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CENTER FOR PUBLIC MANAGEMENT

RYAN WHITE CARE ACT
BOSTON EMA TITLE I PROGRAMS

REGIONAL ANALYSIS
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INTRODUCTION

In January 2005, the Boston Public Health Commission (BPHC) asked Suffolk University's Center for Public Management to conduct a regional—Boston, Metro West, Northeast, Southeast, Central and New Hampshire—comparison of health and quality of life outcomes for people receiving Ryan White Title I services in FY2003, comparing new intakes (n=1,903) and on-going clients (n=4,655). Analysts measured health outcomes along seven dimensions, and quality of life outcomes along eight; analysts also computed an average outcome score.

STUDY GOAL

The report answers the question: Are there any statistically significant regional differences for new intakes and on-going clients on health and quality of life outcomes?

REPORT ORGANIZATION

Analysts divided this report into two sections in an effort to address multiple audiences. **Part I** lays out study findings and system implications intended for a more general audience of service providers, clients and general public. **Part II** presents a more detailed overview of the study methodology, along with a summary of findings and recommendations for future study, intended for technical audiences.

PART I.

SYSTEMS IMPLICATIONS

New Intake Clients¹

Health Outcomes

Analysts found statistically significant differences² for new intake clients on two health outcome measures—knowledge about HIV/AIDS & other support services and ability to access medical care & other support services across the regions. The regions also differed significantly on average outcome score—averaged over seven health outcome dimensions. The *Central* region had lower health outcomes scores and appeared to be the region causing significant differences to appear, while in general, the other five regions tended to be more similar to one another.

¹ Clients who have started using a Ryan White Title I service during the current reporting period.

² Statistically significant means that there is only a 5% or 1% chance that the results occurred by chance.

Quality of Life Outcomes

Among new intakes, no statistically significant differences were found across regions on any quality of life measure or on average scores over eight measures.

On-Going Clients³

Health Outcomes

For health outcomes, there were no common themes determined across regional differences but there were statistically significant findings within specific regions:

- Clients in *Boston* had lower scores on CD-4 counts and knowledge about HIV/AIDS.
- Clients in the *Northeast* region had lower scores on ability to access medical care.
- Clients in the *Central* region had lower scores on ability to access medical care and ability to maintain medical care.
- Clients in the *Southeast* region had higher scores for the average health care outcome score, as well as higher scores on individual health outcomes of ability to access medical care, and ability to maintain medical care.

Quality of Life Outcomes

For quality of life outcomes, there were no common themes determined across regional differences but there were statistically significant findings within specific regions:

- Clients in the *Southeast* and *New Hampshire* regions were more likely to have the ability to advocate than on-going clients in other regions.
- Clients in the *Southeast* region were somewhat more likely than clients in other regions to maintain stable housing.
- Clients in the *Southeast* and *Northeast* regions were more likely than clients in other regions to have fully networked support.
- Clients in the *Southeast* and *Central* regions were more likely than clients in other regions to cope with stress.

³ Clients who are continuing to use a Ryan White Title I service and have had a case review during the current reporting period.

- Clients in the *Northeast* and *Central* regions were more likely than clients in other regions to have lower depression levels.
- Clients in the *Northeast* had less need than clients in other regions for crisis intervention services and lower levels of criminal behavior than clients in other regions.
- Clients in *Metro West*, *Southeast* and *Central* were more likely than clients in other regions to have lower levels of side effects.
- Clients in *Southeast* and *New Hampshire* had higher average quality of life outcome scores than clients in other regions.

Study Implications

Results of analysis suggested that there is a lot of regional variation for the two groups—new intake and on-going clients—on health and quality of life outcomes. At the same time, it is not clear what the implications of such variation might be. Analysis suggests two things:

- Regional variations present an opportunity for further study to determine why there are differences and what they mean for decision makers.
- Regional variations also suggest that there is a need for additional, more sophisticated statistical analysis to further sort out and explain the statistically significant differences observed. For example whether or not service mix and number of providers within a region have an impact on health and quality of life outcome scores.

