Quality of Life Assessment
Pilot Report

June 2009
410 Capitol Avenue
Hartford, CT 06134

dmhas

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Notes from the Director

The Department of Mental Health and Addiction Services has directed considerable effort over a number of years toward promoting a recovery-oriented system of care. DMHAS' overarching goal has been to develop a value-driven, recovery-oriented system of services for those it serves. Value-driven - the highest quality of care we can purchase at the most reasonable cost. Recovery-oriented - a system with a message of hope, that one can get better and improve her or his quality of life, despite her or his illness, and that offers opportunities for one to be part of his or her community again. Our vision emphasizes a holistic view of those we serve; we recognize that recovery is much more than mental health or substance abuse treatment. Recovery includes the development of positive social relationships, physical and psychological health, work, stable housing, and meaningful participation in the community: all essential components of a quality life.

In order to promote improved quality of life for the individuals we serve, it became clear that we needed to better understand how consumers view the quality of their lives. In fact, consumers at one of the DMHAS- funded social clubs challenged us to move beyond our Consumer Satisfaction Survey in order to consider other measures of recovery and well being. These interactions led the Evaluation, Quality Management, and Improvement (EQMI) Division to introduce a pilot designed to measure the degree to which consumers were satisfied with the quality of their lives. In fiscal year 2008, DMHAS implemented a new survey tool, the World Health Organization's (WHO) Quality of Life BRÈF - the brief version of its quality of life instrument. Based on our research, this is one of the first times that the QOL has been administered to consumers of a state mental health and substance abuse system.

The Quality of Life survey was voluntarily administered by providers in conjunction with the Consumer Satisfaction Survey. Over 14,000 consumers responded in this ground-breaking effort.

This initial report summarizes these responses and provides information across a number of domains that contribute to well being. The report is not intended to measure provider performance, but is instead designed to provide useful information about the individuals we serve. Areas of satisfaction or dissatisfaction can help us to consider other ways to support and promote recovery. The information may also show useful trends that reflect opportunities or barriers to recovery that may exist in a given region or locale.

I am excited to present this Quality of Life report to our stakeholders, and I would like to acknowledge their participation in our initial attempt to measure quality of life. The survey and this report provided a vehicle for consumers to voice their opinions about their quality of life and the degree to which they are satisfied with discrete aspects of it. It is our hope that this information can help us as we continue our efforts to promote a recovery-oriented system of care.

Jim Siemianowski
Director, Evaluation, Quality Management and Improvement

April 2009

Acknowledgements

The Connecticut Department of Mental Health and Addiction Services (DMHAS) would like to offer its thanks to everyone who completed the WHOQOL-BRÈF survey and gave us invaluable and very personal information. We are very grateful for your contribution.

We could not have done this without the help of our provider community and their responsiveness in implementing the Quality of Life instrument. Thank you.

Karin Haberlin oversaw the survey process and developed this report with the able assistance of Mike Hettinger, who ran the reports, and Kristen Miller, who conducted the statistical analyses. Patti Blanchette, Maria Cabrera, Cindy Claudio, Marilyn Duran, Sharon Greaves, Tia Jackson-Lee, JoAnn Novajovsky, Karen Oliver-Jallow, Jill Price, and DMHAS summer workers helped enormously with data entry.

Thanks to Efrain Diaz from the DMHAS Office of Multicultural Affairs helped modify colloquialisms in the Spanish translation of the WHOQOL-BRÈF.

Survey Process

The Connecticut Department of Mental Health and Addiction Services (DMHAS) conducts an annual consumer satisfaction survey. The targeted population is people in recovery who received DMHAS-funded treatment for substance use and/or mental health disorders. In Fiscal Year 2008, DMHAS elected to add the 26-item WHOQOL-BRÈF Quality of Life (QOL) instrument to the survey as an optional part of the annual process. This was the first time that DMHAS has administered a QOL instrument on this scale. About 60% of consumer survey respondents also answered at least 1 question per domain of the QOL instrument.

Findings

Survey Demographics

- Statewide, a total of 14,560 people completed at least one question per domain in the WHOQOL-BRÈF instrument. DMHAS provider system includes 128 providers that administer consumer surveys; of this group, 104 agencies submitted QOL responses.
- Slightly more than half (54%) of the respondents were men; 42% were women, and about 4% of respondents did not identify their gender.
- The majority (59%) of respondents were White; 18% were African-American/Black, and 9% did not identify their race.
- About 19% of respondents identified as Hispanic and 29% chose not to indicate whether or not they were of Latino/a origin (called Ethnicity in the survey).
- The largest group of survey respondents fell between the ages of 35-54 (53%).
- About 47% percent of respondents were surveyed in mental health programs, and 41% were surveyed from substance use programs. Data about the type of care is missing for about 12% of respondents because some agencies did not provide this information.
- Thirty-seven percent of respondents self-reported that they were receiving treatment for emotional or mental health issues; 31% reported that they were receiving treatment for alcohol or drug issues, and more than a quarter of respondents (26%) indicated that they were receiving treatment for both mental health and substance use problems.

Demographic Characteristics and Quality of Life

Gender

- Men tended to have significantly higher general quality of life.

Race

- African-Americans tended to report higher quality of life, and Whites tended to report the lowest, across all domains.
- People who reported being treated for both mental health and substance use problems tended to indicate a lower quality of life.

Ethnicity

- Hispanics tended to have significantly higher QOL in the Social domain than people who are non-Hispanic, although Non-Hispanic people tended to have higher scores in Physical Health and Environment.

Age Group

- In this sample, as age increased, QOL decreased, though changes are not as significant in the Environment domain.

Self-Identified Reason for Seeking Services

- Respondents who self-reported that they were receiving substance use treatment tended to have a significantly higher quality of life than people who reported that they were receiving treatment for mental health problems, or for both mental health and substance use problems. This pattern holds true regardless of whether or not the respondents were actually reporting from a substance use program.

Level of Care

- Respondents receiving vocational rehabilitation and residential services tended to report a higher quality of life; people who receive case management and methadone maintenance services tended to score the lowest.
- People receiving vocational rehabilitation service scored higher than any other levels of care in the Environment domain.

Length of Stay

- Clients who have been receiving services for less than one year tended to report better QOL in the Physical Health, Psychological, and General Quality of Life domains.
- Although substance use clients tended to report a higher quality of life, substance use clients who have received services for 5 or more years scored lowest in the Physical domain.
- Mental health clients who have received services for 5 or more years tended to score relatively high in the Psychological domain.

Method of Survey Administration

- Respondents who received the QOL instrument from provider staff members reported significantly better QOL in the Physical Health, Social, and General Quality of Life domains than did those who received the survey via multiple methods (i.e., a combination of staff and other neutral parties).

Planning Region

- Across all domains except Environment, respondents from Region 1 (Southwest CT) reported significantly better QOL than did respondents from all other regions.

Statewide Quality of Life by WHOQOL-BRÈF Domain

Key statistically significant differences for each domain, on the statewide level, are summarized below in Table 1. Detailed information by domain and split out by Program Type may be found later in this document in the Results section.

Table 1: Better Quality of Life by Domain - Statewide

	General QOL	*Physical Health*	*Psychological*	*Social Relationships*	*Environment*
Respondents receiving tx for substance use problems	x	x	x	x	
Men	x	x	x	x	x
African Americans	x	x		x	x
Non-Hispanic ethnic background		x			x
Hispanic ethnic background				x	
Aged 24 years or younger	x	x	x	x	x
Receiving Residential services	x	x	x		
Receiving Social Rehab services	x		x		
Receiving Vocational Rehab services	x	x	x		x
Receiving services for less than 1 year	x	x	x	x	

Limitations

This was the first year that a quality of life instrument of any kind was implemented on a statewide level in Connecticut. Consequently, the DMHAS community faced a number of challenges:

- To our knowledge, this is one of the first times that a publicly funded behavioral health care system has been assessed for quality of life in the United States.
- Communication about the purpose and scope of the Quality of Life pilot needed to be more comprehensive at the beginning of the survey period.
- Anticipated and actual burden on provider staff prevented participation in many cases.
- Some providers rejected the instrument on a philosophical or clinical basis.
- Some consumers rejected parts of or the entire QOL instrument as "too personal."
- The QOL instrument was administered at a point in time, rather than in a pre-post design. Consequently, it is nearly impossible to correlate clients' quality of life to specific treatment received.
- Finally, despite DMHAS' attempt to provide anonymity to its consumers during the survey process, we have been unable to provide a totally anonymous survey setting.

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If you have any questions, concerns, and suggestions/recommendations, please contact:

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Introduction

Rationale

The mission of the Department of Mental Health and Addiction Services is to improve the quality of life of the people of Connecticut by providing an integrated network of comprehensive, effective and efficient mental health and addiction services that foster self-sufficiency, dignity and respect.[1]

DMHAS' mission statement clearly indicates that our goal is to improve **quality of life** for the people of Connecticut whom we serve.

In 1948, the World Health Organization (WHO) issued this definition of health, which remains to this day:

"Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."[2]

Building on this definition of health, WHO researchers developed this definition of quality of life in 1991: "*individuals' perceptions of their position in life in the context of the culture and value systems in which they live, and in relation to their goals, expectations, standards, and concerns."*[3]

As a recovery-oriented system of care, DMHAS aims to improve quality of life for people who receive our services. We want people to experience improvement in their lives with regard to not just their physical or mental health, but their total well-being. While "well-being" has been traditionally defined as "happiness", Ryff identified several dimensions of psychological well-being:

Self-acceptance,
Positive relations with others,
Autonomy,
Environmental mastery,
Purpose in life, and,
Personal growth;[4]

which are all characteristics of a highly functioning individual living in modern society. We believe that in order to serve people working towards recovery, we need to assess well-being and/or quality of life for two main goals. Our first goal is to obtain a broad sense of the quality of life of our service population. Our second goal is to use the information obtained to plan policy, strategy, and services designed to improve quality of life for the people whom we serve.

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[1] Connecticut Department of Mental Health and Addiction Services. Retrieved February 17, 2009 from <http://www.ct.gov/dmhas/cwp/view.asp?a=2899&q=334082#Mission>.
[2] Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19-22 June, 1946; signed on 22 July 1946 by the representatives of 61 States (Official Records of the World Health Organization, no. 2, p. 100) and entered into force on 7 April 1948.
[3] The WHOQOL Group. (1994). The Development of the World Health Organization Quality of Life Assessment Instrument (the WHOQOL). In J. Orley & W. Kuyken (Eds.), Quality *of Life Assessment: International Perspectives* (pp. 41-57). Berlin, Germany: Springer-Verlag.
[4] Ryff, C. (1989). Happiness Is Everything, or Is It? Explorations on the Meaning of Psychological Well-Being. *Journal of Personality and Social Psychology*. Vol. 57, No. 6, 1069-1081.

Benefits of measuring quality of life in a behavioral health setting

- A baseline administration can tell us about the overall quality of life for DMHAS clients, and can also provide the DMHAS community with information about differences across demographic, treatment, and programmatic lines.
- Recovery oriented treatment considers the whole person's needs, and a quality of life instrument can help DMHAS assess these needs.
- Repeated administrations can show changes in quality life domains over time.
- Results can inform planning on agency and programmatic levels.

Quality of life and recovery

In a recent study with schizophrenic clients[5], Wu et al. found that the existence of basic needs (food, shelter) were negatively associated with physical and mental health quality. Further, they found that consumers' satisfaction with their lives was associated with continuity of care and treatment choice. The study results suggest that service providers need to attend to multiple client needs: basic needs, interpersonal and intimacy concerns, and social skills training, in addition to traditional mental health services.

Consumers want improved quality of life

DMHAS has received thousands of comments through the annual consumer survey process; many comments pertain to quality of life issues. Selected comments from the FY07 Consumer Survey[6] include:

Overall Quality of Life/General Health

- Hopefully with my new therapist, I'll be able to move up and along with my life.
- I need more help in improving my physical and spiritual well being as may relate to my mental health.
- I want a job as soon as possible… I WANT TO WORK.
- I would like to go back to school and get a part-time job.
- I am not leading the life I want to lead.

Physical Health

- I am crippled by years of weight gain. It's been an uphill battle because medications are prescribed such as lithium…
- I feel my symptoms are worse- particularly side effects that are not healthy to me.
- Medical issues are not met or too much of a concern to them, finding the needs and knowledge to get the help from resources is not there, very vague on necessary funds and help to get better.

Psychological

- I wish I had better control of my life.
- I would like to recover from my illness and get better.

Social Relationships

- I need to be on a level plane financially and socially. I.e. driver's license and relationships.
- I do have other interests outside the mental health agency. I don't like to be categorized as sick. I like people, writing, sports.
- I don't get enough sociability in my life but I'm not able to deal with that now.

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[5] Wu, CFM, Mak, WWS, Wan, DLY. (2007). Quality of life of mental health consumers in Hong Kong: Analysis of service perceptions. *Quality of Life Research* 16: 31-40.

[6] Connecticut Department of Mental Health and Addiction Services. (2007). *Consumer Survey Annual Report*. October 19, 2007. <http://www.ct.gov/dmhas/lib/dmhas/consumersurvey/07csreport.pdf>.

- I would like to get help in getting benefits of job and have a place of my own… so that my children can be a part of my life again.

Environment

- Environment can be better.
- I would really like to move on to better things like having my own apartment again.
- I can't do anything- I'm helpless. My race makes it very hard to be in recovery. I grew up in church and my disability makes it very hard to be healed. I feel trapped here.

Quality of life data collection and usage

During Fiscal Year 2008, the Evaluation, Quality Management, and Improvement Division at DMHAS collected over 14,000 quality of life assessments, using the WHOQOL-BRÈF instrument. This report summarizes our analysis of these data and outlines next steps for quality of life assessment by this agency. We will continue to analyze these data further to generate future lines of inquiry and research questions as well as release QOL findings to the DMHAS community and to the public.

Quality of life information may help DMHAS set benchmarks for future improvements and planning. A review of these potential benchmarks may be found later in this document, in the Discussion section.

DMHAS assures its private non-profit partners that results will not be used as part of any contracting or re-bid processes until further notice. This usage of data would be inappropriate, particularly as clients' quality of life may not be associated with behavioral health treatment he or she might be receiving. Additionally, DMHAS will not use quality of life results to impose sanctions or provide rewards, for the same reason. Finally, DMHAS will not use the results from the QOL pilot to change the scope of providers' work.

The WHOQOL-BRÈF

DMHAS has chosen the WHOQOL-BRÈF to collect quality of life outcomes. The WHOQOL-BRÈF is the brief version of the original quality of life instrument developed by the World Health Organization. The WHOQOL-BREF measures an individual's satisfaction in the following domains: Physical Health, Psychological, Social Relationships, and Environment. The WHOQOL-BRÈF instrument contains 26 questions from the original 100 item WHOQOL instrument, which has been extensively piloted and tested internationally.[7]

Instrument selection

The selection of the WHOQOL-BRÈF instrument was the result of several months of focused research on measuring aspects of recovery not currently being measured by the current DMHAS Consumer Survey tool. Provider feedback, particularly from rehabilitation levels of care such as clubhouses, has indicated that the MHSIP measures do not provide a complete picture of consumers' progress towards recovery. While DMHAS added a Recovery domain in to the existing MHSIP items in 2006[8], provider and consumer feedback suggested that DMHAS needed to look at a broader definition of improvement.

EQMI staff worked with about 10 members of the Prime Time House clubhouse in Torrington, Connecticut during the first half of calendar year 2007. Notes from these meetings may be found in Appendix 2. DMHAS funds social and vocational rehabilitation programs at this agency. Several meetings and two focus groups helped us narrow down the main outcome measures of concern for the clubhouse members. The following themes emerged from this work:

- Active in one's own recovery/treatment plan
- Activity level
- Alleviation of symptoms
- Decrease in medication
- Employment/Work when ready
- Finding a purpose/self-actualization
- Gratification /volunteering/helping others
- Happiness
- Housing stability/living situation
- Increased ability
- Individual success
- Level of activity/number of hours at clubhouse
- Level of community/social involvement
- Quality of life/Wellness
- Reduced hospitalizations/reduced length of inpatient stay
- Reduction in need for assistance
- Reduction in need for benefits
- Reduction in need for community supports
- Security
- Service utilization

[7] The WHOQOL Group. (1994). Development of the World Health Organization WHOQOL-BREF quality of life assessment. *Psychological Medicine* 28: 551-558.
[8] Connecticut Department of Mental Health and Addiction Services (2006). *Consumer Survey Annual Report.* August 2006. <http://www.ct.gov/dmhas/lib/dmhas/consumersurvey/06csreport.pdf>. See also: *Commissioner's Note*, August 11, 2006. <http://www.ct.gov/dmhas/lib/dmhas/consumersurvey/06coverletter.pdf>.

Using these key points of interest as a guide, EQMI staff identified a number of survey instruments which could be used to measure the above outcomes. These instruments included portions of the Behavioral Risk Factor Surveillance System (BRFSS)[9], the Satisfaction With Life Scale (SWLS)[10], the Meaning in Life Questionnaire (MLQ)[11], the Mental Health Inventory-5 (MHI-5)[12], the Fordyce Emotions Questionnaire[13], the Personal Growth Initiative Scale (PGIS)[14], the Subjective Happiness Scale[15], and the WHOQOL-BRÈF.

EQMI staff returned to Prime Time House in May 2007 with samples of all the above mentioned instruments, which were reviewed by about 10 members and staff. Clubhouse members and staff enthusiastically endorsed the WHOQOL-BRÈF as an instrument that "asks the right questions".

A project that began as a local pilot expanded to a statewide pilot when this instrument was shared with senior DMHAS management, who decided that the WHOQOL-BRÈF be included with the consumer survey package in mid 2007.

As mentioned previously, the WHOQOL-BRÈF is a 26-item short version of the original WHOQOL instrument, which is comprised of 100 items. An analysis of the psychometric properties of the WHOQOL-BRÈF, using a sample of 11,830 adults drawn from 23 countries, concluded that it has very good reliability and validity.[16] Herrman et al. report the WHOQOL-BRÈF was sensitive to the self-reported health related quality of life status of people living with psychosis.[17] As the WHOQOL-BRÈF has only been in general circulation for about four years, it is likely that research results will be published in the near future which will give us a more complete picture of this instrument's reliability and validity.

Administration of the Consumer Survey with Quality of Life Addendum

The Department of Mental Health and Addiction Services administers an annual consumer survey using a slightly modified version of the 28-item Adult Survey published by the federally-funded Mental Health Statistics Improvement Program[18]. The Connecticut version of the MHSIP survey retains 23 questions from the original and includes a five-item recovery domain, added in 2005.[19] Fiscal Year 2008 was the sixth year of continuous consumer satisfaction survey data collection by DMHAS. Surveys are offered in English and Spanish to clients in state operated and private non-profit grant-funded programs in the DMHAS system. Most levels of care in both mental health and addiction services are required to participate in the consumer survey, although acute and outreach programs are exempt.[20]

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[9] Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Questionnaire*. (2006). Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.

[10] Corrigan, J. (2000). The Satisfaction With Life Scale. *The Center for Outcome Measurement in Brain Injury*. Retrieved January 15, 2009 from <http://www.tbims.org/combi/swls>.

[11] Steger, MF, Frazier, P, Oishi, S, Kaler, M. (2006). The Meaning in Life Questionnaire: Assessing the Presence of and Search for Meaning in Life. *Journal of Counseling Psychology.* 53(1):80–93.

[12] Berwick DM, Murphy JM, Goldman PA, Ware JE Jr, Barsky AJ, Weinstein MC. (1991). Performance of a five-item mental health screening test. *Med Care.* 29(2):169-76.

[13] Fordyce, M. (1988). *Fordyce Emotions Questionnaire*. Retrieved May 4, 2007, from <http://www.authentichappiness.sas.upenn.edu/tests/Percentage_t.aspx?id=254>.

[14] Robitschek, C. (1998). Personal growth initiative: The construct and its measure. *Measurement and Evaluation in Counseling and Development* 30: 183-198.

[15] Lyubomirsky, S. & Lepper, H.S. (1999). A measure of subjective happiness: Preliminary reliability and construct validation. *Social Indicators Research*, 46: 137-155.

[16] Skevington, SM, Lotfy, M, and O'Connell, KA. (2004). The World Health Organization's WHOQOL-BREF quality of life assessment: Psychometric properties and results of the international field trial. A Report from the WHOQOL Group. *Quality of Life Research* 13(2): 299-310.

[17] Herrman H, Hawthorne G, Thomas R. (2002). Quality of life assessment in people living with psychosis. *Social Psychiatry and Psychiatric Epidemiology.* 37(11):510-8.

[18] Please see http://www.mhsip.org/MHSIP_Adult_Survey.pdf for the original survey developed by the Mental Health Statistics Improvement Program Policy Group.

[19] Please see <http://www.ct.gov/dmhas/lib/dmhas/consumersurvey/surveyenglish.pdf> for the Connecticut version of the MHSIP Adult Survey.

[20] More information about participation requirements may be found in the Consumer Survey Instructions: <http://www.ct.gov/dmhas/lib/dmhas/consumersurvey/instructions.pdf>

About 89% of respondents to the FY2008 DMHAS Consumer Survey[21] indicated that they were satisfied with their current behavioral health treatment, and around 90% indicated that they were satisfied with quality and appropriateness of treatment as well as their own participation in treatment planning. However, only about 76% of respondents indicated satisfaction within the recovery domain, and 80% were satisfied with outcomes. Past consumer surveys have featured similar differences and DMHAS felt that a quality of life survey might help understand the lower levels of satisfaction with recovery and outcomes.

Consequently, the WHOQOL-BRÈF instrument was appended to the existing consumer survey and included a one page instruction sheet. It was included as part of the customary consumer survey package that was distributed to the provider community in October 2007. Like the Consumer Survey, this instrument was offered in English and Spanish. Providers were advised that collection of the QOL data was optional, but it soon became clear that additional explanation and communication was needed regarding the addition of the QOL instrument. In February 2008, a number of clarifying communications were issued to the provider community from the Office of the Commissioner. The commissioner's memo dated February 7, 2008 may be found in Appendix 3.

Data Entry

After receiving a large amount of feedback from the DMHAS community, the Evaluation, Quality Management, and Improvement division agreed to perform data entry of consumer surveys with QOL data attached. Providers requesting data entry were asked to mail hard copy surveys to EQMI by July 1, 2008. As a result of this accommodation, OOC entered over 5,000 surveys for providers, using the screens created in the DMHAS Provider Accountability System (DPAS) for this purpose.

The remaining 9,000 surveys were entered by PNP and state operated facility staff at the local level.

Analysis

Once all data were entered, data were analyzed with SPSS in a manner similar to the methodology used for the consumer survey. DMHAS used SPSS coding and syntax provided by the University of Washington, which distributes the WHOQOL-BRÈF in North America. Additionally, DMHAS obtained feedback on our analytic methodology from Mick Power of the University of Edinburgh. (Personal communication, September 5, 2008.) Professor Power is one of the researchers who helped develop the WHOQOL-BRÈF.

WHOQOL-BRÈF Scoring and Interpretation

The WHOQOL-BRÈF is a subset of 26 items from the original WHOQOL-100 instrument. These 26 items comprise four domain scores as well as two individually scored items concerning overall health and quality of life (for the purposes of our analysis, we grouped these two items into a fifth domain called Overall QOL and General Health).
The domain scores (Overall QOL and General Health, Physical Health, Psychological, Social Relationships, and Environment) are scored so that higher scores indicate a higher quality of life. Each domain is evaluated on a 0-100 scale. There are three items of the WHOQOL-BRÈF instrument that need to have their scores reversed before scoring, because they are negatively phrased. These items are:

- *To what extent do you feel that physical pain prevents you from doing what you need to do?*
- *How much do you need any medical treatment to function in your daily life?*
- *How often do you have negative feelings such as blue mood, despair, anxiety, depression?*

Domains are *not* summed for a final, overall score with this instrument.

[21] Connecticut Department of Mental Health and Addiction Services, November 2008. Accessed on February 17, 2009 from <http://www.ct.gov/dmhas/lib/dmhas/consumersurvey/CSreport08.pdf>.

Treatment of missing responses

For the Physical Health or Environment domains, domain scores are not calculated per person if more than one response item is missing. If just one response is missing from a domain, an imputed response may be calculated by substituting a person-specific average of the completed items.

For the Psychological and Social Relationships domains, if any response items are missing per domain, a domain score is not calculated. This is reflected in the relatively lower Ns for these two domains in this report.

