

CHAIN 2008-1a Report



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Service Needs and Utilization  
New York City  
Round 5 Interviews:  
2008-2009

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**C.H.A.I.N. REPORT**

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## **Introduction**

This CHAIN report continues an earlier series of service gaps and utilization reports (Report 2004-1 and 2005-3a). The definitions of service needs and utilization have been updated to reflect the evolving priority areas for HIV/AIDS services in New York City's EMA. One or two measures of service needs and a parallel measure of adequate service utilization are defined for the following areas: health care, case management, mental health, alcohol and drug treatment, transportation, and food. This report presents service needs and adequate utilization for the 2005-2009 period that will serve as a baseline for monitoring future trends. As in the previous analysis, sub-group differences are inspected for sex, race/ethnicity, mental health, substance use, age, borough, source of HIV medical care, housing status, and place of birth.

## **Key Findings**

- Across all service categories, need for services for the 2008-2009 period either declined or remained stable from the 2005-2008 period (See Table 4).
- Across all service categories, adequate service utilization remained stable over time (See Table 4).
- For the current 2008-2009 period, food service stands out as a service area with high need and below average in adequate utilization (See Table 5).
- Individuals experiencing homelessness, born in Puerto Rico, and currently using substances stand out as subgroups with above average need across multiple service areas (See Table 6).
- Cohort members under age 39 stand out as a subgroup with below average levels of adequate utilization across multiple service areas (See Table 6).

## **Methodology**

### ***New York City CHAIN Recruitment and Study Sample***

*Cohort Recruitment* The NYC CHAIN cohort was recruited in 2002 and augmented with a refresher sample recruited in 2009-2010. The sampling and recruitment protocols were similar

for the NYC 2002 cohort and the NYC refresher sample. Service agencies with known HIV+ clients or patients were randomly selected from a sampling frame stratified by type of agency (medical or social service agency) and borough. Then within each participating agency, clients or patients were sampled either through random selection from a listing of the agency's HIV clients or through an onsite sequential enrollment. To protect the privacy of agency clients and patients, agency staff made initial contact to determine interest in the study. Contact information of interested clients/patients was turned over to CHAIN staff for formal enrollment and informed consent procedures.

For the NYC 2002 cohort, 684 clients were recruited and interviewed from 34 service agencies between July 2002 and December 2003. Twenty-five (25) HIV-positive persons who were not connected to medical care were also recruited through outreach and completed a shorter version of the interview. Of those 25, nine individuals completed the full CHAIN baseline interview and are included in the study cohort. For the detailed sampling strategy, study protocols, and cohort characteristics see previous CHAIN reports (2004-4).

The refresher cohort recruitment started in February 2009. As of March 2010, 327 clients/patients were recruited from 16 agencies and 250 were interviewed.

*Study Sample* Data for this study were obtained from 1,078 interviews completed with 698 New York City CHAIN Cohort members between November 2005 and October 2009. To assess trends in service needs and adequate utilization, we compare the data for two successive time periods. The current period corresponds to 584 round five interviews completed between June 2008 and October 2009. The current interviews were completed by 383 individuals from the original 2002 cohort and 201 individuals from the refresher sample, who were newly recruited for the round five interviews. A recent past period was formed by pooling 400 round four interviews with 94 round three interviews completed by cohort members who completed round three but not round four interviews. The combined round 3 and 4 interviews were conducted between November 2005 and July 2008.

### *Study Variables*

The CHAIN interviews collect information on various aspects of an individual's life, including use of social and medical services, as well as demographic and wellbeing measures relevant to need for these services.

### *Service Need and Adequate Utilization Measures*

NYC DOHMH and CHAIN staff developed nine pairs of service need and adequate utilization measures for six service categories: health care, case management, mental health, alcohol and drug treatment, transportation, and food services. Table 1 displays the operational definitions for service needs and adequate utilization measures. A need for service often involved multiple criteria that took into account both "objective" criteria based upon individual attributes such as health status and behavior, as well as an individual's perceived service need. For some service categories, use of services was taken as evidence of need as well. As the term "adequate" implies, service utilization was often measured by incorporating a performance dimension of the services. We discuss below the logic for the more complex measures.

Need for ARV treatment support services was based on meeting one of the following criteria: (1) not currently taking ARV meds *and* reporting a CD4 count below 200 for the current or a previous interview, (2) currently taking ARV meds, but not completely adherent, and (3) adherent to ARV meds but using treatment support services. Among individuals in need of ARV treatment support services, only those meeting the third need criteria were regarded as receiving an adequate level of service.

Need for social service case management was based on one or more of the following criteria: (1) poor mental health functioning, (2) recent emergency room visit or inpatient care, (3) recent drug or drinking problem, or (4) recent housing instability. Among those in need, adequate utilization of social service case management required one or more of the following in the past 6 months: (1) development or revision of a care plan, (2) referral for social services, or (3) assistance in completing an application for benefits or entitlements.

Need for medical case management was based on meeting one or more of the following criteria: (1) interruption of medical care, (2) missed medical care appointments, or (3) absence of lab tests for CD4 count or viral load. Additionally, persons who currently did not report any of the above criteria were considered in need if they reported any of these problems at the previous interview and were currently receiving referrals to medical services from their case manager. Among individuals in need, only those who recently received referral to medical services were judged to be adequately utilizing medical case management. Definitions for the remaining service need and adequate utilization measures can be found in Table 1.

### *Subgroup Variables*

Table 2 lists the variables for subgroup analyses. These included sex, race/ethnicity, mental health, illicit substance use, age group, geographic area, having an HIV provider, source of HIV medical care, housing stability, and place of birth. Mental health functioning was measured using the Medical Outcomes Study (MOS) SF-12v2 Mental Health Composite Scale (MCS; Ware, et al. 2002). Scores below 37 out of 100 points were coded as low mental health functioning according to Medical Outcomes Trust guidelines. Substance use was measured as current, former, or no history. Current substance use was indicated by use of heroin, cocaine, and/or crack during the six months preceding the interview. During the interview, CHAIN participants provided the agency of their HIV primary care provider. This information was linked to a CHAIN agency database and categorized by the type of organizational setting. 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, drug treatment housing with no other address, or someone else's housing as "doubled-up." Homeless indicates literally homeless individuals who slept on the street or stayed in a shelter or an SRO or welfare hotel with no supportive services in the past 6 months. Table 3 displays sample size for subgroups listed in Table 2. In this and subsequent tables, findings are tabulated separately for the current and past periods.

### *Presentation of Findings and Analysis Plan*

Table 4 presents the percentage of NYC CHAIN participants in need of each service and whether there was a significant difference in service need between the current interviews (2008-2009)

and the previous interviews completed between 2005 and 2008. Among those in need, Table 4 presents the percentage with adequate service utilization and whether there was a significant difference between the current and recent past periods. Table 5 cross classifies service areas according to level of need and adequate utilization. Of particular interest are service areas grouped in the high need and low adequate utilization category.

Subgroup differences were investigated through a two-step procedure. The first series of tables in the Appendix to this report, Tables 7A through 15A, display for each service area the percentages of each subgroup with service need and adequate service utilization among those in need. Data are separately summarized for the current 2008-2009 and recent past 2005-2008 interviews. For each variable that exhibits statistically significant ( $p < .05$ ) subgroup differences, the first row is flagged with an asterisk (\*). Shaded rows indicate subgroups with sample sizes that are too small to draw reliable conclusions about meaningful group differences.

Bivariate and multivariate logistic regression models were estimated for a more rigorous identification of important subgroup differences for the current round of interviews (2008-2009). Subgroup variables that were part of the definition of the service need variable were dropped from the bivariate and multivariable model for the service need outcomes. For example, mental health, illicit drug use, and housing stability were removed from the social service case management need regression model. Mental health and substance use were removed from professional mental health service need and alcohol and drug treatment service need regression models, respectively. Detailed results for the logistic regression subgroup analysis are presented in the Series B tables in the report Appendix and follow their respective Series A table. Table 6 highlights subgroups with notably above average service needs and notably below adequate service utilization.

Caution should be taken in interpreting comparisons between the current and recent past periods of interviews. The current 2008-2009 interviews combine the ongoing cohort with new individuals recruited for the refresher sample. Therefore, differences between the two periods of interviews are not strictly the average change for repeated interviews with the same individual. However, large changes between periods might be cautiously interpreted to indicate temporal

changes since a larger number of individuals were interviewed at both times and individuals interviewed during 2005-2008 and 2008-2009 were recruited from the same sites following the same procedures.

## **Results**

Discussion of results is restricted to the summary of findings presented in Tables 4 through 6. Interested readers will find more detailed results in the Report's Appendix.

