



SUFFOLK UNIVERSITY

CENTER FOR PUBLIC MANAGEMENT

**RYAN WHITE HIV/AIDS TREATMENT MODERNIZATION ACT
BOSTON EMA PART A (TITLE I) PROGRAMS**

OUTCOMES MEASUREMENT SUMMARY

ANNUAL OUTCOMES REPORT

FY06: MARCH 2006 – FEBRUARY 2007

SEPTEMBER 2007

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EXECUTIVE SUMMARY

Suffolk University in conjunction with the Boston Public Health Commission (BPHC) has been assessing the impact of Ryan White Title I services on people living with HIV/AIDS (PLWH) in the Boston EMA since 1996. Suffolk University's Center for Public Management (CPM) collects individual client outcomes data every six months from service providers and reports the results annually to BPHC.

This report evaluates outcome reports over the past three reporting periods: Year-End FY05 (September 2005 – February 2006), Mid-Year FY06 (March 2006 – August 2006) and Year-End FY06 (September 2006 – February 2007). During FY06, fifty-three (53) providers providing services in 12 different service categories (case management, client advocacy, dental, drug reimbursement, food services, housing, mental health, peer support, primary medical care, substance abuse, transportation and Minority AIDS Initiative, or MAI) submitted outcome measurement reports on 5,729 unique clients in March 2006 – August 2006 and 5,899 unique clients in September 2006 – February 2007. Results are presented for six study groups: on-going clients, new clients, 3-Year Cohort (FY04 – FY06), on-going MAI clients, new MAI clients, and 5-Year MAI Cohort (FY02 – FY06). (See Figure 1)

Demographic profiles for new and on-going clients are similar. The average age for clients is 44 years old, and 67% are male. For race/ethnicity, 27% are Hispanic, 44% are White, and 24% are Black. Most clients' primary language is English (72%). Regarding diagnostics, 39% are HIV positive/Not AIDS (39%), and 44% are AIDS/CDC defined. Twenty-three percent (23%) of clients were referred into services by a health center and 19% were referred by a case manager. Forty-three percent (43%) of clients were exposed to HIV through heterosexual contact. Fifty-six (56%) of clients have income levels equal to or below the federal poverty level, and fifty-eight percent (58%) are permanently housed.

In this analysis, the medical outcomes (CD-4 counts and HIV viral loads) continue to suggest that both clients new to Ryan White Title I Services and those who are continuing to receive services are in good to excellent health. However, a review of the 3-Year Cohort (clients who consistently received an outcomes measurement report at least once in each fiscal year over a three-year period, March 2004 – February 2007) highlights a slight decline in the overall quality of life for PLWH in the Boston EMA. (See Figure 17)

In addition, after examining individual quality of life outcomes, only four out of eight outcomes indicate good or excellent outcome scores for on-going clients (score greater than or equal to 68/100). The other four indicators have scores ranging from 58 to 64, indicating a fair quality of life status; those indicators are: 1) ability to advocate, 2) coping skills and level of stress, 3) level of depression, and 4) level of crisis intervention. A potential area for future investigation includes reviewing the delivery of services, in order to assess ways of assisting clients to achieve optimal outcomes.

A comparison of clients by status (new vs. on-going) at the end of FY06 suggests that Title I services has an overall positive impact on clients using its services. For the September 2006 – February 2007 reporting period, on-going clients had higher scores than new clients for the following indicators: knowledge about HIV/AIDS (12-points higher for on-going clients), access to medical care (31-points higher for on-going clients), ability to maintain housing (41-points higher for on-going clients) and network of support (15-points higher for on-going clients). (See Figures 10, 11, 13, and 14) It is important to note that the analysis is limited to client status (new vs. on-going) and does not reflect individual client progress from new to on-going status.

The most significant change in individual outcome scores was observed with new clients and their ability to access medical care (20-point drop over the past two fiscal years). This finding could be further investigated to determine whether or not this is a reporting anomaly or whether access to medical care is more limited for people who are not part of the Title I Service Delivery System.

Several data limitations should be recognized when reviewing this report. The outcomes data reported was provided only by Title I service providers and does not include outcome or service data for services covered by other state or federal funding sources. Furthermore, PLWH in the Boston EMA may have received other medical or support services that could have impacted their reported health and quality of life outcomes.

Additional limitations include: inconsistent outcome assessments between reporting periods, and varied selection of health and quality indicators by providers.

INTRODUCTION

Since 1996, Suffolk University’s Center for Public Management (CPM) has evaluated the delivery of Ryan White Title I services in the Boston EMA. CPM is responsible for collecting individual client outcomes data every six months from service providers and reporting annually to the Boston Public Health Commission (BPHC). During FY06 outcomes data was collected across 12 different service categories: case management, client advocacy, dental, drug reimbursement, food services/meals, housing, mental health, peer support, primary care, substance abuse, transportation, and Minority AIDS Initiative (MAI), which supports case management and/or peer support programs. In the first reporting period (March 2006 – August 2006), 8,223 outcome reports were collected from 53 different providers which represented 5,729 unduplicated clients, and in the second reporting period (September 2006 – February 2007), 8,994 outcome reports were collected from 52 different providers which represented 5,899 unduplicated clients.

Data presented in this report encompasses several years of outcomes collection. Specifically, this report presents new health and quality of outcomes data from the two reporting periods in FY06 (March 2006 – August 2006 and September 2006 – February 2007). This data is compared to Year-End FY05 (September 2005 – February 2006) outcomes data for on-going and new clients. Also, additional years of outcomes data are included in comparisons related to two cohort groups: the 3-Year Cohort and the 5-Year MAI Cohort.

Below are definitions for the six study groups included in this report. (See Figure 1)

FIGURE 1. STUDY GROUPS¹

Study Group	# of Unduplicated Clients	Definition
1. On-Going Clients	3,665	Clients who are continuing to use a Ryan White Title I service and have had a case review during FY06.
2. New Clients	1,304	Clients who have started using a Ryan White Title I service during FY06.
3. 3-Year Cohort	3,719	Clients who consistently received an outcomes measurement report (at least once in each fiscal year) over a three-year period (March 2004 – February 2007).
4. On-Going MAI clients	215	Clients who are continuing to use Ryan White Title I services funded through the Minority AIDS Initiative (MAI) and have had a case review during FY06.
5. New MAI clients	62	Clients who have started using Ryan White Title I services funded through the Minority AIDS Initiative (MAI) during FY06.
6. 5-Year MAI Cohort	29	Minority AIDS Initiative (MAI) clients who consistently received an outcomes measurement report (at least once in each fiscal year) over a three-year period (March 2002 – February 2007).

¹ Clients may be included in both the new and on-going study groups if they received outcome measurement reports from multiple providers and/or for different services or their case was opened and then closed during the reporting period.

STUDY GOAL

This report focuses on four questions:

- 1) Have the health and quality of life outcomes for on-going clients and new clients changed significantly while comparing the past three reporting periods (Year-End FY05: September 2005 – February 2006; Mid-Year FY06: March 2006 – August 2006; and Year-End FY06: September 2006 – February 2007)?
- 2) Have the health and quality of life outcomes for on-going MAI clients and new MAI clients changed significantly while comparing the past two fiscal years (FY05: March 2005 – February 2006 and FY06: March 2006 – February 2007)?
- 3) Have the health and quality of life outcomes for clients in the 3-Year Cohort changed significantly while comparing the past three fiscal years (FY04: March 2004 – February 2005; FY05: March 2005 – February 2006; and FY06: March 2006 – February 2007)?
- 4) Have the health and quality of life outcomes for clients in the 5-Year MAI Cohort changed significantly while comparing the past five fiscal years (FY02: March 2002 – February 2003; FY03: March 2003 – February 2004; FY04: March 2004 – February 2005; FY05: March 2005 – February 2006; and FY06: March 2006 – February 2007)?

METHODOLOGY

Development of the Outcomes Measurement System (OMS)

In 1996, Suffolk University's Center for Public Management began working with the Boston Public Health Commission (BPHC) to develop an Outcomes Measurement System (OMS) to evaluate Ryan White Title I services' impact on the health and quality of life of people living with HIV/AIDS (PLWH) in the Boston EMA.

Initially, working with Title I Providers, analysts developed outcome measures for each Title I service offered within the Boston EMA.

In 2001, analysts made two modifications to the OMS. First, analysts merged separate data instruments into one (see Appendix A), yielding seven health and eight quality of life measures. Title I providers must report five outcomes for each client served; three of these must be health outcomes, including CD-4 counts and/or viral loads. Second, analysts adopted unique (and anonymous) client identifiers that were developed by BPHC for clients utilizing Ryan White Title I services, allowing tracking of health and quality of life outcomes over time.

In 2004, analysts integrated the BPHC demographic database into the OMS, allowing more detailed analysis of the impact of Title I services.

Data Collection

Researchers evaluate health and quality of life outcomes every six months using a two-page standard survey tool. Researchers evaluate the outcomes measurement report for

new clients (clients who have started using Ryan White Title I services during the current reporting period) and **on-going clients** (clients who are continuing to use Title I service and have had a case review during the current reporting period).

Title I providers—case managers, client advocates, peer counselors, etc.— are instructed to select five identical outcomes for each individual client within the agency. Of these five, three must be health measures, of which one must be either CD-4 counts or viral load. Each provider selects additional measures most appropriate for their program.²

To ensure confidentiality, clients are identified on the Outcomes Measurement Report using a unique identifier, consisting of a 13-digit code: which consists of the first three letters of the client's mother's first name, the 6-digit date of birth and the last 4 digits of the client's social security number. By utilizing unique client identifiers, an individual client's health and quality of life status, along with their service utilization, can be tracked over time.

In addition to unique client identifiers and outcome scores, providers also include on the reports:

- Report date
- Agency name
- Agency contact name and phone number
- Client status (new intake, six month review, inactive-but not closed, closed)
- Intake date for new clients

Providers participate in a yearly training, which includes verbal and written instructions (available in the Provider Manual) on completing and submitting outcomes forms. Boston Public Health Commission (BPHC) assists in coordination of technical assistance for agencies related to outcomes submission, and Suffolk staff provides individualized training on electronic submission and paper report completion.

The Annual Report presents health and quality of life outcomes data for all clients receiving Ryan White Title I services across the following reporting periods: Year-End FY05 (September 2005 – February 2006), Mid-Year FY06 (March 2006 – August 2006) and Year-End FY06 (September 2006 – February 2007).

Outcome Measures

Ryan White Title I provides an array of direct and supportive services developed to improve and maintain the health status and quality of life of PLWH to the highest level possible. Services should improve a client's health status and quality of life.