PART II. METHODS, FINDINGS & CONCLUSIONS

METHODOLOGY

Data Collection

Researchers measured health and quality of life outcomes every six months using a two-page standard survey tool. Title I providers completed the outcomes measurement report for new clients (clients who have started using a Ryan White Title I services during the current reporting period) and on-going clients (clients who are continuing to use a Title I service and have had a case review during the current reporting period).

Researchers instructed Title I providers—case managers, client advocates, peer counselors—to select five identical outcomes for each individual client within the agency, three of which had to be health measures and one had to be either CD-4 counts or Viral Loads. Each provider selected additional measures most appropriate for their program. Reports were completed in accordance with the Universal Standards of Care, which was established in collaboration between the Boston Public Health Commission and the Massachusetts Department of Public Health, and the service-specific standards of care established by the Boston Public Health Commission. Reports were then forwarded to Suffolk for analysis.

To ensure confidentiality, clients were 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 yearly training, including verbal and written instructions (available in the Provider Manual) on completing and submitting outcomes forms. Boston Public Health Commission 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.

Data Quality

Several methods guarantee the highest data quality. Upon receipt, Suffolk reviewed each outcome measurement report for missing or inconsistent information. After data entry, the project supervisor randomly selected surveys, and cross-referenced them with the database for data input errors. Further, reports detailing clients entered into the database were distributed to providers submitting paper outcome measurement reports. Providers checked 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. Providers also use this report as a reference to ensure that the same clients received reports in the next reporting period. In addition, upon request, client history reports can be generated showing not only unique client identifiers, but also client outcomes.

Survey Reliability

Analysts performed statistical tests to determine reliability of the outcomes measurement survey tool: how much of the variability in outcome scores is due to measurement error and how much is due to variability in true scores? Results indicate a high degree of internal consistency. 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: the closer the results are to 1.00 the more reliable the survey tool.)

Data Sets

Using the unique client code identifiers reported on the outcomes measurement instrument zip codes for the Cohort were matched and exported from the BPHC Database, and merged into the Outcomes Database (n=2,925).⁴

Figures 2A-2C show FY03 demographic data provided by the Boston Public Health Commission for the Title I EMA Epidemiological Profile (n=15,828) and the Boston Title I EMA Service Profile (n=7,672).

⁴ Zip codes represent the client's city or town of residence at the time of intake.

Regional codes were assigned to each client zip code using service area definitions provided by the Massachusetts Department of Public Health Care Coordination Program.

Calculating Outcomes

Step 1: Each of the four measurement levels is 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 are entered.

Step 3: Mean scores are generated.

Step 4: Mean scores are 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 Status

Analysts calculated Health Status by averaging Outcomes 1 to 6 and then proceeding with step 4 above.

- 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

Calculating Quality Of Life Status

Analysts calculated Quality of Life Status by averaging Outcomes 7 & 9-15 and then proceeding with step 4 above.⁵

- Outcome 7: Ability to Advocate
- Outcome 9: Ability to Maintain Housing
- Outcome 10: Network of Support
- 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

A score of 100 indicates that a client has reached the optimal goal (i.e. CD-4 count >500). Outcomes scores less than 100 are categorized as good (score: 68-99), fair (score: 34-67), and poor (score 0-33) (i.e. CD-4 count < 50).

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

Statistical Notes

Using the Statistical Program for the Social Sciences (SPSS), researchers used the One-Way ANOVA procedure to determine whether or not outcome scores differed between regions. Bonferroni's adjustment was used in the Post Hoc analysis to adjust for the differences in sample size among the regions.

The One-Way ANOVA procedure produces a one-way analysis of variance for a quantitative dependent variable (e.g., outcome score) by a single factor

⁵ 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.

(e.g., region) variable. Analysis of variance is used to test the hypothesis that several means are equal. This technique is an extension of the two-sample t test.

Statistical significance indicates that there is a high probability that a result is not likely to be due to chance alone. A difference between two groups is usually considered statistically significant if chance could explain it only 5% of the time or less (the p value is less than .05) or 1% of the time or less (the p value is less than .01).