### ***Overall Service Needs and Adequate Utilization***

Aside from the universal need for HIV health care, need for services for the 2005-2008 period ranged from a 16.1% for transportation to 90.4% for food services. For the 2008-2009 period, service needs ranged from 8.7% to 89.1%, also for transportation and food service, respectively. The cohort's need for services has declined in recent years in three areas: ARV treatment support, social service case management, and transportation (See Table 4). The needs for remaining service areas were stable over the years. As previously noted, the trend in need for these service areas may represent an actual decline in NYC CHAIN cohort member's needs but may also result from the changing composition of the cohort due to recruitment of new cohort members during the 2008-2009 interviews.

Adequate utilization of services for the current period (2008-2009) ranges from 41.2% among those in need of transportation services to over 96% for HIV health care. Adequate service utilization has remained stable over time for all service areas with the exception of social service case management and transportation service utilization, where it has increased between the past and current period, though the change is not statistically significant. Table 5 cross-classifies service areas by level of need (above and below 50%) and level of adequate utilization (above and below 50%). Food service stands out as services with relatively high need (89%) and relatively low levels of adequate utilization (49%)

### ***Subgroup differences***

Subgroup differences reveal a complex pattern that is not easily summarized. The interested reader may review the detailed findings in the Appendix. Table 6 highlights the subgroups with

service needs substantially above cohort average or levels of adequate utilization substantially below the cohort average, by service areas for the current period. The table flags subgroups that exhibit statistically significant departures from other groups based on the regression models presented in Series B tables. Table 6 includes a few subgroups that did not achieve conventional levels of statistical significance in the regression models but showed substantial departures in the observed percentages presented in the Series A tables. Table 6 excludes subgroups that exhibited large statistical deviations in the Series A tables but were regarded as unreliable results because of very small sample sizes.

Subgroups with above average need across multiple services include homeless individuals (five service areas), current substance users (three service areas), and those born in Puerto Rico (three service areas). Individuals under age 39 appear to be the subgroup most vulnerable to below average levels of adequate utilization across multiple service areas.

**Table 1: Measuring Needs and Adequate Utilization – Definitions**

<b>SERVICE AREA</b>	<b>Need</b>	<b>Adequate Utilization</b>
<b>HEALTH</b>		
<b>HIV Primary Care</b>	Positive HIV serostatus	One or more visit to primary physician in the last six months
<b>ARV Treatment Support</b>	(1) CD4 Count < 200 & not on ARV OR (2) not completely adherent to ARV meds OR (3) adherent to ARV meds with support services	Receiving support services for taking ARVs from professional providers
<b>CASE MANAGEMENT</b>		
<b>CM: Social Service</b>	(1) Poor mental health function (Mental Component Summary (MCS) = < 37.0) OR (2) had an inpatient, emergency room or mobile unit visit for psychiatric or mental health reason in the last six months OR (3) heavy or problem drinking during the past six months OR (4) used cocaine, crack, or heroin during past year OR (5) homeless or in unstable housing in the last six months	A case manager did one or more of the following in the last six months: (1) Revising or developing a plan for dealing with needs OR (2) referrals for social services OR (3) help filling out forms for benefits or entitlements
<b>CM: Medical Referral</b>	(1) No HIV primary care in the last six months OR (2) stopped going or did not have any appointments for six or more months since the last interview OR (3) missed more than one appointment in the past six months OR (4) no CD4 or VL test in the past six months OR (5) had above problems at prior rounds and have had a case manager providing assistance with getting/referrals to specific medical services in the past six months	A case manager helped in getting or referring for medical services during the last six months
<b>MENTAL HEALTH (MH)</b>		
<b>Professional MH</b>	(1) Poor mental health function (MCS = < 37.0) OR (2) had an inpatient, emergency room or mobile unit visit for psychiatric or mental health reason in the last six month OR (3) received counseling from a mental health care professional or clinical social worker in the last six months	Received counseling from a mental health care professional or clinical social worker in the last six months

SERVICE AREA	Need	Adequate Utilization
<b>ALCOHOL OR DRUGS (AOD)</b>		
<b>AOD Treatment</b>	(1) Used cocaine, crack or heroin during the past year OR (2) heavy or problem drinking during the past six months OR (3) reported receiving drug or alcohol treatment was "considerably" or "extremely" important OR (4) received any form of treatment for alcohol or drug use in last six months	Received any form of treatment for alcohol or drug use in last six months
<b>TRANSPORTATION</b>		
<b>Transportation</b>	(1) Reported need for transportation assistance OR (2) Lack of transportation resulted in delayed or not receiving medical or social services in the past six months	Received transportation services in the last six months
<b>FOOD</b>		
<b>Food Services</b>	(1) Did not have enough money in the household for food once in a while to very often in the last six months OR (2) went for a while day without anything to eat in the last 30 days OR (3) receiving food stamps OR (4) do not have unlimited access to a kitchen	Received 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) received food voucher or food from a food pantry

**Table 2: Subgroup Variables**

<b>Subgroups</b>	
<b>Sex:</b>	Male=1, Female=0 (transgender is recoded by the biological sex)
<b>Race/Ethnicity:</b>	White=1, Black=2 Latino=3, Other=4
<b>Mental Illness:</b>	(Using SF-12v2) MCS=<37=0, MCS>37=1
<b>Illicit Drug Use:</b>	Never used crack/cocaine or heroin=0, Past use=1, Current use in the past 6 months=2
<b>Age Group:</b>	Age 20-39 ; age 40-49, age 50+
<b>Geographic Area:</b>	Bronx, Brooklyn, Manhattan, Queens, Staten Island
<b>HIV Medical Care:</b>	No provider=0, Have provider=1
<b>Source of HIV Medical Care:</b>	HHC, Other Voluntary Hospital, Community Health Clinic/Clinic, Drug treatment/Social Service agencies, Private MD
<b>Housing stability:</b>	<ul style="list-style-type: none"> <li>• Stable—individuals in permanent housing</li> <li>• Unstable—Individuals not currently in a permanent housing but not literally homeless, including those in a transitional housing program, drug treatment housing with no other address, or those temporarily doubled up with friends or family</li> <li>• Homeless—individuals who describe themselves a homeless or report sleeping on the street, in a shelter, an SRO or welfare hotel with no services in last six months</li> </ul>
<b>Place of Birth:</b>	US=0, PR=1, Other=2

Table 3: Sample Characteristics

Sample	Past (2005-2008)	Current (2008-2009)
Total Number of interviews	N=494	N=584
<b>SEX</b>		
Male	55.1%	57.7%
<b>RACE/ETHNICITY</b>		
Black	55.1%	54.5%
Latino	34.2%	34.9%
White	9.5%	8.9%
<b>MENTAL HEALTH</b>		
MCS=<37	22.7%	27.0%
<b>DRUG USE</b>		
Current	22.9%	20.0%
Past	57.3%	55.0%
Never	19.8%	25.0%
<b>AGE</b>		
20-39	11.5%	10.1%
40-49	40.3%	37.0%
50+	48.2%	52.9%
<b>BOROUGH</b>		
Bronx	25.3%	28.6%
Brooklyn	31.6%	29.5%
Manhattan	25.5%	23.1%
Queens	13.0%	12.8%
Staten Island	4.7%	6.0%
<b>HIV PRIMARY CARE</b>		
No Primary Care	1.4%	1.7%
HHC	15.2%	11.3%
Other Voluntary Hospital	57.9%	58.9%
Community Health Center/Clinic	12.4%	13.2%
Drug Treatment/Social Service Agency	9.7%	10.3%
Private MD	3.4%	4.6%
<b>HOUSING STABILITY</b>		
Stable	76.3%	82.7%
Unstable	18.2%	9.3%
Homeless	5.5%	8.1%
<b>PLACE OF BIRTH</b>		
US	75.9%	75.3%
PR	11.3%	8.6%
Other	12.8%	16.1%

**Table 4. Trends in Service Need and Adequate Utilization: New York City**  
**Past= 2005-2008 interviews and Current =2008-2009 interviews**

	Service Needs			Adequate Utilization		
	Past	Current	Trend	Past	Current	Trend
<b>HIV Primary Care</b>	N/A	N/A	N/A	98.1%	96.5%	—
<b>Treatment Support</b>	50.2%	32.2%	↓*	33.7%	50.6%	↑
<b>Social Service CM</b>	65.2%	52.0%	↓*	70.1%	70.1%	—
<b>Medical Referral CM</b>	50.7%	44.6%	—	62.8%	63.3%	—
<b>Professional MH</b>	51.4%	55.0%	—	66.5%	71.8%	—
<b>AOD Treatment</b>	58.8%	50.0%	—	45.6%	43.6%	—
<b>Transportation</b>	16.1%	8.7%	↓*	16.7%	41.2%	↑
<b>Food Service</b>	90.4%	89.1%	—	44.9%	48.5%	—