There are seven health outcome measures for PLWH in the Boston EMA. The optimal outcome for each health indicator is shown in Figure 2.

²Note: Some outcome measures are subjective in nature and are assessed based on the professional judgment of the provider.

FIGURE 2. HEALTH OUTCOME MEASURES

Health Outcome Measures	Optimal Outcome
1. CD-4 Counts	Have a CD-4 count greater than 500.
2. HIV Progression-Viral Load	Have HIV Viral Loads of less than 50 or at an undetectable level.
3. Knowledge about HIV/AIDS & Other Support Services	Be fully informed about HIV/AIDS and other support services.
4. Ability to Access Medical Care & Other Support Services	Have most of their barriers to good health care addressed and be able to use both health care and other support services appropriately; thereby reducing the unnecessary use of emergency services.
5. Ability to Maintain Medical Care	Have not missed more than three medical appointments in past 6 months.
6. Ability to Adhere to Medical Therapies	Routinely adhere to their medical therapies.
7. Medical Treatments-Consistent with US Public Health Service Guidelines	Be receiving medical treatment that is consistent with US Public Health Service Guidelines.

There are eight quality of life outcome measures for PLWH in the Boston EMA. The optimal outcome for each quality of life indicator is shown in Figure 3.

FIGURE 3. QUALITY OF LIFE OUTCOME MEASURES

Quality of Life Outcome Measures	Optimal Outcome
8. Ability to Advocate	Be able to access and use appropriately all needed services; have been clean and sober for more than six months; and would routinely use transmission prevention protocols.
9. Ability to Maintain Housing	Have been in stable housing for more than six months and their housing status would not be in jeopardy.
10. Network of Support	Have a full array of networked support available when they need it.
11. Coping Skills and Level of Stress	Have their personal stress under control and have assurance that their care-taking and family situation is also not overly stressed.
12. Level of Depression	Not depressed.
13. Level of Crisis Intervention Services	No crisis interventions needed in the last six months.
14. Level of Side Effects	Have no medication side effects which adversely impact life activities.
15. Level of Criminal Behavior	Have not been arrested or incarcerated in the last six months

Outcome Calculations

Analysts employed a four-step process in calculating outcome scores³:

Step 1: Each of the four measurement levels was assigned a descending numeric score (9=crisis, 0=no need). (See example below.)

Outcomes: To improve and/or stabilize...	Client's Level of Need			
	Crisis Score=9	High Need Score=6	Moderate/Low Need Score=3	No Need Score=0
1. CD-4 counts	<input type="checkbox"/> Less than 50	<input type="checkbox"/> 50 - 199	<input type="checkbox"/> 200 – 500	<input type="checkbox"/> >500

Step 2: Numeric scores ranging from 0-9 were computed.

Step 3: Mean scores were generated.

Step 4: Mean scores were adjusted to a 100-point ascending scale (0=crisis, 100=no need/achieved outcome) by subtracting the mean from 9.00 and then multiplying the result by 11.1.

Calculating Health & Quality of Life Status

Analysts measured Health Status by averaging Outcomes 1 to 6, then executing Step 4 above.⁴

Outcome 1: CD-4 Counts

Outcome 2: HIV Progression-Viral Load

Outcome 3: Knowledge about HIV/AIDS & Other Support Services

Outcome 4: Ability to Access Medical Care & Other Support Services

Outcome 5: Ability to Maintain Medical Care

Outcome 6: Ability to Adhere to Medical Therapies

Analysts measured Quality of Life Status by averaging Outcomes 7 & 9-15, then proceeding with step 4 above.

Outcome 7: Ability to Advocate

Outcome 9: Ability to Maintain Housing

Outcome 10: Network of Support

³ If a client receives an outcomes assessment from more than one provider then the scores are averaged.

⁴ Outcome 8 (Medical Treatments – assuring that they are consistent with US Public Health Service Guidelines) is not included in the analysis since it is measured on a 2-point rather than 4 point scale.

- Outcome 11: Coping Skills and Level of Stress
- Outcome 12: Level of Depression
- Outcome 13: Level of Crisis Intervention Services
- Outcome 14: Level of Side Effects
- Outcome 15: Level of Criminal Behavior

Interpreting Outcome Scores

Outcomes are ranked into four measurement levels: excellent (score: 100), good (score: 68-99), fair (score: 34-67), and poor (score: 0-33).

Reported Outcome Score	Health/Quality of Life
100	EXCELLENT ...Achieved outcome goal. May need continued services to maintain goal achievement.
68-99	GOOD ...Making significant progress towards outcome goal. Needs some additional services to reach the goal.
34-67	FAIR ...Making some progress toward reaching the outcome goal. There is a significant need for additional services.
0-33	POOR ...In crisis and in need of substantial additional services

Data Quality

Upon receipt, Suffolk reviews each outcome measurement report for missing or inconsistent information. After data entry, the project supervisor randomly selects surveys, and cross-references them with the database for data input errors. In addition, reports detailing clients entered into the database are distributed to providers submitting paper outcome measurement reports. Providers then check their lists to ensure that Suffolk entered unique identifiers for their clients correctly. This report is helpful for larger providers or for agencies with high staff turnover, to ensure consistency in data collection. Providers also use this report as a reference to ensure that reports are completed on the same clients in the next reporting period.

Survey Reliability

Analysts performed statistical tests to determine the reliability of the outcomes measurement survey tool. Two fundamental questions addressed when assessing survey reliability are: how much of the variability in outcome scores is due to measurement error and how much is due to variability in true scores? Results indicated a high degree of internal consistency (Note: Internal consistency measures how consistently individuals respond to the items within a scale). This type of reliability often helps researchers interpret data and predict the value of scores and the limits of the relationship among variables. Split half computations yielded a Guttman Split half=.8883, and an unequal-length Spearman-Brown=.9640. To confirm split-halves reliability, Cronbach's alpha yielded a standardized alpha of .8655 for 10 items. (Note: A result closer to 1.00 indicates greater survey tool reliability.)

Statistical Notes

Analysts employed an Independent Samples T-Test to compare mean outcome scores between fiscal years. The best procedure to obtain independent samples is through random sampling. Four-hundred (400) clients were randomly selected using a statistical software package (SPSS) from each fiscal year. The T-Test was then used to compare the mean scores of each individual outcome between any two groups (e.g., between reporting periods).

Analysts used Levene's Test for Equality of Variances to determine whether two groups (e.g., fiscal years FY05 and FY06) had an approximately equal variance on any dependent variable (e.g., CD-4 counts). Levene's Test allows analysts to test for statistical significance of these variances.

Statistical significance indicates that there is a high probability that a result is not likely due to chance alone. An observed difference between 2 groups is usually considered statistically significant when a statistical test determines that chance accounts for this difference 5% or 1% of the time or less. In other words, there is a 95-99% certainty that the observed results cannot be explained solely by chance.

In this report, researchers marked statistically significant relationships with a single asterisk (*) for $p < .05$, indicating there is only a 5% chance that the findings fall outside the data presented. Statistically significant relationships with a $p < .01$ are marked with a

double asterisk (**), indicating there is only a 1% chance that the findings fall outside the data presented.

DATA SUMMARY

In order to provide a more comprehensive and varied analysis, data in this report is displayed in several different formats:

- *Figure 4* provides a summary of the outcomes data for each of the two reporting periods in FY05 and FY06.
- *Figures 5-7, and 10-16* detail outcomes data for the last three reporting periods (September 2005 – February 2006, March 2006 – August 2006, and September 2006 – February 2007).
- *Figures 8, 9 & Appendix A* detail year-end data (September 2006 – February 2007) for FY06.
- *Figures 17-19 and 24* represent outcomes for the same PLWH over time using the most recent data available in the fiscal year.
- *Figures 20-23* detail outcomes data for new and on-going MAI clients for FY05 and FY06.

Data Set

Figure 4 details outcomes data for two fiscal years (FY05 and FY06) from two different reporting periods (March – August and September – February). In the last reporting period of FY06, analysts collected 8,994 outcome measurement reports representing 5,899 unduplicated clients.

FIGURE 4. SUMMARY OF OUTCOMES DATA (FY05 AND FY06)

Fiscal Year	Reporting Period	Number of Outcome Reports	Number of Unduplicated Clients	Number of Providers
FY05	MARCH 2005- AUGUST 2005	8,792	5,421	51
FY05	SEPTEMBER 2005- FEBRUARY 2006	8,677	4,197	52
FY06	MARCH 2006- AUGUST 2006	8,223	5,729	53
FY06	SEPTEMBER 2006- FEBRUARY 2007	8,994	5,899	52

Figure 5 details by service category the number of funded providers, the number of outcome reports submitted, and the number of unduplicated clients. In FY06, 19 of the 52 Title I providers (37%) delivered case management services. Among the 12 service areas, food services providers contributed the most outcome reports for the largest group of unduplicated clients. They submitted 1458 of 8994 (16%) outcome reports for 1321 out of 5899 (22%) unduplicated clients.

FIGURE 5. NUMBER OF PROVIDERS/REPORTS SUBMITTED/UNDUPLICATED CLIENTS BY SERVICE
Year-End FY05 (Sept '05-Feb '06), Mid-Year FY06 (Mar '06-Aug '06), and Year-End FY06 (Sept '06-Feb '07)

Service Category	Number of Providers			Number of Outcome Reports Submitted			Number of Unduplicated Clients		
	Year-End FY05	Mid-Year FY06	Year-End FY06	Year-End FY05	Mid-Year FY06	Year-End FY06	Year-End FY05	Mid-Year FY06	Year-End FY06
1. Case Management	22	19	19	1,344	1,365	1,337	1,287	1,324	1,308
2. Client Advocacy	8	5	5	1,389	1,336	1,179	1,227	1,215	1,074
3. Dental	1	1	1	1,809	1,979	2,239 ⁵	1,729	1,979	2,192
4. Drug Reimbursement	1	1	1	191	197	181	191	197	180
5. Food Services/Meals	12	12	12	1,428	1,290	1,458	1,250	1,183	1,321
6. Housing	13	12	12	771	751	969	704	682	885
7. Mental Health	11	12	12	463	471	435	457	465	433
8. Peer Support	13	13	11	882	953	1,167	816	877	1,070
9. Primary Care	7	8	8	574	544	630	574	544	630
10. Substance Abuse	6	6	6	209	151	177	175	123	145
11. Transportation	10	9	10	1,195	640	1,009	1,107	627	944
12. MAI	9	7	7	343	462	399	302	453	328

⁵ Note: Approximately 57% of outcome measurement reports submitted by dental providers were for inactive clients which did not contain outcome data.