Scoring

After the data is recoded and missing data is handled, we computed a raw score by summing the items in each domain into raw scores. These scores were checked to ensure that they were in the correct range, and then transformed into a 0-100 scale score using this formula:

$$\text{Transformed Scale} = \left[\frac{(\text{Actual raw score - lowest possible raw score})}{\text{Possible raw score range}} \right] \times 100$$

Results

Frequencies

A total of 14,560 respondents answered at least one question per QOL domain.

Table 2: QOL Respondents by Agency

Provider	QOL Responses
ABH - GA Only Providers	269
Ability Beyond Disability Institute	29
Alcohol and Drug Recovery Center	271
Alcohol Services Organization of South Central CT	218
Alliance Treatment Center Inc.	64
APT Foundation Inc.	645
Artreach Inc.	56
Backus Hospital	156
Bridge House	124
Bridgeport Community Health Center	15
BRIDGES	195
Bristol Hospital	32
Catholic Charities & Family Svs, Diocese of Norwich	25
Catholic Charities - Fairfield County	98
Catholic Charities - Waterbury	58
Cedarcrest Regional Hospital	46
Center for Human Development	135
Central Connecticut Coast YMCA	38
Chemical Abuse Services Agency	42
Chrysalis Center Inc.	339
Columbus House	166
Common Ground Community	43
Community Enterprises Inc.	52
Community Health Center Inc.	5
Community Mental Health Affiliates	298
Community Prevention and Addiction Services	186
Community Renewal Team	63
Connecticut Counseling Centers Inc.	401
Connecticut Mental Health Center	839
Connecticut Renaissance Inc.	144
Connection Inc.	62
Continuum of Care	156
Coordinating Council for Children in Crisis	17
Council of Churches: Greater Bridgeport	22
Crossroad Inc.	91
CTE Inc. Viewpoint Recovery Program	18
CW Resources Inc.	34
Dixwell/Newhallville Community MHS Inc.	113
Easter Seal Goodwill Industries Rehab. Center Inc.	43
Easter Seal Rehab. Center of Greater Waterbury Inc.	40
Easter Seals of Greater Hartford Rehab. Center Inc.	63
Education Connection	9

Provider	QOL Responses
Family and Children's Agency Inc.	55
Family Centers Inc.	28
Farrell Treatment Center	38
Fellowship Inc.	257
Fish Inc.: Torrington Chapter	11
FSW Inc.	42
Gilead Community Services Inc.[22]	133
Goodwill Industries of Western Connecticut Inc.	48
Guardian Ad Litem	32
Hall Brooke Foundation Inc.	41
Harbor Health Services	246
Hartford Dispensary	969
Hartford Hospital	96
Hill Health Corp.	287
Hogar Crea Inc.	8
Hospital of St. Raphael	138
Human Resource Development Agency	107
Immaculate Conception Inc.	11
Inter-Community Mental Health Group Inc.	160
Interlude Inc.	34
John J. Driscoll United Labor Agency Inc.	24
Keystone House Inc.	120
Kuhn Employment Opportunities inc.	25
Laurel House	195
Liberation Programs	878
Liberty Community Services	27
Marrakech Day Services	68
McCall Foundation Inc.	167
Mental Health Association of Connecticut Inc.	305
Mercy Housing and Shelter Corp.	107
MICAH Housing Pilots Program	6
Middlesex Hospital Mental Health Clinic	53
Morris Foundation Inc.	283
My Sisters' Place	36
New Directions Inc. of North Central Connecticut	77
New Haven Home Recovery	22
New Milford Hospital	67
Northwest Center for Family Services and Mental Health	25
Norwalk Hospital	270
Operation Hope of Fairfield Inc.	9
Pathways Inc.	53
Perception Programs Inc.	152
Positive Directions	17
Regional Network of Programs	624
Reliance House	240
SCADD	269
Search for Change Inc.	18

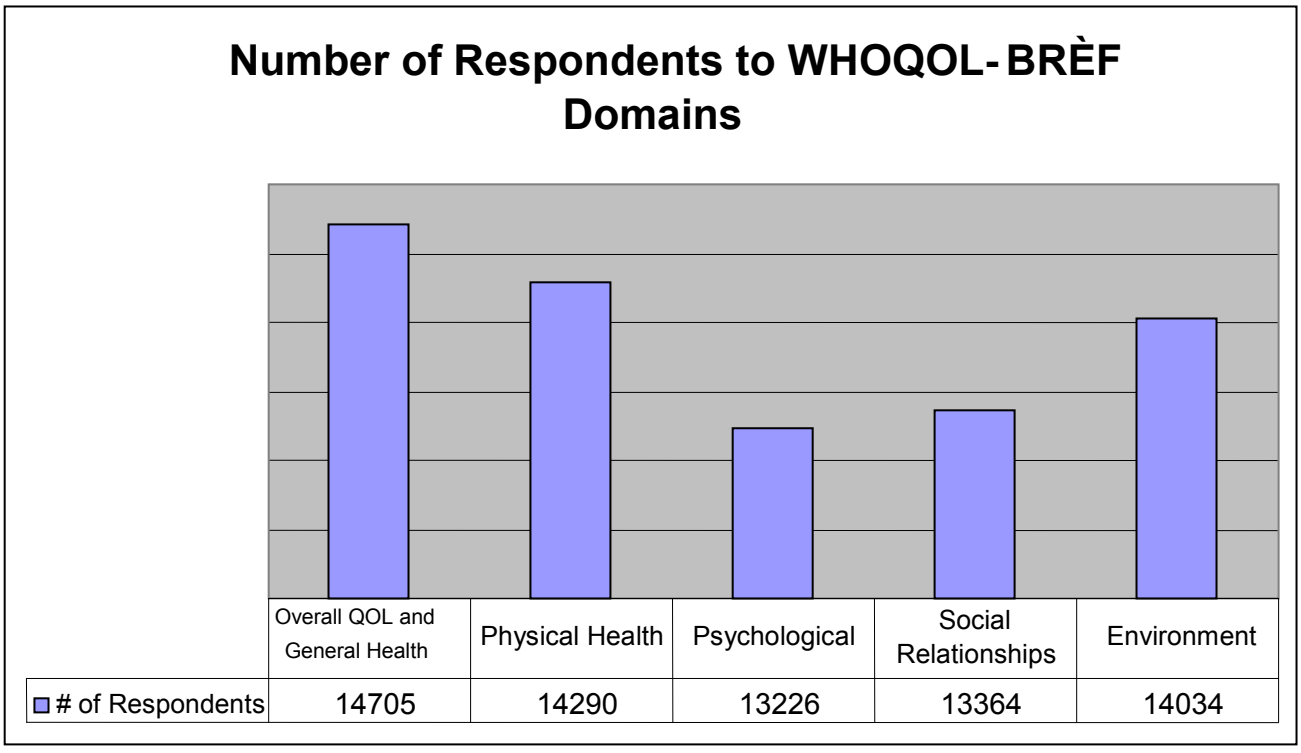
[22] Gilead allowed clients to apply multiple programs to the same survey response; for the purpose of this table, we are counting the number of individual clients who responded.

Provider	QOL Responses
Shelter for the Homeless Inc.	91
St. Luke's Community Services Inc.	62
St. Mary's Hospital Corp.	174
St. Vincent DePaul Society of Middletown Inc.	24
St. Vincent DePaul Society of Waterbury Inc.	60
Stafford Family Services	104
Stamford Hospital	14
Supportive Environmental Living Facility	43
United Community and Family Services	125
United Services Inc.	281
Valley Mental Health Center	127
Western Connecticut Mental Health Network	416
Wheeler Clinic	304
Yale University - Behavioral Health	109
Yale University - WAGE	28
TOTAL	14560

Because we emphasized that the QOL addendum to the Consumer Survey was optional, and that consumers could leave answers blank if they so chose, we experienced variability in the number of scorable responses to different domains.

Interestingly, although we received an amount of negative feedback regarding satisfaction with one's sex life (which is part of the Social Relationships domain,) the lowest number of valid responses was actually found in the Psychological domain. It is not clear as to why this is, although counts of calculated responses to both domains are relatively lower due to the scoring methodology.

Figure 1: Number of Respondents to WHOQOL-BRÈF Domains



Overall Quality of Life and General Health was the most commonly answered domain. The following table provides demographic information about consumers who responded to questions in this domain; it provides a good snapshot of the

people who chose to share this information with DMHAS. We have included demographic information from the 2008 Consumer Survey for comparison.

Table 3: Demographic Trends for Quality of Life Respondents, compared with 2008 Consumer Survey Respondents

	QOL N	*QOL Percent*	*CS N*	*CS Percent*
Gender				
Female	6245	42.5%	9775	40.4%
Male	7939	54.0%	13023	53.8%
Unknown	521	3.5%	1390	5.7%
TOTAL	***14705***		***24188***	
Race				
American Indian/Alaskan	150	1.0%	240	1%
Asian	78	0.5%	136	0.6%
Black	2639	18.0%	4116	17%
Native Hawaiian/Pacific Islander	49	0.3%	70	0.3%
White	8737	59.4%	14148	58.5%
Mixed	594	4.0%	962	4%
Other	1136	7.7%	1907	7.9%
Unknown	1322	9.0%	2609	10.8%
TOTAL	***14705***		***24188***	
Ethnicity				
Mexican	108	0.7%	170	0.7%
Puerto Rican	2077	14.1%	3296	13.6%
Other Hispanic/Latino	629	4.3%	1025	4.2%
Not Hispanic	7584	51.6%	12007	49.6%
Unknown	4307	29.3%	7690	31.8%
TOTAL	***14705***		***24188***	
Age Range				
20 and Under	468	3.2%	921	3.8 %
21-24	1009	6.9%	1770	7.3%
25-34	2912	19.8%	4699	19.4%
35-54	7756	52.7%	12193	50.4%
55-64	1699	11.6%	2615	10.8%
65 and Older	331	2.3%	557	2.3 %
Unknown	530	3.6%	1433	5.9%
TOTAL	***14705***		***24188***	
Program Type				
MH	6953	47.3%	11022	45.4%
SA	6088	41.4%	10588	43.6%
Unknown	1664	11.3%	2578	11.0%
TOTAL	***14705***		***24188***	
Reason for Service				
Emotional/Mental Health	5381	36.6%	8226	30.3%
Alcohol or Drugs	4547	30.9%	7538	31.2%
Both Emotional/Mental Health and Alcohol or Drugs	3837	26.1%	6100	25.2%
Unknown	940	6.4%	2324	9.6%
TOTAL	***14705***		***24188***	

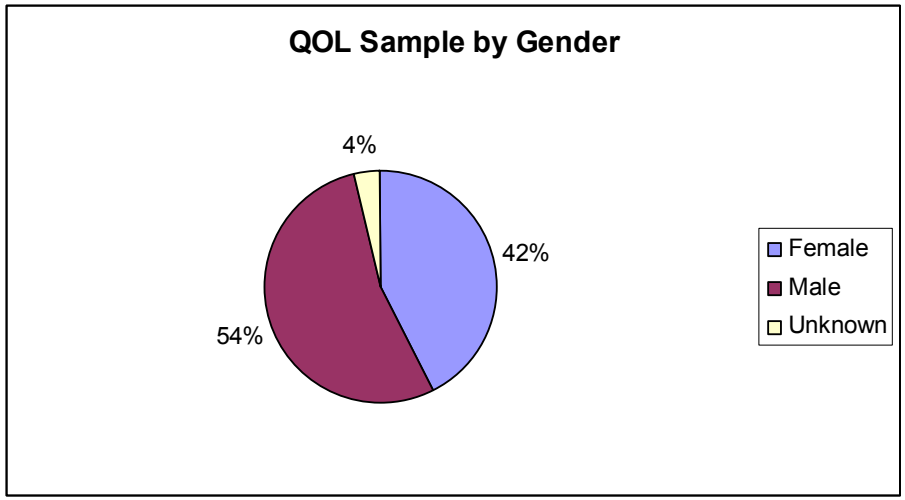
(Table continued on next page…)

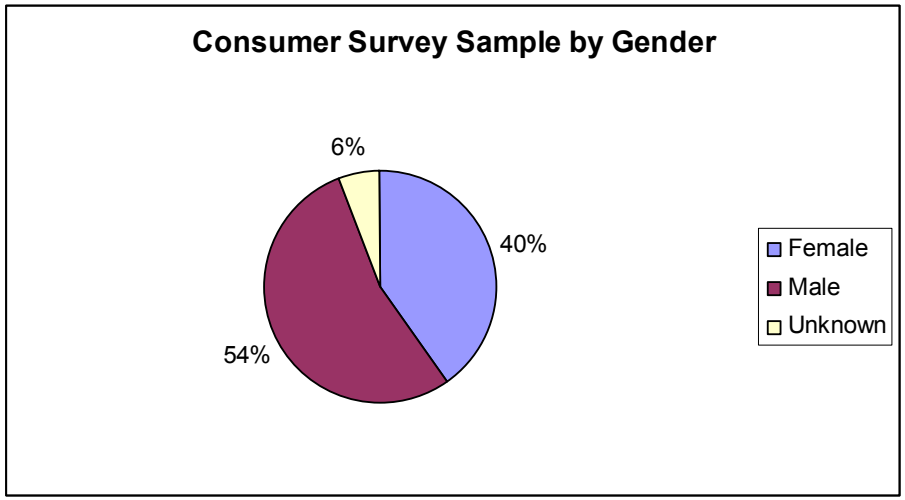
Service Duration				
Less than 1 year	5693	38.7%	9872	40.8%
12 months to 2 years	2253	15.3%	3414	14.1%
More than 2 years	2205	15.0%	3275	13.5%
More than 5 years	3278	22.3%	4685	19.4%
Unknown	1276	8.7%	2942	12.2%
TOTAL	***14705***		***24188***	

Comparing the QOL Respondents with Overall Consumer Survey Responders

Quality of Life respondents form a subset of the overall Consumer Survey population. The pie charts on the next several pages compare demographic characteristics between the Quality of Life set and the entire Consumer Survey respondent set.

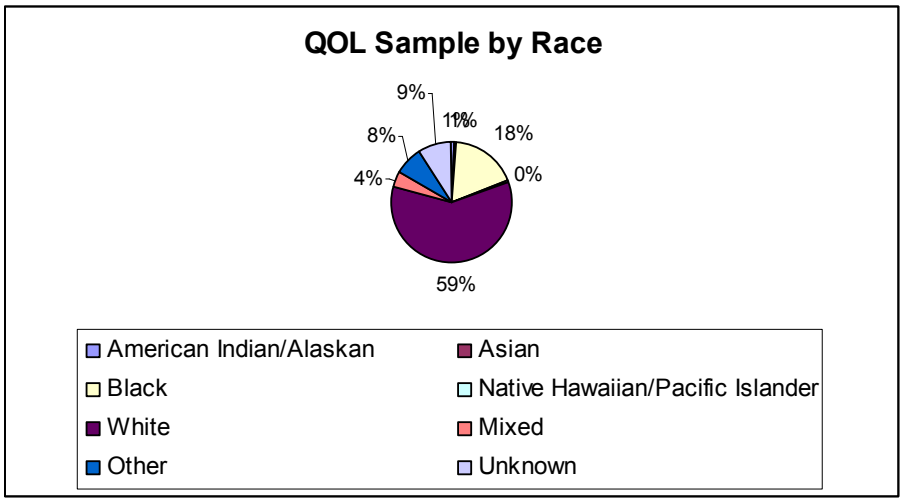
Figure 2: Gender

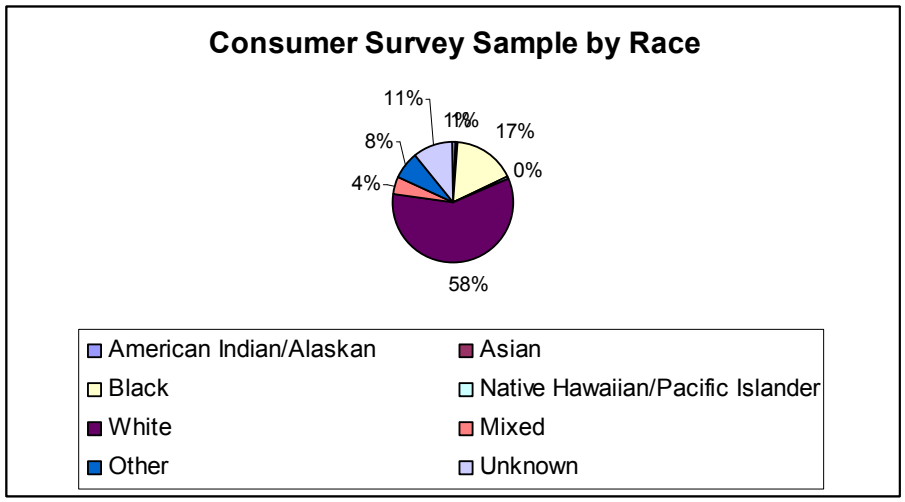




The gender distribution between groups is fairly similar, with slightly more known females in the QOL group, and fewer respondents who chose not to disclose their gender.

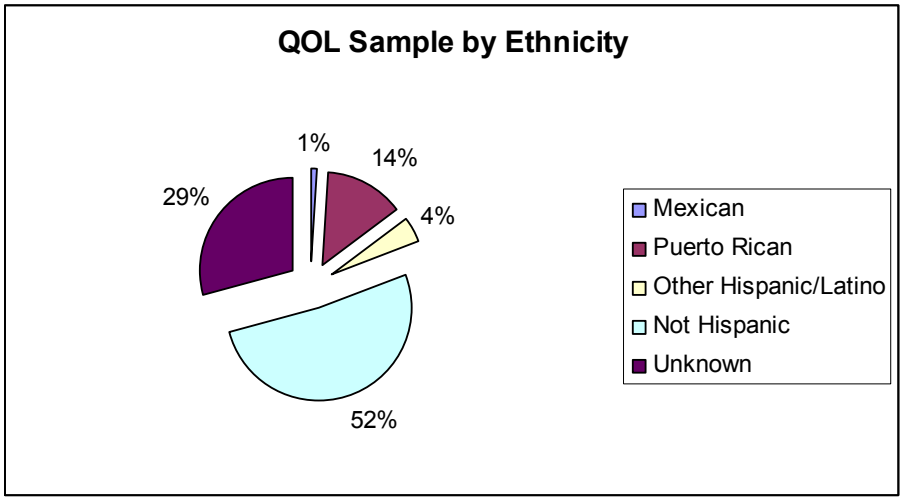
Figure 3: Race

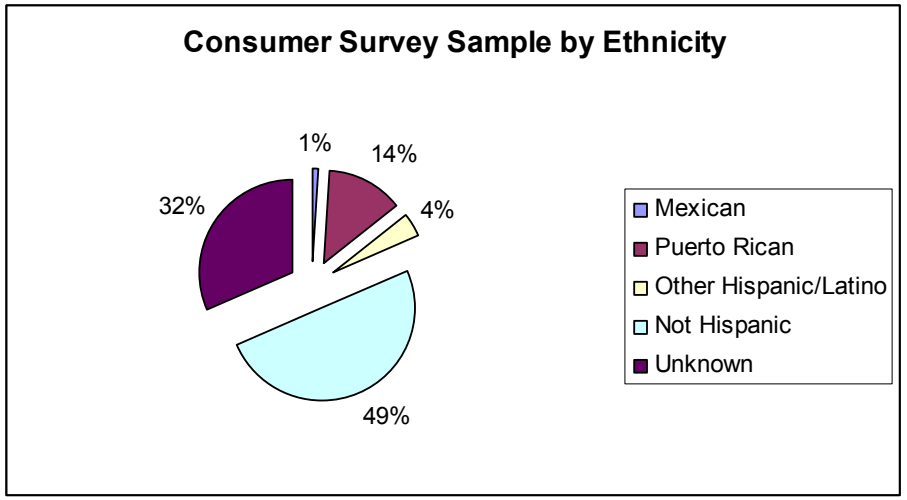




Racial distribution between the QOL subset and the Consumer Survey sample is almost identical.

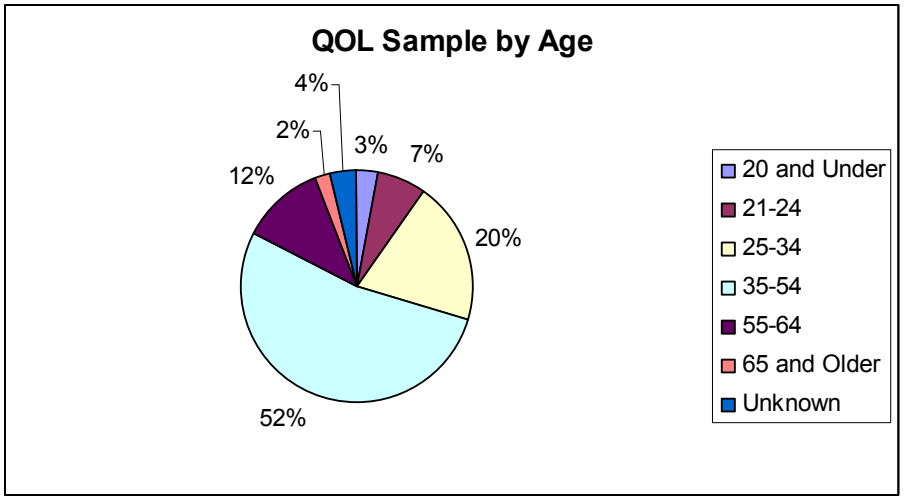
Figure 4: Ethnicity

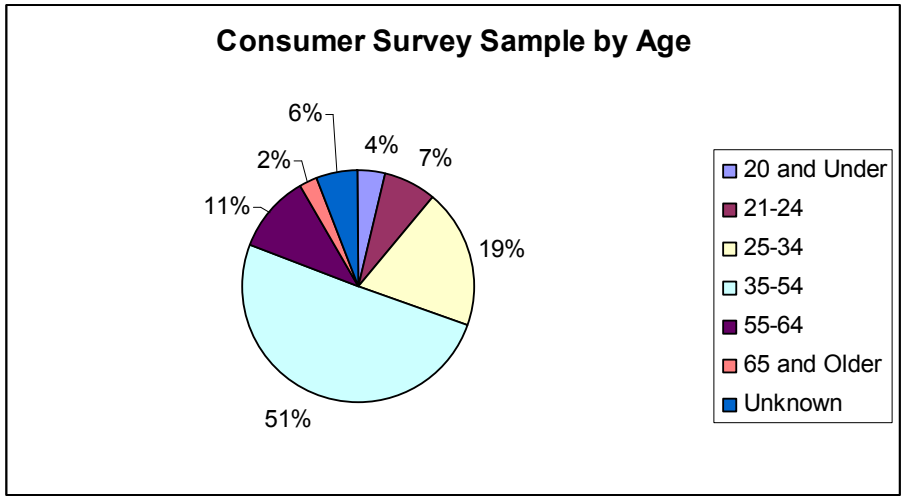




The QOL sample contains slightly fewer people of Hispanic origin, specifically people who identify themselves as Puerto Ricans.