\* Statistically Significant trend

**Table 5: Cross Classification of Service Areas by level of Need and Adequate Utilization:  
New York City CHAIN 2008-2009 Interviews**

		<b>Adequate Service Utilization Level</b>	
		<b>High (&gt;60%)</b>	<b>Low (=&lt;50%)</b>
<b>Service Needs</b>	<b>High (&gt;50%)</b>	HIV Primary Care Social Service CM Professional MH	Food Services
	<b>Low (=&lt;50%)</b>	Medical Referral CM	Treatment Support AOD Treatment Transportation

**Table 6. Summary of Subgroups with Above Average Service Needs & Below Average Adequate Utilization:  
New York City Current Interviews (2008-2009)**

<b>SERVICE AREA</b>	<b>Service Need</b>	<b>Adequate Utilization</b>
	Subgroups with service needs substantially higher than average.	Subgroups with adequate utilization substantially below average.
<b>HEALTH</b>		
<b>HIV Primary Care</b>	N/A	
<b>ARV Treatment Support</b>	<ul style="list-style-type: none"> <li>• Current substance user*</li> <li>• HIV Medical Care from HHC</li> </ul>	<ul style="list-style-type: none"> <li>• Female*</li> <li>• Black</li> <li>• Current substance user*</li> <li>• HIV Medical Care from Community Health Center/Clinic</li> <li>• US Born</li> </ul>
<b>CASE MANAGEMENT</b>		
<b>CM: Social Service</b>	<ul style="list-style-type: none"> <li>• White*</li> <li>• Age 20-39</li> <li>• Born in PR</li> </ul>	<ul style="list-style-type: none"> <li>• HIV Medical Care from Community Health Center/Clinic</li> </ul>
<b>CM: Medical Referral</b>	<ul style="list-style-type: none"> <li>• Current Substance User*</li> <li>• HIV Medical Care from HHC*</li> <li>• Homeless*</li> <li>• Poor Mental Health</li> </ul>	<ul style="list-style-type: none"> <li>• Unstably housed</li> <li>• Good Mental Health*</li> </ul>
<b>MENTAL HEALTH (MH)</b>		
<b>Professional MH</b>	<ul style="list-style-type: none"> <li>• Female*</li> <li>• Current Substance User*</li> <li>• Age 20-39</li> <li>• Homeless</li> <li>• Born in PR/other country*</li> </ul>	<ul style="list-style-type: none"> <li>• Age 20-39*</li> </ul>
<b>ALCOHOL OR DRUGS (AOD)</b>		
<b>AOD Treatment</b>	<ul style="list-style-type: none"> <li>• HIV Medical Care from Drug Treatment/Social Service Agency*</li> <li>• Homeless*</li> </ul>	<ul style="list-style-type: none"> <li>• Age 20-39*</li> <li>• Living in Queens*</li> </ul>
<b>TRANSPORTATION</b>		
<b>Transportation</b>	<ul style="list-style-type: none"> <li>• Homeless*</li> <li>• Born in PR/other country*</li> </ul>	<ul style="list-style-type: none"> <li>• Male</li> <li>• Poor Mental Health*</li> </ul>
<b>FOOD</b>		
<b>Food service</b>	<ul style="list-style-type: none"> <li>• Homeless</li> </ul>	<ul style="list-style-type: none"> <li>• Female*</li> <li>• Living in Staten Island</li> <li>• Born in PR*</li> </ul>

\* Statistically significant subgroup difference

## Appendix

### Series A Tables for Subgroup Differences in Services Needs and Adequate Utilization for Recent Past (2005-2008) and Current (2008-2009) Interviews.

An asterisk in the “total” row in the Series B tables indicates significant difference (<.05) between the past and current time periods. An asterisk in the first row for a subgroup variable indicates significant (<.05) subgroup differences for that variable. Caution should be taken when interpreting proportions of these independent variables with small sample size. These small cells are in gray shade.

### Series B Tables: Single Variable and Multiple Variable Subgroup Logistic Regression Analysis for Current Interviews (2008-2009).

Series B tables (7B to 15B) reports odds ratios for bivariate and multivariate logistic regression analysis. The reference category for an independent variable is noted with a “1”.

**Table 7A: New York City Ambulatory Health Care/ HIV Primary Care**

	Past (2005-2008)		Current (2008-2009)	
	Need	Adequate Utilization	Need	Adequate Utilization
<b>Total</b>	ALL	98.1%	ALL	96.5%
<b>Gender</b>				
<i>Male</i>	ALL	97.9%	ALL	96.4%
<i>Female</i>	ALL	95.3%	ALL	96.7%
<b>Race/ Ethnicity</b>				
<i>White</i>	ALL	98.8%	ALL	98.0%
<i>Black</i>	ALL	95.6%	ALL	96.8%
<i>Latino</i>	ALL	97.7%	ALL	95.5%
<i>Other</i>	ALL	100%	ALL	100%
<b>Mental Illness</b>				
<i>MCS=&lt;37.0</i>	ALL	95.7%	ALL	98.7%
<i>MCS&gt;37.0</i>	ALL	97.0%	ALL	95.7%
<b>Illicit Drug Use</b>				
<i>Never Used</i>	ALL	99.4%	ALL	97.9%*
<i>Past User</i>	ALL	97.5%	ALL	97.5%
<i>Current User</i>	ALL	93.8%	ALL	92.3%
<b>Age Group</b>				
<i>Age 20-39</i>	ALL	100%	ALL	100%
<i>Age 40-49</i>	ALL	95.7%	ALL	96.2%
<i>Age 50+</i>	ALL	96.9%	ALL	96.0%
<b>Geographic Area</b>				

<b>Bronx</b>	ALL	96.2%	ALL	92.5%*
<b>Brooklyn</b>	ALL	95.2%	ALL	98.8%
<b>Manhattan</b>	ALL	98.5%	ALL	95.5%
<b>Queens</b>	ALL	100%	ALL	100%
<b>Staten Island</b>	ALL	94.1%	ALL	100%
<b>HIV Medical Care</b>				
<b>No HIV Provider</b>	ALL	N/A	ALL	N/A
<b>Have HIV Provider</b>	ALL	98.0%	ALL	98.2%
<b>Source of HIV Medical Care</b>				
<b>HHC</b>	ALL	94.2%	ALL	98.5%
<b>Voluntary Hospital</b>	ALL	97.8%	ALL	97.6%
<b>CHC/Clinic</b>	ALL	100%	ALL	100%
<b>Drug Treatment / Social Service</b>	ALL	100%	ALL	98.2%
<b>Private MD</b>	ALL	100%	ALL	100%
<b>Housing</b>				
<b>Stable</b>	ALL	96.8%	ALL	97.5%*
<b>Unstable</b>	ALL	94.4%	ALL	90.7%
<b>Homeless</b>	ALL	96.2%	ALL	93.3%
<b>Place of Birth</b>				
<b>US</b>	ALL	96.8%	ALL	96.7%
<b>PR</b>	ALL	97.4%	ALL	91.8%
<b>Other</b>	ALL	95.6%	ALL	97.8%

Table 7B: New York City 2008-2009 Ambulatory Health Care/ HIV Primary Care

	Service Needs: Odds Ratios		Service Utilization: Odds Ratios	
	Bivariate	Multivariate	Bivariate	Multivariate
<b>Gender</b>			<i>p</i> =.812	
<i>Male</i>			0.895	1.459
<i>Female</i>			1	1
<b>Race/ Ethnicity</b>			<i>p</i> =.601	
<i>White</i>			1	1
<i>Black</i>			0.602	0.699
<i>Latino</i>			0.427	0.162
<i>Other</i>			--	--
<b>Mental Illness</b>			<i>p</i> =.053	
<i>MCS</i> ≤ <i>37.0</i>			1	1
<i>MCS</i> > <i>37.0</i>			0.288	0.189
<b>Illicit Drug Use</b>			<i>p</i> =.040	
<i>Never Used</i>			1	1
<i>Past User</i>			0.826	0.523
<i>Current User</i>			0.259*	0.059*
<b>Age Group</b>			<i>p</i> =.922	
<i>Age 20-39</i>			--	--
<i>Age 40-49</i>			1.05	0.378
<i>Age 50+</i>			1	1
<b>Geographic Area</b>			<i>p</i> =.011	
<i>Bronx</i>			1	1
<i>Brooklyn</i>			6.85*	0.440
<i>Manhattan</i>			1.72	0.119*
<i>Queens</i>			--	--
<i>Staten Island</i>			--	--
<b>HIV Medical Care</b>				
<i>No HIV Provider</i>			--	
<i>Have HIV Provider</i>			--	
<b>Source of HIV Medical Care</b>			<i>p</i> =.887	
<i>HHC</i>			1	1
<i>Voluntary Hospital</i>			0.637	0.450
<i>CHC/Clinic</i>			--	--
<i>Drug Treatment / Social Service</i>			0.831	0.333
<i>Private MD</i>			--	--
<b>Housing</b>			<i>p</i> =.045	
<i>Stable</i>			1	1
<i>Unstable</i>			0.255*	0.269
<i>Homeless</i>			0.364	0.700
<b>Place of Birth</b>			<i>p</i> =.225	
<i>US</i>			1	1
<i>PR</i>			0.378	0.232
<i>Other</i>			1.528	0.336