Figure 6 details by individual outcome the number of providers selecting each outcome, the number of times the outcome was selected, and the number of unduplicated clients represented by each outcome. Aside from medical outcomes (CD-4 counts and HIV viral loads), the most frequently selected outcomes were: ability to access medical care, ability to advocate, and knowledge about HIV/AIDS. (See Figure 6)

FIGURE 6. NUMBER OF PROVIDERS/TIMES OUTCOMES SELECTED/UPDUPLICATED CLIENTS BY OUTCOMES

Year-End FY05 (Sept '05-Feb '06), Mid-Year FY06 (Mar '06-Aug '06), and Year-End FY06 (Sept '06-Feb '07)

Outcomes Category	Number of Providers			Number of Times Outcomes Selected			Number of Unduplicated Clients		
	Year-End FY05	Mid-Year FY06	Year-End FY06	Year-End FY05	Mid-Year FY06	Year-End FY06	Year-End FY05	Mid-Year FY06	Year-End FY06
1. CD-4 counts	48	48	48	6,375	6,165	6,988	4,257	4,422	4,699
2. HIV progression – viral load	40	39	40	5,161	5,101	5,703	3,721	3,930	4,144
3. Knowledge about HIV/AIDS and other support services	31	26	28	2,456	2,151	2,269	1,941	1,856	1,910
4. Ability to access medical care and other support services	20	21	21	2,848	2,343	3,140	2,303	2,074	2,612
5. Ability to maintain Medical Care	22	17	20	2,039	1,473	1,459	1,784	1,403	1,396
6. Ability to adhere to medical therapies	17	15	17	1,006	985	862	933	960	817
7. Ability to advocate and act on their own behalf and in their best interest	25	25	26	2,907	2,605	2,490	2,110	2,104	1,953
8. Medical Treatments – assuring that they are consistent with US Public Health Service Guidelines	3	4	4	229	360	277	228	319	273
9. Ability to maintain housing	28	25	25	1,744	1,702	1,853	1,461	1,524	1,596
10. Level of support network/reduces isolation	23	21	20	1,669	1,625	1,800	1,431	1,425	1,552
11. Coping skills and level of stress	19	18	20	1,196	1,136	1,483	1,100	1,080	1,371
12. Level of depression	11	12	11	408	561	351	386	542	322
13. Level of crisis intervention services usage	15	16	15	1,922	2,051	1,810	1,601	1,807	1,474
14. Level of side effects from medications	10	10	10	426	597	465	419	591	462
15. Level of criminal behavior (arrests and/or incarceration)	4	3	2	130	206	92	126	205	92
16. (Optional)	5	3	3	378	232	300	335	210	239

RESULTS

Results from the outcomes data collected during the mid-year FY06 (March 2006– August 2006) and last reporting period of FY06 (September 2006-February 2007) are broken down by the major study groups and presented below.

On-Going & New Clients Overview

Definitions:

On-going clients are clients who are continuing to use a Ryan White Title I service and have had a case review during the first or last reporting period of the fiscal year.

New clients are clients who have started using a Ryan White Title I service during the first or last reporting period of the fiscal year and have received an initial outcomes evaluation during the intake process. *Note: Clients may be included in both the new and on-going study groups if they received outcome measurement reports from multiple providers and/or for different services or their case was opened and then closed during the reporting period.*

Demographic Profile:

The demographic profile for on-going clients at the end of FY06 is as follows:

- Average age of 44
- 67% male, 32% female, 1% transgender
- 27% Hispanic
- 44% White, 29% Black, 24% unknown or unreported, 3% other
- 39% HIV positive/not AIDS, 44% AIDS/CDC Defined, 14% HIV/AIDS Status Unknown, 2% unknown or unreported
- 56% with income levels equal to or below federal poverty level
- 58% permanently housed, 19% not permanently housed, 15% unknown or unreported, 8% other
- Fourteen percent (14%) of new clients were self-referred, 19% by a case manager and 23% by a health center and 44% other
- Exposed through MSM (24%), IDU (21%) and Heterosexual contact (43.3%)

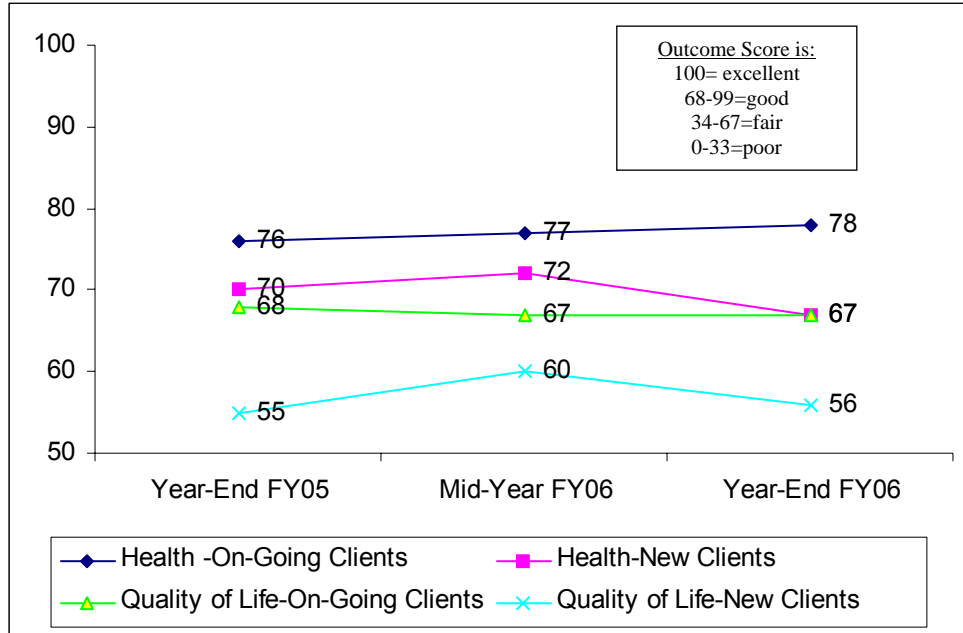
The demographic profile for new clients at the end of FY06 is as follows:

- Average age of 42
- 70% male, 20% female, 1% transgender
- 26% Hispanic
- 44% White, 30% Black, 23% unknown or unreported, 3% other
- 43% HIV positive/not AIDS, 39% AIDS/CDC Defined, 14% HIV/AIDS Status Unknown, 1% HIV indeterminate (under age 2), 2% unknown or unreported
- 59% with income levels equal to or below federal poverty level
- 54% permanently housed, 23.8% not permanently housed
- Fifteen percent (15%) of new clients were self-referred, 22% by a case manager and 21% by a health center and 42% other
- Exposed through MSM (27%), IDU (22%) and Heterosexual contact (44%)

Comparing the last three reporting periods, average health and quality of life outcomes scores have remained relatively constant overtime (Figure 7).

**FIGURE 7. AVERAGE HEALTH & QUALITY OF LIFE OUTCOME SCORES FOR
ON-GOING vs. NEW CLIENTS**

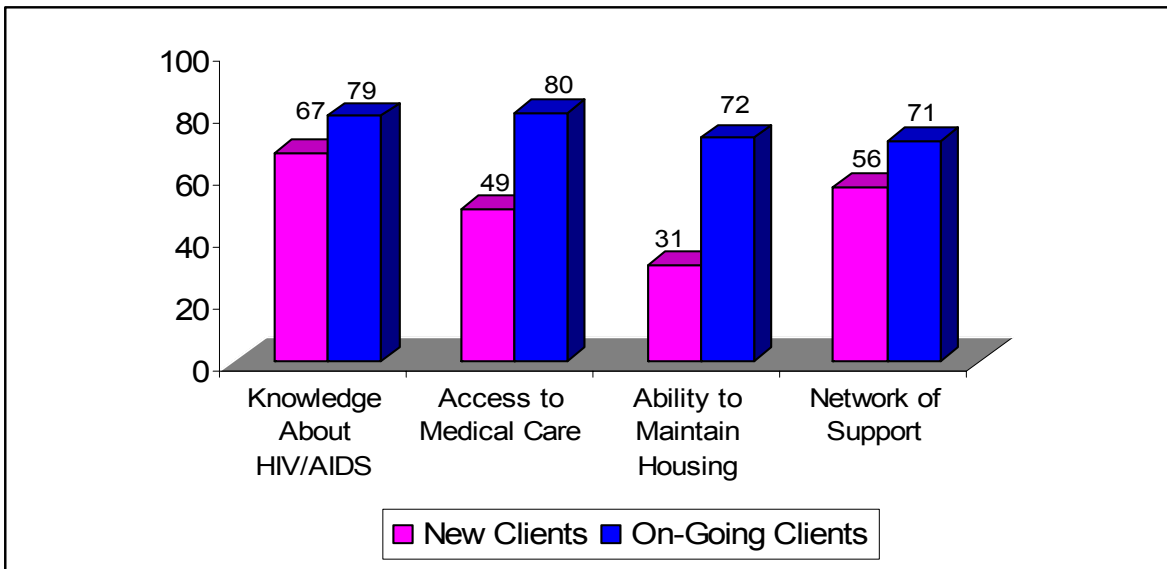
Year-End FY05 (Sept '05-Feb '06), Mid-Year FY06 (Mar '06-Aug '06), and Year-End FY06 (Sept '06-Feb '07)



New Clients vs. On-Going Clients

According to outcomes data for Year-End FY06 (September 2006 – February 2007), new clients had significantly lower outcome scores than on-going clients for four outcomes: knowledge about HIV/AIDS (12 points difference), access to medical care (31 points difference), ability to maintain housing (41 points difference) and network of support (15 points difference). (See Figure 8)

FIGURE 8. STATISTICALLY SIGNIFICANT DIFFERENCES IN OUTCOMES BETWEEN ON-GOING & NEW CLIENTS
(Year-End FY06: Sept. '06-Feb. '07)