In this report, researchers marked statistically significant relationships with a single asterisk (*) for $p < .05$, indicating there is only a 5% chance that findings fall outside the data presented. Statistically significant relationships with a $p < .01$ are marked with a double asterisk (**), indicating 99% certainty.

SUMMARY FINDINGS

The statistically significant findings for the regional comparison of FY03 data are outlined below.⁶ The findings are divided into two sections: New Intakes and On-Going clients. Each of these sections includes only those results that were deemed to be statistically significant for the health outcomes and the quality of life outcomes compared across regions.

New Intakes

- Figure 4A compares new intake health outcome scores by region. In the *Central* region the overall average health outcome score is significantly lower compared to all other regions. Individual health outcomes of knowledge about HIV/AIDS & other support services, ability to access medical care & other support services scores are significantly lower.
- Figure 4B compares new intake quality of life outcome scores by region. There are no statistically significant differences in quality of life outcomes by region.

⁶The use of the word "significantly" throughout this report indicates a statistically significant difference where the p values are at either the .05 or .01 level.

On-Going Clients

Figure 5A compares on-going client's health outcomes by region.

- Clients in *Boston* have significantly lower CD-4 counts and knowledge about HIV/AIDS outcome scores.
- Clients in the *Northeast* region have significantly lower ability to access medical care outcome scores.
- Clients in the *Central* region have significantly lower ability to access medical care, and ability to maintain medical care outcome scores.
- Clients in the *Southeast* region had higher scores for the average health care outcome score, as well as higher scores on individual health outcomes of ability to access medical care, and ability to maintain medical care.

Figure 5B compares regional quality of life outcomes scores.

- Network of support outcomes scores are significantly lower for clients in *Boston* region.
- Ability to advocate outcomes scores are significantly higher for clients in the *New Hampshire* region.
- Level of side effects outcomes scores are significantly lower for clients in the *Metro West* region.
- Clients in the *Central* region have mixed outcome scores. Level of depression outcome scores are significantly higher. Level of side effects and coping skills/level of stress outcome scores are significantly lower.
- Clients in the *Southeast* region have an overall quality of life outcome score that is significantly higher compared to clients in all other regions. Individual quality of life outcomes of ability to advocate, ability to maintain housing, network of support, coping skills/level of stress and level of side effects scores are significantly higher.

CONCLUSIONS

While it is the case that analysts observed a number of statistically significant differences among regions on a variety of health and quality of life outcomes for on-going and new intake clients, management and policy implications are problematic: results do not suggest any common themes across regions and in some cases seem counterintuitive, and additional statistical analysis is warranted to sort out what the relationships in the data might really mean.

Because such a wide variety of statistically significant relationships were observed, BPHC might want to consider a more in depth study of how the regions differ. We are reluctant to conclude that a statistically significant difference in the study necessarily implies a best practice or lesson learned from one region to be applied to all others. Such additional study might involve use of alternative methodologies—client and/or provider focus groups or case studies of specific services of interest, for example.

Additional statistical analyses are warranted in the future. A major analysis strategy would be to directly compare outcome scores for new intakes and on-going clients, then look at how they differ by region. Another option would be to look at new intakes and on-going clients by region to see which variable (client status or region) has a greater impact on client outcomes. It seems likely that there is a complex set of statistically important interactions between client group and region that are not apparent in the tabular data used in this study. For example, further analysis is needed to determine the impact that service mix and/or the number of providers in a region has on outcome scores. A multiple regression should also be part of future analysis.