**Table 8A: New York City Treatment Support**

	Past (2005-2008)		Current (2008-2009)	
	Need	Adequate Utilization	Need	Adequate Utilization
<b>Total</b>	50.2%	33.7%	32.2%*	50.6%
<b>Gender</b>				
<i>Male</i>	43.2%	46.3%	30.0%	61.1%*
<i>Female</i>	46.7%	59.0%	35.1%	38.2%
<b>Race/ Ethnicity</b>				
<i>White</i>	39.7%	45.8%	27.7%	50.0%*
<i>Black</i>	43.3%	52.7%	34.0%	41.7%
<i>Latino</i>	49.1%	46.8%	31.0%	67.9%
<i>Other</i>	30.0%	66.7%	20.0%	0%
<b>Mental Illness</b>				
<i>MCS=&lt;37.0</i>	44.2%	42.0%	35.9%	43.8%
<i>MCS&gt;37.0</i>	44.9%	53.2%	30.8%	53.4%
<b>Illicit Drug Use</b>				
<i>Never Used</i>	34.1%	51.3%	30.8%*	60.0%*
<i>Past User</i>	43.8%	54.9%	28.3%	51.9%
<i>Current User</i>	52.4%	43.2%	44.1%	40.0%
<b>Age Group</b>				
<i>Age 20-39</i>	32.1%	17.9%*	35.1%	50.0%
<i>Age 40-49</i>	46.0%	46.4%	32.4%	45.2%
<i>Age 50+</i>	47.4%	60.6%	31.4%	54.7%
<b>Geographic Area</b>				
<i>Bronx</i>	46.7%	48.1%	31.5%*	56.8%
<i>Brooklyn</i>	43.5%	51.0%	36.6%	43.1%
<i>Manhattan</i>	45.3%	51.2%	34.9%	50.0%
<i>Queens</i>	53.3%	59.2%	27.1%	58.8%
<i>Staten Island</i>	28.8%	33.3%	14.3%	60.0%
<b>HIV Medical Care</b>				
<i>No HIV Provider</i>	20.0%	0.0%	16.7%	0.0%
<i>Have HIV Provider</i>	45.1%	51.1%	32.3%	50.9%
<b>Source of HIV Medical Care</b>				
<i>HHC</i>	66.3%*	57.3%	45.5%*	51.7%
<i>Voluntary Hospital</i>	38.6%	54.9%	29.2%	55.7%
<i>CHC/Clinic</i>	57.2%	48.5%	32.9%	41.7%
<i>Drug Treatment / Social Service</i>	47.4%	32.5%	35.8%	58.8%
<i>Private MD</i>	25.0%	16.7%	29.2%	0.0%
<b>Housing</b>				
<i>Stable</i>	46.1%	54.7%	33.0%	50.3 %
<i>Unstable</i>	49.0%	38.4%	28.0%	53.8%
<i>Homeless</i>	44.3%	23.8%	28.6%	50.0 %
<b>Place of Birth</b>				
<i>US</i>	42.3%	49.9%	31.4%	43.0%*
<i>PR</i>	49.9%	45.0%	28.3%	69.2%
<i>Other</i>	52.3%	59.5%	37.9%	71.9%

Table 8B: New York City 2008-2009 Treatment Support

	Service Needs: Odds Ratios		Service Utilization: Odds Ratios	
	Bivariate	Multivariate	Bivariate	Multivariate
<b>Gender</b>	<i>p</i> =.215		<i>p</i> =.003	
<i>Male</i>	0.794	0.758	2.547**	3.621**
<i>Female</i>	1	1	1	1
<b>Race/ Ethnicity</b>	<i>p</i> =.624		<i>p</i> =.007	
<i>White</i>	1	1	1	1
<i>Black</i>	1.348	1.521	0.714	0.444
<i>Latino</i>	1.176	1.171	2.111	0.869
<i>Other</i>	0.654	0.821	--	--
<b>Mental Illness</b>	<i>p</i> =.268		<i>p</i> =.260	
<i>MCS≤37.0</i>	1	1	1	1
<i>MCS&gt;37.0</i>	0.796	0.883	1.473	1.927
<b>Illicit Drug Use</b>	<i>p</i> =.010		<i>p</i> =.173	
<i>Never Used</i>	1	1	1	1
<i>Past User</i>	0.885	1.029	0.718	0.600
<i>Current User</i>	1.773*	2.155*	0.444	0.304*
<b>Age Group</b>	<i>p</i> =.864		<i>p</i> =.521	
<i>Age 20-39</i>	1	1	1	1
<i>Age 40-49</i>	0.885	0.824	0.824	0.658
<i>Age 50+</i>	0.848	0.841	1.205	0.833
<b>Geographic Area</b>	<i>p</i> =.070		<i>p</i> =.620	
<i>Bronx</i>	1	1	1	1
<i>Brooklyn</i>	1.254	1.249	0.576	0.786
<i>Manhattan</i>	1.166	1.217	0.760	0.771
<i>Queens</i>	0.810	0.736	1.086	0.654
<i>Staten Island</i>	0.362*	0.316*	1.140	2.356
<b>HIV Medical Care</b>	<i>p</i> =.386			
<i>No HIV Provider</i>	1		--	
<i>Have HIV Provider</i>	2.390		--	
<b>Source of HIV Medical Care</b>	<i>p</i> =.145		<i>p</i> =.628	
<i>HHC</i>	1	1	1	1
<i>Voluntary Hospital</i>	0.494*	0.548*	1.173	1.372
<i>CHC/Clinic</i>	0.588	0.570	0.667	0.591
<i>Drug Treatment / Social Service</i>	0.671	0.977	1.333	1.687
<i>Private MD</i>	0.494	0.640	--	--
<b>Housing</b>	<i>p</i> =.673		<i>p</i> =.970	
<i>Stable</i>	1	1	1	1
<i>Unstable</i>	0.791	0.746	1.150	1.154
<i>Homeless</i>	0.814	0.670	0.986	2.317
<b>Place of Birth</b>	<i>p</i> =.420		<i>p</i> =.005	
<i>US</i>	1	1	1	1
<i>PR</i>	0.862	1.088	2.986	2.894
<i>Other</i>	1.337	1.776	3.391**	2.876

**Table 9A: New York City Social Service Case Management**

	Past (2005-2008)		Current (2008-2009)	
	Need	Adequate Utilization	Need	Adequate Utilization
<b>Total</b>	65.2%	70.1%	52.0%	70.1%
<b>Gender</b>				
<i>Male</i>	61.2%	66.2%*	55.1%	69.4%
<i>Female</i>	50.2%	70.7%	47.8%	71.2%
<b>Race/ Ethnicity</b>				
<i>White</i>	51.8%	58.3%	65.4%*	77.4%
<i>Black</i>	53.2%	67.6%	47.0%	66.4%
<i>Latino</i>	61.6%	70.7%	56.4%	72.4%
<i>Other</i>	70.0%	100%	50.0%	80.0%
<b>Mental Illness</b>				
<i>MCS=&lt;37.0</i>	ALL	63.6%	ALL	72.1%
<i>MCS&gt;37.0</i>	44.1%	70.8%	34.2%	67.9%
<b>Illicit Drug Use</b>				
<i>Never Used</i>	28.8%	65.7%*	36.6%	68.0%
<i>Past User</i>	43.4%	77.4%	41.4%	68.9%
<i>Current User</i>	ALL	59.1%	ALL	72.5%
<b>Age Group</b>				
<i>Age 20-39</i>	53.8%*	90.4%*	61.0%*	70.6%
<i>Age 40-49</i>	61.7%	67.1%	55.1%	75.7%
<i>Age 50+</i>	52.9%	64.8%	48.0%	65.4%
<b>Geographic Area</b>				
<i>Bronx</i>	62.3%	64.4%	54.5%	68.8%
<i>Brooklyn</i>	54.2%	66.0%	52.9%	66.3%
<i>Manhattan</i>	53.3%	67.5%	53.7%	66.2%
<i>Queens</i>	60.6%	80.9%	42.7%	76.7%
<i>Staten Island</i>	51.5%	72.2%	48.6%	100%
<b>HIV Medical Care</b>				
<i>No HIV Provider</i>	83.3%	0.0%	70.0%	25.0%
<i>Have HIV Provider</i>	56.0%	69.9%	51.7%	70.8%
<b>Source of HIV Medical Care</b>				
<i>HHC</i>	61.2%	70.8%	59.1%	71.1%
<i>Voluntary Hospital</i>	57.5%	66.6%	50.0%	72.8%
<i>CHC/Clinic</i>	39.1%	77.5%	48.1%	56.8%
<i>Drug Treatment / Social Service</i>	70.0%	74.6%	61.0%	75.8%
<i>Private MD</i>	41.7%	91.7%	44.4%	72.7%
<b>Housing</b>				
<i>Stable</i>	42.4%	61.4%*	41.9%	70.4%
<i>Unstable</i>	ALL	67.5%	ALL	63.5%
<i>Homeless</i>	ALL	80.8%	ALL	76.7%
<b>Place of Birth</b>				
<i>US</i>	55.2%	66.4%	51.6%	69.7%
<i>PR</i>	60.6%	75.3%	61.2%	72.4%
<i>Other</i>	58.1%	71.2%	48.9%	70.7%

