.6%	52.9%	26.7%	37.5%
<i>Black</i>	36.4%	43.1%	35.4%	28.6%
<i>Hispanic/Latino</i>	24.3%	58.8%	26.7%	41.7%
<i>Other</i>	0.0%	--	0.0%	--
Mental Health				
<i>Poor</i>	38.0%	46.7%	35.4%	29.4%
<i>Good</i>	32.0%	49.1%	29.5%	34.2%
Problem Substance Use				
<i>Never Used</i>	4.4%	50.0%	1.3%	0.0%
<i>Past User</i>	35.2%	58.1%	41.5%	38.2%
<i>Current User</i>	ALL	36.8%	ALL	25.0%
Age Group				
<i>Age 19-39</i>	29.3%	58.3%	20.8%	40.0%
<i>Age 40-49</i>	34.6%	50.0%	27.7%	38.5%
<i>Age 50+</i>	34.9%	44.4%	35.2%	29.7%
County of Residence				
<i>Putnam</i>	50.0%	0.0%	50.0%	0.0%
<i>Rockland</i>	33.3%	20.0%	25.9%	42.9%
<i>Westchester</i>	33.8%	52.7%	31.8%	31.9%
HIV Medical Care				
<i>No HIV Provider</i>	100%	100%	0.0%	--
<i>Have HIV Provider</i>	33.6%	47.6%	31.3%	32.7%
HIV Medical Care Setting				
<i>Voluntary Hospital</i>	36.4%	47.8%	31.0%	32.3%
<i>CHC/Clinic</i>	30.2%	50.0%	36.2%	33.3%
<i>AOD Treatment / Social Service</i>	0.0%	--	100%	0.0%
<i>Private MD</i>	11.1%	0.0%	11.8%	50.0%
Housing Status				
<i>Stable</i>	32.5%	49.2%	25.4%	25.0%
<i>Unstable</i>	34.8%	37.5%	48.3%	42.9%
<i>Homeless</i>	54.5%	66.7%	83.3%	60.0%
Place of Birth				
<i>U.S.</i>	37.7%	48.0%	39.7%	31.3%
<i>Puerto Rico</i>	46.2%	66.7%	41.7%	60.0%
<i>Other Country</i>	10.3%	25.0%	4.5%	0.0%

Table 14B: Logistic Regression, Tri-County 2012-2013 AOD Treatment

	Service Needs: Odds Ratios		Service Utilization: Odds Ratios	
	Bivariate	Multivariate	Bivariate	Multivariate
Gender	<i>p</i> =.109		<i>p</i> =.761	
Male	1.695	1.436	1.197	1.234
Female	1	1	1	
Race/ Ethnicity	<i>p</i> =.479		<i>p</i> =.680	
White	1	1	1	1
Black	1.504	3.304*	0.667	0.951
Hispanic/Latino	1.000	3.477	1.190	1.093
Other	--	--	--	--
Mental Health	<i>p</i> =.448		<i>p</i> =.729	
Poor	1.313	2.039	0.801	0.320
Good	1	1	1	1
Problem Substance Use	<i>p</i> =.000		<i>p</i> =.327	
Never Used	1		--	--
Past User	52.417***		1.857	2.548
Current User	--		1	1
Age Group	<i>p</i> =.330		<i>p</i> =.797	
Age 19-39	0.484	1	1.576	1
Age 40-49	0.703	0.282*	1.477	1.664
Age 50+	1	0.574	1	2.107
County of Residence	<i>p</i> =.713		<i>p</i> =.573	
Putnam	2.857	--	--	--
Rockland	1	1	1	1
Westchester	1.330	0.866	0.625	0.770
HIV Medical Care				
No HIV Provider				
Have HIV Provider				
HIV Medical Care Setting	<i>p</i> =.193		<i>p</i> =.882	
Voluntary Hospital	3.370	2.923	0.476	0.209
CHC/Clinic	4.257	4.492	0.500	0.212
AOD Treatment / Social Service	--	--	--	--
Private MD	1	1	1	1
Housing Status	<i>p</i> =.005		<i>p</i> =.216	
Stable	1	1	1	
Unstable	2.748*	4.926**	2.250	4.470
Homeless	14.722*	46.695***	4.500	4.014
Place of Birth	<i>p</i> =.002		<i>p</i> =.220	
U.S.	13.808***	27.229***	0.303	0.363
Puerto Rico	15.000**	11.142*	1	1
Other Country	1	1	--	--

*Multivariate Model not estimated due to absence of variability in outcome (See Table 13A).