FIGURE 1. NUMBER OF PROVIDERS BY REGION
FY03 (MARCH 2003-FEBRUARY 2004)

Region	Number of Providers
Boston	40
Metro West	6
Northeast	4
Southeast	3
Central	3
New Hampshire	4
Total	60

FIGURE 2A. PERCENTAGE OF NEW INTAKES BY REGION
FY03 (MARCH 2003-FEBRUARY 2004)

Region	New Intakes	
	<i>n</i>	Frequency
Boston	808	42.5%
Metro West	236	12.4%
Northeast	190	10.0%
Southeast	151	7.9%
Central	114	6.0%
New Hampshire	17	0.9%
Homeless [†]	25	1.3%
Unknown/Missing/NA [†]	362	19.0%
Total	1,903	100%

FIGURE 2B. PERCENTAGE OF ON-GOING CLIENTS BY REGION
FY03 (MARCH 2003-FEBRUARY 2004)

Region	On-Going Clients	
	<i>n</i>	Frequency
Boston	1974	42.4%
Metro West	620	13.3%
Northeast	697	15.0%
Southeast	348	7.5%
Central	329	7.1%
New Hampshire	274	5.9%
Homeless [†]	61	1.3%
Unknown/Missing/NA [†]	352	7.6%
Total	4,655	100%

**FIGURE 3A. NUMBER OF TIMES OUTCOMES REPORTED ON
FOR NEW INTAKES BY REGION
FY03 (MARCH 2003-FEBRUARY 2004)**

Outcomes	Boston	Metro West	Northeast	Southeast	Central	NH	Total
CD-4 Counts	725	211	180	138	85	17	1,356
HIV Progression-Viral Load	568	165	147	118	92	16	1,106
Knowledge about HIV/AIDS & Other Support Services	469	126	98	61	46	11	811
Ability to Access Medical Care & Other Support Services	311	95	84	82	56	13	641
Ability to Maintain Medical Care	263	60	43	55	20	0	441
Ability to Adhere to Medical Therapies	274	67	38	17	12	4	412
Ability to Advocate	356	105	72	75	60	3	671
Medical Treatments-Consistent with US Public Health Service Guidelines	65	21	6	3	6	2†	103
Ability to Maintain Housing	241	68	35	35	63	11	453
Network of Support	293	70	72	42	26	1†	504
Coping Skills and Level of Stress	182	56	42	21	46	4	351
Level of Depression	124	27	22	6	12	1†	192
Level of Crisis Intervention Services	104	26	39	7	6	4	186
Level of Side Effects	117	26	24	8	17	1†	193
Level of Criminal Behavior	44	21	11	23	31	0†	130
Total	4,136	1,144	913	691	578	88	7,550

**FIGURE 3B. NUMBER OF TIMES OUTCOMES REPORTED ON
FOR ON-GOING CLIENTS BY REGION
FY03 (MARCH 2003-FEBRUARY 2004)**

Outcomes	Boston	Metro West	Northeast	Southeast	Central	NH	Total
CD-4 Counts	1778	577	675	324	220	270	3,844
HIV Progression-Viral Load	1518	492	600	303	308	269	3,490
Knowledge about HIV/AIDS & Other Support Services	991	284	455	152	117	96	2,095
Ability to Access Medical Care & Other Support Services	686	246	188	207	153	211	1,691
Ability to Maintain Medical Care	583	199	281	177	101	6	1,347
Ability to Adhere to Medical Therapies	765	157	244	59	114	65	1,404
Ability to Advocate	1226	390	287	183	202	121	2,409
Medical Treatments-Consistent with US Public Health Service Guidelines	169	44	27	37	6	113	396
Ability to Maintain Housing	643	172	138	96	95	93	1,237
Network of Support	685	204	236	87	132	3	1,347
Coping Skills and Level of Stress	401	154	115	53	177	54	954
Level of Depression	691	156	132	27	44	11	1,061
Level of Crisis Intervention Services	619	206	266	49	24	143	1,307
Level of Side Effects	654	145	154	33	94	12	1,092
Level of Criminal Behavior	66	30	22	27	69	1†	215
Total	11,475	3,456	3,820	1,814	1,856	1,468	23,889

†Not included in the comparative analysis.

**FIGURE 4A. HEALTH OUTCOME SCORES FOR NEW INTAKES BY REGION
FY03 (MARCH 2003-FEBRUARY 2004)**

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.