Table 9B: New York City 2008-2009 Social Services Case Management

	Service Needs: Odds Ratios		Service Utilization: Odds Ratios	
	Bivariate	Multivariate	Bivariate	Multivariate
<b>Gender</b>	<i>p</i> =.081		<i>p</i> =.753	
<i>Male</i>	1.341	1.385	0.919	1.005
<i>Female</i>	1	1	1	1
<b>Race/ Ethnicity</b>	<i>p</i> =.035		<i>p</i> =.525	
<i>White</i>	1	1	1	1
<i>Black</i>	0.470*	0.430**	0.577	0.585
<i>Latino</i>	0.686	0.571	0.764	0.724
<i>Other</i>	0.529	0.506	1.167	1.202
<b>Mental Illness</b>			<i>p</i> =.443	
<i>MCS=&lt;37.0</i>	--		1	1
<i>MCS&gt;37.0</i>	--		0.819	0.708
<b>Illicit Drug Use</b>	<i>p</i> =.324		<i>p</i> =.782	
<i>Never Used</i>	1		1	1
<i>Past User</i>	1.225		1.040	0.976
<i>Current User</i>	--		1.239	1.406
<b>Age Group</b>	<i>p</i> =.096		<i>p</i> =.214	
<i>Age 20-39</i>	1	1	1	1
<i>Age 40-49</i>	0.784	0.746	1.296	1.376
<i>Age 50+</i>	0.591	0.523*	0.789	0.863
<b>Geographic Area</b>	<i>p</i> =.488		<i>p</i> =.722	
<i>Bronx</i>	1	1	1	1
<i>Brooklyn</i>	0.936	1.085	0.893	1.017
<i>Manhattan</i>	0.968	1.038	0.889	0.737
<i>Queens</i>	0.620	0.632	1.494	1.565
<i>Staten Island</i>	0.787	0.840	--	--
<b>HIV Medical Care</b>	<i>p</i> =.242		<i>p</i> =.061	
<i>No HIV Provider</i>	1		1	
<i>Have HIV Provider</i>	0.458		7.259	
<b>Source of HIV Medical Care</b>	<i>p</i> =.298		<i>p</i> =.404	
<i>HHC</i>	1	1	1	1
<i>Voluntary Hospital</i>	0.692	0.644	1.090	0.996
<i>CHC/Clinic</i>	0.640	0.610	0.535	0.462
<i>Drug Treatment / Social Service</i>	1.084	1.032	1.273	0.792
<i>Private MD</i>	0.554	0.468	1.086	0.786
<b>Housing</b>			<i>p</i> =.365	
<i>Stable</i>	--		1	1
<i>Unstable</i>	--		0.729	1.010
<i>Homeless</i>	--		1.385	1.756
<b>Place of Birth</b>	<i>p</i> =.355		<i>p</i> =.950	
<i>US</i>	1	1	1	1
<i>PR</i>	1.481	1.274	1.143	1.429
<i>Other</i>	0.899	0.837	1.052	0.935

**Table 10A: New York City Medical Referral Case Management**

	Past (2005-2008)		Current (2008-2009)	
	Need	Adequate Utilization	Need	Adequate Utilization
<b>Total</b>	50.7%	62.8%	44.6%	63.3%
<b>Gender</b>				
<i>Male</i>	50.3%	59.0%	43.4%	66.2%
<i>Female</i>	52.4%	60.0%	46.1%	59.4%
<b>Race/ Ethnicity</b>				
<i>White</i>	48.2%	53.3%	47.1%	65.2%
<i>Black</i>	50.4%	63.1%	46.9%	59.6%
<i>Latino</i>	51.5%	56.7%	41.0%	69.2%
<i>Other</i>	80.0%	100%	30.0%	66.6%
<b>Mental Illness</b>				
<i>MCS=&lt;37.0</i>	65.6%*	60.4%	51.3%*	75.0%*
<i>MCS&gt;37.0</i>	47.3%	59.8%	42.0%	58.0%
<b>Illicit Drug Use</b>				
<i>Never Used</i>	35.3%*	30.0%	33.8%*	58.7%
<i>Past User</i>	47.9%	66.2%	42.0%	62.2%
<i>Current User</i>	66.3%	56.0%	64.9%	68.1%
<b>Age Group</b>				
<i>Age 20-39</i>	46.7%	71.4%	53.4%	70.0%
<i>Age 40-49</i>	58.4%	58.3%	44.4%	66.3%
<i>Age 50+</i>	44.8%	58.1%	42.9%	59.3%
<b>Geographic Area</b>				
<i>Bronx</i>	52.7%*	44.7%*	45.3%*	63.2%
<i>Brooklyn</i>	54.8%	63.6%	46.8%	61.0%
<i>Manhattan</i>	58.3%	59.8%	49.3%	60.9%
<i>Queens</i>	40.7%	84.6%	41.1%	72.4%
<i>Staten Island</i>	20.0%	50.0%	20.0%	71.4%
<b>HIV Medical Care</b>				
<i>No HIV Provider</i>	ALL	8.3%*	ALL	0.0%
<i>Have HIV Provider</i>	50.6%	61.4%	44.4%	64.3%
<b>Source of HIV Medical Care</b>				
<i>HHC</i>	56.6%*	64.2%	56.1%*	70.3%
<i>Voluntary Hospital</i>	51.5%	58.5%	43.6%	64.0%
<i>CHC/Clinic</i>	55.3%	69.4%	50.0%	59.0%
<i>Drug Treatment / Social Service</i>	38.8%	56.8%	33.3%	52.9%
<i>Private MD</i>	17.9%	75.0%	30.8%	88.9%
<b>Housing</b>				
<i>Stable</i>	50.5%*	55.3%*	42.1%*	62.1%*
<i>Unstable</i>	48.4%	59.6%	49.0%	50.0%
<i>Homeless</i>	69.2%	72.2%	65.9%	82.8%
<b>Place of Birth</b>				
<i>US</i>	52.6%	61.5%	46.0%	62.3%
<i>PR</i>	50.4%	56.7%	48.9%	62.5%
<i>Other</i>	42.7%	58.4%	35.9%	70.0%

Table 10B: New York City 2008-2009 Medical Referral Case Management

	Service Needs: Odds Ratios		Service Utilization: Odds Ratios	
	Bivariate	Multivariate	Bivariate	Multivariate
<b>Gender</b>	<i>p</i> =.537		<i>p</i> =.278	
<i>Male</i>	0.899	0.788	1.336	1.178
<i>Female</i>	1	1	1	1
<b>Race/ Ethnicity</b>	<i>p</i> =.444		<i>p</i> =.553	
<i>White</i>	1	1	1	1
<i>Black</i>	0.993	1.156	0.786	0.832
<i>Latino</i>	0.783	0.891	1.200	1.345
<i>Other</i>	0.482	0.546	1.067	1.244
<b>Mental Illness</b>	<i>p</i> =.049		<i>p</i> =.009	
<i>MCS</i> ≤ <i>37.0</i>	1	1	1	1
<i>MCS</i> > <i>37.0</i>	0.688*	0.754	0.460*	0.512*
<b>Illicit Drug Use</b>	<i>p</i> =.000		<i>p</i> =.551	
<i>Never Used</i>	1	1	1	1
<i>Past User</i>	1.416	1.616*	1.158	1.438
<i>Current User</i>	3.623***	3.725***	1.499	2.058
<b>Age Group</b>	<i>p</i> =.338		<i>p</i> =.412	
<i>Age 20-39</i>	1	1	1	1
<i>Age 40-49</i>	0.697	0.604	0.843	1.005
<i>Age 50+</i>	0.655	0.571	0.626	0.699
<b>Geographic Area</b>	<i>p</i> =.024		<i>p</i> =.807	
<i>Bronx</i>	1	1	1	1
<i>Brooklyn</i>	1.063	1.068	0.911	0.853
<i>Manhattan</i>	1.173	1.175	0.907	0.708
<i>Queens</i>	0.843	1.139	1.526	1.632
<i>Staten Island</i>	0.302**	0.323*	1.453	1.525
<b>HIV Medical Care</b>				
<i>No HIV Provider</i>	--		--	
<i>Have HIV Provider</i>	--		--	
<b>Source of HIV Medical Care</b>	<i>p</i> =.051		<i>p</i> =.305	
<i>HHC</i>	1	1	1	1
<i>Voluntary Hospital</i>	0.606	0.663	0.753	0.876
<i>CHC/Clinic</i>	0.784	0.874	0.608	0.749
<i>Drug Treatment / Social Service</i>	0.392*	0.447	0.476	0.438
<i>Private MD</i>	0.348*	0.323*	3.385	3.066
<b>Housing</b>	<i>p</i> =.008		<i>p</i> =.026	
<i>Stable</i>	1	1	1	1
<i>Unstable</i>	1.325	1.207	0.610	0.734
<i>Homeless</i>	2.663**	2.354*	2.929*	2.452
<b>Place of Birth</b>	<i>p</i> =.168		<i>p</i> =.710	
<i>US</i>	1	1	1	1
<i>PR</i>	1.126	1.470	1.008	0.718
<i>Other</i>	0.657	0.825	1.412	1.070