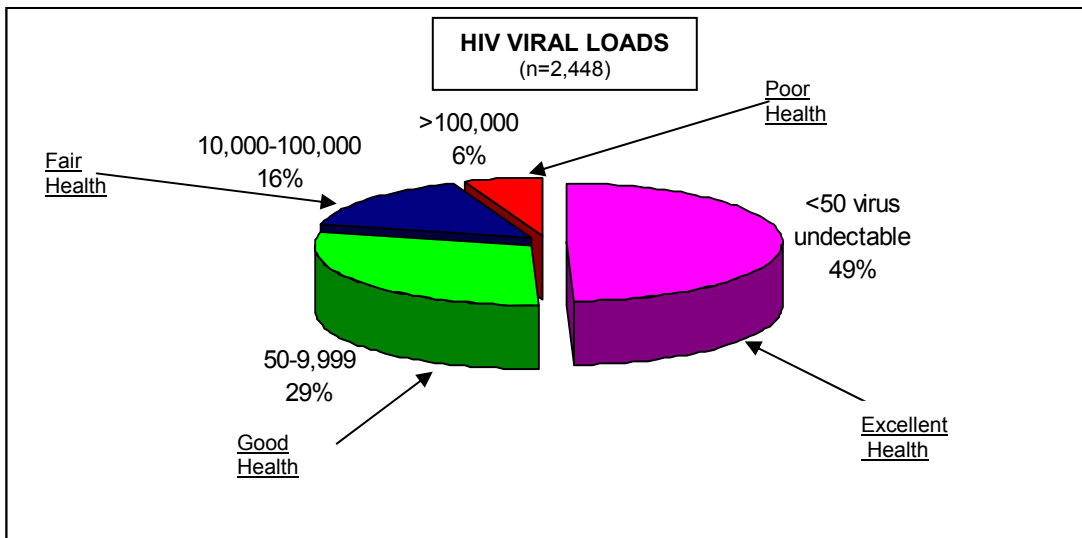
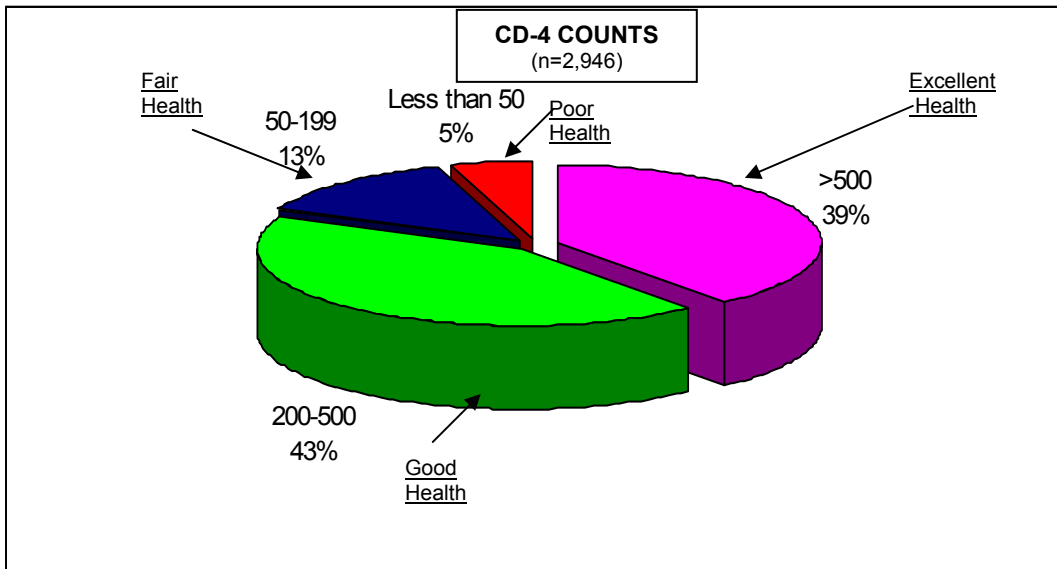


Outcome Score is:
100= excellent
68-99=good
34-67=fair
0-33=poor

On-Going Clients

At the end of FY06 (September 2006-February 2007), the majority of on-going clients continue to be in good or excellent health according to medical indicators. Specifically, eighty-two percent (82%) of clients were reported to have CD-4 counts of 200 or greater, and seventy-eight percent (78%) were reported to have HIV viral loads of less than 10,000. (See Figure 9)

FIGURE 9. HEALTH MEASURES: CD-4 COUNTS AND VIRAL LOADS FOR ON-GOING CLIENTS
(Year-End FY06: SEPTEMBER 06 -FEBRUARY 07)



Comparing Year-End FY05 to Year-End FY06, there were no statistically significant changes for on-going clients' individual health and quality of life outcomes.

Figure 10 compares individual health outcome scores for on-going clients during the last three reporting periods (Year-End FY05, Mid-Year FY06 and Year-End FY06). As the change in outcome scores indicate, health outcomes scores remained constant from Year-End FY05 to Year-End FY06.

FIGURE 10. HEALTH OUTCOME SCORES FOR ON-GOING CLIENTS

Year-End FY05 (Sept '05-Feb '06), Mid-Year FY06 (Mar '06-Aug '06), and Year-End FY06 (Sept '06-Feb '07)

Health Outcomes	On-Going Clients								Optimal Outcome Goal
	Year-End FY05 (# of unduplicated clients=3,323)		Mid-Year FY06 (# of unduplicated clients=4,950)			Year-End FY06 (# of unduplicated clients=3,665)			
	# of unduplicated clients	Outcome Score	# of unduplicated clients	Outcome Score	Change in Outcome Score	# of unduplicated clients	Outcome Score	Change in Outcome Score	
1. CD-4 Counts	2,946	72	3,646	73	1	3,495	73	No change	100 = CD Count >500
2. HIV Progression-Viral Load	2,448	75	3,228	74	-1	2,971	76	2	100 = <50/virus undetectable
3. Knowledge about HIV/AIDS & Other Support Services	1,390	77	1,550	75	-2	1,444	79	4	100 = Fully Informed about HIV/AIDS & other support services.
4. Ability to Access Medical Care & Other Support Services	1,588	80	1,684	82	2	1,972	80	-2	100 = Most barriers addressed and resources utilized/uses ER and other support services appropriately.
5. Ability to Maintain Medical Care	1,138	81	1,065	88	7	887	88	No change	100 = Missed 0-3 medical appointments in past 6 months.
6. Ability to Adhere to Medical Therapies	582	73	698	72	-1	640	69	-3	100 = Routinely adheres to medical therapies.
8. Medical Treatments-Consistent with US Public Health Service Guidelines [†]	180	100	284	95	-5	172	98	3	100 = Receives medical treatment consistent with US Public Health Service Guidelines.
AVERAGE HEALTH OUTCOME SCORE		76		77	1		78	1	100 = Optimal Outcome Score
WEIGHTED HEALTH OUTCOME SCORE[‡]		76		76	No change		77	1	

Outcome Score is:
100=excellent
68-99=good
34-67=fair
0-33=poor

[†] Not included in the average outcome score.
[‡] Individual outcomes are weighted and averaged according to the percentage of the total outcomes they represent.

Figure 11 compares individual quality of life outcome scores for on-going clients during the last three reporting periods. There were no statistically significant changes in individual or overall quality of life outcomes scores for on-going clients.

FIGURE 11. QUALITY OF LIFE OUTCOME SCORES FOR ON-GOING CLIENTS

Year-End FY05 (Sept '05-Feb '06), Mid-Year FY06 (Mar '06-Aug '06), and Year-End FY06 (Sept '06-Feb '07)

Quality of Life Outcomes	On-Going Clients								Optimal Outcome Goal
	Year-End FY05 (# of unduplicated clients=3,323)		Mid-Year FY06 (# of unduplicated clients=4,950)			Year-End FY06 (# of unduplicated clients=3,665)			
	# of unduplicated clients	Outcome Score	# of unduplicated clients	Outcome Score	Change in Outcome Score	# of unduplicated clients	Outcome Score	Change in Outcome Score [§]	
7. Ability to Advocate	1,525	62	1,669	64	2	1,429	63	-1	100 = Can get and use appropriately all needed services/sober>6 months/routinely uses transmission prevention protocols.
9. Ability to Maintain Housing	870	73	1,089	74	1	986	72	-2	100 = Stable Housing for >6 months-housing not in jeopardy.
10. Network of Support	968	71	1,153	68	-3	1,078	71	3	100 = Fully networked support when needed.
11. Coping Skills and Level of Stress	733	58	860	56	-2	957	58	2	100 = Stress is under control personally/care-taking and family situation is not stressed.
12. Level of Depression	322	58	484	60	2	261	56	-4	100 = Not depressed.
13. Level of Crisis Intervention Services	1,022	66	1,435	65	-1	1,165	64	-1	100 = No crisis interventions needed in the last 6 months.
14. Level of Side Effects	328	85	515	81	-4	381	82	1	100 = No side effect/no adverse impact on life activities.
15. Level of Criminal Behavior [†]	50	77	160	86	9	38	68	-18	100 = No arrests and/or no incarcerations in the last 6 months.
AVERAGE QUALITY OF LIFE OUTCOME SCORE		68		67	-1		67	No change	100 = Optimal Outcome Score
WEIGHTED HEALTH OUTCOME SCORE[‡]		66		66	No change		66	No change	

[†]Not included in the average outcome score.

[‡]Individual outcomes are weighted and averaged according to the percentage of the total outcomes they represent.

<p>Outcome Score is: 100 = excellent 68-99 = good 34-67 = fair 0-33 = poor</p>
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New Clients

Comparing Year-End FY05 (September 2005 – February 2006), Mid-Year FY06 (March 2006 – August 2006), and Year-End FY06 (September 2006 – February 2007), there were two individual outcome measures that showed statistically significant changes among new clients. To better understand these changes, comparisons were also made to Mid-Year FY05 (March 2005 – August 2005) and Year-End FY04 (September 2004 – February 2005).

Ability to maintain housing showed a significant increase during Mid-Year FY06 (score: 57) compared to previous reporting periods. (See Figure 12) However, it is interesting to note that in comparison to previous outcome scores, the observed outcome score increase in Mid-Year FY06 was atypical. Meanwhile, ability to access medical care dropped considerably by Year-End FY06 (20-point decline from Year-End FY04 to Year-End FY06).