Table 15A: Tri-County Subgroup Differences, Transportation

	Past (2010-2012)		Current (2012-2013)	
	Need	Utilization	Need	Utilization
Total	24.3%	45.9%	23.2%	56.1%
Gender				
<i>Male</i>	21.5%	30.4%	19.5%	58.8%
<i>Female</i>	26.4%	55.3%	26.7%	54.2%
Race/ Ethnicity				
<i>White</i>	40.0%	57.1%	23.3%	57.1%
<i>Black</i>	18.6%	53.8%	23.2%	43.5%
<i>Hispanic/Latino</i>	22.9%	25.0%	22.2%	80.0%
<i>Other</i>	83.3%	40.0%	33.3%	100%
Mental Health				
<i>Poor</i>	24.1%	52.6%	20.8%	60.0%
<i>Good</i>	24.4%	42.9%	24.0%	54.8%
Problem Substance Use				
<i>Never Used</i>	29.7%	44.4%	17.3%	46.2%
<i>Past User</i>	21.3%	50.0%	26.8%	68.2%
<i>Current User</i>	21.1%	37.5%	30.0%	33.3%
Age Group				
<i>Age 19-39</i>	24.4%	20.0%	20.8%	60.0%
<i>Age 40-49</i>	18.5%	53.3%	21.3%	60.0%
<i>Age 50+</i>	27.9%	50.0%	24.8%	53.8%
County of Residence				
<i>Putnam</i>	50.0%	0.0%	0.0%	--
<i>Rockland</i>	26.7%	62.5%	25.9%	57.1%
<i>Westchester</i>	23.7%	44.2%	23.0%	55.9%
HIV Medical Care				
<i>No HIV Provider</i>	0.0%	--	0.0%	--
<i>Have HIV Provider</i>	24.4%	45.9%	23.3%	56.1%
HIV Medical Care Setting				
<i>Voluntary Hospital</i>	25.5%	46.8%	24.0%	54.2%
<i>CHC/Clinic</i>	20.8%	36.4%	20.7%	75.0%
<i>AOD Treatment / Social Service</i>	50.0%	100%	0.0%	--
<i>Private MD</i>	22.2%	50.0%	29.4%	20.0%
Housing Status				
<i>Stable</i>	21.6%	47.6%	22.5%	59.4%
<i>Unstable</i>	34.8%	37.5%	24.1%	42.9%
<i>Homeless</i>	27.3%	66.7%	33.3%	50.0%
Place of Birth				
<i>U.S.</i>	24.6%	55.1%	28.1%	55.9%
<i>Puerto Rico</i>	7.7%	0.0%	33.3%	100%
<i>Other Country</i>	28.2%	9.1%	6.8%	0.0%