**Table 11A: New York City Mental Health - Professional**

	Past (2005-2008)		Current (2008-2009)	
	Need	Adequate Utilization	Need	Adequate Utilization
<b>Total</b>	51.4%	66.5%	55.0%	71.8%
<b>Gender</b>				
<i>Male</i>	46.4%*	67.5%	50.7%*	70.7%
<i>Female</i>	55.2%	66.5%	60.7%	72.8%
<b>Race/ Ethnicity</b>				
<i>White</i>	64.8%	79.5%	55.8%	72.4%
<i>Black</i>	48.4%	66.9%	51.3%	75.3%
<i>Latino</i>	52.1%	64.8%	60.3%	66.4%
<i>Other</i>	20.0%	0.0%	60.0%	83.3%
<b>Mental Illness</b>				
<i>MCS=&lt;37.0</i>	ALL	42.0%*	ALL	51.3%*
<i>MCS&gt;37.0</i>	36.5%	86.0%	38.7%	91.4%
<b>Illicit Drug Use</b>				
<i>Never Used</i>	41.7%	62.2%*	58.2%*	67.9%
<i>Past User</i>	49.2%	75.5%	50.5%	75.2%
<i>Current User</i>	57.4%	53.5%	63.2%	68.9%
<b>Age Group</b>				
<i>Age 20-39</i>	56.5%	59.9%	66.1%	56.4%*
<i>Age 40-49</i>	51.8%	66.7%	56.9%	73.8%
<i>Age 50+</i>	46.9%	70.6%	51.4%	74.1%
<b>Geographic Area</b>				
<i>Bronx</i>	45.6%	49.0%	52.7%	66.7%
<i>Brooklyn</i>	46.6%	75.0%	57.6%	72.7%
<i>Manhattan</i>	55.6%	74.0%	57.8%	74.0%
<i>Queens</i>	55.6%	60.3%	50.7%	71.1%
<i>Staten Island</i>	51.5%	61.1%	51.4%	83.3%
<b>HIV Medical Care</b>				
<i>No HIV Provider</i>	75.0%	0.0%	30.0%	66.7%
<i>Have HIV Provider</i>	50.0%	68.2%	55.4%	71.8%
<b>Source of HIV Medical Care</b>				
<i>HHC</i>	38.8%	88.7%*	56.1%	78.4%
<i>Voluntary Hospital</i>	51.3%	65.3%	56.4%	72.5%
<i>CHC/Clinic</i>	52.7%	72.8%	62.3%	68.1%
<i>Drug Treatment / Social Service</i>	52.5%	71.6%	43.3%	69.2%
<i>Private MD</i>	48.8%	66.7%	48.1%	61.5%
<b>Housing</b>				
<i>Stable</i>	48.7%*	69.5%	53.6%	72.5%
<i>Unstable</i>	50.6%	56.6%	55.6%	70.0%
<i>Homeless</i>	71.2%	66.1%	68.1%	67.7%
<b>Place of Birth</b>				
<i>US</i>	47.5%*	70.3%	50.9%*	72.3%
<i>PR</i>	56.3%	54.8%	66.0%	63.6%
<i>Other</i>	60.0%	67.2%	68.1%	74.2%

Table 11B: New York City 2008-2009 Mental Health - Professional

	Service Needs: Odds Ratios		Service Utilization: Odds Ratios	
	Bivariate	Multivariate	Bivariate	Multivariate
<b>Gender</b>	<i>p</i> =.016		<i>p</i> =.675	
<i>Male</i>	0.666*	0.572**	1.110	1.544
<i>Female</i>	1	1	1	1
<b>Race/ Ethnicity</b>	<i>p</i> =.237		<i>p</i> =.368	
<i>White</i>	1	1	1	1
<i>Black</i>	0.834	0.916	1.162	1.198
<i>Latino</i>	1.204	1.098	0.753	0.902
<i>Other</i>	1.190	1.020	1.905	3.350
<b>Mental Illness</b>			<i>p</i> =.000	
<i>MCS</i> ≤ <i>37.0</i>	--		1	1
<i>MCS</i> > <i>37.0</i>	--		10.111***	11.218***
<b>Illicit Drug Use</b>	<i>p</i> =.038		<i>p</i> =.398	
<i>Never Used</i>	1	1	1	1
<i>Past User</i>	0.731	1.026	1.433	1.435
<i>Current User</i>	1.235*	1.833*	1.050	1.301
<b>Age Group</b>	<i>p</i> =.086		<i>p</i> =.089	
<i>Age 20-39</i>	1	1	1	1
<i>Age 40-49</i>	0.678	0.810	2.173*	4.243**
<i>Age 50+</i>	0.544	0.689	2.205*	2.949*
<b>Geographic Area</b>	<i>p</i> =.739		<i>p</i> =.618	
<i>Bronx</i>	1	1	1	1
<i>Brooklyn</i>	1.217	1.138	1.333	1.209
<i>Manhattan</i>	1.228	1.137	1.425	1.491
<i>Queens</i>	0.922	0.672	1.227	1.179
<i>Staten Island</i>	0.951	1.008	2.500	2.890
<b>HIV Medical Care</b>	<i>p</i> =.108		<i>p</i> =.846	
<i>No HIV Provider</i>	1		1	
<i>Have HIV Provider</i>	2.898		1.275	
<b>Source of HIV Medical Care</b>	<i>p</i> =.219		<i>p</i> =.751	
<i>HHC</i>	1	1	1	1
<i>Voluntary Hospital</i>	1.014	1.166	0.729	0.462
<i>CHC/Clinic</i>	1.297	1.497	0.589	0.485
<i>Drug Treatment / Social Service</i>	0.599	0.682	0.621	0.595
<i>Private MD</i>	0.728	0.958	0.441	0.414
<b>Housing</b>	<i>p</i> =.155		<i>p</i> =.839	
<i>Stable</i>	1	1	1	1
<i>Unstable</i>	1.081	1.237	0.886	1.491
<i>Homeless</i>	1.845	1.954	0.797	0.652
<b>Place of Birth</b>	<i>p</i> =.002		<i>p</i> =.538	
<i>US</i>	1	1	1	1
<i>PR</i>	1.872*	1.854	0.670	1.150
<i>Other</i>	2.058**	2.366**	1.100	1.540