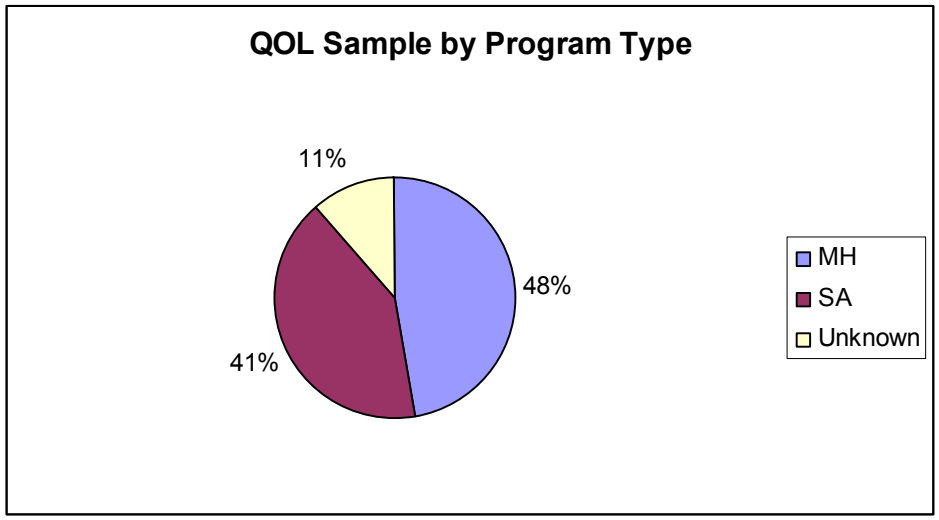
Figure 5: Age

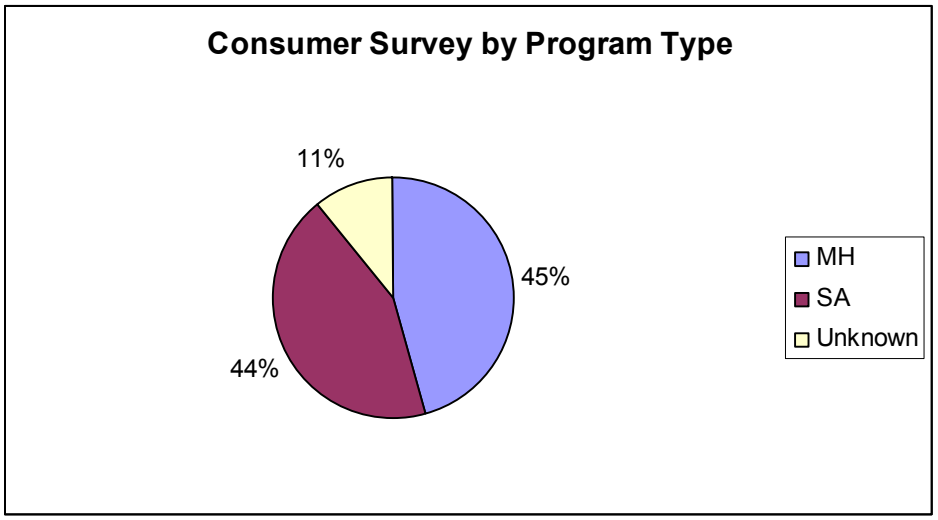




The QOL sample is fairly similar to the overall survey sample; it has slightly fewer respondents who did not indicate an age range.

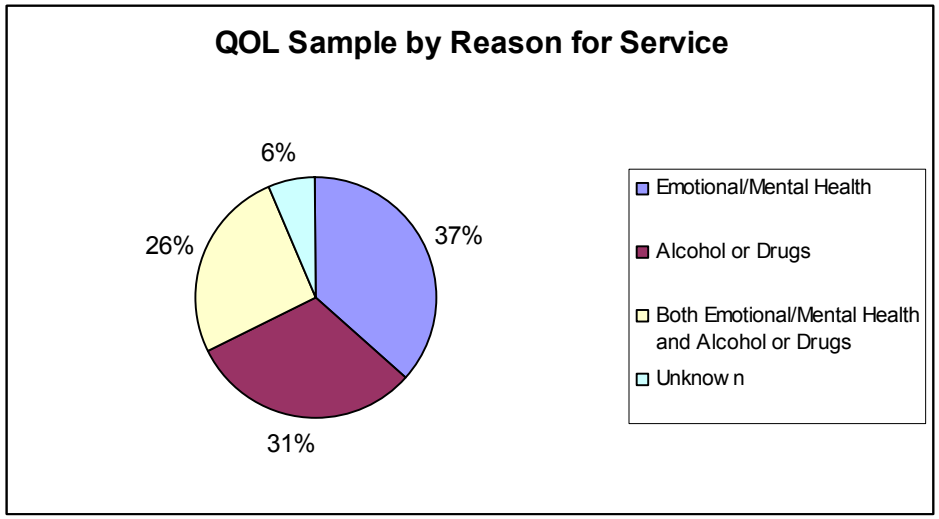
Figure 6: Program Type

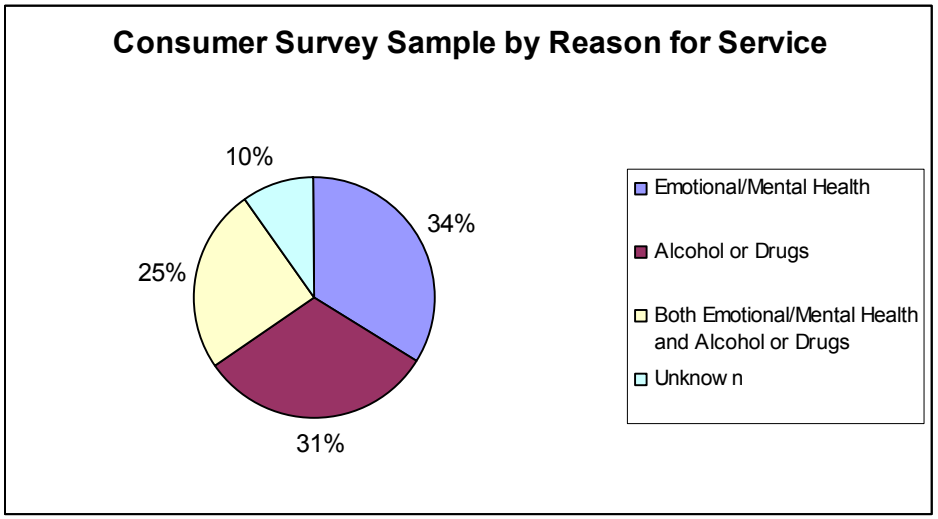




Respondents receiving mental health services are slightly overrepresented in the QOL sample, by 3%. (This set of numbers is determined by analyzing the type of programs that reported them.)

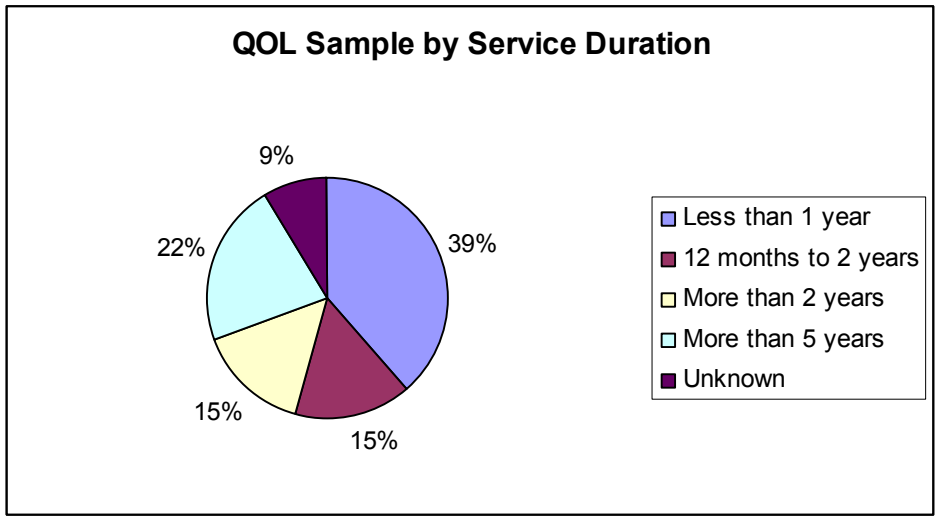
Figure 7: Reason for Service

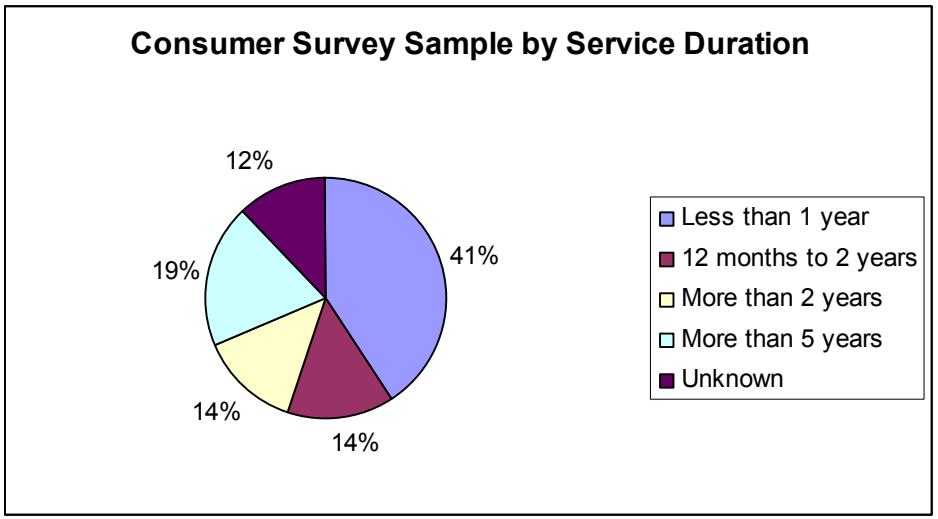




QOL respondents tended to be slightly more likely to state that they are receiving services for mental health or emotional problems. (This set of numbers is determined by client self-report.)

Figure 8: Service Duration



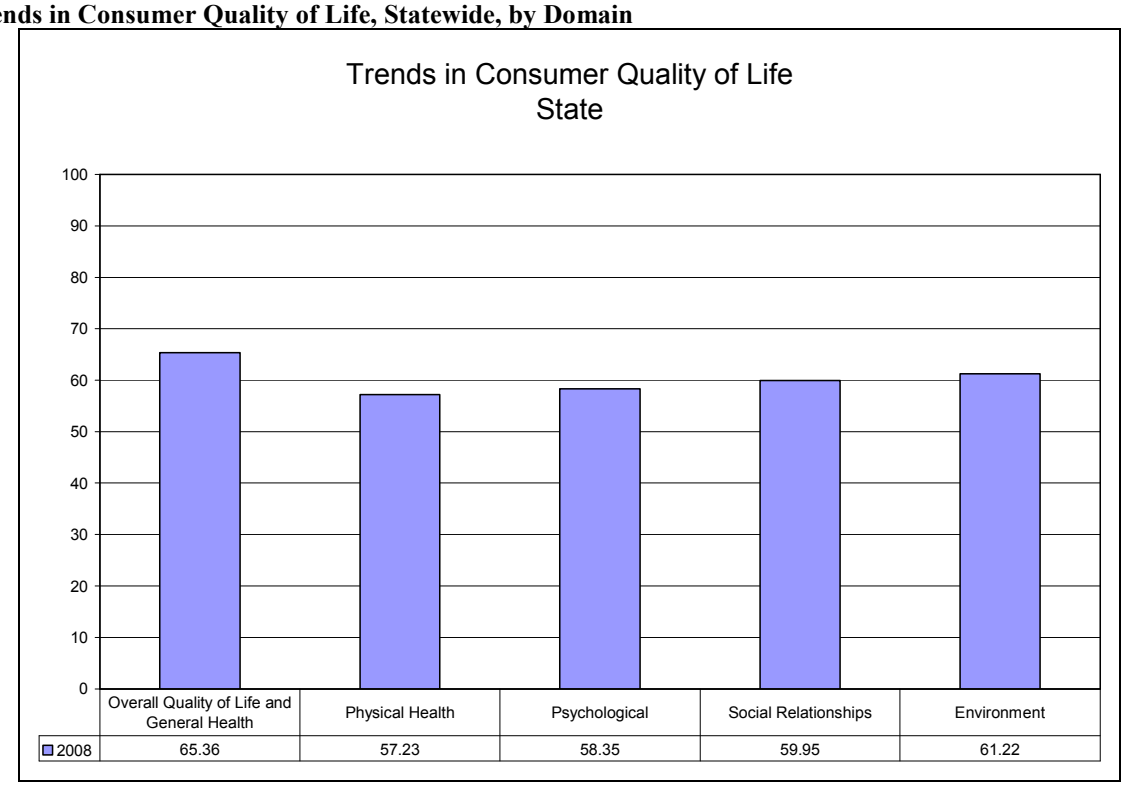


Quality of life respondents tend to have received services slightly longer than respondents in the overall Consumer Survey population. Additionally, there are fewer "Unknown" responses in the QOL sample.

We feel that the Quality of Life sample is a fairly representative subset of the overall Consumer Survey population, although it tends to be comprised of slightly more mental health clients who may have been in the DMHAS system for a longer period of time.

Overall Statewide Results

Figure 9: Trends in Consumer Quality of Life, Statewide, by Domain

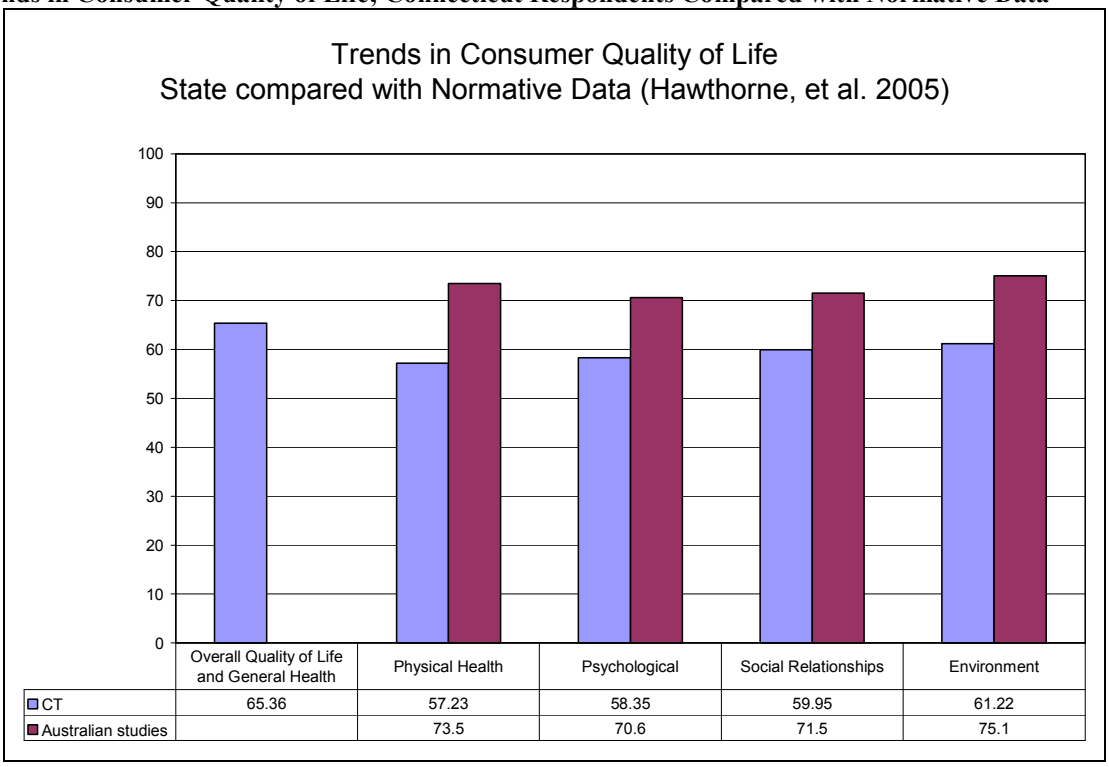


As noted previously in the report, the WHOQOL-BRÈF consists of four domains as well as two general questions about quality of life and health, which comprises a fifth domain in our analyses. On a statewide level, the highest scoring domain was in Overall Quality of Life and General Health, with Environment coming in second, Social Relationships third, Psychological fourth, and finally, Physical Health as the lowest scoring domain.

While at this writing, population norms for the WHOQOL-BRÈF in the United States have not been established, research from Australia suggests population norms in the 70-75 range for the four original domains.[23] These results were based on community samples, recruited through random telephone selection. Figure 10 compares DMHAS' domain results with the Australian norms.

[23] Hawthorne, G, Herrman, H., Murphy, B. (2006). Interpreting the WHOQOL-BREF: Preliminary Population Norms and Effect Sizes. *Social Indicators Research* 77:37–59.

Figure 10: Trends in Consumer Quality of Life; Connecticut Respondents Compared with Normative Data



	Overall Quality of Life and General Health	Physical Health	Psychological	Social Relationships	Environment
CT	65.36	57.23	58.35	59.95	61.22
Australian studies		73.5	70.6	71.5	75.1

Although this QOL instrument is commonly analyzed by domain, it is also useful to look at trends in individual question responses. Table 4 lists each question of the WHOQOL-BRÈF in their domains. All questions are scored on the same scale, from 1 (worst) to 5 (best).

Table 4: Trends in Consumer Quality of Life, Statewide, by Question

Quality of Life Trends by Question		State		
Year	N	Mean Score	Median Score	Std. Dev. of Score
Overall Quality of Life and General Health				
How would you rate your quality of life?				
2008	14797	3.74	4	0.91
How satisfied are you with your health?				
2008	14764	3.49	4	1.06
Physical Health				
*To what extent do you feel that physical pain prevents you from doing what you need to do?**				
2008	14716	2.38	2	1.24
*How much do you need any medical treatment to function in your daily life?**				
2008	14584	2.64	3	1.27
Do you have enough energy for daily life?				
2008	14671	3.42	3	1.09
How well are you able to get around?				
2008	14433	3.77	4	1.06
How satisfied are you with your sleep?				
2008	14587	3.31	1	1.17
How satisfied are you with your ability to perform your daily living activities?				
2008	14550	3.59	5	1.01
How satisfied are you with your capacity for work?				
2008	14359	3.34	4	1.2
Psychological				
How much do you enjoy life?				
2008	14600	3.56	4	1.05
To what extent do you find your life to be meaningful?				
2008	14343	3.57	2	1.09
How well are you able to concentrate?				
2008	14752	3.29	4	0.98
Are you able to accept your bodily appearance?				
2008	14579	3.51	3	1.17
How satisfied are you with your abilities?				
2008	14516	3.61	4	1.04
*How often do you have negative feelings such as blue mood, despair, anxiety, or depression?**				
2008	14410	2.75	1.5	1.07
Social Relationships				
How satisfied are you with your personal relationships?				
2008	14430	3.52	4	1.1
How satisfied are you with your sex life?				
2008	13834	3.12	4	1.29
How satisfied are you with the support you get from your friends?				
2008	14470	3.56	3.5	1.05

(Table continued on next page…)

Environment				
How safe do you feel in your daily life?				
2008	14681	3.65	4	0.96
How healthy is your physical environment?				
2008	14583	3.6	4	0.98
Have you enough money to meet your needs?				
2008	14589	2.69	3	1.29
How available to you is the information that you need in your day-to-day life?				
2008	14446	3.51	2.5	0.99
To what extent do you have the opportunity for leisure activities?				
2008	14449	3.2	2	1.08
How satisfied are you with the conditions of your living place?				
2008	14499	3.64	4	1.13
How satisfied are you with your access to health services?				
2008	14452	3.77	4	1
How satisfied are you with your mode of transportation?				
2008	14451	3.54	5	1.19

* These items are reversed in domain scoring. Consequently, a lower score is not indicative of a poor result.

Table 5 explores the five *lowest* scoring questions, sorted in ascending order.

Table 5: Trends in Consumer Quality of Life, Statewide, Lowest Scoring Questions

Question	N	Mean	Median	Std Dev
Have you enough money to meet your needs?	14589	2.69	3	1.29
*How satisfied are you with your sex life?**	13834	3.12	4	1.29
To what extent do you have the opportunity for leisure activities?	14449	3.2	2	1.08
How well are you able to concentrate?	14752	3.29	4	0.98
How satisfied are you with your sleep?	14587	3.31	1	1.17

* Many respondents felt that this question was too intrusive and declined to answer.

These questions span domains. *"Have you enough money to meet your needs"* and *"To what extent do you have the opportunity for leisure activities"* belong to the Environment domain. *"How satisfied are you with your sex life"* is a Social Relationships question, while *"How well are you able to concentrate"* is a Psychological domain question. Finally, "*How satisfied are you with your sleep*" is a question in the Physical domain. Respondents appear to be dissatisfied with a range of issues including money, personal relationships, mental and physical functioning, and leisure opportunities.

Table 6 reviews the five *highest* scoring questions, sorted in descending order.

Table 6: Trends in Consumer Quality of Life, Statewide, Highest Scoring Questions

Question	N	Mean	Median	Std Dev
How well are you able to get around?	14433	3.77	4	1.06
How satisfied are you with your access to health services?	14452	3.77	4	1
How would you rate your quality of life?	14797	3.74	4	0.91
How safe do you feel in your daily life?	14681	3.65	4	0.96
How satisfied are you with the conditions of your living place?	14499	3.64	4	1.13

Interestingly, the five highest scoring questions are a bit more clustered. "How safe do you feel in your daily life", *"How satisfied are you with your access to health services"*, and *"How satisfied are you with the conditions of your living place"* all belong to the Environment domain. *"How well are you able to get around"* is a Physical question, while *"How would you rate your quality of life"* is one of the overall quality of life questions. It appears that respondents generally feel satisfied in these areas, although mean and median scores are notably lower than the possible high score of 5 per question.

The next section of this report will explore any statistical differences between groups within the population of respondents to the DMHAS administration of the WHOQOL-BRÈF quality of life instrument.

Differences between Groups[24]

Program Type

- Respondents receiving Substance Use services indicated a *significantly* better Quality of Life (QOL) in every domain except Environment.
- Environment was the only domain in which QOL was *not* influenced by program type.

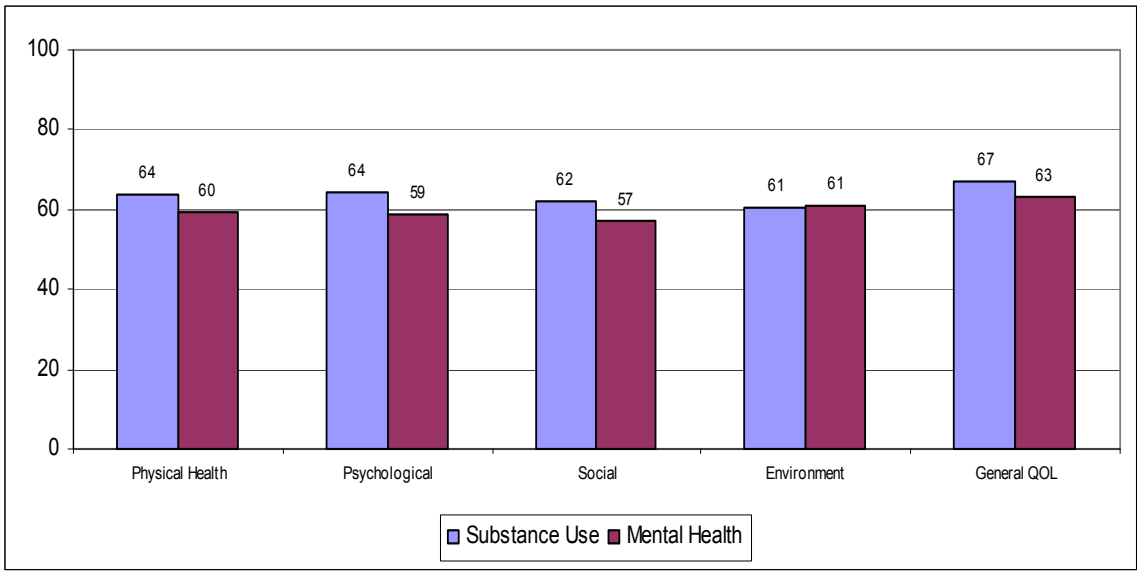


Figure 11: Consumer QOL by Program Type

[24] All analyses were evaluated at alpha = .01. This means that there is a 1 in 100 chance that a difference is identified as a significant difference when in fact it is not.

Gender

- Men reported a *significantly* better QOL than did women in all domains.