Table 15B: Logistic Regression, Tri-County 2012-2013 Transportation

	Service Needs: Odds Ratios		Service Utilization: Odds Ratios	
	Bivariate	Multivariate	Bivariate	Multivariate
Gender	<i>p</i> =.264		<i>p</i> =.770	
Male	0.668	0.532	1.209	0.149
Female	1	1	1	1
Race/ Ethnicity	<i>p</i> =.979		<i>p</i> =.187	
White	1	1	1	1
Black	0.994	0.796	0.577	0.750
Hispanic/Latino	0.939	0.977	3.000	5.178
Other	1.643	3.410	--	--
Mental Health	<i>p</i> =.655		<i>p</i> =.778	
Poor	0.832	1.100	1.235	2.684
Good	1	1	1	1
Problem Substance Use	<i>p</i> =.283		<i>p</i> =.236	
Never Used	1	1	1	1
Past User	1.749	1.087	2.500	26.184
Current User	2.044	1.338	0.583	2.074
Age Group	<i>p</i> =.855		<i>p</i> =.931	
Age 19-39	0.800	1	1.286	1
Age 40-49	0.821	0.901	1.286	40.223
Age 50+	1.357	0.756	1	0.701
County of Residence	<i>p</i> =.740		<i>p</i> =0.952	
Putnam	--	--	--	--
Rockland	1	1	1	1
Westchester	0.852	0.632	0.950	1.150
HIV Medical Care				
No HIV Provider	--		--	
Have HIV Provider	--		--	
HIV Medical Care Setting	<i>p</i> =.744		<i>p</i> =.157	
Voluntary Hospital	0.758	0.750	4.727	7.274
CHC/Clinic	0.626	0.797	12.000	251.239
AOD Treatment / Social Service	--	--	--	--
Private MD	1	1	1	1
Housing Status	<i>p</i> =.825		<i>p</i> =.726	
Stable	1	1	1	1
Unstable	1.094	1.477	0.513	0.231
Homeless	1.719	1.640	0.684	0.074
Place of Birth	<i>p</i> =.024			
U.S.	5.341**	6.489*	--	--
Puerto Rico	6.833*	6.425	--	--
Other Country	1	1	--	--

*Multivariate Model not estimated due to absence of variability in outcome (See Table 14A).

Table 16A: Tri-County Subgroup Differences, Food Services

	Past (2010-2012)		Current (2012-2013)	
	Need	Utilization	Need	Utilization
Total	87.5%	56.0%	83.4%	73.6%*
Gender				
<i>Male</i>	87.7%	41.6%	80.0%	71.2%
<i>Female</i>	87.3%	66.9%	86.7%	75.7%
Race/ Ethnicity				
<i>White</i>	85.7%	55.6%	82.8%	65.2%
<i>Black</i>	86.1%	59.6%	84.7%	78.8%
<i>Hispanic/Latino</i>	90.0%	50.0%	82.2%	68.6%
<i>Other</i>	100%	50.0%	66.7%	50.0%
Mental Health				
<i>Poor</i>	91.1%	60.0%	84.1%	59.5%
<i>Good</i>	85.8%	54.0%	82.8%	78.6%
Problem Substance Use				
<i>Never Used</i>	85.4%	58.3%	75.7%	64.8%
<i>Past User</i>	88.4%	53.4%	87.7%	79.4%
<i>Current User</i>	89.5%	59.4%	95.0%	77.8%
Age Group				
<i>Age 19-39</i>	82.9%	50.0%	75.0%	55.6%
<i>Age 40-49</i>	88.7%	57.1%	84.8%	75.0%
<i>Age 50+</i>	88.2%	57.1%	84.6%	77.6%
County of Residence				
<i>Putnam</i>	100%	50.0%	100%	50.0%
<i>Rockland</i>	82.8%	69.6%	85.2%	91.3%
<i>Westchester</i>	88.0%	54.4%	82.9%	70.4%
HIV Medical Care				
<i>No HIV Provider</i>	0.0%	--	--	--
<i>Have HIV Provider</i>	87.9%	56.0%	83.4%	73.6%
HIV Medical Care Setting				
<i>Voluntary Hospital</i>	90.2%	55.1%	87.9%	73.8%
<i>CHC/Clinic</i>	82.4%	61.0%	77.6%	73.8%
<i>AOD Treatment / Social Service†</i>	100%	50.0%	100%	0.0%
<i>Private MD</i>	77.8%	42.9%	76.5%	76.9%
Housing Status				
<i>Stable</i>	88.5%	55.6%	85.1%	73.7%
<i>Unstable</i>	80.4%	48.6%	71.4%	65.0%
<i>Homeless</i>	100%	90.0%	100%	100%
Place of Birth				
<i>U.S.</i>	88.3%	57.0%	86.0%	76.5%
<i>Puerto Rico</i>	100%	61.5%	100%	75.0%
<i>Other Country</i>	78.9%	54.3%	71.4%	63.3%