**Table 12A: New York City Alcohol or Drug Treatment**

	Past (2005-2008)		Current (2008-2009)	
	Need	Adequate Utilization	Need	Adequate Utilization
<b>Total</b>	58.8%	45.6%	50.0%	43.6%
<b>Gender</b>				
<i>Male</i>	62.3%*	49.3%	50.7%	45.3%
<i>Female</i>	54.5%	40.4%	49.0%	41.3%
<b>Race/ Ethnicity</b>				
<i>White</i>	56.7%*	47.4%	57.7%*	50.0%
<i>Black</i>	65.2%	45.2%	54.7%	41.6%
<i>Latino</i>	50.7%	44.5%	40.7%	45.8%
<i>Other</i>	10.0%	0.0%	50.0%	40.0%
<b>Mental Illness</b>				
<i>MCS=&lt;37.0</i>	64.3%	45.1%	51.6%	48.8%
<i>MCS&gt;37.0</i>	57.2%	45.6%	49.8%	41.7%
<b>Illicit Drug Use</b>				
<i>Never Used</i>	15.4%*	10.0% *	12.3%*	0.0%*
<i>Past User</i>	52.8%	50.1%	48.9%	52.2%
<i>Current User</i>	ALL	42.9%	ALL	38.5%
<b>Age Group</b>				
<i>Age 20-39</i>	53.9%	34.0%	37.3%	27.3%
<i>Age 40-49</i>	59.3%	45.6%	50.0%	43.9%
<i>Age 50+</i>	59.7%	47.1%	52.4%	45.7%
<b>Geographic Area</b>				
<i>Bronx</i>	65.9%*	49.0%	49.1%*	44.4%*
<i>Brooklyn</i>	66.3%	45.3%	58.1%	46.0%
<i>Manhattan</i>	50.5%	48.0%	51.9%	37.1%
<i>Queens</i>	60.7%	32.7%	30.7%	30.4%
<i>Staten Island</i>	37.3%	57.1%	48.6%	70.6%
<b>HIV Medical Care</b>				
<i>No HIV Provider</i>	83.3%	25.0%	60.0%	33.3%
<i>Have HIV Provider</i>	58.5%	45.9%	49.8%	43.9%
<b>Source of HIV Medical Care</b>				
<i>HHC</i>	71.9%*	43.6%	50.0%*	54.5%*
<i>Voluntary Hospital</i>	53.4%	43.2%	49.4%	40.2%
<i>CHC/Clinic</i>	49.8%	42.5%	41.6%	40.6%
<i>Drug Treatment / Social Service</i>	78.8%	61.9%	66.7%	47.5%
<i>Private MD</i>	85.7%	56.7%	40.7%	63.6%
<b>Housing</b>				
<i>Stable</i>	56.3%*	41.1%	48.4%*	43.2%
<i>Unstable</i>	62.5%	54.9%	48.1%	53.8%
<i>Homeless</i>	77.7%	65.0%	68.1%	38.7%
<b>Place of Birth</b>				
<i>US</i>	65.5%*	48.4%*	55.9%*	43.5%
<i>PR</i>	45.0%	50.0%	44.0%	54.5%
<i>Other</i>	39.4%	22.2%	25.5%	34.8%

Table 12B: New York City 2008-2009 Alcohol or Drug Treatment

	Service Needs: Odds Ratios		Service Utilization: Odds Ratios	
	Bivariate	Multivariate	Bivariate	Multivariate
<b>Gender</b>	<i>p</i> =.675		<i>p</i> =.500	
<i>Male</i>	1.073	1.110	1.176	1.332
<i>Female</i>	1	1	1	1
<b>Race/ Ethnicity</b>	<i>p</i> =.011		<i>p</i> =.811	
<i>White</i>	1	1	1	1
<i>Black</i>	0.886	0.982	0.713	0.477
<i>Latino</i>	0.503*	0.722	0.844	0.526
<i>Other</i>	0.733	1.078	0.667	0.766
<b>Mental Illness</b>	<i>p</i> =.695		<i>p</i> =.280	
<i>MCS</i> ≤ <i>37.0</i>	1	1	1	1
<i>MCS</i> > <i>37.0</i>	0.929	0.788	0.752	0.647
<b>Illicit Drug Use</b>	<i>p</i> =.000		<i>p</i> =.023	
<i>Never Used</i>	1		1	1
<i>Past User</i>	6.808***		1.749*	2.082*
<i>Current User</i>	--		--	--
<b>Age Group</b>	<i>p</i> =.101		<i>p</i> =.247	
<i>Age 20-39</i>	1	1	1	1
<i>Age 40-49</i>	1.682	1.394	2.089	1.999
<i>Age 50+</i>	1.853*	1.445	2.242	1.941
<b>Geographic Area</b>	<i>p</i> =.003		<i>p</i> =.085	
<i>Bronx</i>	1	1	1	1
<i>Brooklyn</i>	1.440	1.581	1.065	1.241
<i>Manhattan</i>	1.116	1.135	0.739	0.689
<i>Queens</i>	0.458**	0.688	0.547	0.487
<i>Staten Island</i>	0.979	0.775	3.000	4.384*
<b>HIV Medical Care</b>	<i>p</i> =.522		<i>p</i> =.602	
<i>No HIV Provider</i>	1		1	
<i>Have HIV Provider</i>	0.662		1.563	
<b>Source of HIV Medical Care</b>	<i>p</i> =.041		<i>p</i> =.341	
<i>HHC</i>	1	1	1	1
<i>Voluntary Hospital</i>	0.977	1.034	0.561	0.389*
<i>CHC/Clinic</i>	0.711	0.661	0.570	0.431
<i>Drug Treatment / Social Service</i>	2.000	2.301*	0.754	0.318*
<i>Private MD</i>	0.688	0.512	1.458	0.983
<b>Housing</b>	<i>p</i> =.033		<i>p</i> =.491	
<i>Stable</i>	1	1	1	1
<i>Unstable</i>	0.988	0.882	1.536	1.709
<i>Homeless</i>	2.270*	1.837	0.832	0.730
<b>Place of Birth</b>	<i>p</i> =.000		<i>p</i> =.406	
<i>US</i>	1	1	1	1
<i>PR</i>	0.620	0.722	1.559	1.217
<i>Other</i>	0.270***	0.343***	0.693	1.005

**Table 13A: New York City Transportation**

	Past (2005-2008)		Current (2008-2009)	
	Need	Adequate Utilization	Need	Adequate Utilization
<b>Total</b>	16.1%	16.7%	8.7%*	41.2%
<b>Gender</b>				
<i>Male</i>	9.7%*	27.3%	10.4%	37.1%*
<i>Female</i>	17.5%	35.7%	6.5%	50.0%
<b>Race/ Ethnicity</b>				
<i>White</i>	20.5%*	35.0%	13.5%	57.1%
<i>Black</i>	8.4%	20.8%	6.9%	36.4%
<i>Latino</i>	16.9%	37.5%	9.8%	40.0%
<i>Other</i>	50.0%	100%	20.0%	50.0%
<b>Mental Illness</b>				
<i>MCS=&lt;37.0</i>	16.4%	13.6%*	11.5%	22.2%*
<i>MCS&gt;37.0</i>	12.4%	36.3%	7.8%	51.5%
<b>Illicit Drug Use</b>				
<i>Never Used</i>	8.2%	42.9%	8.2%	33.3%
<i>Past User</i>	15.3%	26.8%	9.0%	48.3%
<i>Current User</i>	11.8%	40.3%	8.5%	30.0%
<b>Age Group</b>				
<i>Age 20-39</i>	13.8%	41.7%	6.8%	50.0%
<i>Age 40-49</i>	13.5%	25.0%	7.4%	37.5%
<i>Age 50+</i>	12.2%	37.5%	10.0%	41.9%
<b>Geographic Area</b>				
<i>Bronx</i>	18.1%	40.6%*	4.8%*	37.5%
<i>Brooklyn</i>	14.1%	23.7%	9.9%	35.3%
<i>Manhattan</i>	10.5%	15.0%	11.1%	60.0%
<i>Queens</i>	2.8%	66.7%	13.3%	30.0%
<i>Staten Island</i>	22.5%	75.0%	2.9%	0.0%
<b>HIV Medical Care</b>				
<i>No HIV Provider</i>	8.3%	0.0%	0.0%	--
<i>Have HIV Provider</i>	13.2%	33.2%	8.9%	41.2%
<b>Source of HIV Medical Care</b>				
<i>HHC</i>	11.2%	25.0%	10.6%	28.6%
<i>Voluntary Hospital</i>	12.6%	33.2%	9.6%	48.5%
<i>CHC/Clinic</i>	14.6%	46.4%	7.8%	16.7%
<i>Drug Treatment / Social Service</i>	20.2%	33.3%	5.0%	33.3%
<i>Private MD</i>	7.1%	0.0%	7.4%	50.0%
<b>Housing</b>				
<i>Stable</i>	11.6%*	40.3%	7.7%*	48.6%
<i>Unstable</i>	6.3%	30.0%	11.1%	16.7%
<i>Homeless</i>	33.3%	25.0%	17.0%	25.0%
<b>Place of Birth</b>				
<i>US</i>	12.9%	25.6%	7.0%*	45.2%
<i>PR</i>	20.0%	41.7%	14.0%	57.1%
<i>Other</i>	6.5%	33.3%	13.8%	23.1%