Health Outcomes	New Intakes FY03 – Region Comparison							Optimal Outcome Goal
	End FY03 ⁷ (n=977)	Boston (n=808) ⁸	Metro West (n=236)	Northeast (n=190)	Southeast (n=151)	Central (n=114)	NH (n=17)	
CD-4 Counts	64	65	67	69	68	57	63	100 = CD Count >500
HIV Progression-Viral Load	64	63	62	63	70	65	66	100 = <50/virus undetectable
Knowledge about HIV/AIDS & Other Support Services	68	65	65	65	62	45**	54	100 = Fully Informed about HIV/AIDS & other support services.
Ability to Access Medical Care & Other Support Services	76	75	74	79	83	53**	64	100 = Most barriers addressed and resources utilized/uses ER and other support services appropriately.
Ability to Maintain Medical Care	84	82	84	84	89	76	Not included	100 = Missed 0-3 medical appointments in past 6 months.
Ability to Adhere to Medical Therapies	82	82	86	85	88	79	92	100 = Routinely adheres to medical therapies.
Medical Treatments- Consistent with US Public Health Service Guidelines ⁹	96	94	95	100	100	100	100	100 = Receives medical treatment consistent with US Public Health Service Guidelines.
AVERAGE OUTCOME SCORE	73	72	73	74	77	63**	68	100 = Optimal Outcome Score

Significantly Higher =  Significantly Lower = 

- Outcome score for knowledge about HIV/AIDS & other support services and ability to access medical care & other support services is significantly lower in the *Central* region than in the other regions.
- The average health outcome score is significantly lower in the *Central* region.

⁷ Outcome scores reported reflect data collected in the last 6 months of FY03 (Sept 2003-Feb 2004) and not the entire fiscal year.

⁸ The n shown represents the total number of *new intakes* reported on within the region. The *n* for each outcome is detailed in Figure 2A.

⁹ The Medical Treatment Outcome is not included in the average outcome score.

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

FIGURE 4B. QUALITY OF LIFE OUTCOME SCORES FOR NEW INTAKES BY REGION
FY03 (MARCH 2003-FEBRUARY 2004)

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.

Quality of Life Outcomes	New Intakes FY03 – Regional Comparison							Optimal Outcome Goal
	End FY03 ¹⁰ (n=977)	Boston (n=808) ¹¹	Metro West (n=236)	Northeast (n=190)	Southeast (n=151)	Central (n=114)	NH (n=17)	
Ability to Advocate	62	60	68	56	62	55	56	100 = Can get and use appropriately all needed services/sober>6 months/routinely uses transmission prevention protocols.
Ability to Maintain Housing	36	33	37	49	50	51	54	100 = Stable Housing for >6 months-housing not in jeopardy.
Network of Support	57	53	61	51	62	42	Not included	100 = Fully networked support when needed.
Coping Skills and Level of Stress	60	57	57	54	64	51	46	100 = Stress is under control personally/care-taking and family situation is not stressed.
Level of Depression	49	59	50	52	44	56	Not included	100 = Not Depressed.
Level of Crisis Intervention Services	71	61	63	65	71	29	29	100 = No crisis interventions needed in the last 6 months.
Level of Side Effects	75	71	66	74	87	67	Not Included	100 = No side effect/no adverse impact on life activities.
Level of Criminal Behavior	25	31	22	42	28	24	Not included	100 = No arrests and/or no incarcerations in the last 6 months.
AVERAGE OUTCOME SCORE	54	53	53	55	59	47	46	100 = Optimal Outcome Score

Significantly Higher =  Significantly Lower = 

- There are no statistically significant differences in quality of life outcomes by region.

¹⁰ Outcome scores reported reflect data collected in the last 6 months of FY03 (Sept 2003-Feb 2004) and not the entire fiscal year.

¹¹ The n shown represents the total number of new intakes reported on within the region. The n for each outcome is detailed in Figure 2A.

FIGURE 5A. HEALTH OUTCOME SCORES FOR ON-GOING CLIENTS BY REGION
FY03 (MARCH 2003-FEBRUARY 2004)

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.