Table 16B: Logistic Regression, Tri-County 2012-2013 Food Services

	Service Needs: Odds Ratios		Service Utilization: Odds Ratios	
	Bivariate	Multivariate	Bivariate	Multivariate
Gender	<i>p</i> =.240		<i>p</i> =.552	
<i>Male</i>	0.615	0.454	0.795	0.533
<i>Female</i>	1	1	1	1
Race/ Ethnicity	<i>p</i> =.865		<i>p</i> =.415	
<i>White</i>	1	1	1	1
<i>Black</i>	1.153	0.859	1.976	2.575
<i>Hispanic/Latino</i>	0.964	0.905	1.164	1.944
<i>Other</i>	0.417	0.317	0.533	2.508
Mental Health	<i>p</i> =.719		<i>p</i> =.026	
<i>Poor</i>	1.186	1.304	0.398*	0.509
<i>Good</i>	1	1	1	1
Problem Substance Use	<i>p</i> =.060		<i>p</i> =.183	
<i>Never Used</i>	1	1	1	1
<i>Past User</i>	2.282	1.513	2.094	1.681
<i>Current User</i>	6.107	6.642	1.900	1.781
Age Group	<i>p</i> =.567		<i>p</i> =.167	
<i>Age 19-39</i>	0.545	0.943	0.360*	0.314
<i>Age 40-49</i>	1.013	1.016	0.864	0.461
<i>Age 50+</i>	1	1	1	1
County of Residence	<i>p</i> =.769		<i>p</i> =.124	
<i>Putnam</i>	--	--	0.095	--
<i>Rockland</i>	1	1	1	1
<i>Westchester</i>	0.842	0.559	0.227	0.135**
HIV Medical Care				
<i>No HIV Provider</i>				
<i>Have HIV Provider</i>				
HIV Medical Care Setting	<i>p</i> =.190		<i>p</i> =.971	
<i>Voluntary Hospital</i>	2.231	3.187	0.845	0.747
<i>CHC/Clinic</i>	1.065	1.938	0.845	0.717
<i>AOD Treatment / Social Service</i>	--	--	--	--
<i>Private MD</i>	1	1	1	1
Housing Status	<i>p</i> =.086		<i>p</i> =.427	
<i>Stable</i>	1	1	1	1
<i>Unstable</i>	0.437	0.405	0.663	1.002
<i>Homeless</i>	--	--	--	--
Place of Birth	<i>p</i> =.038		<i>p</i> =.364	
<i>U.S.</i>	2.447*	1.861	1.888	1.345
<i>Puerto Rico</i>	--	--	1.737	0.753
<i>Other Country</i>	1	1	1	1