Table 13B : New York City 2008-2009 Transportation

	Service Needs: Odds Ratios		Service Utilization: Odds Ratios	
	Bivariate	Multivariate	Bivariate	Multivariate
<b>Gender</b>	<i>p</i> =.094		<i>p</i> =.388	
<i>Male</i>	1.673	1.539	0.591	0.016*
<i>Female</i>	1	1	1	1
<b>Race/ Ethnicity</b>	<i>p</i> =.244		<i>p</i> =.799	
<i>White</i>	1	1	1	1
<i>Black</i>	0.478	0.647	0.429	0.133
<i>Latino</i>	0.699	0.571	0.500	0.077
<i>Other</i>	1.607	1.776	0.750	0.001
<b>Mental Illness</b>	<i>p</i> =.174		<i>p</i> =.038	
<i>MCS</i> ≤ <i>37.0</i>	1	1	1	1
<i>MCS</i> > <i>37.0</i>	0.652	0.751	3.719*	101.742*
<b>Illicit Drug Use</b>	<i>p</i> =.956		<i>p</i> =.486	
<i>Never Used</i>	1	1	1	1
<i>Past User</i>	1.109	1.357	1.867	0.080
<i>Current User</i>	1.044	1.109	0.857	0.026
<b>Age Group</b>	<i>p</i> =.489		<i>p</i> =.894	
<i>Age 20-39</i>	1	1	1	1
<i>Age 40-49</i>	1.100	1.683	0.600	0.025
<i>Age 50+</i>	1.533	2.233	0.722	0.015
<b>Geographic Area</b>	<i>p</i> =.068		<i>p</i> =.398	
<i>Bronx</i>	1	1	1	1
<i>Brooklyn</i>	2.180	2.335	0.909	0.389
<i>Manhattan</i>	2.484*	2.224	2.500	22.814
<i>Queens</i>	3.058*	2.913	0.714	1.336
<i>Staten Island</i>	0.585	0.690	--	--
<b>HIV Medical Care</b>				
<i>No HIV Provider</i>	--		--	
<i>Have HIV Provider</i>	--		--	
<b>Source of HIV Medical Care</b>	<i>p</i> =.746		<i>p</i> =.556	
<i>HHC</i>	1	1	1	1
<i>Voluntary Hospital</i>	0.894	0.939	2.353	5.186
<i>CHC/Clinic</i>	0.712	0.812	0.500	0.457
<i>Drug Treatment / Social Service</i>	0.444	0.547	1.250	699.562
<i>Private MD</i>	0.674	0.637	2.500	22.044
<b>Housing</b>	<i>p</i> =.115		<i>p</i> =.180	
<i>Stable</i>	1	1	1	1
<i>Unstable</i>	1.507	1.619	0.211	0.702
<i>Homeless</i>	2.473*	2.585*	0.352	3.807
<b>Place of Birth</b>	<i>p</i> =.055		<i>p</i> =.245	
<i>US</i>	1	1	1	1
<i>PR</i>	2.148	1.357	1.619	0.080
<i>Other</i>	2.117*	1.109*	0.364	0.026

Table 14A: New York City Food Services

	Past (2005-2008)		Current (2008-2009)	
	Need	Adequate Utilization	Need	Adequate Utilization
<b>Total</b>	90.4%	44.9%	89.1%	48.5%
<b>Gender</b>				
<i>Male</i>	87.0%*	53.9%	86.8%*	58.7%*
<i>Female</i>	94.2%	44.0%	92.2%	35.3%
<b>Race/ Ethnicity</b>				
<i>White</i>	72.4%*	53.0%	76.5%*	48.6%
<i>Black</i>	92.6%	51.3%	91.5%	49.6%
<i>Latino</i>	89.9%	47.2%	88.1%	45.8%
<i>Other</i>	100%	12.5%	100%	60.0%
<b>Mental Illness</b>				
<i>MCS=&lt;37.0</i>	91.5%	48.3%	90.4%	52.6%
<i>MCS&gt;37.0</i>	89.8%	50.2%	88.6%	46.9%
<b>Illicit Drug Use</b>				
<i>Never Used</i>	82.4%*	43.5%	83.3%*	41.4%
<i>Past User</i>	89.9%	51.7%	90.6%	48.6%
<i>Current User</i>	95.4%	50.1%	92.3%	56.6%
<b>Age Group</b>				
<i>Age 20-39</i>	91.6%	37.9%	84.7%	56.3%
<i>Age 40-49</i>	91.0%	55.5%	93.0%	45.3%
<i>Age 50+</i>	88.8%	46.7%	87.2%	49.4%
<b>Geographic Area</b>				
<i>Bronx</i>	91.7%*	58.6%	87.2%	50.0%
<i>Brooklyn</i>	92.4%	48.4%	93.0%	48.0%
<i>Manhattan</i>	82.9%	53.2%	91.0%	51.8%
<i>Queens</i>	95.4%	39.1%	78.7%	46.4%
<i>Staten Island</i>	100%	30.1%	94.3%	36.4%
<b>HIV Medical Care</b>				
<i>No HIV Provider</i>	91.7%	50.0%	50.0%*	100%
<i>Have HIV Provider</i>	90.2%	49.5%	89.8%	48.2%
<b>Source of HIV Medical Care</b>				
<i>HHC</i>	91.2%	67.6%	89.4%	53.4%
<i>Voluntary Hospital</i>	90.0%	46.5%	92.4%	45.8%
<i>CHC/Clinic</i>	91.4%	46.3%	85.7%	51.6%
<i>Drug Treatment / Social Service</i>	96.3%	58.8%	86.2%	54.2%
<i>Private MD</i>	69.0%	37.5%	76.9%	42.1%
<b>Housing</b>				
<i>Stable</i>	90.1%	48.0%	88.3%	46.4%*
<i>Unstable</i>	88.8%	55.1%	88.9%	45.7%
<i>Homeless</i>	96.4%	52.3%	97.9%	71.4%
<b>Place of Birth</b>				
<i>US</i>	89.2%	51.0%	91.1%*	49.3%*
<i>PR</i>	91.9%	38.7%	91.8%	29.5%
<i>Other</i>	91.7%	51.0%	78.7%	55.7%

Table 14B: New York City 2008-2009 Food Services

	Service Needs: Odds Ratios		Service Utilization: Odds Ratios	
	Bivariate	Multivariate	Bivariate	Multivariate
<b>Gender</b>	<i>p</i> =.035		<i>p</i> =.000	
<b>Male</b>	0.554*	0.588	2.599***	2.434***
<b>Female</b>	1	1	1	1
<b>Race/ Ethnicity</b>	<i>p</i> =.013		<i>p</i> =.764	
<b>White</b>	1	1	1	1
<b>Black</b>	3.305**	5.542***	1.040	0.951
<b>Latino</b>	2.269*	4.920**	0.893	0.822
<b>Other</b>	--	--	1.583	1.376
<b>Mental Illness</b>	<i>p</i> =.527		<i>p</i> =.261	
<b>MCS=&lt;37.0</b>	1	1	1	1
<b>MCS&gt;37.0</b>	0.823	0.831	0.796	0.758
<b>Illicit Drug Use</b>	<i>p</i> =.040		<i>p</i> =.084	
<b>Never Used</b>	1	1	1	1
<b>Past User</b>	1.920*	1.608	1.337	1.399
<b>Current User</b>	2.400*	2.015	1.845*	1.615
<b>Age Group</b>	<i>p</i> =.051		<i>p</i> =.361	
<b>Age 20-39</b>	1	1	1	1
<b>Age 40-49</b>	2.400	2.482	0.643	0.580
<b>Age 50+</b>	1.228	1.087	0.760	0.665
<b>Geographic Area</b>	<i>p</i> =.017		<i>p</i> =.611	
<b>Bronx</b>	1	1	1	1
<b>Brooklyn</b>	1.958	2.264	0.924	0.921
<b>Manhattan</b>	1.481	1.348	1.073	0.969
<b>Queens</b>	0.542	0.622	0.867	0.895
<b>Staten Island</b>	2.423	1.660	0.571	0.586
<b>HIV Medical Care</b>	<i>p</i> =.002			
<b>No HIV Provider</b>	1		--	
<b>Have HIV Provider</b>	8.810***		--	
<b>Source of HIV Medical Care</b>	<i>p</i> =.079		<i>p</i> =.631	
<b>HHC</b>	1	1	1	1
<b>Voluntary Hospital</b>	1.442	1.640	0.737	0.736
<b>CHC/Clinic</b>	0.712	0.507	0.927	0.982
<b>Drug Treatment / Social Service</b>	0.742	0.495	1.029	1.195
<b>Private MD</b>	0.395	0.292	0.633	0.572
<b>Housing</b>	<i>p</i> =.058		<i>p</i> =.007	
<b>Stable</b>	1	1	1	1
<b>Unstable</b>	1.061	1.452	0.970	0.688
<b>Homeless</b>	6.104	5.290	2.888*	2.211*
<b>Place of Birth</b>	<i>p</i> =.005		<i>p</i> =.017	
<b>US</b>	1	1	1	1
<b>PR</b>	1.105	1.463	0.431*	0.391*
<b>Other</b>	0.363***	0.373*	1.292	1.429

## 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.