FIGURE 12. SIGNIFICANT CHANGES IN INDIVIDUAL HEALTH & QUALITY OF LIFE OUTCOME SCORES FOR NEW CLIENTS

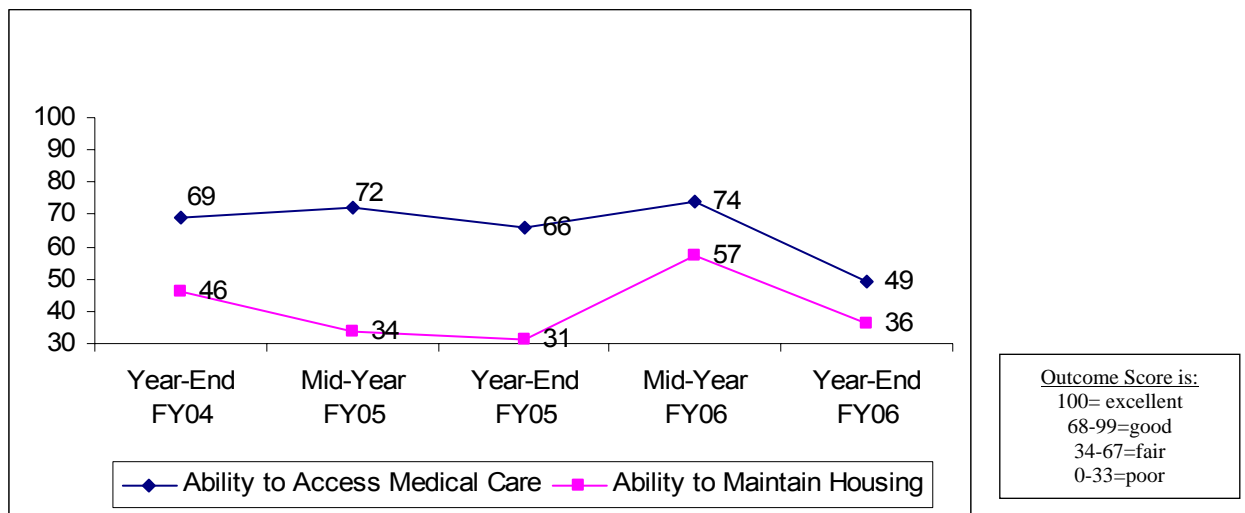


Figure 13 compares individual health outcome scores for new clients during the last three reporting periods. Although most of the health outcomes remained constant, ability to access medical care showed a significant decrease in Year-End FY06 compared to the previous two reporting periods.

FIGURE 13. HEALTH OUTCOME SCORES FOR NEW CLIENTS

Year-End FY05 (Sept '05-Feb '06), Mid-Year FY06 (Mar '06-Aug '06), and Year-End FY06 (Sept '06-Feb '07)

Health Outcomes	New Clients								Optimal Outcome Goal
	Year-End FY05 (# of unduplicated clients=1,303)		Mid-Year FY06 (# of unduplicated clients=1,071)			Year-End FY06 (# of unduplicated clients=1,304)			
	# of unduplicated clients	Outcome Score	# of unduplicated clients	Outcome Score	Change in Outcome Score	# of unduplicated clients	Outcome Score	Change in Outcome Score	
1. CD-4 Counts	1,146	68	991	67	-1	1,226	70	3	100 = CD Count >500
2. HIV Progression-Viral Load	947	70	776	68	-2	969	71	3	100 = <50/virus undetectable
3. Knowledge about HIV/AIDS & Other Support Services	406	64	368	65	1	401	67	2	100 = Fully Informed about HIV/AIDS & other support services.
4. Ability to Access Medical Care & Other Support Services	685	66	462	74	8	662	49	-25**	100 = Most barriers addressed and resources utilized/uses ER and other support services appropriately.
5. Ability to Maintain Medical Care	268	79	237	86	7	247	81	-5	100 = Missed 0-3 medical appointments in past 6 months.
6. Ability to Adhere to Medical Therapies	126	72	128	71	-1	107	63	-8	100 = Routinely adheres to medical therapies.
8. Medical Treatments-Consistent with US Public Health Service Guidelines ¹	25	96	35	94	-2	46	92	-2	100 = Receives medical treatment consistent with US Public Health Service Guidelines.
AVERAGE HEALTH OUTCOME SCORE		70		72	2		67	-5	100 = Optimal Outcome Score
WEIGHTED HEALTH OUTCOME SCORE¹¹		68		70	2		67	-3	

Outcome Score is:
100 = excellent
68-99 = good
34-67 = fair
0-33 = poor

**Statistically significant, p<.01-99% level of certainty in the findings.

¹Not included in the average outcome score.

¹¹Individual outcomes are weighted and averaged according to the percentage of the total outcomes they represent.

Figure 14 compares individual quality of life outcome scores for new clients during the last three reporting periods. Although most of the quality of life outcomes remained constant, ability to maintain housing showed a significant decrease in Year-End FY06 compared to Mid-Year FY06. However, there was no statistically significant difference in outcome scores for ability to maintain housing between Year-End FY05 and Year-End FY06.

FIGURE 14. QUALITY OF LIFE OUTCOME SCORES FOR NEW CLIENTS

Year-End FY05 (Sept '05-Feb '06), Mid-Year FY06 (Mar '06-Aug '06), and Year-End FY06 (Sept '06-Feb '07)

Quality of Life Outcomes	New Clients								Optimal Outcome Goal
	Year-End FY05 (# of unduplicated clients=1,303)		Mid-Year FY06 (# of unduplicated clients=1,071)			Year-End FY06 (# of unduplicated clients=1,304)			
	# of unduplicated clients	Outcome Score	# of unduplicated clients	Outcome Score	Change in Outcome Score	# of unduplicated clients	Outcome Score	Change in Outcome Score	
7. Ability to Advocate	651	54	593	56	2	532	58	2	100 = Can get and use appropriately all needed services/sober>6 months/routinely uses transmission prevention protocols.
9. Ability to Maintain Housing	386	36	364	57	21*	545	31	-26*	100 = Stable Housing for >6 months-housing not in jeopardy.
10. Network of Support	343	55	319	54	-1	346	56	2	100 = Fully networked support when needed.
11. Coping Skills and Level of Stress	225	52	226	52	No change	268	55	3	100 = Stress is under control personally/care-taking and family situation is not stressed.
12. Level of Depression	42	52	60	58	6	47	50	-8	100 = Not depressed.
13. Level of Crisis Intervention Services	440	60	441	62	2	309	61	-1	100 = No crisis interventions needed in the last 6 months.
14. Level of Side Effects	71	78	76	81	3	53	82	1	100 = No side effect/no adverse impact on life activities.
15. Level of Criminal Behavior†	45	64	45	51	-13	23	42	-9	100 = No arrests and/or no incarcerations in the last 6 months.
AVERAGE QUALITY OF LIFE OUTCOME SCORE		55		60	5		56	-4	100 = Optimal Outcome Score
WEIGHTED HEALTH OUTCOME SCORE‡		53		58	5		51	-7	

*Statistically significant, p<.05-95% level of certainty in the findings.

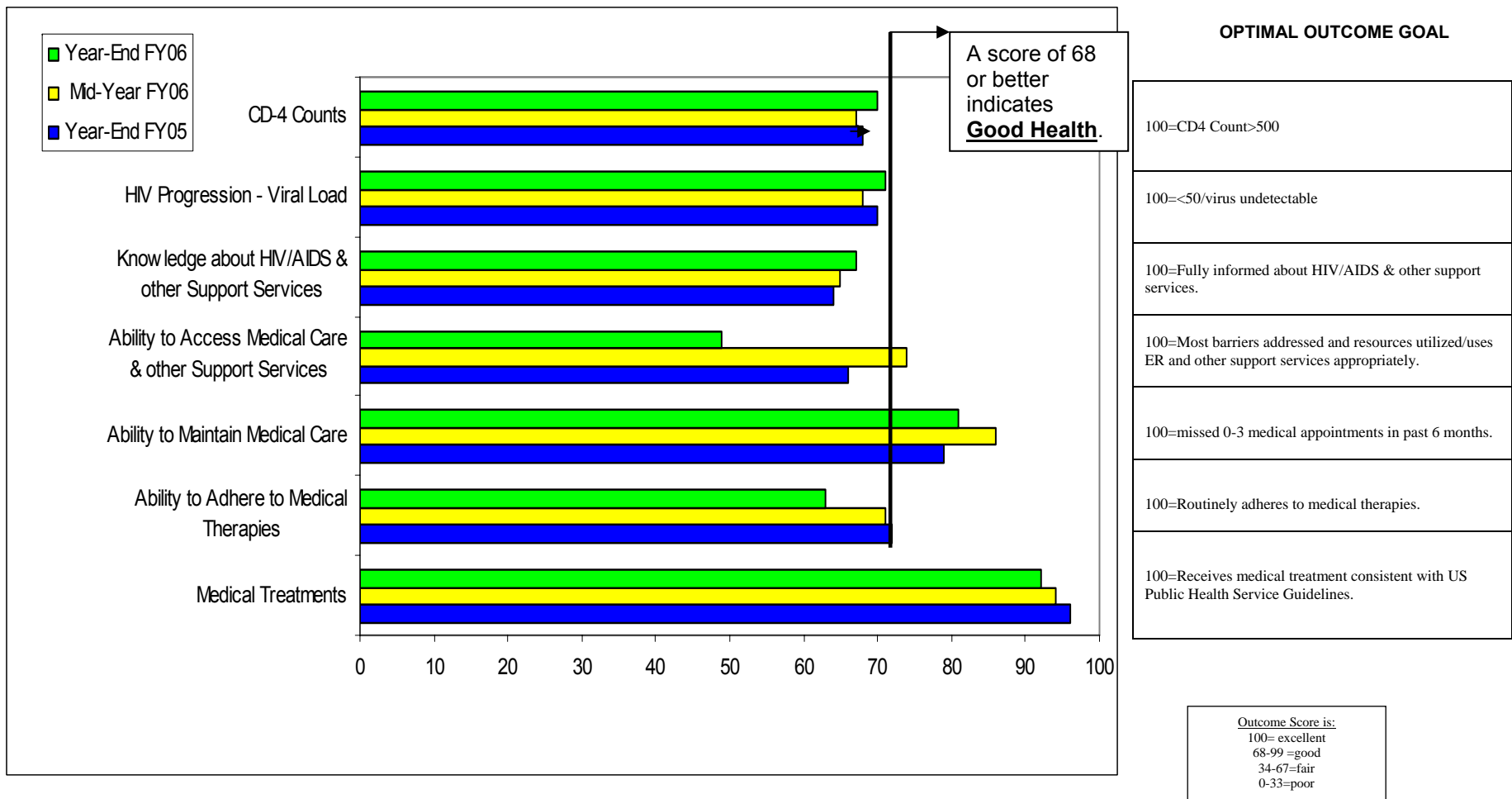
† Not included in the average outcome score.

‡ Individual outcomes are weighted and averaged according to the percentage of the total outcomes they represent.