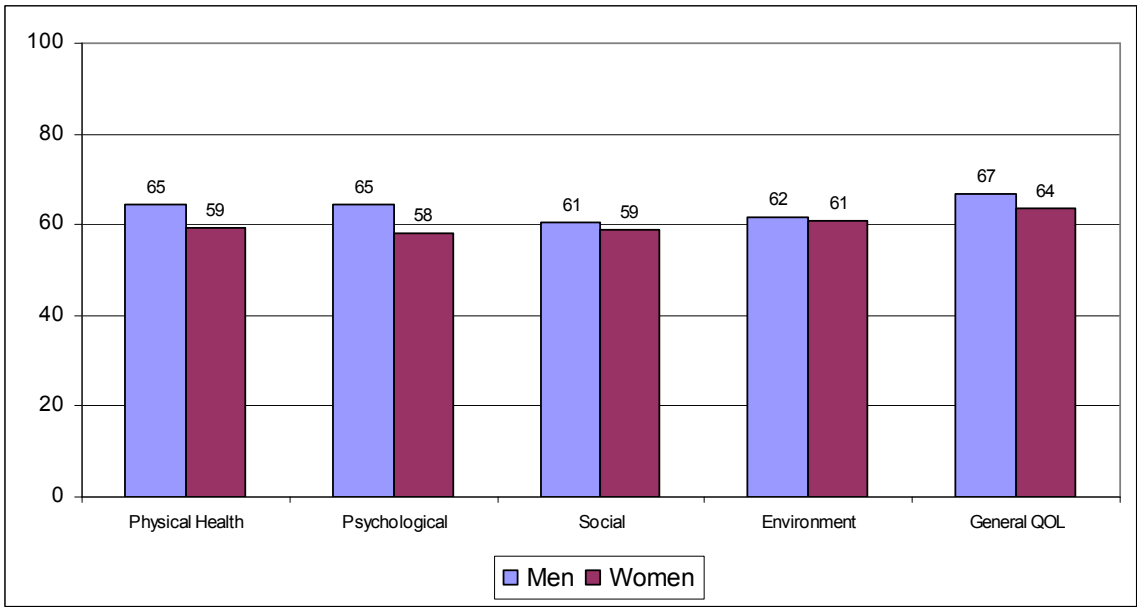


Figure 12: Consumer QOL by Gender

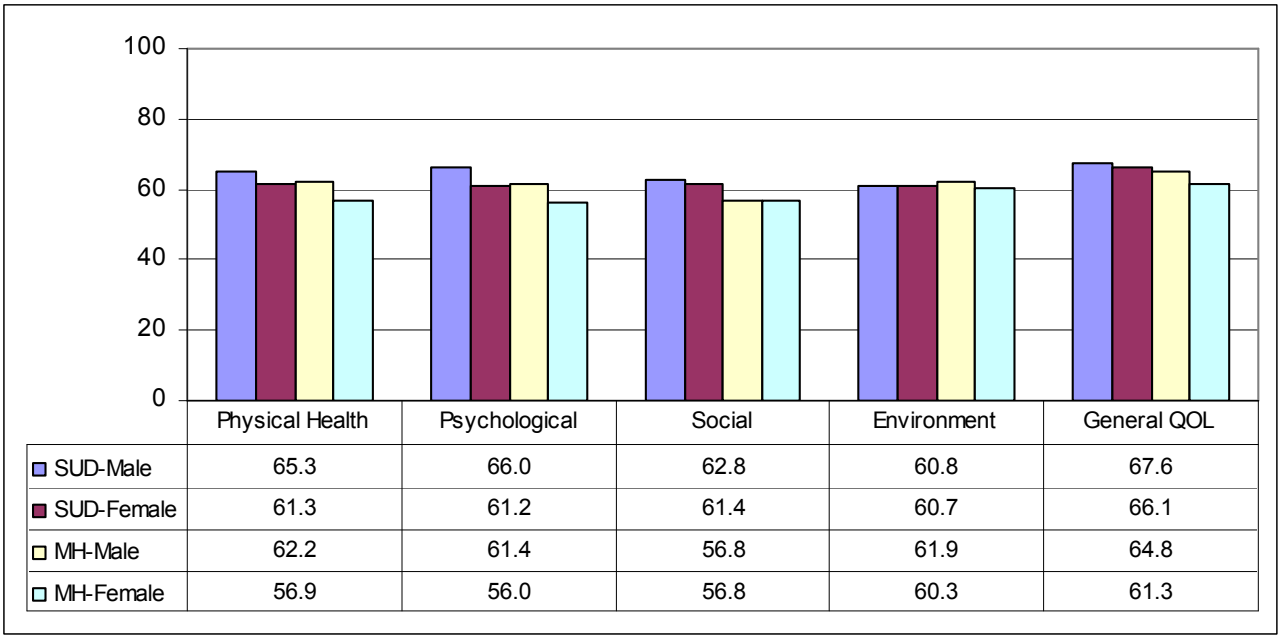
Did Quality of Life Differ by Gender by Program Type?

Substance Use Disorders

- Men reported a *significantly* better QOL than did women within the Physical Health, Psychological, and General QOL domains
- Gender did not affect QOL in the Social or Environment domains.

Mental Health Disorders

- Men reported a *significantly* better QOL than did women within the Physical Health, Psychological, Environment and General QOL domains
- Gender did not affect QOL in the Social domain.



	Physical Health	Psychological	Social	Environment	General QOL
SUD-Male	65.3	66.0	62.8	60.8	67.6
SUD-Female	61.3	61.2	61.4	60.7	66.1
MH-Male	62.2	61.4	56.8	61.9	64.8
MH-Female	56.9	56.0	56.8	60.3	61.3

Figure 13: Consumer QOL by Gender and Program Type

SUBSTANCE USE DISORDERS

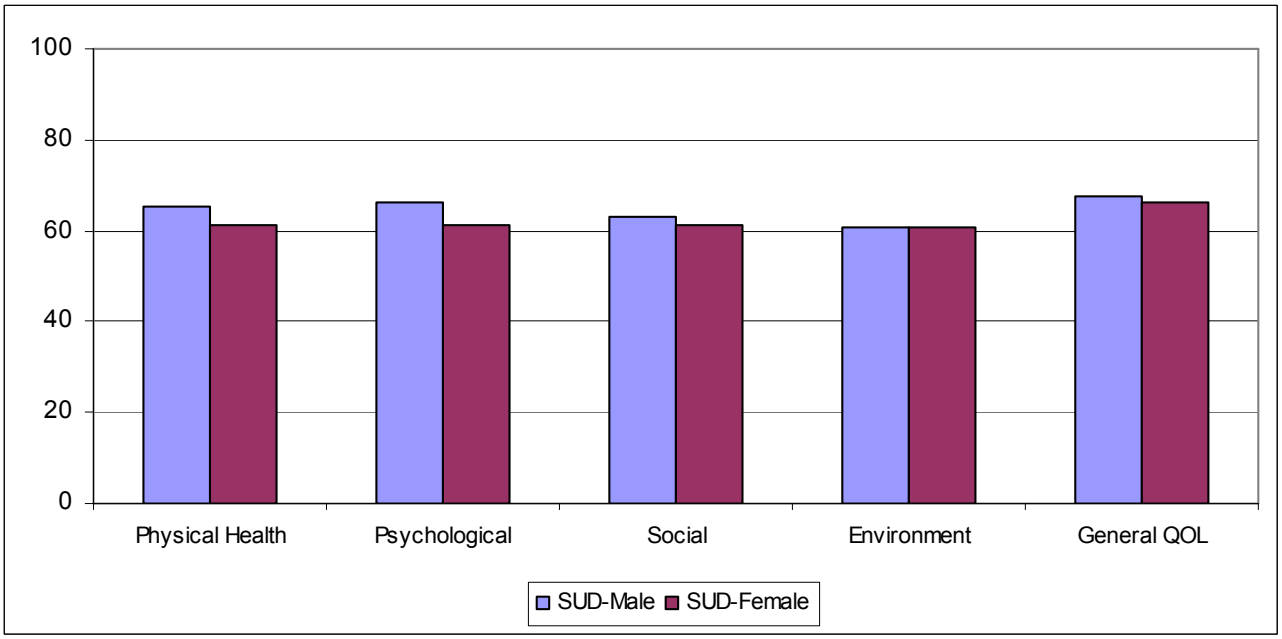


Figure 14: Consumer QOL by Gender by Substance Use Disorder Program Type

MENTAL HEALTH DISORDERS

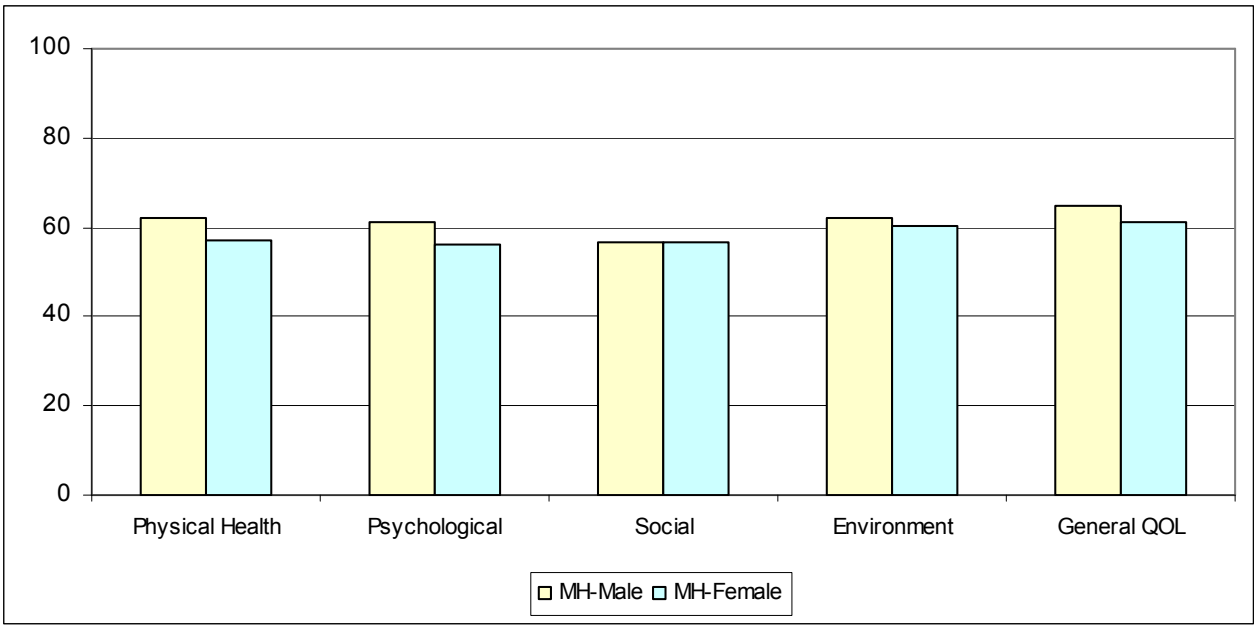
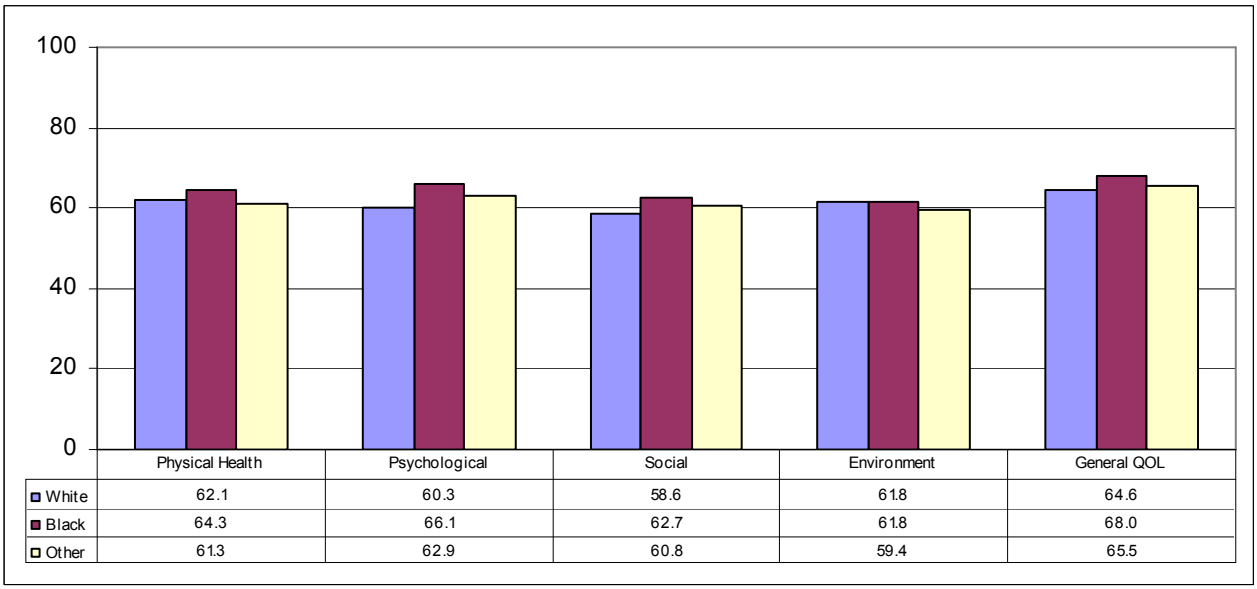


Figure 24: Consumer QOL by Gender by Mental Health Program Type

Race

- African-Americans reported *significantly* better QOL within the Physical Health and General QOL domains than did Whites or those who identified themselves as another non-White race (here summarized as "Other").
- Within the Social and Environment domains, African-Americans reported *significantly* better QOL than those who identified themselves as another non-White race or Whites. Additionally, those who identified themselves as another non-White race reported *significantly* better QOL than did Whites.



	Physical Health	Psychological	Social	Environment	General QOL
White	62.1	60.3	58.6	61.8	64.6
Black	64.3	66.1	62.7	61.8	68.0
Other	61.3	62.9	60.8	59.4	65.5

Figure 15: Consumer QOL by Race

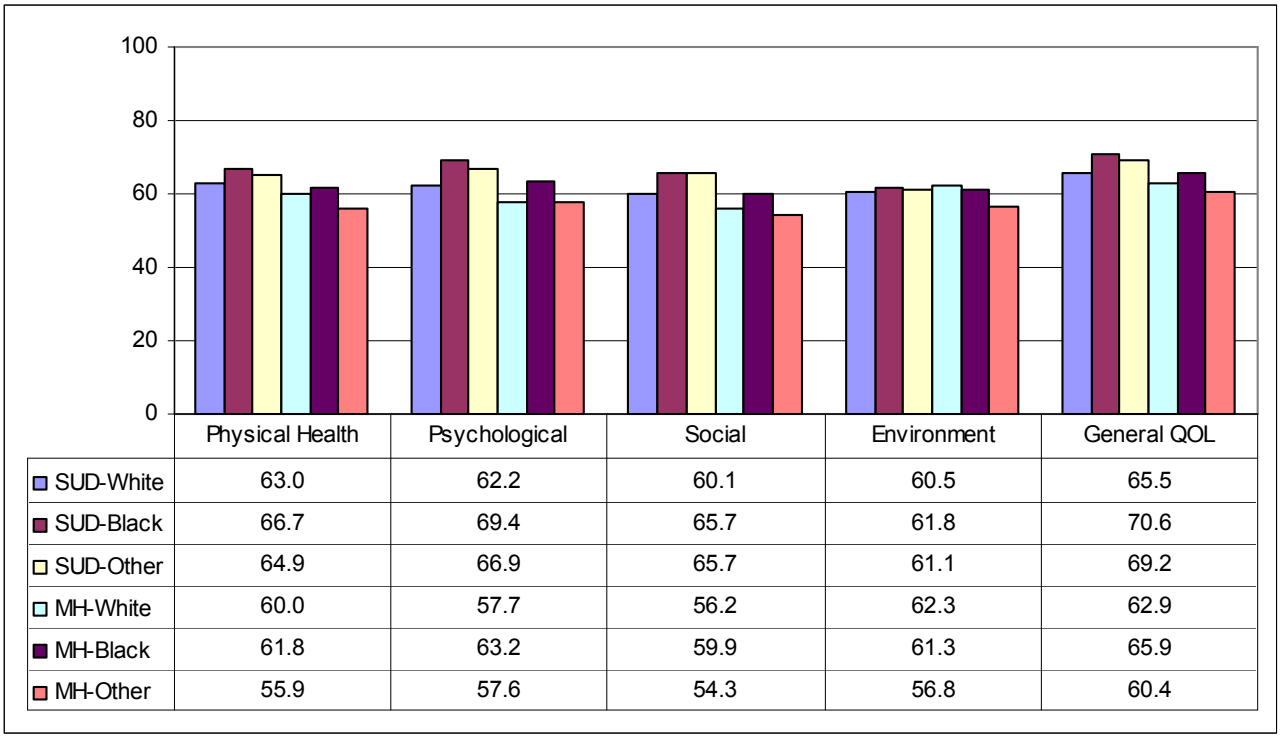
Did Quality of Life Differ by Race by Program Type?

Substance Use Disorders

- Within the Physical Health and General QOL domains, African-Americans reported *significantly* better QOL than did Whites or those who identified themselves as another non-White race.
- Within the Social and Environment domains, African-Americans reported *significantly* better QOL than those who identified themselves as another non-White race or Whites. Additionally, those who identified themselves as another non-White race reported *significantly* better QOL than did Whites.

Mental Health Disorders

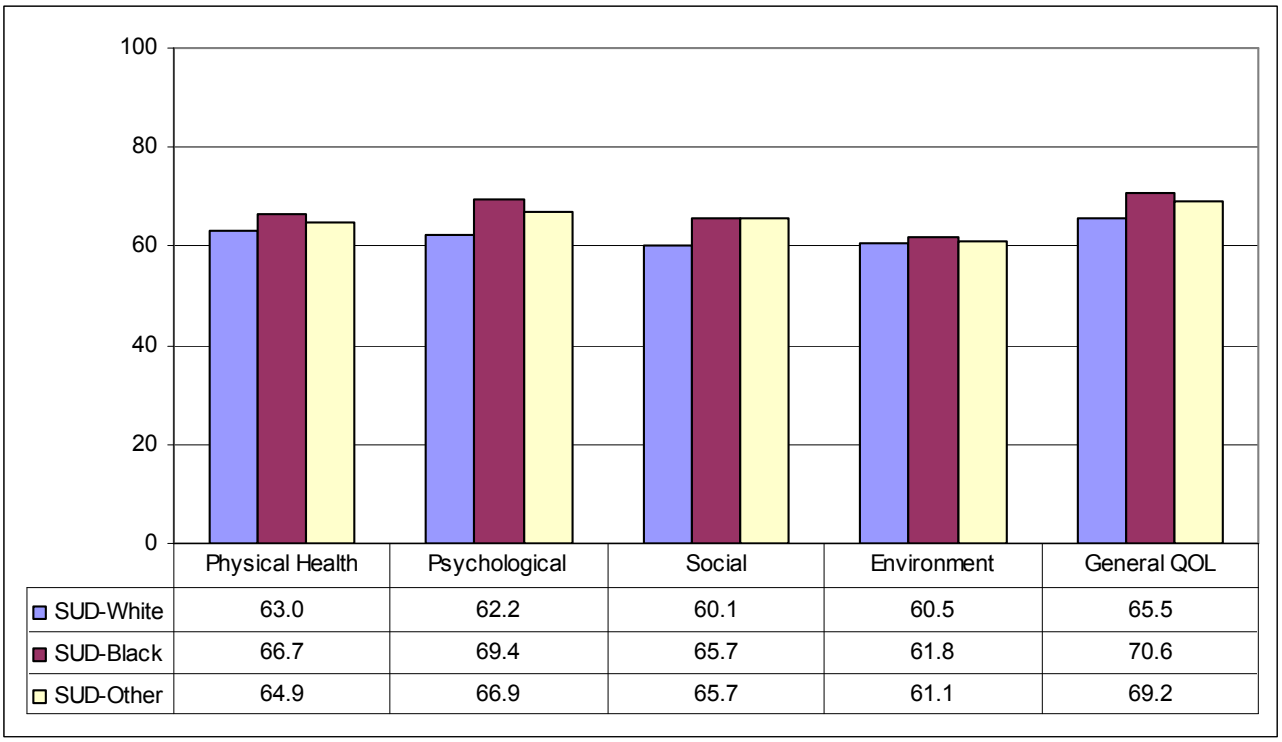
- Within the Physical Health and General QOL domains, African-Americans reported *significantly* better QOL than those who identified themselves as another non-White race or Whites. Additionally, those who identified themselves as a non-White race reported *significantly* better QOL than did Whites.
- Within the Psychological and Social domains, African-Americans reported *significantly* better QOL than did Whites or those who identified themselves as another non-White race.
- African-Americans and Whites reported *significantly* better QOL with respect to the Environment domain than did respondents who identify with another non-White race.



	Physical Health	Psychological	Social	Environment	General QOL
SUD-White	63.0	62.2	60.1	60.5	65.5
SUD-Black	66.7	69.4	65.7	61.8	70.6
SUD-Other	64.9	66.9	65.7	61.1	69.2
MH-White	60.0	57.7	56.2	62.3	62.9
MH-Black	61.8	63.2	59.9	61.3	65.9
MH-Other	55.9	57.6	54.3	56.8	60.4

Figure 16: QOL by Race by Program Type

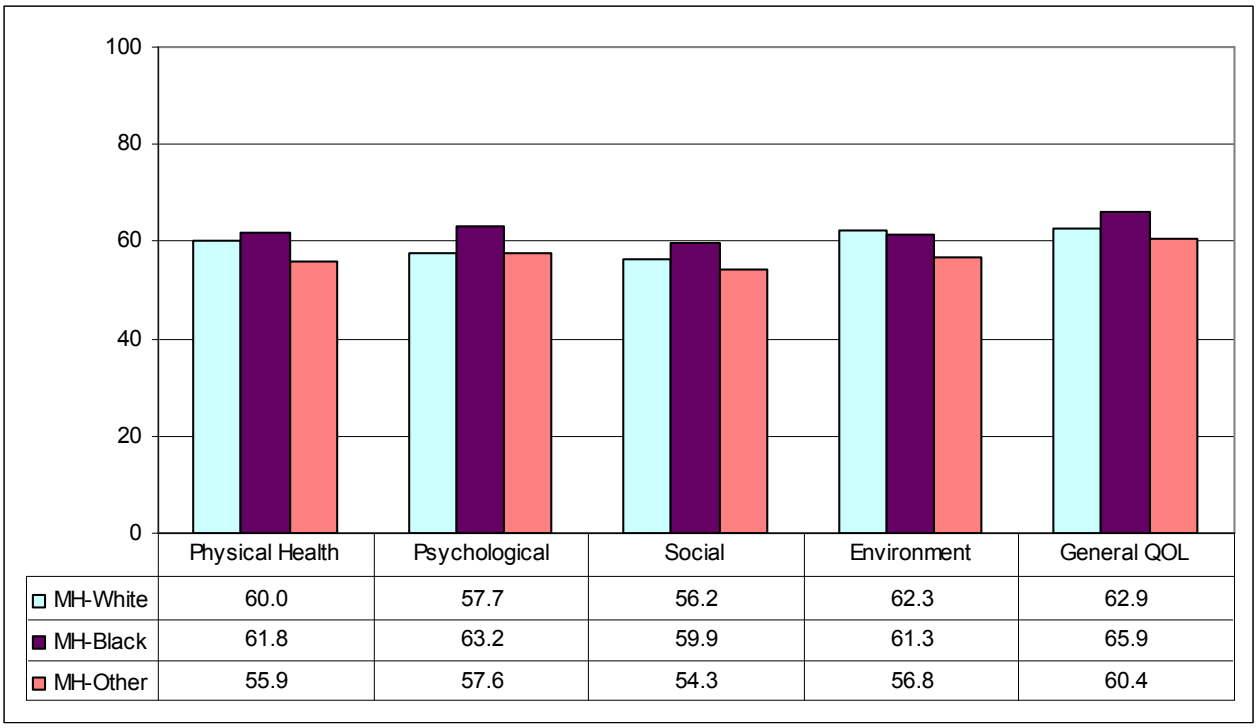
SUBSTANCE USE DISORDERS



	Physical Health	Psychological	Social	Environment	General QOL
SUD-White	63.0	62.2	60.1	60.5	65.5
SUD-Black	66.7	69.4	65.7	61.8	70.6
SUD-Other	64.9	66.9	65.7	61.1	69.2

Figure 17: Consumer QOL by Race by Substance Use Disorder Program Type

MENTAL HEALTH DISORDERS

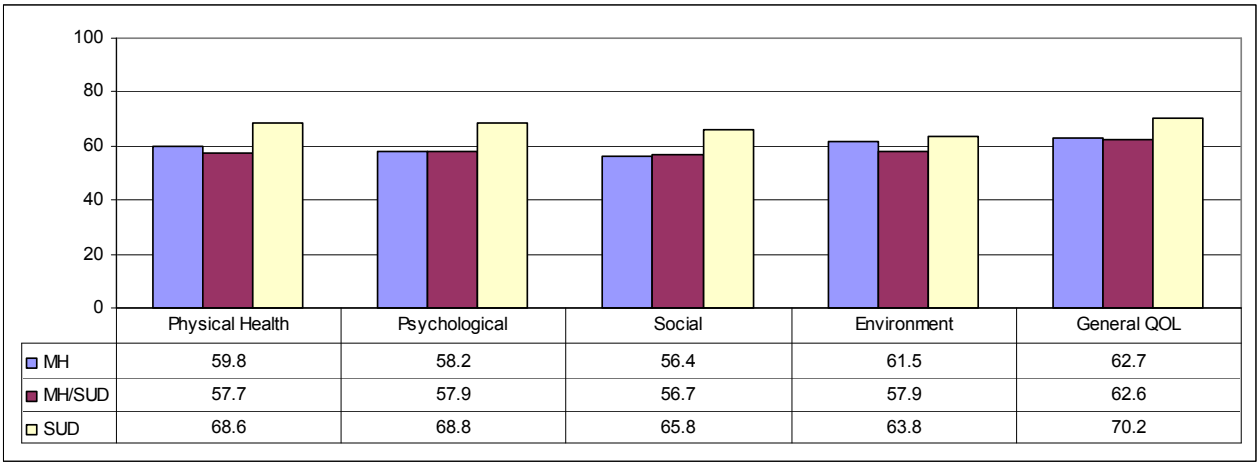


	Physical Health	Psychological	Social	Environment	General QOL
MH-White	60.0	57.7	56.2	62.3	62.9
MH-Black	61.8	63.2	59.9	61.3	65.9
MH-Other	55.9	57.6	54.3	56.8	60.4

Figure 18: Consumer QOL by Race by Mental Health Program Type

Self-Identified Reason for Seeking Services

- Respondents who identified themselves as receiving services for Substance Use disorders reported *significantly* better QOL in the Psychological, Social, and General QOL domains than did respondents who identified themselves as receiving services for either Mental Health only or for both Mental Health and Substance Use.
- Respondents who identified themselves as receiving services for Substance Use disorders reported *significantly* better QOL with in the Physical Health and Environment domains than those who identified themselves as receiving services for either Mental Health only or for both Mental Health and Substance Use. Additionally, those who identified themselves as receiving services for Mental Health reported *significantly* better QOL than those who stated they received both Mental Health and Substance Use services.