Table 17A: Tri-County Subgroup Differences, Nutrition Counseling Services

	Past (2010-2012)		Current (2012-2013)	
	Need	Utilization	Need	Utilization
Total	ALL	18.8%	ALL	26.9%
Gender				
<i>Male</i>	ALL	20.6%	ALL	20.0%
<i>Female</i>	ALL	17.5%	ALL	33.7%
Race/ Ethnicity				
<i>White</i>	ALL	37.5%	ALL	20.7%
<i>Black</i>	ALL	14.9%	ALL	19.8%
<i>Hispanic/Latino</i>	ALL	17.9%	ALL	44.2%
<i>Other</i>	ALL	16.7%	ALL	66.7%
Mental Health				
<i>Poor</i>	ALL	16.9%	ALL	31.1%
<i>Good</i>	ALL	19.8%	ALL	25.4%
Problem Substance Use				
<i>Never Used</i>	ALL	22.1%	ALL	27.4%
<i>Past User</i>	ALL	18.8%	ALL	29.1%
<i>Current User</i>	ALL	11.1%	ALL	15.8%
Age Group				
<i>Age 19-39</i>	ALL	5.1%	ALL	16.7%
<i>Age 40-49</i>	ALL	21.5%	ALL	27.3%
<i>Age 50+</i>	ALL	21.5%	ALL	28.4%
County of Residence				
<i>Putnam</i>	ALL	0.0%	ALL	50.0%
<i>Rockland</i>	ALL	41.4%	ALL	44.4%
<i>Westchester</i>	ALL	15.9%	ALL	23.2%
HIV Medical Care				
<i>No HIV Provider</i>	ALL	100%	ALL	0.0%
<i>Have HIV Provider</i>	ALL	18.5%	ALL	27.1%
HIV Medical Care Setting				
<i>Voluntary Hospital</i>	ALL	17.8%	ALL	25.8%
<i>CHC/Clinic</i>	ALL	19.6%	ALL	30.9%
<i>AOD Treatment / Social Service</i>	ALL	50.0%	ALL	100%
<i>Private MD</i>	ALL	22.2%	ALL	17.6%
Housing Status				
<i>Stable</i>	ALL	22.3%	ALL	27.2%
<i>Unstable</i>	ALL	9.1%	ALL	31.0%
<i>Homeless</i>	ALL	0.0%	ALL	0.0%
Place of Birth				
<i>U.S.</i>	ALL	19.7%	ALL	24.3%
<i>Puerto Rico</i>	ALL	7.7%	ALL	50.0%
<i>Other Country</i>	ALL	18.4%	ALL	27.3%

Table 17B: Logistic Regression, Tri-County 2012-2013 Nutrition Counseling Services

	Service Needs: Odds Ratios		Service Utilization: Odds Ratios	
	Bivariate	Multivariate	Bivariate	Multivariate
Gender			<i>p</i> =.046	
<i>Male</i>			0.491*	0.375*
<i>Female</i>			1	1
Race/ Ethnicity			<i>p</i> =.012	
<i>White</i>			1	1
<i>Black</i>			0.946	0.960
<i>Hispanic/Latino</i>			3.035*	4.279
<i>Other</i>			7.667	18.865*
Mental Health			<i>p</i> =.460	
<i>Poor</i>			1.327	1.536
<i>Good</i>			1	1
Problem Substance Use			<i>p</i> =.512	
<i>Never Used</i>			1	1
<i>Past User</i>			1.088	1.257
<i>Current User</i>			0.497	0.451
Age Group			<i>p</i> =.508	
<i>Age 19-39</i>			0.503	1
<i>Age 40-49</i>			0.944	0.258*
<i>Age 50+</i>			1	0.567
County of Residence			<i>p</i> =.066	
<i>Putnam</i>			1.250	--
<i>Rockland</i>			1	1
<i>Westchester</i>			0.378*	0.182**
HIV Medical Care				
<i>No HIV Provider</i>				
<i>Have HIV Provider</i>				
HIV Medical Care Setting			<i>p</i> =.542	
<i>Voluntary Hospital</i>			1.620	2.448
<i>CHC/Clinic</i>			2.088	4.116
<i>AOD Treatment / Social Service</i>			--	--
<i>Private MD</i>			1	1
Housing Status			<i>p</i> =.678	
<i>Stable</i>			1	1
<i>Unstable</i>			1.204	1.408
<i>Homeless</i>			--	--
Place of Birth			<i>p</i> =.186	
<i>U.S.</i>			0.858	2.064
<i>Puerto Rico</i>			2.667	2.002
<i>Other Country</i>			1	1

Table 18A: Tri-County Subgroup Differences, Permanent Housing Placement Service

	Past (2010-2012)		Current (2012-2013)	
	Need	Utilization	Need	Utilization
Total	17.1%	32.6%	10.2%	44.4%
Gender				
<i>Male</i>	17.8%	15.8%	11.5%	50.0%
<i>Female</i>	16.7%	45.8%	8.9%	37.5%
Race/ Ethnicity				
<i>White</i>	20.0%	28.6%	6.7%	50.0%
<i>Black</i>	15.7%	40.9%	11.1%	36.4%
<i>Hispanic/Latino</i>	17.1%	16.7%	11.1%	60.0%
<i>Other</i>	33.3%	50.0%	0.0%	--
Mental Health				
<i>Poor</i>	22.8%	27.8%	12.5%	50.0%
<i>Good</i>	14.5%	36.0%	9.3%	41.7%
Problem Substance Use				
<i>Never Used</i>	22.0%	25.0%	6.7%	40.0%
<i>Past User</i>	13.1%	43.8%	7.3%	33.3%
<i>Current User</i>	18.4%	28.6%	35.0%	57.1%
Age Group				
<i>Age 19-39</i>	31.7%	7.7%	25.0%	66.7%
<i>Age 40-49</i>	12.3%	60.0%	10.6%	40.0%
<i>Age 50+</i>	15.5%	35.0%	6.7%	28.6%
County of Residence				
<i>Putnam</i>	50.0%	100%	50.0%	100%
<i>Rockland</i>	13.3%	25.0%	7.4%	50.0%
<i>Westchester</i>	17.4%	31.6%	10.1%	40.0%
HIV Medical Care				
<i>No HIV Provider</i>	0.0%	--	0.0%	--
<i>Have HIV Provider</i>	17.2%	32.6%	10.2%	44.4%
HIV Medical Care Setting				
<i>Voluntary Hospital</i>	18.5%	38.2%	4.0%	75.0%
<i>CHC/Clinic</i>	17.0%	11.1%	20.7%	33.3%
<i>AOD Treatment / Social Service</i>	0.0%	0.0%	100%	100%
<i>Private MD</i>	0.0%	0.0%	5.9%	0.0%
Housing Status				
<i>Stable</i>	3.1%	83.3%	0.7%	0.0%
<i>Unstable</i>	63.0%	24.1%	48.3%	42.9%
<i>Homeless</i>	72.7%	25.0%	50.0%	66.7%
Place of Birth				
<i>U.S.</i>	16.6%	39.4%	11.6%	42.9%
<i>Puerto Rico</i>	15.4%	50.0%	8.3%	100%
<i>Other Country</i>	20.5%	0.0%	6.8%	33.3%

Table 18B: Logistic Regression, Tri-County 2012-2013 Permanent Housing Placement Service

	Service Needs: Odds Ratios		Service Utilization: Odds Ratios	
	Bivariate	Multivariate	Bivariate	Multivariate
Gender	<i>p</i> =.568		<i>p</i> =.607	
Male	1.331	0.569	1.667	
Female	1	1	1	
Race/ Ethnicity	<i>p</i> =.773		<i>p</i> =.690	
White	1	1	1	
Black	1.750	2.219	0.571	
Hispanic/Latino	1.750	2.120	1.500	
Other	--	--	--	
Mental Health	<i>p</i> =.534		<i>p</i> =.745	
Poor	1.393	0.803	1.400	
Good	1	1	1	
Problem Substance Use	<i>p</i> =.002		<i>p</i> =.691	
Never Used	1	1	1	
Past User	1.105	1.314	0.750	
Current User	7.538**	7.961**	2.000	
Age Group	<i>p</i> =.042		<i>p</i> =.418	
Age 19-39	4.667*	9.156***	5.000	
Age 40-49	1.667	1.614	1.667	
Age 50+	1	1	1	
County of Residence	<i>p</i> =.276			
Putnam	12.500	--	--	
Rockland	1	1	1	
Westchester	1.410	1.717	0.667	
HIV Medical Care				
No HIV Provider				
Have HIV Provider				
HIV Medical Care Setting	<i>p</i> =.007		<i>p</i> =0.184	
Voluntary Hospital	0.667	0.664	6.000	
CHC/Clinic	4.174	7.007*	1	
AOD Treatment / Social Service	--	--	--	
Private MD	1	1	--	
Housing Status	<i>p</i> =.000		<i>p</i> =.477	
Stable	1		--	
Unstable	131.600***		0.375	
Homeless	141.000***		1	
Place of Birth	<i>p</i> =.663		<i>p</i> =.769	
U.S.	1.788	3.179	1.500	
Puerto Rico	1.242	3.071	--	
Other Country	1	1	1	

Table 19A: Tri-County Subgroup Differences, Rental Assistance

	Past (2010-2012)		Current (2012-2013)	
	Need	Utilization	Need	Utilization
Total	84.9%	73.7%	94.4%*	61.0%*
Gender				
<i>Male</i>	80.4%	64.0%	94.3%	57.3%
<i>Female</i>	88.2%	80.3%	94.4%	64.7%
Race/ Ethnicity				
<i>White</i>	68.8%	70.8%	96.7%	48.3%
<i>Black</i>	90.7%	74.8%	92.9%	68.5%
<i>Hispanic/Latino</i>	81.4%	71.9%	95.6%	51.2%
<i>Other</i>	83.3%	80.0%	100%	100%
Mental Health				
<i>Poor</i>	82.3%	72.3%	93.8%	53.3%
<i>Good</i>	86.0%	74.3%	94.6%	63.9%
Problem Substance Use				
<i>Never Used</i>	83.5%	67.1%	96.0%	51.4%
<i>Past User</i>	86.9%	80.2%	95.1%	71.8%
<i>Current User</i>	81.6%	67.7%	85.0%	52.9%
Age Group				
<i>Age 19-39</i>	70.7%	62.1%	91.7%	40.9%
<i>Age 40-49</i>	93.8%	80.3%	93.6%	63.6%
<i>Age 50+</i>	83.7%	72.2%	95.2%	65.0%
County of Residence				
<i>Putnam</i>	100%	100%	100%	100%
<i>Rockland</i>	80.0%	70.8%	96.3%	46.2%
<i>Westchester</i>	85.4%	73.8%	93.9%	63.3%
HIV Medical Care				
<i>No HIV Provider</i>	0.0%	--	100%	0.0%
<i>Have HIV Provider</i>	85.2%	73.7%	94.3%	61.4%
HIV Medical Care Setting				
<i>Voluntary Hospital</i>	85.3%	76.4%	99.0%	69.7%
<i>CHC/Clinic</i>	83.0%	63.6%	86.2%	46.0%
<i>AOD Treatment / Social Service</i>	100%	100%	100%	100%
<i>Private MD</i>	88.9%	75.0%	94.1%	56.3%
Housing Status				
<i>Stable</i>	92.8%	80.6%	99.3%	66.7%
<i>Unstable</i>	54.3%	28.0%	72.4%	23.8%
<i>Homeless</i>	72.7%	62.5%	83.3%	60.0%
Place of Birth				
<i>U.S.</i>	85.4%	76.5%	93.4%	69.9%
<i>Puerto Rico</i>	76.9%	90.0%	100%	50.0%
<i>Other Country</i>	84.6%	54.5%	95.5%	40.5%

Table 19B: Logistic Regression, Tri-County 2012-2013 Rental Assistance

	Service Needs: Odds Ratios		Service Utilization: Odds Ratios	
	Bivariate	Multivariate	Bivariate	Multivariate
Gender	<i>p</i> =.956		<i>p</i> =.330	
Male	0.965	4.223	0.732	0.901
Female	1	1	1	1
Race/ Ethnicity	<i>p</i> =.686		<i>p</i> =.058	
White	1	1	1	1
Black	0.453	0.024***	2.328	4.552**
Hispanic/Latino	0.741	0.183	1.122	3.584
Other	--	--	--	--
Mental Health	<i>p</i> =.833		<i>p</i> =.215	
Poor	0.861	0.566	0.645	0.976
Good	1	1	1	1
Problem Substance Use	<i>p</i> =.193		<i>p</i> =.032	
Never Used	1	1	1	1
Past User	0.813*	1.151	2.408*	1.521
Current User	0.236	2.835	1.064	0.353
Age Group	<i>p</i> =.775		<i>p</i> =.117	
Age 19-39	0.550	0.841	0.373*	1
Age 40-49	0.733	0.054**	0.942	0.429
Age 50+	1	1	1	0.801
County of Residence	<i>P</i> =.629		<i>p</i> =.106	
Putnam	--	--	--	--
Rockland	1	1	1	1
Westchester	0.594	0.527	2.013	2.090
HIV Medical Care				
No HIV Provider				
Have HIV Provider				
HIV Medical Care Setting	<i>p</i> =.032		<i>p</i> =.020	
Voluntary Hospital	6.187	107.363***	1.789	1.973
CHC/Clinic	0.391	0.408	0.663	1.196
AOD Treatment / Social Service	--	--	--	--
Private MD	1	1	1	1
Housing Status	<i>p</i> =.001		<i>p</i> =.003	
Stable	1	1	1	1
Unstable	0.019***	0.0001***	0.156***	0.186*
Homeless	0.035*	0.000***	0.750	2.593
Place of Birth	<i>p</i> =.626		<i>p</i> =.004	
U.S.	0.673	0.347	3.417**	2.744
Puerto Rico	--	--	1.471	0.865
Other Country	1	1	1	1

Appendix II: Regression Analysis of Number of Service Needs and Number of Underutilized Services among Those in Need (2012-2013: N=176)

	Number of Needs		Number of Underutilized Services	
	Coef.	95% CI	Coef.	95% CI
Sex				
Female	0	--	0	--
Male	-0.677	-1.014, -0.340	0.235	-0.305, 0.775
Ethnic				
White	0	--	0	--
Black	-0.080	-0.625, 0.465	-0.239	-0.929, 0.451
Hispanic/Latino	0.386	-0.286, 1.059	-0.699	-1.495, 0.096
Other	0.597	-0.904, 2.098	-2.980	-3.813, -2.147
Mental Health				
Poor	0.672	0.310, 1.034	0.196	-0.352, 0.743
Good	0	--	0	--
Problem Substance Use				
Never	0	--	0	--
Past	0.519	0.126, 0.912	-0.216	-0.801, 0.370
Current	1.380	0.723, 2.037	0.893	-0.258, 2.044
Age				
19-39	-0.070	-0.635, 0.494	0.190	-0.461, 0.841
40-49	-0.267	-0.703, 0.169	0.077	-0.485, 0.639
50+	0	--	0	--
County				
Putnam	0.401	-0.359, 1.161	-3.227	-4.236, -2.218
Rockland	0	--	0	--
Westchester	-0.105	-0.571, 0.361	0.234	-0.375, 0.844
HIV PCP				
No PCP	0.604	-0.364, 1.573	2.501	1.274, 3.728
Voluntary Hosp	0.492	-0.082, 1.067	-0.484	-1.180, 0.212
CHC/Clinic	0.528	0.060, 1.117	-0.624	-1.337, 0.088
AOD Tx/ Soc Svc	0.120	-0.787, 1.028	0.644	-0.598, 1.886
Private MD	0	--	0	--
Housing Status				
Stable	0	--	0	--
Unstable	0.444	-0.131, 1.019	0.151	-0.416, 0.717
Homeless	0.720	-0.301, 1.742	-0.036	-1.182, 1.111
Birth Place				
U.S.	0.846	0.424, 1.268	-0.010	-0.635, 0.615
Puerto Rico	1.193	0.461, 1.925	0.089	-1.184, 1.363
Other Country	0	--	0	--
Constant	7.081	6.239, 7.924	4.041	3.018, 5.065
	F(16, 156)=. R-squared = 0.379		F(16, 157)=. R-squared = 0.181	

References

Ware, J.E. Jr, M. Kosinski, D.M. Turner-Bowker, & B. Gandek. (2002) *How to Score Version 2 of the SF-12 Health Survey*. Lincoln, RI: QualityMetric Inc., and Boston: Health Assessment Lab.