Outcome Score is:
100 = excellent
68-99 = good
34-67 = fair
0-33 = poor

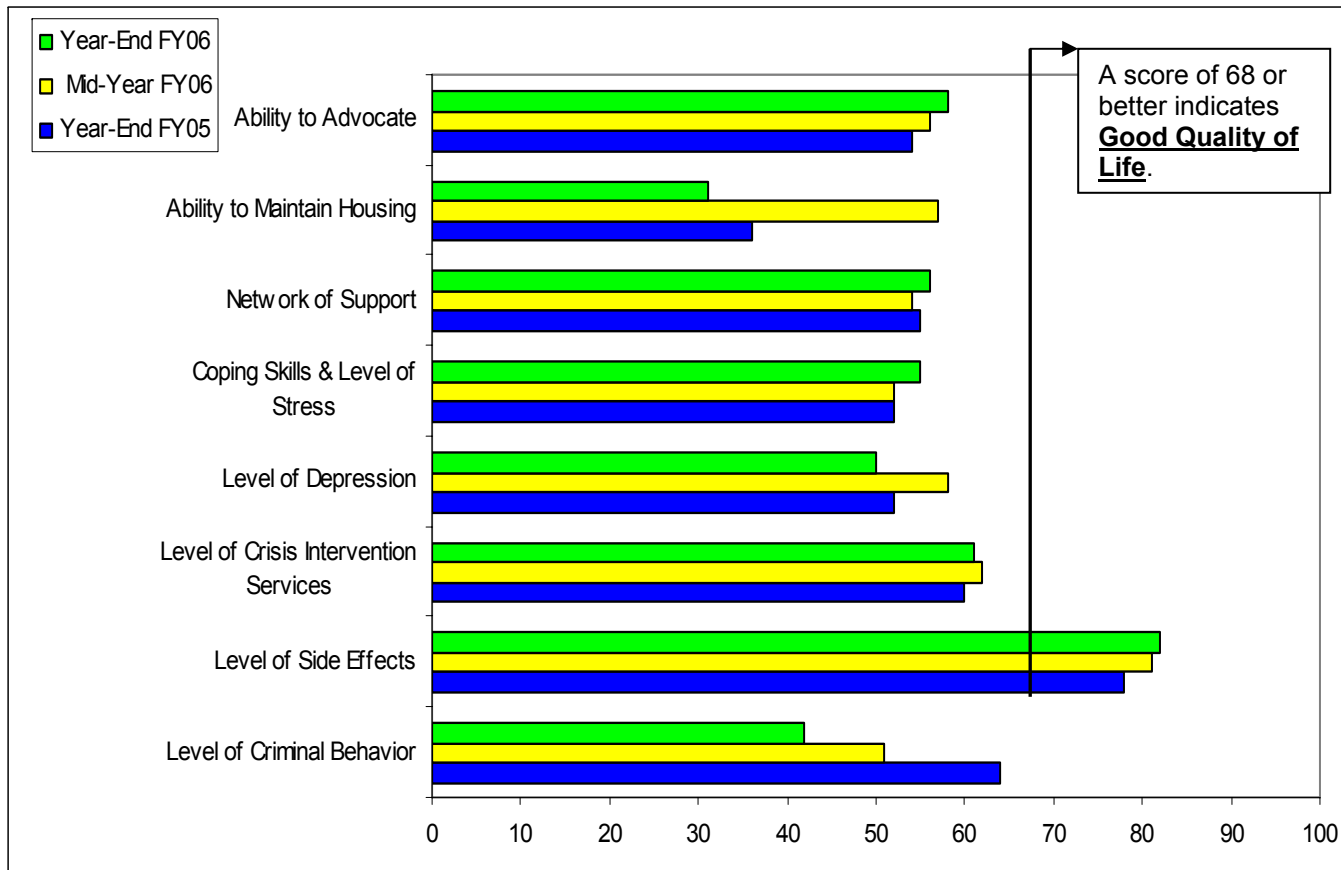
During the last three reporting periods, initial outcome reports for new clients indicated that most were in "good" health. Notably, at end of FY06, individual outcome scores showed that new clients met or exceeded "good health" in four of seven health indicators by having scores above 68. (See Figure 15)

FIGURE 15. HEALTH OUTCOME SCORES FOR NEW CLIENTS
Year-End FY05 (Sept '05-Feb '06), Mid-Year FY06 (Mar '06-Aug '06), and Year-End FY06 (Sept '06-Feb '07)



During the last three reporting periods, initial outcome reports for new clients demonstrated that most had not achieved "good" quality of life. Notably, at the end of FY06, individual outcome scores showed that new clients only met or exceeded one of eight quality of life indicators for "good quality of life" with a score above 68. (See Figure 16)

FIGURE 16. QUALITY OF LIFE OUTCOME SCORES FOR NEW CLIENTS
Year-End FY05 (Sept '05-Feb '06), Mid-Year FY06 (Mar '06-Aug '06), and Year-End FY06 (Sept '06-Feb '07)



A score of 68 or better indicates **Good Quality of Life**.

OPTIMAL OUTCOME GOAL

100 = Can get and use appropriately all needed services/sober>6 months/routinely uses transmission prevention protocols.
100 = Stable Housing for >6 months-housing not in jeopardy.
100 = Fully networked support when needed.
100 = Stress is under control personally/care-taking and family situation is not stressed.
100 = Not Depressed.
100 = No crisis interventions needed in the last 6 months.
100 = No side effect/no adverse impact on life activities.
100 = No arrests and/or no incarcerations in the last 6 months.

Outcome Score is:
100= excellent
68-99 =good
34-67=fair
0-33=poor

3-Year Cohort

A cohort is a group of individuals, identified by a common characteristic, who are studied over a period of time. The 3-Year Cohort includes clients who consistently received an outcomes measurement report (at least once in each fiscal year) over a three-year period (March 2004 – February 2007).

In the cohort analysis of 3,719 unduplicated clients tracked from FY04 to FY06 (March 2004 - February 2007), health outcome scores slightly increased while quality of life outcome scores showed a slight decline. These changes reflect a widening gap between health and quality of life outcomes for clients in the Cohort. (See Figure 17)

FIGURE 17. CHANGE IN HEALTH & QUALITY OF LIFE OUTCOME SCORES FOR THE COHORT
FY04 (Mar. '04-Feb. '05), FY05 (Mar. '05-Feb. '06), and FY06 (Mar. '06-Feb. '07)

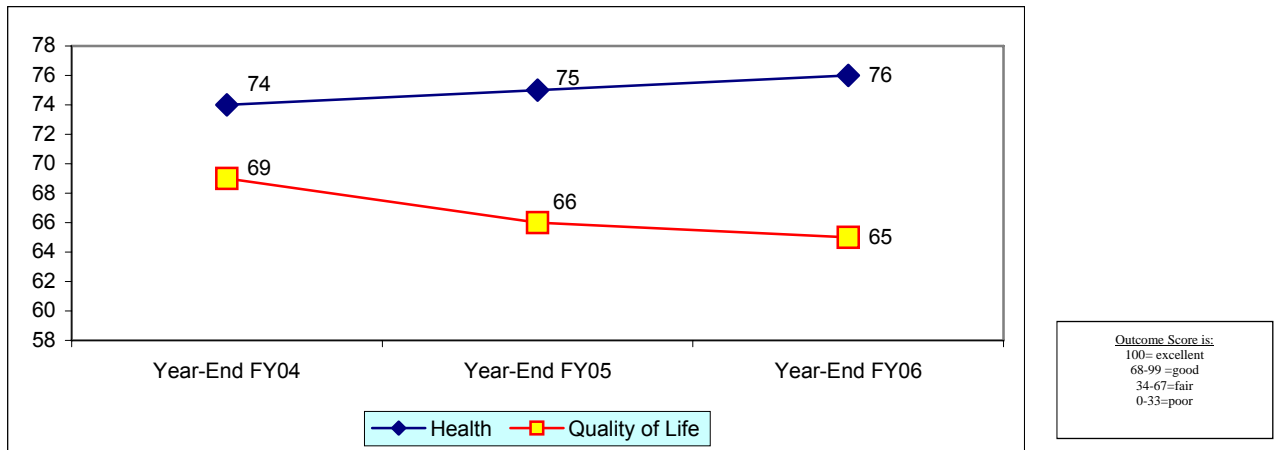


Figure 18 compares individual health outcome scores for the Cohort during the last three reporting periods. Notably, all health outcomes remained constant over the last three reporting periods.

FIGURE 18. HEALTH OUTCOME SCORES FOR COHORT

Year-End FY05 (Sept '05-Feb '06), Mid-Year FY06 (Mar '06-Aug '06), and Year-End FY06 (Sept '06-Feb '07)

Health Outcomes	Cohort								Optimal Outcome Goal
	Year-End FY05		Mid-Year FY06			Year-End FY06			
	# of unduplicated clients	Outcome Score	# of unduplicated clients	Outcome Score	Change in Outcome Score	# of unduplicated clients	Outcome Score	Change in Outcome Score	
1. CD-4 Counts	2,250	70	1,989	71	1	1,875	72	1	100 = CD Count >500
2. HIV Progression-Viral Load	2,096	71	1,825	73	2	1,897	74	1	100 = <50/virus undetectable
3. Knowledge about HIV/AIDS & Other Support Services	1,303	74	959	74	No change	867	76	2	100 = Fully Informed about HIV/AIDS & other support services.
4. Ability to Access Medical Care & Other Support Services	1,308	79	1,106	76	-3	1,091	74	-2	100 = Most barriers addressed and resources utilized/uses ER and other support services appropriately.
5. Ability to Maintain Medical Care	1,027	87	1,019	85	-2	1,001	86	1	100 = Missed 0-3 medical appointments in past 6 months.
6. Ability to Adhere to Medical Therapies	525	75	559	72	-3	418	70	-2	100 = Routinely adheres to medical therapies.
8. Medical Treatments- Consistent with US Public Health Service Guidelines †	120	93	152	98	5	126	96	-2	100 = Receives medical treatment consistent with US Public Health Service Guidelines.
AVERAGE HEALTH OUTCOME SCORE		76		75	1		75	No change	100 = Optimal Outcome Score
WEIGHTED HEALTH OUTCOME SCORE ††		75		75	No change		75	No change	

† Not included in the average outcome score.

†† Individual outcomes are weighted and averaged according to the percentage of the total outcomes they represent.

Outcome Score is:
100 = excellent
68-99 = good
34-67 = fair
0-33 = poor

Figure 19 compares individual quality of life outcome scores for the Cohort during the last three reporting periods. Similar to health outcomes, there were no statistically significant changes in quality of life outcomes over the past three reporting periods.