	Physical Health	Psychological	Social	Environment	General QOL
MH	59.8	58.2	56.4	61.5	62.7
MH/SUD	57.7	57.9	56.7	57.9	62.6
SUD	68.6	68.8	65.8	63.8	70.2

Figure 19: Consumer QOL by Self-Identified Reason for Seeking Services

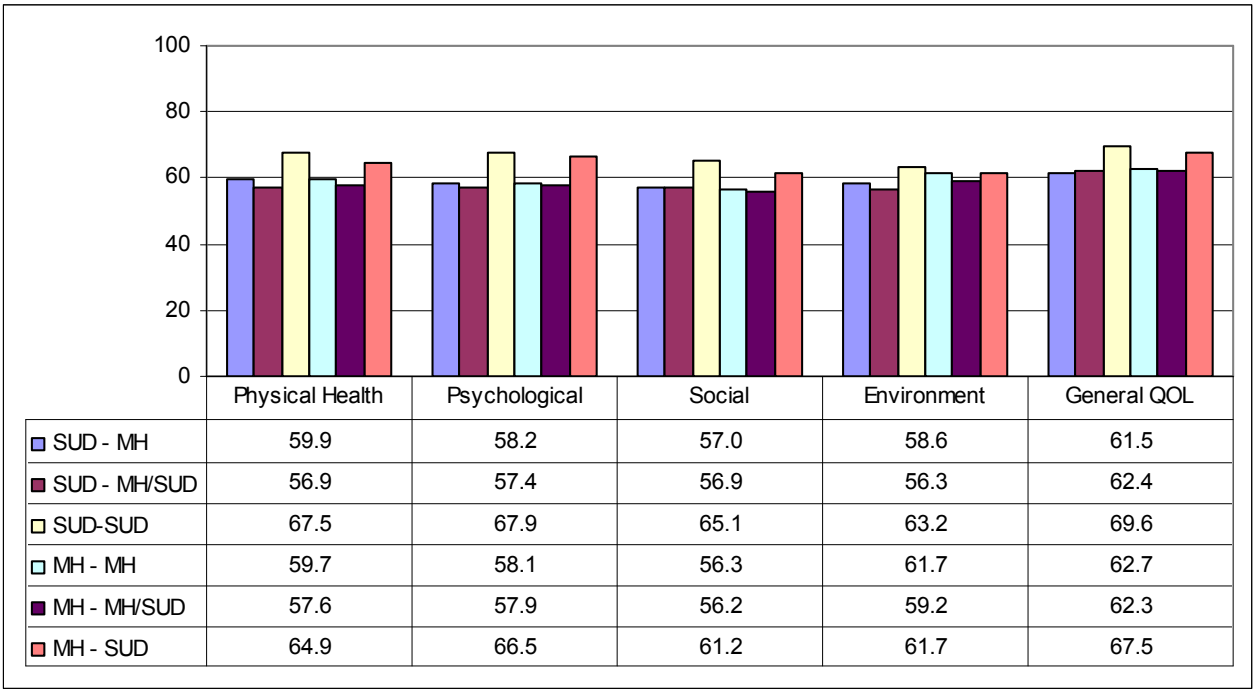
Did Quality of Life Differ by Self-Identified Reason for Seeking Services by Program Type?

Substance Use Disorders

- Respondents in SU programs who identified themselves as receiving services for Substance Use disorders expressed *significantly* better QOL in all domains compared to those who identified themselves as receiving services for either Mental Health or both Mental Health and Substance Use.

Mental Health Disorders

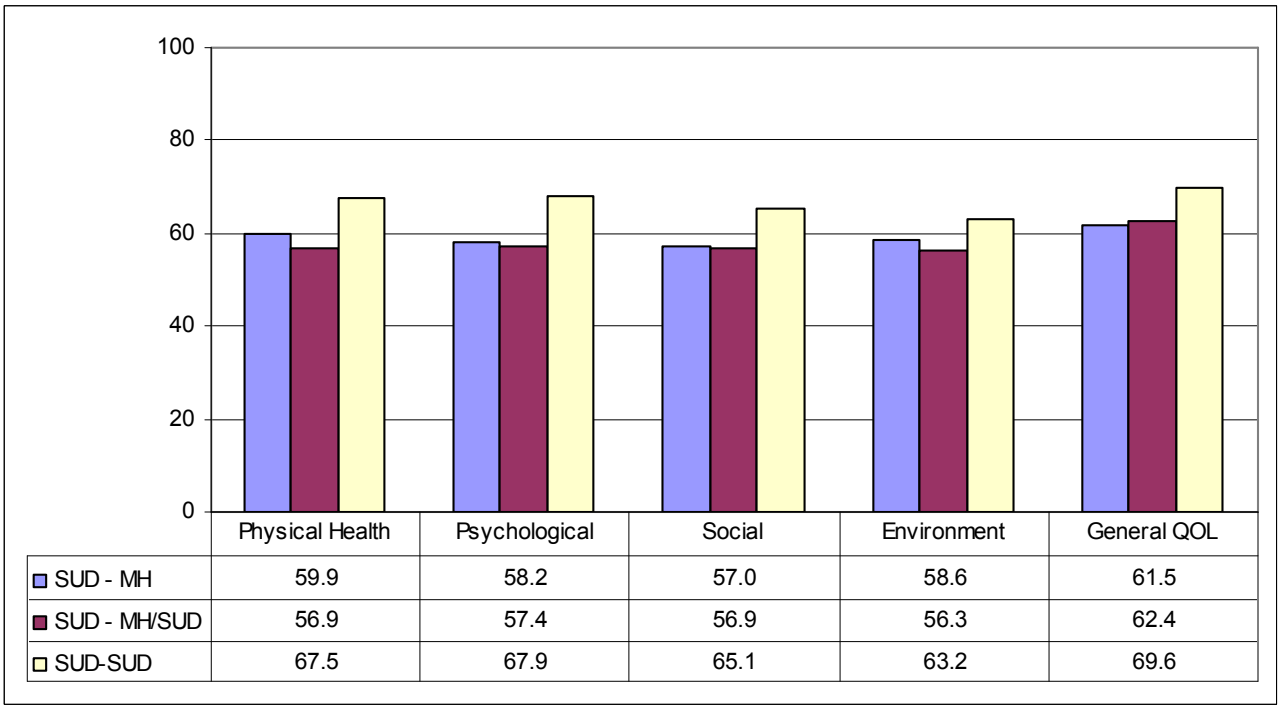
- Respondents in MH programs who identified themselves as receiving services for Substance Use reported *significantly* better QOL within the Physical Health, Psychological, and General QOL domains compared to those who identified themselves as receiving Mental Health or both Mental Health and Substance Abuse services. Within the Physical Health domain, those who identified themselves as receiving Mental Health services reported a better QOL compared to those who reported receiving both types of services.



	Physical Health	Psychological	Social	Environment	General QOL
SUD - MH	59.9	58.2	57.0	58.6	61.5
SUD - MH/SUD	56.9	57.4	56.9	56.3	62.4
SUD-SUD	67.5	67.9	65.1	63.2	69.6
MH - MH	59.7	58.1	56.3	61.7	62.7
MH - MH/SUD	57.6	57.9	56.2	59.2	62.3
MH - SUD	64.9	66.5	61.2	61.7	67.5

Figure 20: Consumer QOL by Self-Identified Reason for Seeking Services by Program Type

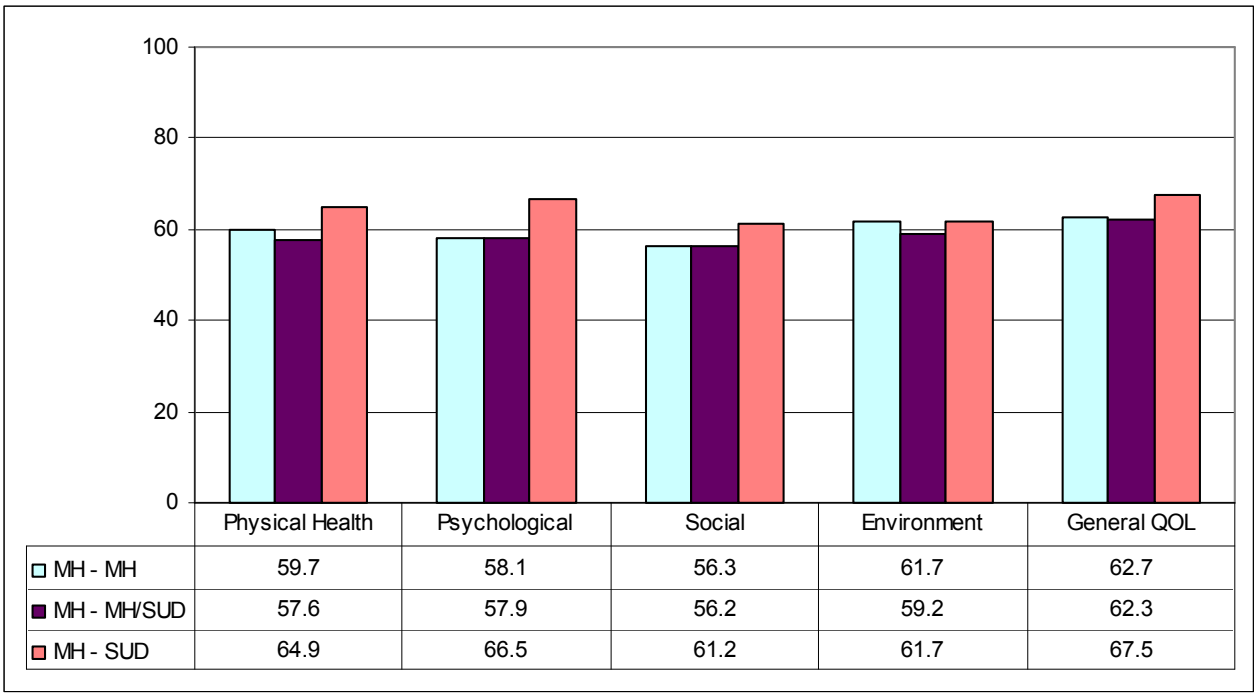
SUBSTANCE USE DISORDERS



	Physical Health	Psychological	Social	Environment	General QOL
SUD - MH	59.9	58.2	57.0	58.6	61.5
SUD - MH/SUD	56.9	57.4	56.9	56.3	62.4
SUD-SUD	67.5	67.9	65.1	63.2	69.6

Figure 21: Consumer QOL by Self-Identified Reason for Seeking Services by Substance Use Disorders

MENTAL HEALTH DISORDERS



	Physical Health	Psychological	Social	Environment	General QOL
MH - MH	59.7	58.1	56.3	61.7	62.7
MH - MH/SUD	57.6	57.9	56.2	59.2	62.3
MH - SUD	64.9	66.5	61.2	61.7	67.5

Figure 22: Consumer QOL by Self-Identified Reason for Seeking Services by Mental Health Program Type

Ethnicity

- Respondents of Hispanic/Latino origin reported *significantly* better QOL in the Social domain than did Non-Hispanics.
- Non-Hispanics reported significantly better QOL in the Physical Health and Environment domains than did Hispanics.

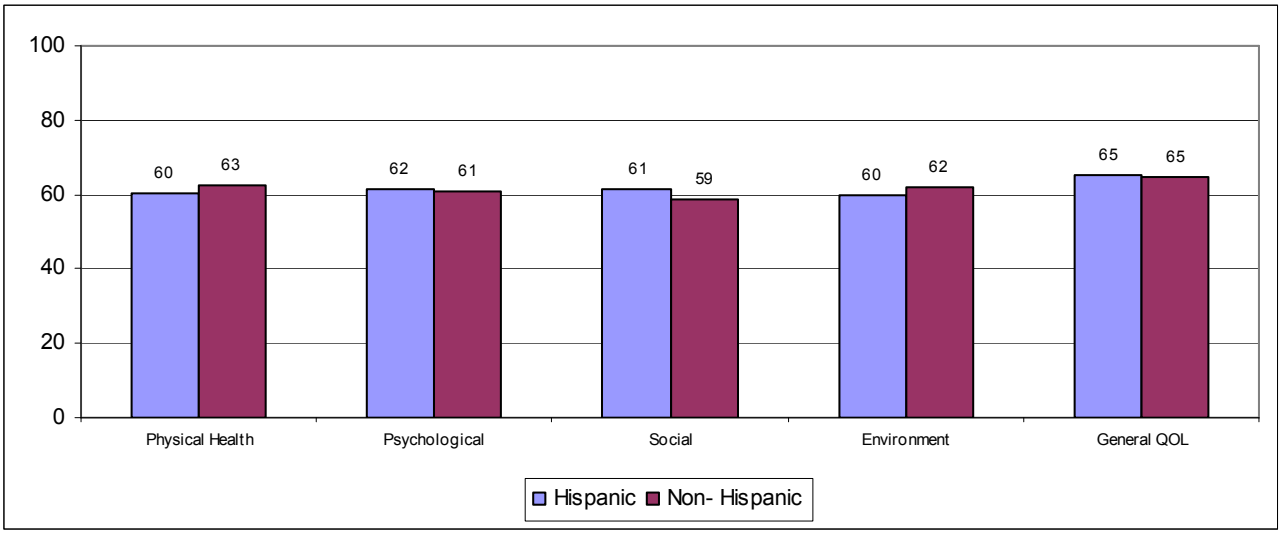


Figure 23: Consumer Satisfaction by Ethnicity

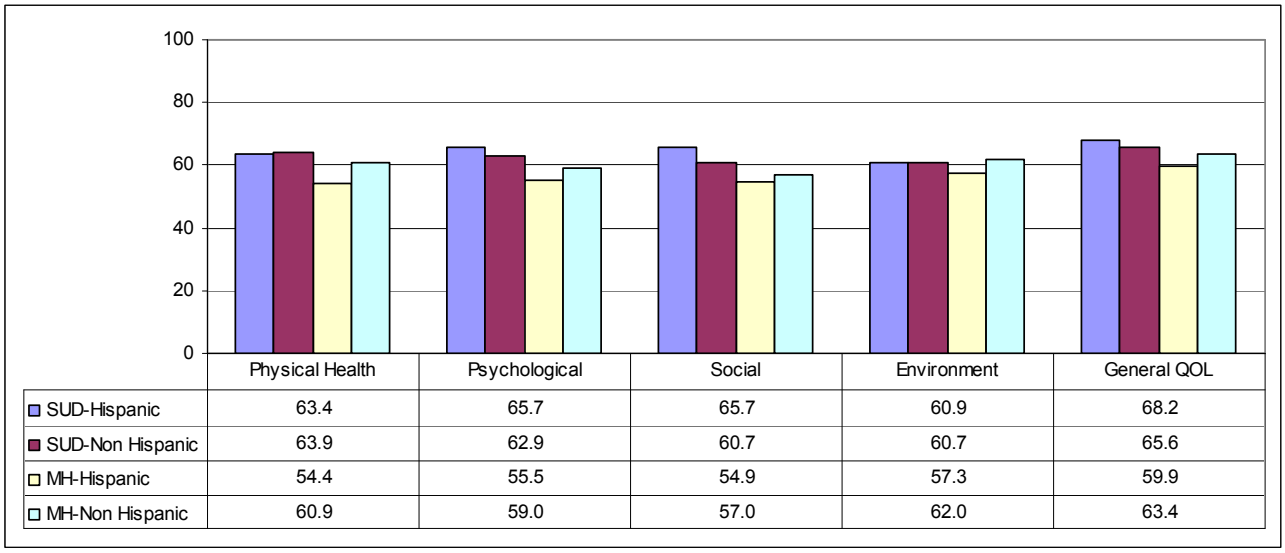
Did Quality of Life Differ by Ethnicity by Program Type?

Substance Use Disorders

- Respondents of Hispanic/Latino origin enrolled in SU programs reported *significantly* better QOL in the Psychological, Social, and General QOL domains than did non-Hispanic respondents enrolled in SU programs.

Mental Health Disorders

- Non-Hispanic respondents enrolled in MH programs reported *significantly* better QOL in all domains except Social than did respondents who were of Hispanic/Latino origin and enrolled in MH programs. There was no difference in the Social domain.



	Physical Health	Psychological	Social	Environment	General QOL
SUD-Hispanic	63.4	65.7	65.7	60.9	68.2
SUD-Non Hispanic	63.9	62.9	60.7	60.7	65.6
MH-Hispanic	54.4	55.5	54.9	57.3	59.9
MH-Non Hispanic	60.9	59.0	57.0	62.0	63.4

Figure 24: Consumer QOL by Ethnicity by Program Type

SUBSTANCE USE DISORDERS

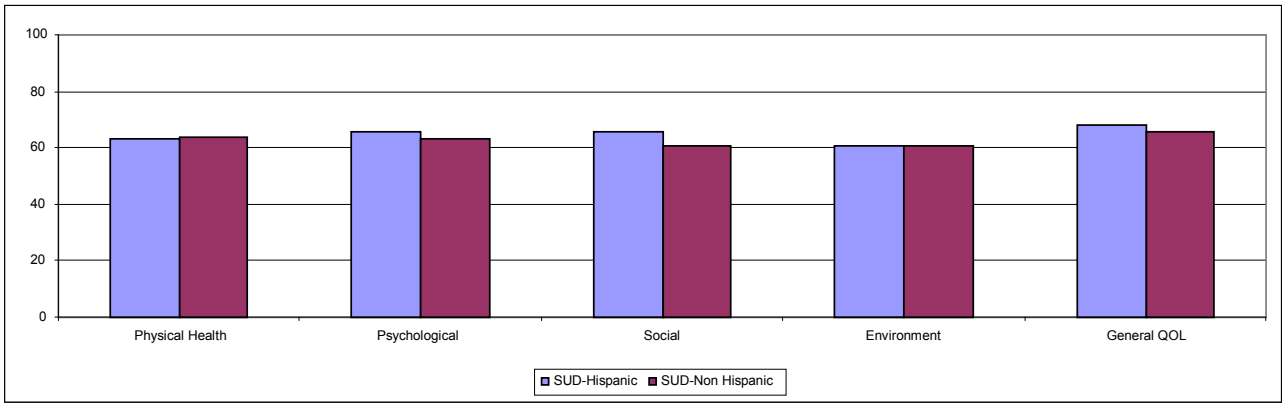


Figure 25: Consumer QOL by Ethnicity by Substance Use Disorder Program Type

MENTAL HEALTH DISORDERS

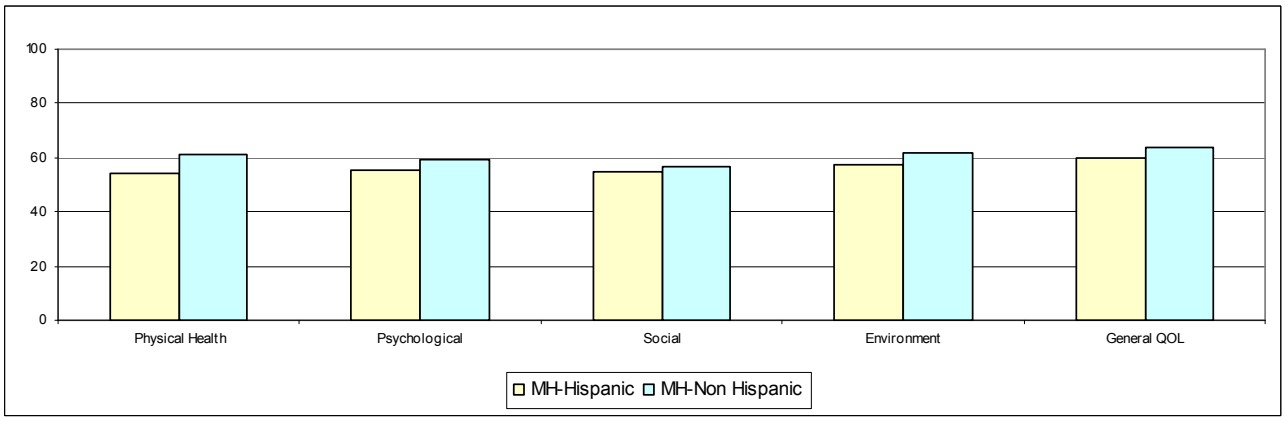
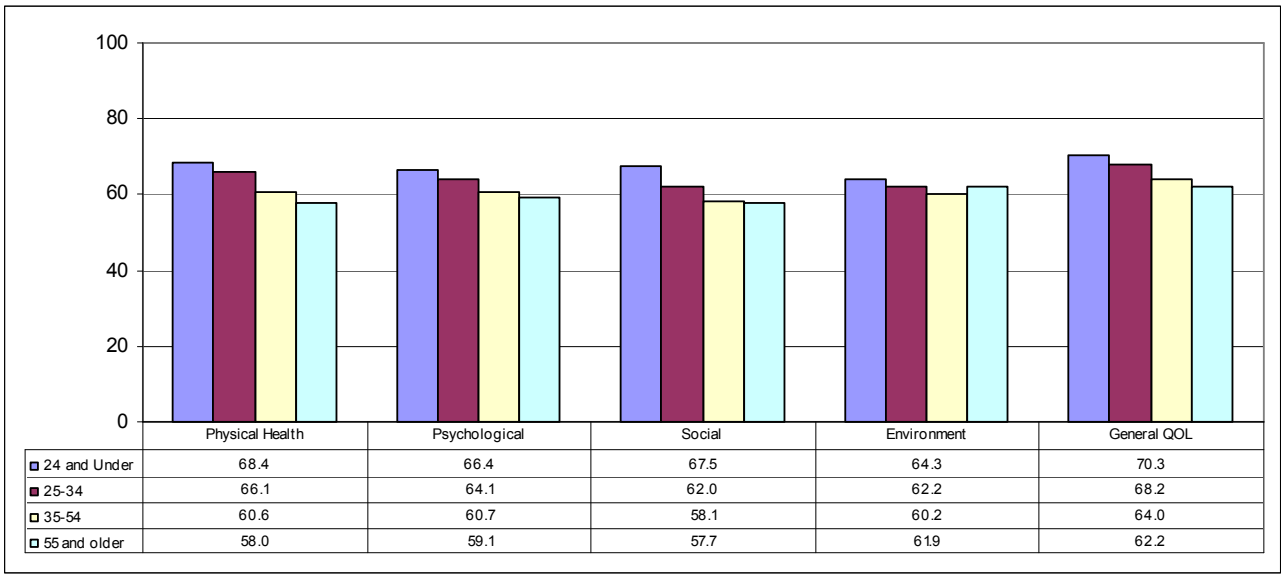


Figure 26: Consumer QOL by Ethnicity by Mental Health Program Type

Age Group

- In general, across all domains, as age increased, reported QOL decreased *significantly*; the youngest group (24 years and under) consistently reported *significantly* better QOL than all older age groups. Each older age group reported *significantly* lower QOL than the next younger age group. In the Social domain however, respondents aged 35 to 54 were not different than those who were over 55. In the Environment domain, QOL for those who were 25-34 was not different from that reported by people over age 55.



	Physical Health	Psychological	Social	Environment	General QOL
24 and Under	68.4	66.4	67.5	64.3	70.3
25-34	66.1	64.1	62.0	62.2	68.2
35-54	60.6	60.7	58.1	60.2	64.0
55 and older	58.0	59.1	57.7	61.9	62.2

Figure 27: Consumer QOL by Age Group

Did Quality of Life Differ by Age Group by Program Type?

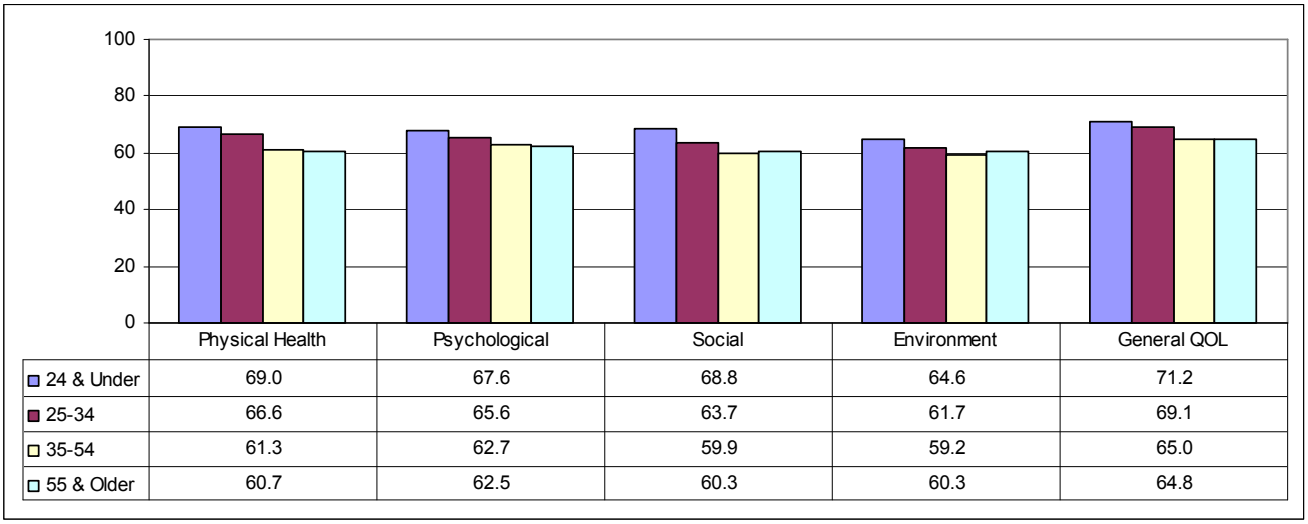
Substance Use Disorders

- Respondents aged 34 and younger and enrolled in SU programs reported *significantly* better QOL in the Psychological and General QOL domains than did respondents enrolled in SU programs who were over 35 years old.
- Within the Physical Health and Social domains, respondents who were under age 24 reported *significantly* better QOL than all older age groups and those who were 25-34 reported *significantly* better QOL than the older age groups.
- Within the Environment domain, respondents who were under age 24 reported *significantly* better QOL than all older age groups. Respondents who were 25-34 reported *significantly* better QOL than those who were 35-54 years old.

Mental Health Disorders

- Respondents aged 34 and younger and enrolled in MH programs reported *significantly* better QOL in the Physical Health and General QOL domains than did respondents over 35 who were enrolled in MH programs. Additionally, within Physical Health, respondents aged 35-54 and reported *significantly* better QOL than did respondents who were over age 55.
- Respondents aged 24 and younger reported *significantly* better QOL in the Social domain than did respondents aged 25 and older.
- Respondents aged 24 and younger reported *significantly* better QOL in the Psychological domain than did respondents aged 35 and older.

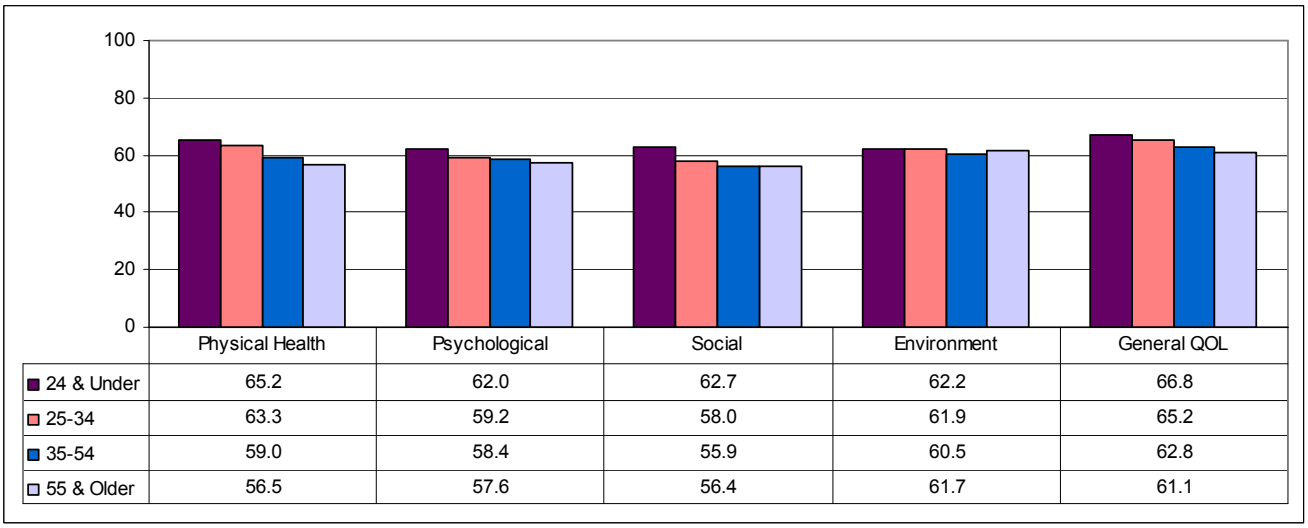
SUBSTANCE USE DISORDERS



	Physical Health	Psychological	Social	Environment	General QOL
24 & Under	69.0	67.6	68.8	64.6	71.2
25-34	66.6	65.6	63.7	61.7	69.1
35-54	61.3	62.7	59.9	59.2	65.0
55 & Older	60.7	62.5	60.3	60.3	64.8

Figure 28: Consumer QOL by Age Group by Substance Use Disorder Program Type

MENTAL HEALTH DISORDERS

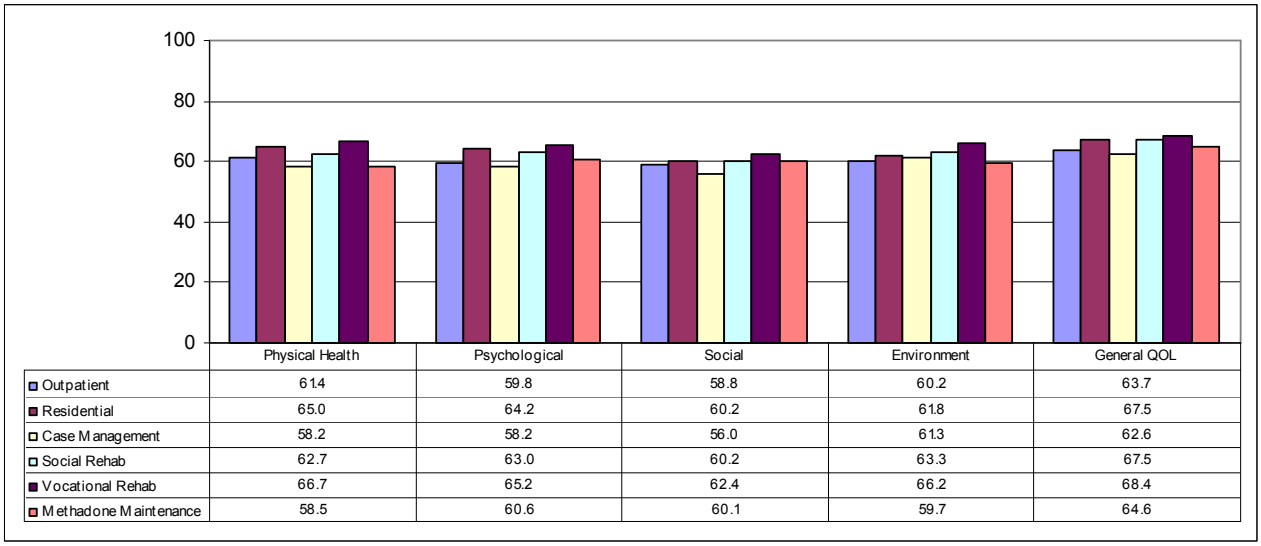


	Physical Health	Psychological	Social	Environment	General QOL
24 & Under	65.2	62.0	62.7	62.2	66.8
25-34	63.3	59.2	58.0	61.9	65.2
35-54	59.0	58.4	55.9	60.5	62.8
55 & Older	56.5	57.6	56.4	61.7	61.1

Figure 29: Consumer QOL by Age Group by Mental Health Program Type

Level of Care

- In the Physical Health domain, respondents who received vocational rehabilitation or residential services reported *significantly* better QOL than that reported by respondents who received other service types. Those who received case management or methadone maintenance services reported a *significantly* lower QOL than those respondents who received any other type of services.
- Respondents who received vocational or social rehabilitation or residential services were *significantly* more satisfied with their QOL in the Psychological and General QOL domains than were respondents who received any other service.
- Respondents who received all other services types reported *significantly* better QOL in the Social domain than did respondents who received case management services.
- In the Environment domain, respondents who received vocational rehabilitation reported *significantly* better QOL compared to those who received any other service type. Additionally, those who received social rehabilitation also reported *significantly* better QOL than those who received all other service types except residential services.



	Physical Health	Psychological	Social	Environment	General QOL
Outpatient	61.4	59.8	58.8	60.2	63.7
Residential	65.0	64.2	60.2	61.8	67.5
Case Management	58.2	58.2	56.0	61.3	62.6
Social Rehab	62.7	63.0	60.2	63.3	67.5
Vocational Rehab	66.7	65.2	62.4	66.2	68.4
Methadone Maintenance	58.5	60.6	60.1	59.7	64.6

Figure 30: Consumer QOL by Level of Care

Did Quality of Life Differ by Level of Care by Program Type?

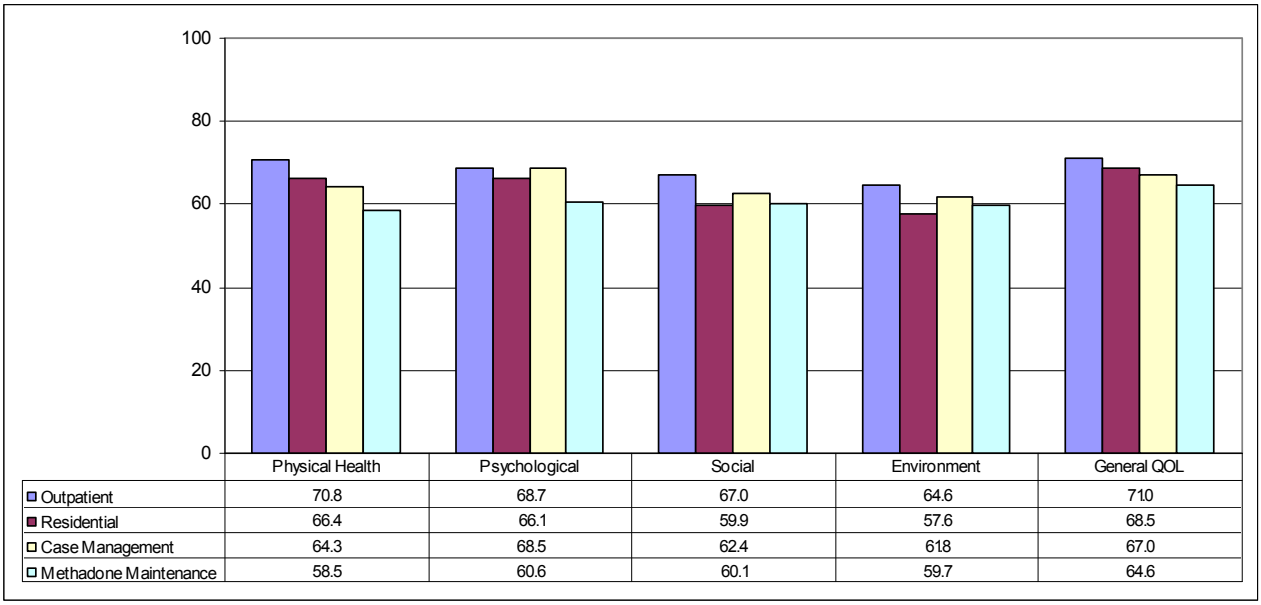
Substance Use Disorders

- In the Physical Health and General QOL domains, respondents who received Substance Use outpatient services reported *significantly* better QOL than those who received residential services, who in turn reported *significantly* better QOL than those who received methadone maintenance services.
- Respondents who received methadone maintenance Substance Use services reported *significantly* lower QOL in the Psychological domain than did respondents who received other types of Substance Use services. Additionally, those who received outpatient services reported *significantly* better QOL than those who received residential services.
- In the Social domain, respondents who received Substance Use services in an outpatient setting reported *significantly* better QOL than did those who were in a residential setting or those receiving methadone maintenance services.
- In the Environment domain, respondents who received Substance Use outpatient services reported *significantly* better QOL than those who received methadone maintenance services, who in turn reported *significantly* better QOL than those who received services in a residential setting.

Mental Health Disorders

- Across all domains, respondents who received Mental Health vocational or social rehabilitation services or services in a residential setting reported *significantly* better QOL than did respondents who received case management services.
- Across all domains, respondents who received Mental Health outpatient services reported a *significantly* lower QOL than those who received all other types of Mental Health services.

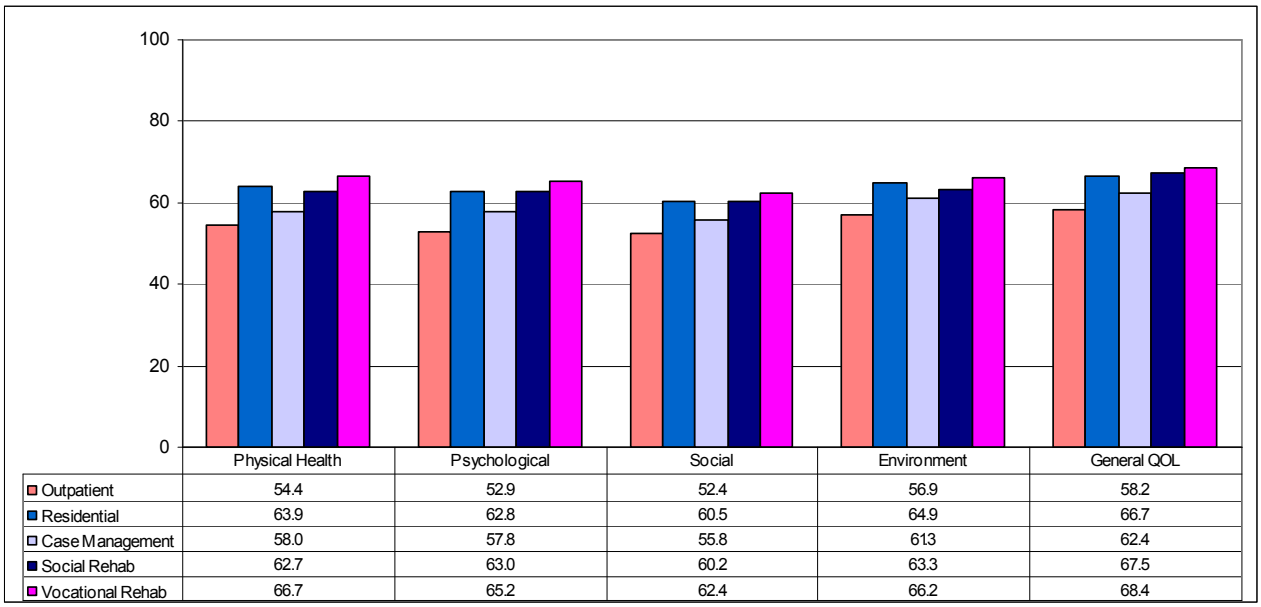
SUBSTANCE USE DISORDERS



	Physical Health	Psychological	Social	Environment	General QOL
Outpatient	70.8	68.7	67.0	64.6	71.0
Residential	66.4	66.1	59.9	57.6	68.5
Case Management	64.3	68.5	62.4	61.8	67.0
Methadone Maintenance	58.5	60.6	60.1	59.7	64.6

Figure 31: Consumer QOL by Level of Care by Substance Use Disorder Program Type

MENTAL HEALTH DISORDERS

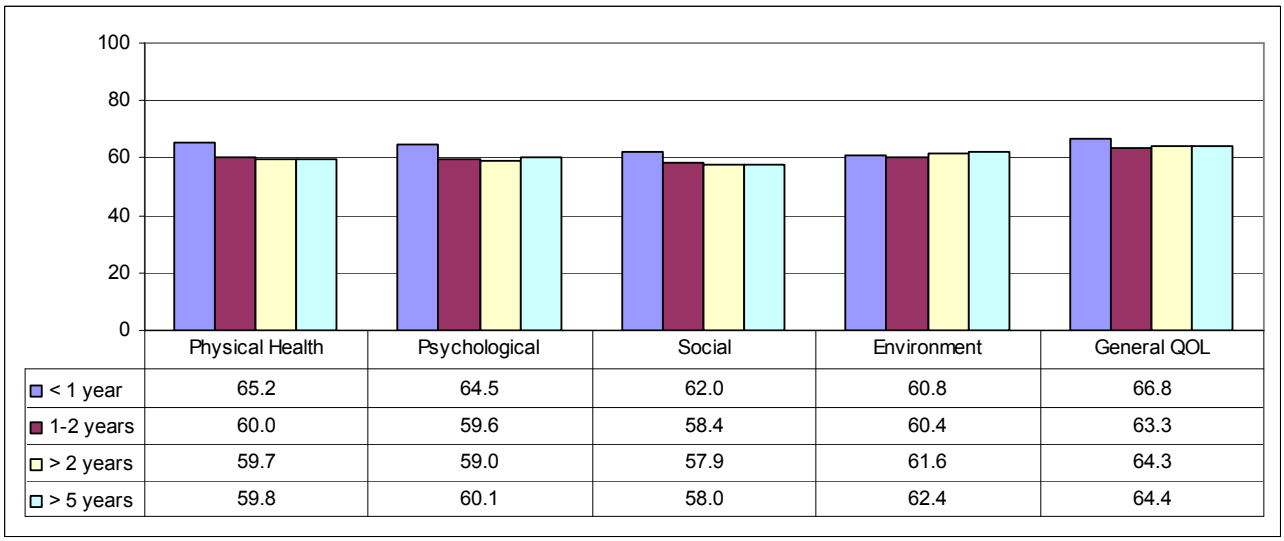


	Physical Health	Psychological	Social	Environment	General QOL
Outpatient	54.4	52.9	52.4	56.9	58.2
Residential	63.9	62.8	60.5	64.9	66.7
Case Management	58.0	57.8	55.8	61.3	62.4
Social Rehab	62.7	63.0	60.2	63.3	67.5
Vocational Rehab	66.7	65.2	62.4	66.2	68.4

Figure 32: Consumer QOL by Level of Care by Mental Health Program Type

Length of Stay

- Respondents who reported receiving services for less than one year had *significantly* better QOL in the Physical Health, Psychological, Social, and General QOL domains than did those who had been in service for more than one year.



	Physical Health	Psychological	Social	Environment	General QOL
< 1 year	65.2	64.5	62.0	60.8	66.8
1-2 years	60.0	59.6	58.4	60.4	63.3
> 2 years	59.7	59.0	57.9	61.6	64.3
> 5 years	59.8	60.1	58.0	62.4	64.4

Figure 33: Consumer QOL by Length of Stay

Did Quality of Life Differ by Length of Stay by Program Type?

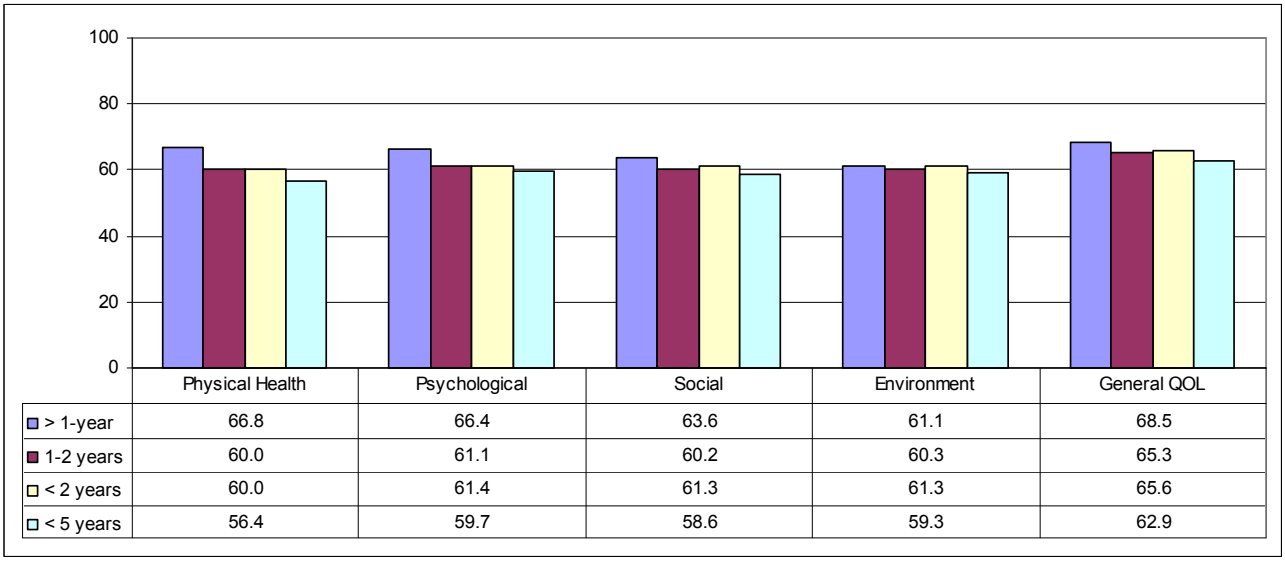
Substance Use Disorders

- Respondents who reported receiving services for less than one year had *significantly* better QOL in the Physical Health, Psychological, and General QOL domains than did those who had been in service for more than one year.
- Respondents receiving Substance Use treatment for more than five years were *significantly* less satisfied with their QOL in the Physical Health domain than were those who received SU treatment for less than five years.

Mental Health Disorders

- Respondents in Mental Health treatment for more than five years reported *significantly* better QOL in the Psychological domain.
- Respondents in Mental Health treatment for less than one year reported *significantly* lower QOL in the Physical Health and Environment domains.
- In terms of the General QOL domain, respondents in treatment for two years or more reported significantly better QOL than those who were in Mental Health services for less than two years.