Health Outcomes	On-Going Clients FY03 – Region Comparison							Optimal Outcome Goal
	End FY03 (n=3,293) ¹²	Boston (n=1,974) ¹³	Metro West (n=620)	Northeast (n=697)	Southeast (n=348)	Central (n=329)	NH (n=274)	
CD-4 Counts	70	66*	69	68	73	68	75	100 = CD Count >500
HIV Progression-Viral Load	71	69	69	67	71	67	73	100 = <50/virus undetectable
Knowledge about HIV/AIDS & Other Support Services	79	74*	79	81	84	83	76	100 = Fully Informed about HIV/AIDS & other support services.
Ability to Access Medical Care & Other Support Services	82	82	82	75*	87*	73*	85*	100 = Most barriers addressed and resources utilized/uses ER and other support services appropriately.
Ability to Maintain Medical Care	86	81	83	87	92*	70*	83	100 = Missed 0-3 medical appointments in past 6 months.
Ability to Adhere to Medical Therapies	78	78	80	78	85	73	79	100 = Routinely adheres to medical therapies.
Medical Treatments-Consistent with US Public Health Service Guidelines ¹⁴	88	75	90	79	92	83	96*	100 = Receives medical treatment consistent with US Public Health Service Guidelines.
AVERAGE OUTCOME SCORE	78	75	77	76	82*	72	79	100 = Optimal Outcome Score

Significantly Higher =  Significantly Lower = 

- Outcome scores for CD-4 counts, knowledge about HIV/AIDS & other support services, ability to access medical care & other support services and ability to maintain medical care for on-going clients differ across regions.
- The average health outcome score is significantly higher in the *Southeast* region.

¹² Outcome scores reported reflect data collected in the last 6 months of FY03 (Sept 2003-Feb 2004) and not the entire fiscal year.

¹³ The n shown represents the total number of *on-going clients* reported on within the region. The n for each outcome is detailed in Figure 2B.

¹⁴ The Medical Treatment Outcome is not included in the average outcome score.

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

FIGURE 5B. QUALITY OF LIFE OUTCOME SCORES FOR ON-GOING CLIENTS BY REGION
FY03 (MARCH 2003-FEBRUARY 2004)

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.

Quality of Life Outcomes	On-Going Clients FY03 – Region Comparison							Optimal Outcome Goal
	End FY03 (n=3,293) ¹⁵	Boston (n=1,974) ¹⁶	Metro West (n=620)	Northeast (n=697)	Southeast (n=348)	Central (n=329)	NH (n=274)	
Ability to Advocate	62	58	61	63	76*	63	75*	100 = Can get and use appropriately all needed services/sober>6 months/routinely uses transmission prevention protocols.
Ability to Maintain Housing	71	71	70	73	86*	69	72	100 = Stable Housing for >6 months-housing not in jeopardy.
Network of Support	68	65*	62	73*	81*	59	89	100 = Fully networked support when needed.
Coping Skills and Level of Stress	58	56	56	59	65*	50*	63	100 = Stress is under control personally/care-taking and family situation is not stressed.
Level of Depression	65	65	65	59*	67	75*	66	100 = Not Depressed.
Level of Crisis Intervention Services	68	66	64	78*	63	70	73	100 = No crisis interventions needed in the last 6 months.
Level of Side Effects	79	73	70*	79	86*	67*	85	100 = No side effect/no adverse impact on life activities.
Level of Criminal Behavior	60	69	65	80*	76	78	Not Included	100 = No arrests and/or no incarcerations in the last 6 months.
AVERAGE OUTCOME SCORE	66	65	64	71	75*	66	75*	100 = Optimal Outcome Score

Significantly Higher = Significantly Lower =

- Outcome scores for ability to advocate, network of support, level of depression, level of crisis intervention services, level of side effects, and level of criminal behavior for on-going clients differ across regions.
- The average quality of life outcome score is significantly higher in the *Southeast* and *NH* regions.

¹⁵ Outcome scores reported reflect data collected in the last 6 months of FY03 (Sept 2003-Feb 2004) and not the entire fiscal year.

¹⁶ The n shown represents the total number of on-going clients reported on within the region. The n for each outcome is detailed in Figure 2B.

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