FIGURE 19. QUALITY OF LIFE OUTCOME SCORES FOR COHORT

Year-End FY05 (Sept '05-Feb '06), Mid-Year FY06 (Mar '06-Aug '06), and Year-End FY06 (Sept '06-Feb '07)

Quality of Life Outcomes	Cohort								Optimal Outcome Goal
	Year-End FY05		Mid-Year FY06			Year-End FY06			
	# of unduplicated clients	Outcome Score	# of unduplicated clients	Outcome Score	Change in Outcome Score	# of unduplicated clients	Outcome Score	Change in Outcome Score	
7. Ability to Advocate	1,325	65	1,285	63	-2	1,259	64	1	100 = Can get and use appropriately all needed services/sober>6 months/routinely uses transmission prevention protocols.
9. Ability to Maintain Housing	670	71	580	70	-1	528	71	1	100 = Stable Housing for >6 months-housing not in jeopardy.
10. Network of Support	920	70	852	67	-3	856	71	4	100 = Fully networked support when needed.
11. Coping Skills and Level of Stress	725	59	705	56	-3	736	57	1	100 = Stress is under control personally/care-taking and family situation is not stressed.
12. Level of Depression	300	56	315	57	1	295	55	-2	100 = Not depressed.
13. Level of Crisis Intervention Services	988	66	965	67	1	905	66	-1	100 = No crisis interventions needed in the last 6 months.
14. Level of Side Effects	315	85	302	83	-2	311	82	-1	100 = No side effect/no adverse impact on life activities.
15. Level of Criminal Behavior †	42	78	45	80	2	43	78	-2	100 = No arrests and/or no incarcerations in the last 6 months.
AVERAGE HEALTH OUTCOME SCORE		67		66	-1		67	1	100 = Optimal Outcome Score
WEIGHTED HEALTH OUTCOME SCORE †		67		65	-2		66	1	

† Not included in the average outcome score.

†† Individual outcomes are weighted and averaged according to the percentage of the total outcomes they represent.

On-Going & New Minority AIDS Initiative (MAI) Clients

On-going MAI clients are clients who are continuing to use a Ryan White Title I service funded under the Minority AIDS Initiative and have had a case review during FY06. New MAI clients are clients who have started using a Ryan White Title I service funded under the Minority AIDS Initiative during FY06 and have received an initial outcomes evaluation during the intake process.

On-Going MAI Clients

Figure 20 compares individual health outcome scores for on-going MAI clients for Year-End FY05 (September 2005 – February 2006) and Year-End FY06 (September 2006 – February 2007). There were no statistically significant changes in outcome scores from Year-End FY05 to Year-End FY06.

FIGURE 20. HEALTH OUTCOME SCORES FOR ON-GOING MAI CLIENTS
Year-End FY05 (Sept. '05-Feb. '06) and Year-End FY06 (Sept. '06-Feb. '07)

Health Outcomes	On-Going MAI Clients					Optimal Outcome Goal
	Year-End FY05 (# of unduplicated clients=270)		Year-End FY06 (# of unduplicated clients=215)		Change in Outcome Score	
	# of unduplicated clients	Outcome Score	# of unduplicated clients	Outcome Score		
1. CD-4 Counts	264	69	192	71	2	100 = CD Count >500
2. HIV Progression-Viral Load	193	72	210	76	4	100 = <50/virus undetectable
3. Knowledge about HIV/AIDS & Other Support Services	93	82	13	82	No change	100 = Fully Informed about HIV/AIDS & other support services.
4. Ability to Access Medical Care & Other Support Services	71	77	0	Not evaluated	N/A	100 = Most barriers addressed and resources utilized/uses ER and other support services appropriately.
5. Ability to Maintain Medical Care	36	92	62	86	-6	100 = Missed 0-3 medical appointments in past 6 months.
6. Ability to Adhere to Medical Therapies	52	66	0	Not evaluated	N/A	100 = Routinely adheres to medical therapies.
8. Medical Treatments-Consistent with US Public Health Service Guidelines †	0	Not evaluated	0	Not evaluated	N/A	100 = Receives medical treatment consistent with US Public Health Service Guidelines.
AVERAGE HEALTH OUTCOME SCORE		76		79	3	100 = Optimal Outcome Score
WEIGHTED HEALTH OUTCOME SCORE †		73		75	2	

Outcome Score is:
100 = excellent
68-99 = good
34-67 = fair
0-33 = poor

† Not included in the average outcome score.
†† Individual outcomes are weighted and averaged according to the percentage of the total outcomes they represent.

Figure 21 compares individual quality of life outcome scores for on-going MAI clients during the last reporting periods of FY05 and FY06. On-going MAI clients had statistically significant lower outcome scores for ability to maintain housing at the end of FY06 compared to the end of FY05 (12-point difference).

FIGURE 21. QUALITY OF LIFE OUTCOME SCORES FOR ON-GOING MAI CLIENTS
Year-End FY05 (Sept. '05-Feb. '06) and Year-End FY06 (Sept. '06-Feb. '07)

Quality of Life Outcomes	On-Going MAI Clients					Optimal Outcome Goal
	Year-End FY05 (# of unduplicated clients=270)		Year-End FY06 (# of unduplicated clients=215)		Change in Outcome Score	
	# of unduplicated clients	Outcome Score	# of unduplicated clients	Outcome Score		
7. Ability to Advocate	118	74	79	66	-8	100 = Can get and use appropriately all needed services/sober>6 months/routinely uses transmission prevention protocols.
9. Ability to Maintain Housing	99	87	123	75	-12*	100 = Stable Housing for >6 months-housing not in jeopardy.
10. Network of Support	128	78	65	73	-5	100 = Fully networked support when needed.
11. Coping Skills and Level of Stress	136	71	23	62	-9	100 = Stress is under control personally/care-taking and family situation is not stressed.
12. Level of Depression	11	80	23	68	-12	100 = Not Depressed.
13. Level of Crisis Intervention Services	75	81	127	78	-3	100 = No crisis interventions needed in the last 6 months.
14. Level of Side Effects	52	71	28	71	No change	100 = No side effect/no adverse impact on life activities.
15. Level of Criminal Behavior [†]	0	Not evaluated	0	Not evaluated	N/A	100 = No arrests and/or no incarcerations in the last 6 months.
AVERAGE QUALITY OF LIFE OUTCOME SCORE		77		70	-7	100 = Optimal Outcome Score
WEIGHTED QUALITY OF LIFE OUTCOME SCORE^{††}		77		73	-4	

Outcome Score is:
100 = excellent
68-99 = good
34-67 = Fair
0-33 = poor

*Statistically significant, p<.05-95% level of certainty in the findings.
[†]Not included in the average outcome score.
^{††}Individual outcomes are weighted and averaged according to the percentage of the total outcomes they represent.

New MAI Clients

The average health outcome score at the end of FY06 for new MAI clients was higher than at the end of FY05. However, the overall weighted health outcome score demonstrated that outcome scores for both FY05 and FY06 were approximately the same. Statistically significant changes in individual health outcomes for new MAI clients were not calculated because the sample size for each outcome was too small. (See Figure 22)

FIGURE 22. HEALTH OUTCOME SCORES FOR NEW MAI CLIENTS
Year-End FY05 (Sept. '05-Feb. '06) and Year-End FY06 (Sept. '06-Feb. '07)

Health Outcomes	New MAI Clients					Optimal Outcome Goal
	Year-End FY05 (# of unduplicated clients =80)		Year-End FY06 (# of unduplicated clients =62)		Change in Outcome Score	
	# of unduplicated clients	Outcome Score	# of unduplicated clients	Outcome Score		
1. CD-4 Counts	33	67	47	60	-7	100 = CD Count >500
2. HIV Progression-Viral Load	37	73	60	70	-3	100 = <50/virus undetectable
3. Knowledge about HIV/AIDS & Other Support Services	2	64	22	74	10	100 = Fully Informed about HIV/AIDS & other support services.
4. Ability to Access Medical Care & Other Support Services	10	69	0	Not evaluated	N/A	100 = Most barriers addressed and resources utilized/uses ER and other support services appropriately.
5. Ability to Maintain Medical Care	14	60	18	67	7	100 = Missed 0-3 medical appointments in past 6 months.
6. Ability to Adhere to Medical Therapies	5	50	0	Not evaluated	N/A	100 = Routinely adheres to medical therapies.
8. Medical Treatments-Consistent with US Public Health Service Guidelines †	0	Not evaluated	0	Not evaluated	N/A	100 = Receives medical treatment consistent with US Public Health Service Guidelines.
AVERAGE HEALTH OUTCOME SCORE		64		68	4	100 = Optimal Outcome Score
WEIGHTED HEALTH OUTCOME SCORE[‡]		68		67	-1	

Outcome Score is:
100 = excellent
68-99 =good
34-67 =fair
0-33 =poor

† Not included in the average outcome score.

‡ Individual outcomes are weighted and averaged according to the percentage of the total outcomes they represent.

Figure 23 compares individual quality of life outcome scores for new MAI clients between FY05 and FY06. While most individual outcomes show measurable variations over this one year period, these changes were not statistically significant due to small sample sizes.

FIGURE 23. QUALITY OF LIFE OUTCOME SCORES FOR NEW MAI CLIENTS
Year-End FY05 (Sept. '05-Feb. '06) and Year-End FY06 (Sept. '06-Feb. '07)

Quality of Life Outcomes	New MAI Clients					Optimal Outcome Goal
	FY05 (# of unduplicated clients =80)		FY06 (# of unduplicated clients =62)		Change in Outcome Score	
	# of unduplicated clients	Outcome Score	# of unduplicated clients	Outcome Score		
7. Ability to Advocate	40	54	38	56	2	100 = Can get and use appropriately all needed services/sober>6 months/routinely uses transmission prevention protocols.
9. Ability to Maintain Housing	32	37	51	49	12	100 = Stable Housing for >6 months-housing not in jeopardy.
10. Network of Support	26	25	27	56	31	100 = Fully networked support when needed.
11. Coping Skills and Level of Stress	15	62	2	83	21	100 = Stress is under control personally/care-taking and family situation is not stressed.
12. Level of Depression	0	Not evaluated	2	100	N/A	100 = Not Depressed.
13. Level of Crisis Intervention Services	16	72	33	81	9	100 = No crisis interventions needed in the last 6 months.
14. Level of Side Effects	5	54	5	87	33	100 = No side effect/no adverse impact on life activities.
15. Level of Criminal Behavior [†]	0	Not evaluated	0	Not evaluated	N/A	100 = No arrests and/or no incarcerations in the last 6 months.
AVERAGE QUALITY OF LIFE OUTCOME SCORE		55		73	18	100 = Optimal Outcome Score
WEIGHTED QUALITY OF LIFE OUTCOME SCORE^{††}		56		61	5	

Outcome Score is:
100= excellent
68-99 =good
34-67=f air
0-33 =poor

[†]Not included in the average outcome score.
^{††}Individual outcomes are weighted and averaged according to the percentage of the total outcomes they represent.