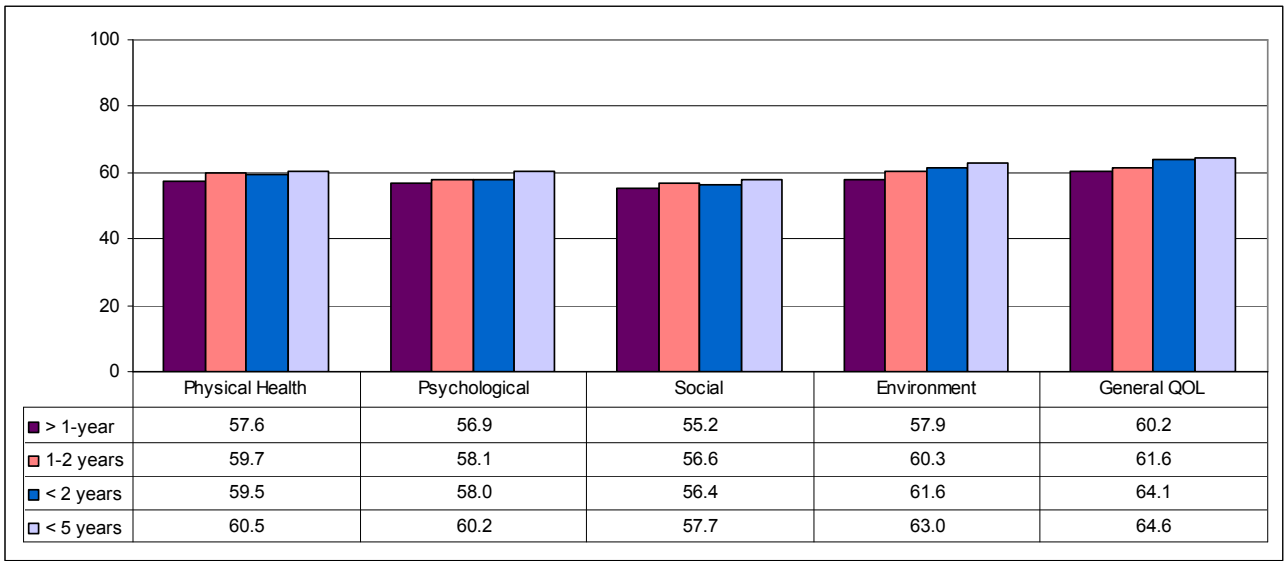
SUBSTANCE USE DISORDERS



	Physical Health	Psychological	Social	Environment	General QOL
> 1-year	66.8	66.4	63.6	61.1	68.5
1-2 years	60.0	61.1	60.2	60.3	65.3
< 2 years	60.0	61.4	61.3	61.3	65.6
< 5 years	56.4	59.7	58.6	59.3	62.9

Figure 34: Consumer QOL by Length of Stay by Substance Use Disorder Program Type

MENTAL HEALTH DISORDERS

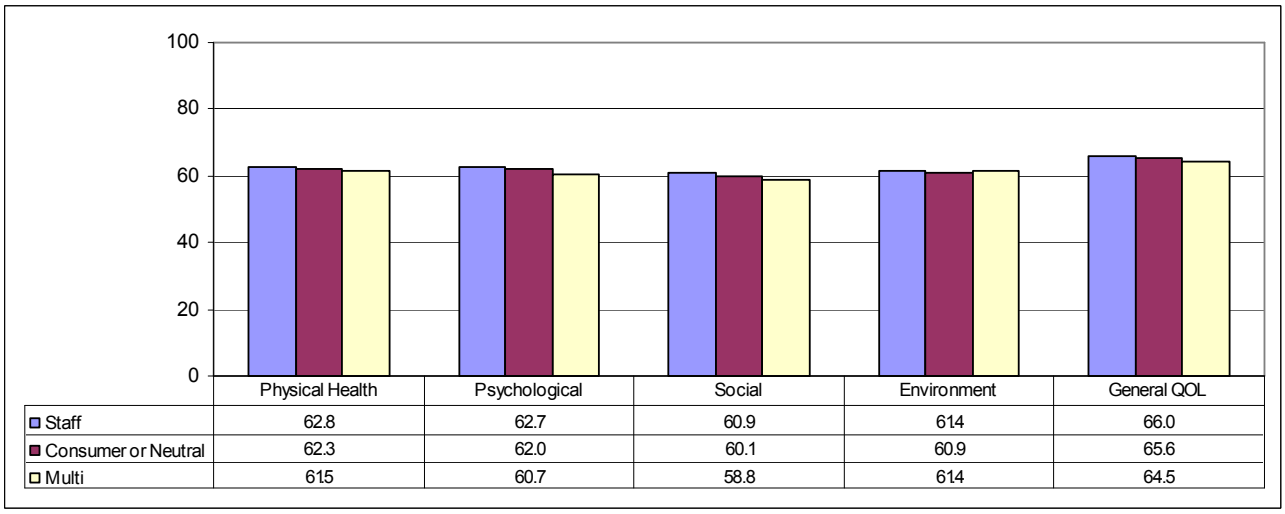


	Physical Health	Psychological	Social	Environment	General QOL
> 1-year	57.6	56.9	55.2	57.9	60.2
1-2 years	59.7	58.1	56.6	60.3	61.6
< 2 years	59.5	58.0	56.4	61.6	64.1
< 5 years	60.5	60.2	57.7	63.0	64.6

Figure 35: Consumer QOL by Length of Stay by Mental Health Program Type

Method of Survey Administration

- Respondents who received the survey from staff members reported *significantly* better QOL in the Physical Health, Social, and General QOL domains than did those who received the survey via multiple methods (i.e., a combination of staff and other neutral parties).
- Respondents who received the survey from staff members or a consumer/other neutral party reported *significantly* better QOL in the Psychological domain.
- The method of survey administration did not impact QOL ratings in the Environment domain.



	Physical Health	Psychological	Social	Environment	General QOL
Staff	62.8	62.7	60.9	614	66.0
Consumer or Neutral	62.3	62.0	60.1	60.9	65.6
Multi	615	60.7	58.8	614	64.5

Figure 36: Consumer QOL by Method of Survey Administration

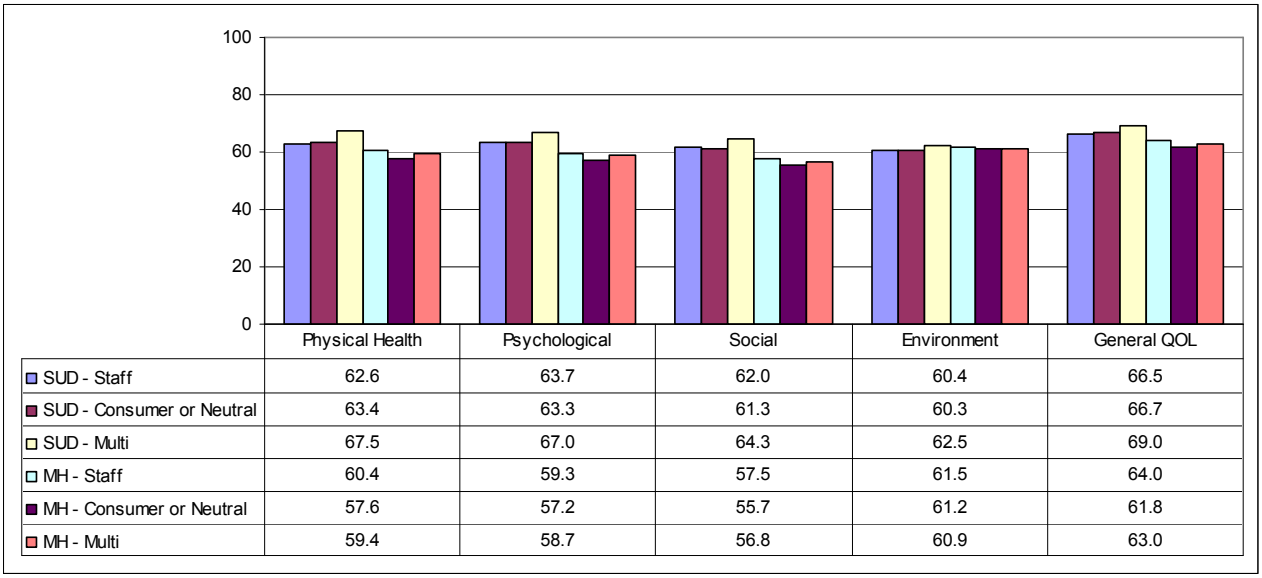
Did Quality of Life Differ by Method of Survey Administration by Program Type?

Substance Use Disorders

- Respondents in Substance Use treatment who received the survey via multiple methods reported *significantly* better QOL across all domains.

Mental Health Disorders

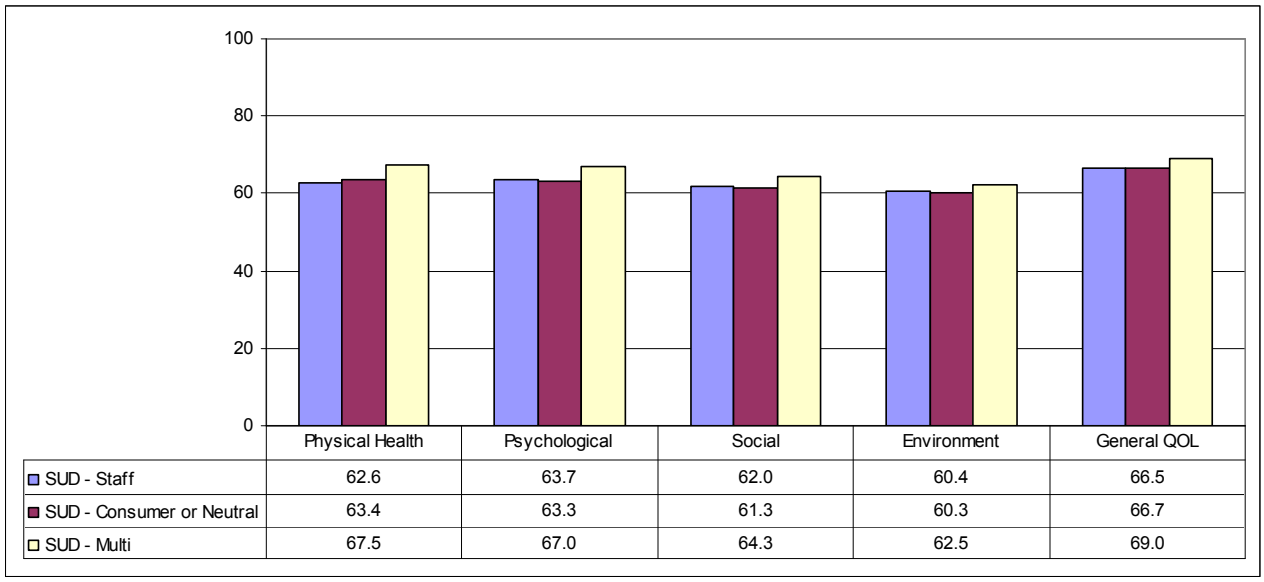
- Respondents in Mental Health treatment who received the survey via staff reported *significantly* better QOL in the Physical Health domain than those who received the survey from another consumer/other neutral parties.
- The method of survey administration did not impact QOL in any other domain.



	Physical Health	Psychological	Social	Environment	General QOL
SUD - Staff	62.6	63.7	62.0	60.4	66.5
SUD - Consumer or Neutral	63.4	63.3	61.3	60.3	66.7
SUD - Multi	67.5	67.0	64.3	62.5	69.0
MH - Staff	60.4	59.3	57.5	61.5	64.0
MH - Consumer or Neutral	57.6	57.2	55.7	61.2	61.8
MH - Multi	59.4	58.7	56.8	60.9	63.0

Figure 37: Consumer QOL by Method of Administration by Program Type

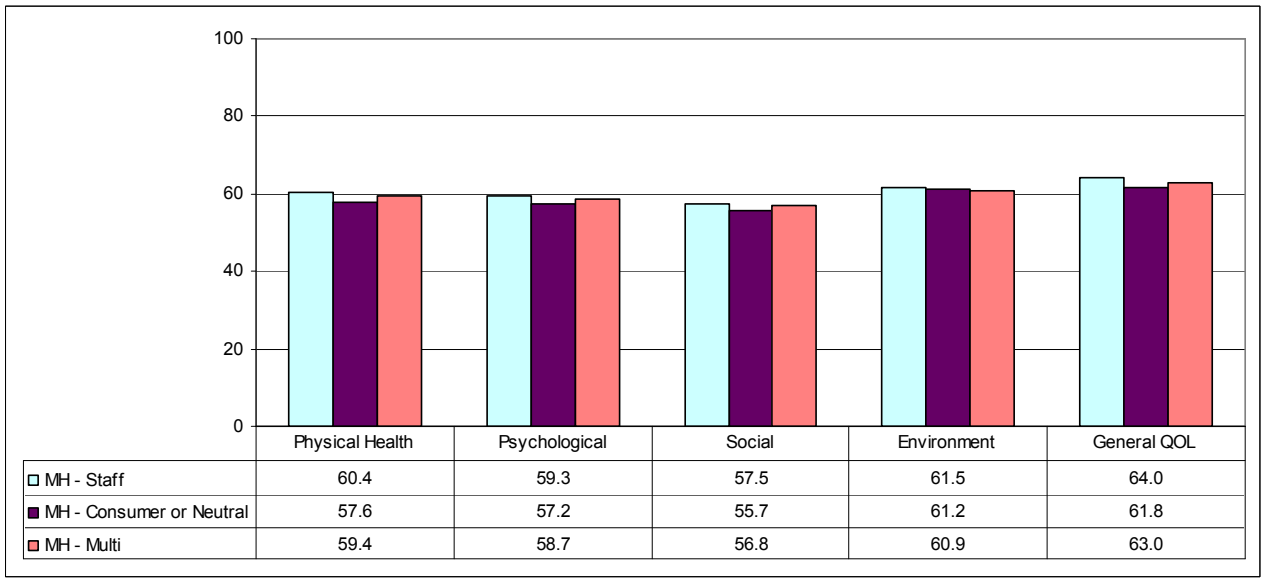
SUBSTANCE USE DISORDERS



	Physical Health	Psychological	Social	Environment	General QOL
SUD - Staff	62.6	63.7	62.0	60.4	66.5
SUD - Consumer or Neutral	63.4	63.3	61.3	60.3	66.7
SUD - Multi	67.5	67.0	64.3	62.5	69.0

Figure 38: Consumer QOL by Method of Survey Administration by Substance Use Disorder Program Type

MENTAL HEALTH DISORDERS

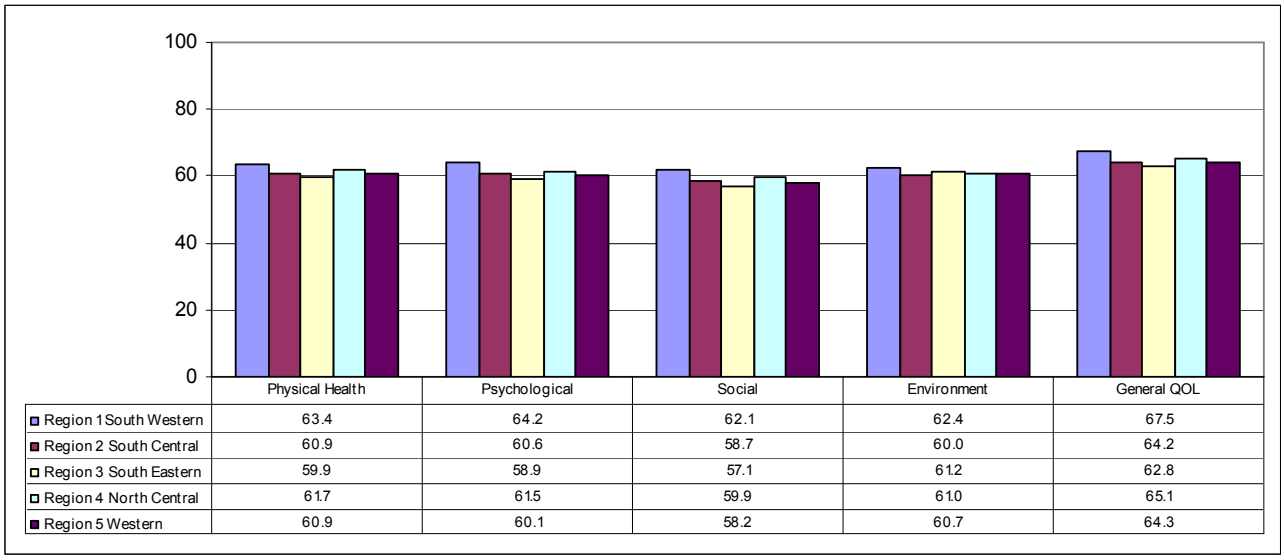


	Physical Health	Psychological	Social	Environment	General QOL
MH - Staff	60.4	59.3	57.5	61.5	64.0
MH - Consumer or Neutral	57.6	57.2	55.7	61.2	61.8
MH - Multi	59.4	58.7	56.8	60.9	63.0

Figure 39: Consumer QOL Method of Survey Administration by Mental Health Program Type

Planning Region

- Across all domains except Environment, respondents from Region 1 reported *significantly* better QOL than did respondents from all other Regions.
- In the Environment domain, respondents from Region 1 reported significantly better QOL than did those from Regions 2, 4, and 5.
- In the Physical Health, Psychological, Social and General QOL domains, respondents from Region 4 reported significantly better QOL than did respondents from Region 3.



	Physical Health	Psychological	Social	Environment	General QOL
Region 1 South Western	63.4	64.2	62.1	62.4	67.5
Region 2 South Central	60.9	60.6	58.7	60.0	64.2
Region 3 South Eastern	59.9	58.9	57.1	61.2	62.8
Region 4 North Central	61.7	61.5	59.9	61.0	65.1
Region 5 Western	60.9	60.1	58.2	60.7	64.3

Figure 40: Consumer QOL by Planning Region

Did Quality of Life Differ by Planning Region by Program Type?

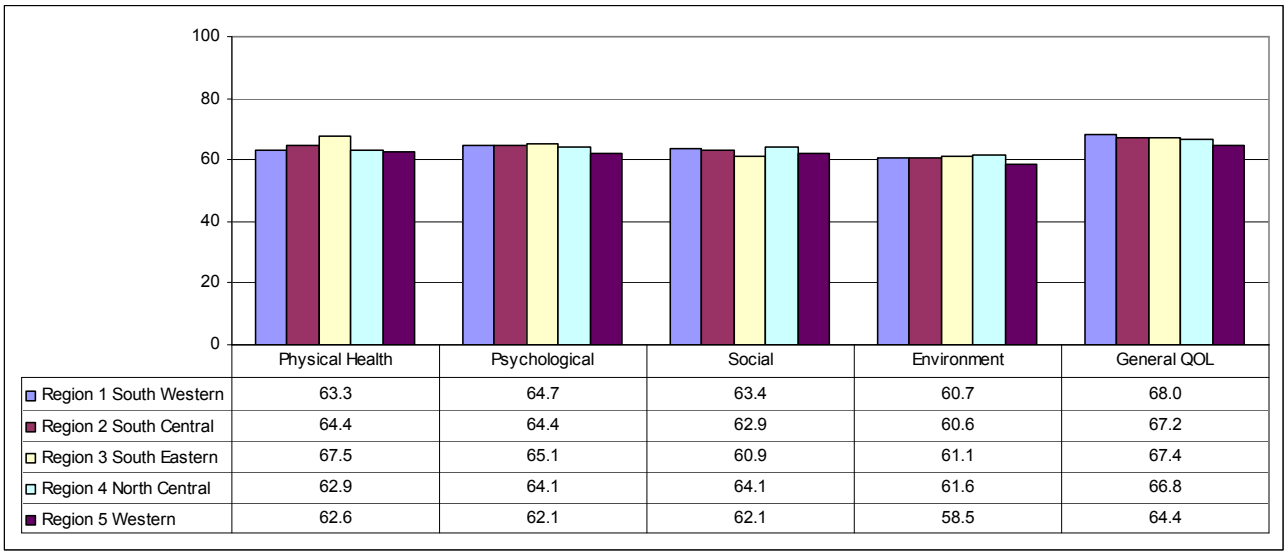
Substance Use Disorders

- In terms of Physical Health, respondents receiving Substance Use treatment from Region 3 reported significantly better QOL than did respondents from any other Region.
- Respondents receiving Substance Use treatment from Regions 1, 2, or 4 reported *significantly* QOL in the Social and General QOL domains than did respondents from Region 5.
- Respondents receiving Substance Use treatment from Regions 1 or 4 reported *significantly* QOL in the Environment domain than did respondents from Region 5.

Mental Health Disorders

- Respondents from receiving Mental Health treatment Region 1 reported *significantly* better QOL in the Physical Health, Psychological, and Environment domains than did respondents from other Regions.
- Respondents from receiving Mental Health treatment Region 1 reported *significantly* better QOL in the Social and General QOL domains than did respondents from Regions 2, 3, or 4.
- Respondents receiving Mental Health treatment from Region 3 reported *significantly* lower QOL in the Physical Health, Psychological, and General QOL domains than did respondents from all other Regions.

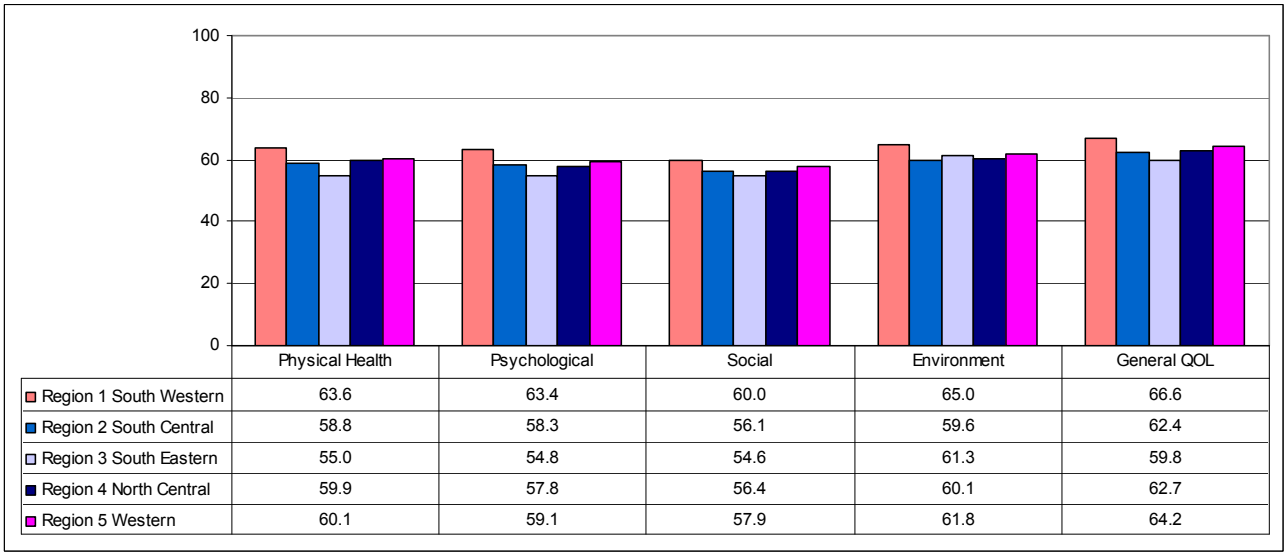
SUBSTANCE USE DISORDERS



	Physical Health	Psychological	Social	Environment	General QOL
Region 1 South Western	63.3	64.7	63.4	60.7	68.0
Region 2 South Central	64.4	64.4	62.9	60.6	67.2
Region 3 South Eastern	67.5	65.1	60.9	61.1	67.4
Region 4 North Central	62.9	64.1	64.1	61.6	66.8
Region 5 Western	62.6	62.1	62.1	58.5	64.4

Figure 41: Consumer QOL by Planning Region by Substance Use Disorder Program Type

MENTAL HEALTH DISORDERS



	Physical Health	Psychological	Social	Environment	General QOL
Region 1 South Western	63.6	63.4	60.0	65.0	66.6
Region 2 South Central	58.8	58.3	56.1	59.6	62.4
Region 3 South Eastern	55.0	54.8	54.6	61.3	59.8
Region 4 North Central	59.9	57.8	56.4	60.1	62.7
Region 5 Western	60.1	59.1	57.9	61.8	64.2

Figure 42: Consumer QOL by Planning Region by Mental Health Program Type

Summary by Domains

Physical Health

The following reported *significantly* better Quality of Life in this domain:

- Respondents who were receiving treatment for Substance Use disorders
- Men
- African Americans
- Respondents who identified themselves as receiving SU services
- Respondents from a non-Hispanic ethnic background
- Respondents aged 24 years or younger
- Respondents receiving vocational rehabilitation or residential services
- Respondents receiving services for less than one year
- Respondents using Providers that administered the survey via staff
- Respondents from Planning Region 1 (South Western)

For respondents receiving services for *Substance Use disorders*, the following reported *significantly* better QOL in the Physical Health domain:

- Men
- African Americans
- Respondents who identified themselves as receiving SU services
- Respondents aged 24 years or younger
- Respondents receiving outpatient services
- Respondents receiving services for less than one year
- Respondents using Providers that administered the survey via multiple methods
- Respondents from Planning Region 3 (South Eastern)

For respondents receiving services in *Mental Health disorders* programs, the following reported *significantly* better QOL in the Physical Health domain:

- Men
- African Americans
- Respondents who identified themselves as receiving SU services
- Respondents from a non-Hispanic ethnic background
- Respondents aged 34 years or younger
- Respondents receiving vocational or social rehabilitation or residential services
- Respondents using Providers that administered the survey via staff
- Respondents from Planning Region 1 (South Western)

Psychological

The following reported *significantly* better Quality of Life in this domain:

- Respondents who were receiving treatment for Substance Use disorders
- Men
- Respondents aged 24 years or younger
- Respondents receiving vocational or social rehabilitation or residential services
- Respondents receiving services for less than one year
- Respondents using Providers that administered the survey via staff or a neutral party
- Respondents from Planning Region 1 (South Western)

For respondents receiving services in *Substance Use disorders* treatment programs, the following reported *significantly* better QOL in the Psychological domain:

- Men
- Respondents who identified themselves as receiving SU services
- Respondents from a Hispanic/Latino ethnic background
- Respondents aged 34 years or younger
- Respondents receiving services for less than one year
- Respondents using Providers that administered the survey via multiple methods

For respondents receiving services in *Mental Health disorders* programs, the following reported significantly better QOL in the Psychological domain:

- Men
- African Americans
- Respondents who identified themselves as receiving SU services
- Respondents from a non-Hispanic ethnic background
- Respondents aged 24 years or younger
- Respondents receiving vocational or social rehabilitation or residential services
- Respondents receiving services for more than five years
- Respondents from Planning Region 1 (South Western)

Social

The following reported *significantly* better Quality of Life in this domain:

- Respondents who were receiving treatment for Substance Use disorders
- Men
- African Americans
- Respondents who identified themselves as receiving SU services
- Respondents from a Hispanic/Latino ethnic background
- Respondents aged 24 years or younger
- Respondents receiving services for less than one year
- Respondents using Providers that administered the survey via staff
- Respondents from Planning Region 1 (South Western)

For respondents receiving services for *Substance Use disorders*, the following reported *significantly* better QOL in the Social domain:

- African Americans
- Respondents who identified themselves as receiving SU services
- Respondents from a Hispanic/Latino ethnic background
- Respondents aged 24 years or younger
- Respondents receiving outpatient services
- Respondents using Providers that administered the survey via multiple methods

For respondents receiving services in *Mental Health disorders* programs, the following reported *significantly* better QOL in the Social domain:

- African Americans
- Respondents aged 24 years or younger
- Respondents receiving vocational or social rehabilitation or residential services
- Respondents from Planning Region 1 (South Western)

Environment

The following reported *significantly* better Quality of Life in this domain:

- Men
- African Americans
- Respondents who identified themselves as receiving SU services
- Respondents from a non-Hispanic ethnic background
- Respondents aged 24 years or younger
- Respondents receiving vocational rehabilitation services
- Respondents from Planning Region 1 (South Western)

For respondents receiving services for *Substance Use disorders*, the following reported *significantly* better QOL in the Environment domain:

- African Americans
- Respondents who identified themselves as receiving SU services
- Respondents aged 24 years or younger
- Respondents receiving outpatient services
- Respondents using Providers that administered the survey via multiple methods

For respondents receiving services in *Mental Health disorders* programs, the following reported *significantly* better QOL in the Environment domain:

- Men
- Respondents from a non-Hispanic ethnic background
- Respondents receiving vocational or social rehabilitation or residential services
- Respondents from Planning Region 1 (South Western)

General Quality of Life

The following reported *significantly* better Quality of Life in this domain:

- Respondents who were receiving treatment for Substance Use disorders
- Men
- African Americans
- Respondents who identified themselves as receiving SU services
- Respondents aged 24 years or younger
- Respondents receiving vocational or social rehabilitation or residential services
- Respondents receiving services for less than one year
- Respondents using Providers that administered the survey via staff
- Respondents from Planning Region 1 (South Western)

For respondents receiving services for *Substance Use disorders*, the following reported *significantly* better QOL in the General QOL domain:

- Men
- African Americans
- Respondents who identified themselves as receiving SU services
- Respondents from a Hispanic/Latino ethnic background
- Respondents aged 34 years or younger
- Respondents receiving outpatient services
- Respondents receiving services for less than one year
- Respondents using Providers that administered the survey via multiple methods

For respondents receiving services in *Mental Health disorders* programs, the following reported *significantly* better QOL in the General QOL domain:

- Men
- African Americans
- Respondents who identified themselves as receiving SU services
- Respondents from a non-Hispanic ethnic background
- Respondents aged 34 years or younger
- Respondents receiving vocational or social rehabilitation or residential services
- Respondents receiving services for more than two years

Discussion

The State of Connecticut initiated the WHOQOL-BRÈF Instrument in order to collect and analyze the extent to which its service consumers were satisfied with the quality of their lives. This report reflects our first attempt to utilize this instrument. The information that was collected and analyzed will serve as a baseline as the instrument is administered in subsequent years. It is our hope that it will begin to inform the normative data since very little normative data is available regarding the WHOQOL-BRÈF at this time.

As such, the data on which we reported is specific to adults receiving mental health and substance abuse services in a state administered behavioral health system. Most research articles focus on validation studies or specific population samples based upon illness or medical condition.[25] Furthermore, the samples used tend to be quite small. As usage of the WHOQOL-BRÈF instrument increases, as appears to be the case, we will have increasingly more data to measure these results against. At that time it will be useful to compare our results to those of the general population in order to see whether our findings are unique to our service population or the population in general.

The results of the DMHAS Quality of Life Survey identified a number of interesting findings that should be examined more carefully. It should be noted that these are preliminary and these findings need to be observed and evaluated across several years. Nonetheless, these findings may provide us with greater insight into the quality of life for persons with mental health and substance use disorders. Some of these findings are discussed below:

Demographic Findings

- **Older respondents reported significantly lower quality of life** – QOL was evaluated across age ranges. Each successive age range reported significantly lower QOL than the age range preceding it. It is clear that chronic health conditions can and do negatively affect quality of life. Older individuals receiving services in the DMHAS system may be negatively impacted by a range of physical, social, and psychological issues that accrue over time. Research has shown that generally, people with serious mental illness tend to die younger than people with non-serious mental illnesses within the public mental health system.[26] Is it possible that the pervasive negative effects associated with chronic mental health and substance use conditions contribute to lower quality of life in older respondents? As more normative data becomes available, it will also be interesting to evaluate whether this finding holds true in the general population or is more specific to the population DMHAS is serving.
- **Younger respondents reported the highest quality of life –** Younger people tended to report higher quality of life. One could speculate that there are debilitating effects associated with aging while struggling with a mental illness or substance use problem. Younger respondents may also be more hopeful about their future. The debilitating social and psychological effects likely result in lower quality of life as individuals' age. Over time, these individuals may lose recovery capital or feel the effects of the loss of these resources. Is this finding reflective of some naturally higher quality of life in young people or may it suggest that earlier intervention is helping these respondents?
- **Race and gender affect perceptions about quality of life –** African-Americans reported significantly higher quality of life in most domains. Women, on the other hand, generally reported lower quality of life. While the data may not offer reasons for these differences, it will be interesting to examine these differences more carefully.

Treatment-Related Findings

- **Length of time in treatment affects quality of life responses** - Respondents with less than one year in treatment tend to report a higher quality of life. It is unclear what contributes to this finding but one can speculate that consumers who remain in treatment for long periods of time continue to experience the debilitating effects of a more chronic or long-term condition. Each of the first three findings speaks to the potential long-term effects of dealing with a chronic condition.

[25] Hawthorne, G et al. (2006).

[26] Colton CW, Manderscheid RW. Congruencies in increased mortality rates, years of potential life lost, and causes of death among public mental health clients in eight states. Prev Chronic Dis [serial online] 2006 Apr. Retrieved on March 17, 2009 from <http://www.cdc.gov/pcd/issues/2006/apr/05_0180.htm>.

- **People receiving social and vocational rehabilitation and residential services tend to report relatively high QOL** – Our analysis showed that individuals receiving services in these programs reported higher quality of life. Consumers in the DMHAS system historically have stressed that work, stable living arrangements, and relationships are essential ingredients of recovery. It would appear that this finding supports the value that consumers place premise of the importance of work and stable housing for recovery.
- **Individuals receiving substance use services indicate a generally higher QOL -** Consumers of our substance abuse services reported a generally higher quality of life. What differences, if any exist in consumers that account for this finding? Do we see differences in resources, recovery capital, or in social supports that contribute to this finding? Among individuals receiving substance abuse services, it is interesting to note that people reporting from methadone clinics indicate a relatively low quality of life.

Domain-Related Findings

- **Domain Scores for CT's public behavioral health clients are lower than existing normative data** – The report compared our results with those of a general population in Australia. Connecticut's scores were almost 10 points lower across most domains than the Australian group. Very little normative data is currently available for the general population in the United States, so it is unclear whether the same results would be evident if we compared our results with a general population. The scores do highlight that in this limited comparison, the general population reports a higher degree of satisfaction with the quality of their lives.
- **Physical Health is the lowest rated domain –** The physical health domain had the lowest degree of satisfaction among our respondents. In analyzing responses to specific questions, scores for health related questions were generally very low and reflected consumer concerns with their physical health status.
- **Consumers are dissatisfied with the quality of their Social Relationships –** A similar finding was noted in the social relationships domain. Specific questions pertaining to social relationships were very low and may reflect dissatisfaction with the degree of community integration and the limited number of social supports available to respondents.

These initial findings raise more questions than answers. This is our first attempt at analyzing and interpreting these data. We have selected an instrument that is growing in use but is limited by the amount of comparative data that is currently available. Some of these findings appear to be related and will require further scrutiny over a period of years. It will be interesting as more data becomes available to evaluate whether our findings are consistent for similar populations in other states. It will also be important to examine our findings in relation to the general population.

Implications for Planning and Quality Improvement

A report such as this raises questions about the data and how can it be incorporated into agency operations. How does a report such as this contribute to quality improvement efforts? In order to be more than interesting, it is imperative that we identify opportunities to use the data in planning, programming, and the development of policies and procedures. The agency-specific data presented in the report may offer providers a way to measure whether quality improvement activities have any effect on QOL scores in subsequent years. Agency data from this initial report can be used as baseline in order to measure changes that result form specific quality improvement activities.

As agencies study their discrete results, QOL differences may surface that relate to the unique demographics of the individuals served. Other scores may reflect local or regional deficits in housing or work opportunities. Certain responses may highlight areas of strength while others may suggest areas for improvement. This section presents some possible examples for incorporating the QOL findings into agency quality improvement initiatives.

Particular findings may have relevance to programming or supports that can be emphasized or enhanced. For example, the findings related to social and vocational rehabilitation highlight the importance of work and social relationships to recovery. Agencies may wish to enhance vocational programming and opportunities, or they may also look for ways to strengthen linkages with programs or agencies in the community that provide vocational rehabilitation.

Similarly, an agency might evaluate the degree to which they encourage the use of natural community supports, and choose to make efforts to expand this usage. Such an effort is not likely to require additional funding, but may mean that greater emphasis is placed on identifying community resources and routinely communicating the information to an agency's consumers. Staff could more routinely seek to link consumers to these community supports.

Another finding identified that physical health is the lowest rated domain for our respondents. This finding is consistent with other national data that shows that persons with mental illness have lower life expectancies and high degrees of co-morbid medical conditions. Some agencies within the state are directly linking their behavioral health services to primary care. In some instances, agencies are co-locating with health care providers. Establishing or strengthening linkages to primary care facilities can have significant effects on improved health. Agencies may also elect to change policies or procedures related to physical health. An example might be to require staff to coordinate annual physicals for an agency's consumers.

These strategies are presented to stimulate thinking regarding how the QOL report can inform agency operations. The quality of life information that has been collected and analyzed provides a rich resource that can be utilized to address concerns that respondents have about the quality of their lives. We hope that the information we have presented will contribute to a range of quality improvement activities that may be suggested by the data.

Appendix 1 – WHOQOL-BRÈF Quality of Life Instrument

(Note: this material was appended to the regular DMHAS consumer survey instrument, which allowed us to associate demographic and other respondent information with the QOL answers.)

Please read each question, assess your feelings, and circle the number on the scale that gives the best answer for you for each question.

	(Please circle the number)				
	Very poor	**Poor**	**Neither poor nor good**	**Good**	**Very Good**
1. How would you rate your quality of life?	**1**	**2**	**3**	**4**	**5**

	(Please circle the number)				
	Very dissatisfied	**Dissatisfied**	**Neither satisfied nor dissatisfied**	**Satisfied**	**Very satisfied**
2. How satisfied are you with your health?	**1**	**2**	**3**	**4**	**5**

The following questions ask about **how much** you have experienced certain things in the last two weeks.

	(Please circle the number)				
	Not at all	**A little**	**A moderate amount**	**Very much**	**An extreme amount**
3. To what extent do you feel that physical pain prevents you from doing what you need to do?	**1**	**2**	**3**	**4**	**5**
4. How much do you need any medical treatment to function in your daily life?	**1**	**2**	**3**	**4**	**5**
5. How much do you enjoy life?	**1**	**2**	**3**	**4**	**5**
6. To what extent do you feel your life to be meaningful?	**1**	**2**	**3**	**4**	**5**

	(Please circle the number)				
	Not at all	Slightly	A Moderate amount	Very much	Extremely
7. How well are you able to concentrate?	**1**	**2**	**3**	**4**	**5**
8. How safe do you feel in your daily life?	**1**	**2**	**3**	**4**	**5**
9. How healthy is your physical environment?	**1**	**2**	**3**	**4**	**5**

The following questions ask about **how completely** you experience or were able to do certain things in the last two weeks.

	(Please circle the number)				
	Not at all	A little	Moderately	Mostly	Completely
10. Do you have enough energy for everyday life?	**1**	**2**	**3**	**4**	**5**
11. Are you able to accept your bodily appearance?	**1**	**2**	**3**	**4**	**5**
12. Have you enough money to meet your needs?	**1**	**2**	**3**	**4**	**5**
13. How available to you is the information that you need in your day-to-day life?	**1**	**2**	**3**	**4**	**5**
14. To what extent do you have the opportunity for leisure activities?	**1**	**2**	**3**	**4**	**5**

	(Please circle the number)				
	Very poor	Poor	Neither poor nor well	Well	Very well
15. How well are you able to get around?	**1**	**2**	**3**	**4**	**5**

The following questions ask you to say how **good** or **satisfied** you have felt about various aspects of your life over the last two weeks.

	(Please circle the number)				
	Very dissatisfied	**Dissatisfied**	**Neither satisfied nor dissatisfied**	**Satisfied**	**Very satisfied**
16. How satisfied are you with your sleep?	**1**	**2**	**3**	**4**	**5**
17. How satisfied are you with your ability to perform your daily living activities?	**1**	**2**	**3**	**4**	**5**
18. How satisfied are you with your capacity for work?	**1**	**2**	**3**	**4**	**5**
19. How satisfied are you with your abilities?	**1**	**2**	**3**	**4**	**5**
20. How satisfied are you with your personal relationships?	**1**	**2**	**3**	**4**	**5**
21. How satisfied are you with your sex life?	**1**	**2**	**3**	**4**	**5**
22. How satisfied are you with the support you get from your friends?	**1**	**2**	**3**	**4**	**5**
23. How satisfied are you with the conditions of your living place?	**1**	**2**	**3**	**4**	**5**
24. How satisfied are you with your access to health services?	**1**	**2**	**3**	**4**	**5**
25. How satisfied are you with your mode of transportation?	**1**	**2**	**3**	**4**	**5**

The following question refers to **how often** you have felt or experienced certain things in the last two weeks.

	(Please circle the number)				
	Never	**Seldom**	**Quite often**	**Very often**	**Always**
26. How often do you have negative feelings, such as blue mood, despair, anxiety, depression?	**1**	**2**	**3**	**4**	**5**

Did someone help you to fill out this form? *(Please circle Yes or No)*	Yes	No

Thank you for your help

Appendix 2 – Notes from Meetings at Prime Time House, 2007

Results from Prime Time House Focus Group, April 5, 2007

Introduction
On April 5, 2007, EQMI staff conducted a focus group with Prime Time House members and staff. About 10 members and 2-3 staff participated over a period of two hours; participants came and went as they wished, as several of them had regular clubhouse duties to perform (such as preparing lunch.)

Our questions were based upon the International Center for Clubhouse Development standards for certification. We isolated the standards that pertain to individuals and used them as a guide for formulating the focus group protocol. As is the case with most focus groups, many of the questions were answered during group discussion rather than directly as a result of being asked a specific question, although as facilitators, we made sure that all points were covered. The focus group protocol may be found in Appendix A of this document.

As discussed in previous meetings between EQMI staff and Prime Time House, there is particular interest in examining the efficacy of the "work ordered day", which is the hallmark of the ICCD certified clubhouse. To this end, most of our questions were focused on the work ordered day, and its meaning and utility to the clubhouse and its members.

Focus group participants were overwhelmingly positive regarding the work ordered day and Prime Time House as catalysts and supports for recovery. Members spoke of how the clubhouse is a safe space for exploring new things and working on one's personal goals, including finding meaningful work. It provides meaningful structure to everyday life. Participants stated that the clubhouse is a community of friends and often a family; a place where one can grow and learn and get support in an individualized, person centered manner, unlike local clinics where "they don't treat you like a normal human being." Focus group participants indicated that the Prime Time House model is unique in that one is not "pigeonholed" or told to "suck it up and get a job" when they are not ready to do so. According to participants, the work ordered day at Prime Time House helps smooth the transition back to work and a normal life.

Indeed, several focus group participants described past traumatic events, such as a work related injury or extreme stress with one's former job, which precipitated a decline into depression, anxiety, and other behavioral health issues. These participants included a nurse and a master carpenter. There seems to be a perception in the outside clinical world that facilities such as Prime Time House are for low functioning people without many job skills, when the reality appears to be much more complex than this.

Methodology
The focus group protocol is a series of open ended questions developed by EQMI staff and reviewed by clubhouse staff and members before use. The questions were used as conversational guidelines during a discussion session which lasted about 2 hours. One EQMI staff person led the focus group while another took notes.

These notes were then transcribed into a text document and analyzed using Atlas.ti qualitative analysis software. This software assists the analyst in generating "codes" or categories for themes and concepts that emerge from the qualitative data.

Results
Once the contents of the text files were coded, we examined the frequency of codes used. The following themes were cited most often in our notes:

Theme	**Frequency**
Community	22
Self esteem / confidence building / feeling valued	20
Skill building / professional development	16
Employment / meaningful work	14
Helping others / giving back	11
Improvement in health / functioning	9
Support	9
Recovery	8
Less dependence	5

Additionally, we identified four main "families" of themes:

Emotional health (gaining confidence, feeling happier, higher self esteem)
Physical health (increased activity, feeling better)
Transition (gaining skills and confidence to enter the workplace, recovering from illness)
Employment (learning a trade or profession, performing complex tasks, working for the clubhouse)

We asked focus group participants to identify the most meaningful elements of clubhouse membership (listed in alphabetical order):

Advocacy	Building awareness of mental illness
Building new skills	Camaraderie
Communication skills	Contributing to community
Educational opportunities	Employment training
Family	Feeling valued / important
Getting emotional needs met	Having a community
Help each other	Interpersonal skills
Intimacy	Less stressful environment
Non-clinical	Once a member, always a member
Political connection	Purpose
Real friendships	Safe space
Self esteem/confidence	Social interaction
Stigma-free environment	Structure
Support	Support with one's job
Time to heal	Work environment
Work is tailored to one's abilities	Working without stress of normal job

We then asked participants to list potential outcome measures as a way of analyzing the efficacy and quality of Prime Time House (listed in alphabetical order):

Active in one's own recovery/treatment plan	Activity level
Alleviation of symptoms	Decrease in medication
Employment	Finding a purpose/self-actualization
Gratification/volunteering/helping others	Happiness
Housing stability/living situation	Increased ability
Individual success	Level of activity/# hours at clubhouse *(existing voc measures)*
Level of community/social involvement	Quality of life

Reduced hospitalizations/reduced length of inpatient stay	Reduction in need for assistance
Reduction in need for benefits	Reduction in need for community supports
Security	Service utilization
Wellness	Work when ready

Discussion

Clubhouse members value the community and opportunities for individual and group healing provided by Prime Time House. Many of the benefits cited by members are much more social than what is customarily measured in a behavioral health setting; however, this is a different kind of treatment modality than is customarily provided.

It is interesting to compare these benefits to the outcome measures, also suggested by member participants. Many of the outcome measures are much more "traditional". A balance of both traditional measures (quality of life, level of activity, changes in service utilization) with more innovative measures (gratification, self-actualization) will most likely give the most accurate picture of how well Prime Time House serves its members. Identified themes and theme families emergent from the focus group analysis should be used to inform this planning.

Notes from meeting at Prime Time House, May 4, 2007

Prime Time House staff (with some member input) decided that they would like to use the WHOQOL-BRÈF (a short quality of life measure) to measure a number of outcomes, including activity level, living situation, quality of life, security and wellness.

Appendix 3 – Commissioner's Memo, February 7, 2008

STATE OF CONNECTICUT
DEPARTMENT OF MENTAL HEALTH AND ADDICTION SERVICES
A Healthcare Service Agency

M. JODI RELL
GOVERNOR

THOMAS A. KIRK, JR., PH.D.
COMMISSIONER

To: DMHAS and PNP CEO's
Regional Mental Health Boards
CAN
CCPA

From: Thomas A. Kirk Jr., Ph.D., Commissioner

Date: February 7, 2008

Subject: Consumer Survey and Quality of Life Instrument SFY 2008

This memo is in response to the issues raised by some consumers and some providers concerning the addition of the Quality of Life instrument to this year's Consumer Survey. The Consumer Survey is part of the contractual agreement that all providers sign with DMHAS. We have been collecting the Consumer Survey since 2003. Every provider will continue to collect the basic Consumer Survey data, which consists of the twenty-eight satisfaction items, six demographic items, and one open-ended question. We encourage you to seek the assistance of peers, people in recovery, or other neutral parties to help you administer the survey.

This is the first year that the World Health Organization Quality of Life (WHOQOL) instrument was added; this instrument will enable us to learn more about the lives of the people that we serve. It is not designed to reflect upon the services that your agency provides; rather it gives us a point-in-time snapshot of an individual's quality of life. The WHOQOL instrument has added 26 items to the overall survey.

To address the concerns of some consumers and staff regarding the increase in the number of items to be entered into the DPAS consumer survey system, we are offering the following options to all providers that are required to collect the consumer survey:

1. All providers will have the option of sending the completed consumer surveys to DMHAS for data entry. If you agency chooses this option, you will need to ensure that all surveys are marked as coming from your agency. If you collected data at the program level, your survey forms will need to include a clear program identifier. If your surveys contain no program-level information, then the data will be entered at the provider level.
2. We realize that most of you are already collecting the above data, as there are only four months left to complete the survey for SFY 2008. The following options are available with respect to the Quality of Life Survey:
    - Continue to collect the QOL data and send it to us for data entry.
    - Collect the QOL survey separately from the 28-item Consumer Survey.
    - Not collect QOL data. If you choose not to collect any information using the WHO-QOL instrument, then we ask that you
        i. Tell us which items in the WHOQOL are meaningful to you.

ii. Alternatively, if the WHOQOL instrument is not what you recommend, identify any statements or instruments that you think would help to measure QOL meaningfully. We encourage you to meet with people in recovery and staff who work on these issues to help you identify the concepts and statements that capture the QOL concept.

Please remember that people in recovery always have a choice of refusing to answer any and all questions in the surveys.

As you know, some providers are using the World Wide Web to collect this information, and we are working with them to set up their web surveys. If you are interested in using the web as a mechanism for collecting this information, but did not express any interest earlier, please contact us and we will work with you to accomplish this.

Finally, if you choose to have data entered by DMHAS, please send the completed surveys using the following check list:

- Stamp or name of your agency on **each survey**
- Clearly written Program Names on **each survey**, if surveys are done at a program level
- The envelope in which the data arrives **should not have a postmark later than 7/1/2008**.
- The envelope should be addressed to:

  Dept. of Mental Health and Addiction Services
  EQMI Division
  410 Capitol Avenue
  PO Box 341431
  Hartford, CT 06134.

All data entry will be done in the month of July; the data will be available to you on August 15, 2008. In case you need these data for any other purposes before 8/15/2008, you will need to either delay those projects, or use other sources of information to meet your timelines.

If you have any additional questions or need further information or discussion, do not hesitate to call Minakshi Tikoo at 860-418-6824 or e-mail her at minakshi.tikoo@po.state.ct.us.

cc: Paul DiLeo, Chief Operating Officer
Steven Fry, Director, Director of Recovery Community Affairs
Minakshi Tikoo, Ph.D., Director, Evaluation Quality Management and Improvement
Lauren Siembab, M.S., Director, Health Care Systems