5-Year MAI Cohort

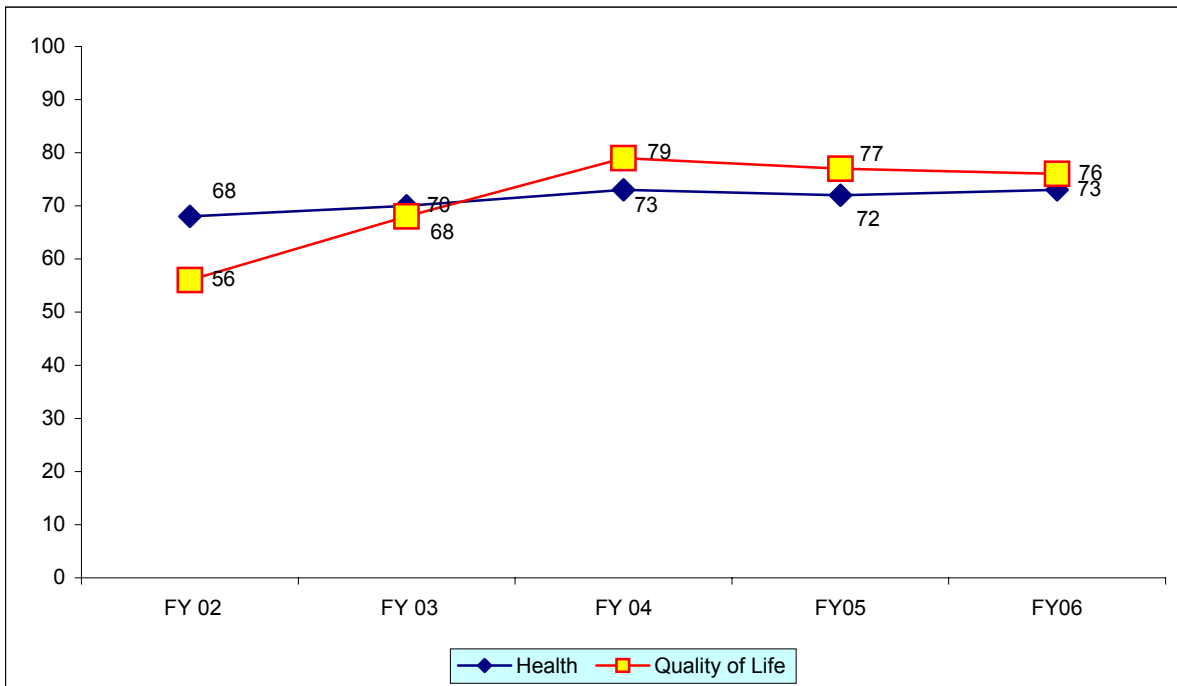
The 5-Year MAI cohort includes clients who received services funded by the Minority AIDS Initiative and who consistently received an outcomes measurement report (at least once in each fiscal year) over a five-year period—March 2002 – February 2007.

Health and quality of life outcome scores for MAI cohort clients continue to remain stable. A MAI cohort of 29 clients tracked from FY02 to FY06 showed a slight, but not significant, decline in health and quality of life outcome scores. (See Figure 24)

FIGURE 24. CHANGE IN HEALTH & QUALITY OF LIFE OUTCOME SCORES FOR MAI COHORT
FY02, FY03, FY04, FY05, AND FY06

(TOTAL NUMBER OF UNDUPLICATED CLIENTS IN 5-YEAR COHORT ASSESSED DURING FY02-FY06=29)

Reported Outcome Score	Health/Quality of Life
100	EXCELLENT...Achieved outcome goal.
68-99	GOOD...Making significant progress towards outcome goal. Needs some additional services to reach the goal.
34-67	FAIR...Making some progress toward reaching the outcome goal. There is a significant need for additional services.
0-33	POOR...In crisis and in need of substantial additional services



Outcome Score is:
100 = excellent
68-99=good
34-67=f air
0-33=poor

Limitations

Caution should be used when comparing average health and quality of life outcome measurement scores across fiscal years since individual outcomes selected by an agency may be inconsistent from one reporting period to another. Furthermore, it should be noted that with the exception of specific cohorts, data from each reporting period represents aggregate data for all clients assessed during the fiscal year.

In cases where the average health/quality of life outcome score is reported, the weighted score has also been calculated. The weighted score accounts for differences in the number of times individual outcomes are reported on by providers. In most cases, there is a small point difference between the average and weighted health/quality of life outcome scores. However, in situations where the average health/quality of life outcome score is considerably different from the weighted score, caution should be used when making comparisons.

It is important to note that the outcomes data presented in this report has been provided by Title I service providers and does not include outcome or service data from providers funded through other state or federal funding sources. Therefore, the health and quality of life outcomes reported may not be fully representative of the PLWH population receiving medical or support services in the Boston EMA.

CONCLUSIONS

Overall, health outcome scores were consistently higher than quality of life outcome scores for both on-going and new clients receiving Ryan White Title I Services. Medical outcomes (CD-4 counts and HIV viral loads) collected over the past three reporting periods for PLWH living in the Boston EMA suggest that clients new to Ryan White Title I Services and those who are continuing to receive services are in good-to-excellent health. However, quality of life indicators have remained consistently in the poor-to-fair range.

With regard to individual outcome measures, at the end of FY06 (September 2006-February 2007) the outcome scores for ongoing clients were significantly higher than those for new clients for the following individual outcomes: ability to maintain housing (41-point difference), access to medical care (31-point difference), network of support (15-point difference), and knowledge about HIV/AIDS (12-point difference).

When comparing individual outcome scores over time, there were no statistically significant changes for on-going clients. For new clients, two outcomes had statistically significant changes over time: ability to maintain housing and ability to access medical care. While the change in score for the housing outcome from Mid-Year FY06 to Year-End FY06 is statistically significant, the Mid-Year FY06 data is inconsistent with other reporting periods and may be a reporting anomaly. The access to medical care outcome has seen a 20-point drop in score from Year-End FY04 to Year-End FY06.

RECOMMENDATIONS FOR FUTURE RESEARCH

The most significant change in individual outcome scores was observed with new clients and their ability to access medical care (20–point drop over the past two fiscal years). This finding could be further investigated to determine whether or not this is a reporting anomaly or whether access to medical care is substantially limited for people who are not part of the Title I Service Delivery System.

To further assess the impact of Ryan White Title I services on PLWH in the Boston EMA, a Cohort of new clients could be followed over multiple reporting periods. Research may address: 1) which combination of services produce the most significant increase in outcomes, 2) whether there is a relationship between change in outcome scores and key demographic variables, and 3) which individual health and quality of life indicators are most likely to increase within the first 12 months of service and how those changes impact overall health and quality of life.

In addition to looking at a Cohort of new clients, it may be beneficial to take a more intricate look at the 3-Year Cohort to determine whether or not changes to overall health and quality of life have been consistent across demographic groups. Research may address 1) whether service utilization is consistent across demographic groups and 2) whether certain demographic groups benefit from specific service combinations.

Furthermore, in order to confirm the validity of the data collected through the Outcomes Measurement System, decision makers may consider examining the feasibility of conducting a consumer-based study. Such a feasibility study could include a determination of cost, research methodology, an extensive literature review and recommended research questions.

**APPENDIX A: OUTCOME MEASUREMENT SURVEY &
AGGREGATE YEAR-END FY06 (SEPTEMBER-FEBRUARY)
SURVEY DATA**

Table B:

Outcomes: To improve and/or stabilize... # of unduplicated clients	Health/Quality of Life Status			
	Poor	Fair	Good	Excellent
	Measurement Level			
	Crisis % of clients reported	High Need % of clients reported	Moderate/Low Need % of clients reported	No Need % of clients reported
9. Ability to Maintain Housing 1596	<input type="checkbox"/> Homeless 36%	<input type="checkbox"/> Limited Stability in Housing - Facing Eviction. 5%	<input type="checkbox"/> Stable Housing for <6 months - needs short-term rental assistance. 12%	<input type="checkbox"/> Stable Housing for >6 months - housing not in jeopardy. 47%
10. Level of Support Network/Reduces isolation. 1552	<input type="checkbox"/> Generally alone. 8%	<input type="checkbox"/> Limited individual support. 20%	<input type="checkbox"/> Some networked support. 37%	<input type="checkbox"/> Fully networked support when needed. 35%
11. Coping Skills and level of stress. 1371	<input type="checkbox"/> Severely stressed personally /care-taking and family situation is under extreme stress. 13%	<input type="checkbox"/> Moderately stressed personally/care-taking and family situation is under moderate stress. 29%	<input type="checkbox"/> Somewhat stressed personally/care-taking and family situation is under some light stress. 34%	<input type="checkbox"/> Stress is under control personally/ care-taking and family situation is not stressed. 25%
12. Level of Depression. 322	<input type="checkbox"/> Severe Depression. 11%	<input type="checkbox"/> Moderate Depression 35%	<input type="checkbox"/> Light Depression. 33%	<input type="checkbox"/> Not Depressed. 21%
13. Level of Crisis Intervention Services usage. 1474	<input type="checkbox"/> More than 6 Crisis Interventions needed in the last 6 months. 8%	<input type="checkbox"/> 4-6 Crisis Interventions needed in the last 6 months. 15%	<input type="checkbox"/> 1-3 Crisis Interventions needed in the last 6 months. 56%	<input type="checkbox"/> No Crisis Interventions needed in the last 6 months. 22%
14. Level of side effects from medications. 462	<input type="checkbox"/> Severe side effects that have significant impact on life activities. 2%	<input type="checkbox"/> Moderate side effects that have some impact on life activities. 12%	<input type="checkbox"/> Light side effects that have limited impact on life activities. 22%	<input type="checkbox"/> No side effect/ no adverse impact on life activities. 63%
15. Level of Criminal Behavior (Arrests and/or Incarceration). 92	<input type="checkbox"/> More than 6 arrests and/or 6 months incarcerated in the last six months. 28%	<input type="checkbox"/> 4-6 arrests and/or months incarcerated in the last six months. 8%	<input type="checkbox"/> 1-3 arrests and/or months incarcerated in the last six months. 19%	<input type="checkbox"/> No arrests and/or no incarcerations in the last six months. 46%
16. (Optional) 239	<input type="checkbox"/> 18%	<input type="checkbox"/> 22%	<input type="checkbox"/> 30%	<input type="checkbox"/> 30%

Notes: