

# Ohio Mental Health Consumer Outcomes System

## *Report 5*



Released November 2004

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Office of Program Evaluation and Research  
Ohio Department of Mental Health

**\* Corrections have been made to the following pages:**

- Page 3: The percentage of Mood Disorders of the Outcome Expected group in the Primary Diagnosis table of Adult Consumer Form A;
- Page 9: Question 14 data of Adult Consumer Form A;
- Page 13: The percentage of Mood Disorders of the Outcome Expected group in the Primary Diagnosis table of Provider Adult Form A;
- Page 17: The total for Marital Status of Adult Consumer Form B;
- Page 18: The total for Employment Status of Adult Consumer Form B

## Purpose of the Report

The purpose of this report is to provide constituents in the mental health system with statewide data that they can use to compare an individual's scores or average agency or board area scores.

This report is organized into three major sections, consistent with the three distinct populations surveyed by the Consumer Outcomes System's instruments:

- 1) **Adult A:** Adults with Severe and Persistent Mental Illness (beginning on page 2)
- 2) **Adult B:** Adults with Less Severe Mental Illnesses (General Mental Health Population) (beginning on page 15)
- 3) **Youth** (beginning on page 24).

Demographic and Outcomes status data, for all ratings contained in the statewide database as of October 6, 2004 with administration dates during Fiscal Year (FY) 2004 (July 1, 2003 – June 30, 2004), are presented for each section. As the Consumer Outcomes System includes two instruments for adults with severe and persistent mental illness (Adult Consumer Form A and Provider Form A) demographic and Outcomes status data are presented separately for each Adult A instrument.

Each "Outcomes Status" section attempts to demonstrate the impact of time in treatment by including bar graphs that display average scores for several categories of ratings based on the length of time between the date of agency admission and the date of Outcomes survey administration. As all FY04 ratings are included in these bar graphs, it is important to remember that an individual could be represented in more than one of the rating categories (e.g., "30 days" as well as "180 days"), or represented more than once in a single rating category (e.g., have two ratings in the "1 year" category). In addition, the length of time between the date of agency admission and date of Outcomes survey administration does not provide a measure of the length of time someone has received mental health services (i.e., individuals may have received services at another agency or been previously discharged and readmitted to their current service agency).

Recommendations for additional content items, as well as suggestions for improvement, are always welcome. Please direct your comments to Kwok Kwan Tam in the Office of Program Evaluation and Research at the Ohio Department of Mental Health (E-mail: [tamk@mh.state.oh.us](mailto:tamk@mh.state.oh.us); Phone: (614)752-9706).

## ADULT A: Adults with Severe and Persistent Mental Illness

The Ohio Mental Health Consumer Outcomes System includes two instruments for adults with severe and persistent mental illness: 1) Adult Consumer Form A, and 2) Provider Form A. For each instrument, demographic and Outcomes data are summarized.

### Adult Consumer Form A: Demographics

As of October, 2004 the statewide Outcomes database contained 26,033 Adult Consumer Form A ratings from 22,574 individuals with administration dates during FY04. These data were submitted by 36 of Ohio's 50 board areas.

In the following tables, the “**Outcomes Received**” group includes the 22,574 individuals in the statewide database. MACSIS Claims and Enrollment data were used in order to determine the extent to which the data received are representative of what is expected in terms of major demographic characteristics. The “**Outcomes Expected**” group includes 76,781 individuals who were at least 18 years of age with an eligible claim submitted for FY04<sup>1</sup>.

The following tables compare the demographic characteristics of the “Outcomes Received” group with the “Outcomes Expected” group for a number of variables, and also present demographic variables that are only collected from the “Outcomes Received” group<sup>2</sup>.

#### Gender

There are differences of less than two percent in the percentages of gender in the “Outcomes Received” and “Outcomes Expected” groups.

	Outcomes Received (N=22,574)	Outcomes Expected (N=76,781)
Female	56.2%	55.7%
Male	43.1%	44.3%
Missing	0.7.%	<0.1%
TOTAL	100%	100%

#### Race

Compared to the “Outcomes Expected” group, the “Outcomes Received” group is made up of 3.3% fewer Blacks/African-Americans. Differences of less than two percent exist between the two groups for the other racial categories.

	Outcomes Received (N=22,574)	Outcomes Expected (N=76,781)
White/Caucasian	69.3%	69.3%
Black/African-Am.	22.3%	25.6%
Hispanic/Latino	1.2%	0.4%
Native Am./P.I.	0.8%	0.4%
Asian	0.3%	0.4%
Multi-racial	3.1%	1.6%
Unknown/Missing	3.0%	2.3%
TOTAL	100%	100%

<sup>1</sup> Eligible claims were determined by the criteria set forth in The Ohio Mental Health Consumer Outcomes System: Procedural Manual, p. 3-9. However, 3,063 (13.6%) individuals with Outcomes on Adult Consumer Form A had claims only for individual counseling, group counseling, or medication somatic from the MACSIS data.

<sup>2</sup> Gender, race, age and primary diagnosis data are from MACSIS Claims and Enrollment.

## Age

On average, the “Outcomes Received” group (mean=42.9, S.D.=12.9 ) is slightly younger than the “Outcomes Expected” group (mean=43.1, S.D.=13.9).

	Outcomes Received (N=22,574)	Outcomes Expected (N=76,781)
≤24	9.0%	10.7%
25-34	18.0%	17.2%
35-44	27.2%	25.8%
45-54	28.5%	27.4%
55-64	12.4%	12.5%
65+	4.8%	6.5%
Missing	-	<0.1%
TOTAL	100%	100%

## Primary Diagnosis

Approximately 83% of the ratings in the “Outcomes Received” group are from individuals who have primary diagnoses that fall under the categories of “Schizophrenia and Other Psychotic Disorders” or “Mood Disorders.” The “Outcomes Received” group is comprised of 2.1% less and 5.7% more than the “Outcomes Expected” group for individuals diagnosed with schizophrenia and other psychotic disorders and mood disorders respectively.

	Outcomes Received (N=22,574)	Outcomes Expected (N=76,781)
Substance-Related Disorders	<b>1.9%</b>	<b>2.1%</b>
Schizophrenia & Other Psychotic Disorders	<b>32.1%</b>	<b>34.2%</b>
Mood Disorders (includes Depressive, Bipolar, Other)	<b>51.2%</b>	<b>49.1%</b>
A. Depressive Disorders	30.9%	30.9%
B. Bipolar Disorders	17.7%	16.5%
C. All Other Mood Disorders	2.6%	1.7%
Anxiety Disorders	<b>5.3%</b>	<b>4.7%</b>
Adjustment Disorders	<b>2.8%</b>	<b>3.6%</b>
Personality Disorders	<b>0.9%</b>	<b>1.2%</b>
All Other Diagnoses <sup>3</sup>	<b>2.6%</b>	<b>3.5%</b>
Missing	<b>3.2%</b>	<b>1.6%</b>
TOTAL	100%	100%

<sup>3</sup> Other diagnoses include attention-deficit and disruptive behavior disorders, delirium, dementia, amnesic disorders, impulse-control disorders, mental disorders due to a general medical condition, dissociative disorders, and sexual and gender identity disorders.

**Education** (only collected from individuals with Outcomes data)

Approximately a third of the ratings in the “Outcomes Received” group are from individuals who indicated they do not have a high school diploma/GED; another 28% are from individuals who indicated the highest degree they have obtained is a high school diploma/GED. About one-quarter are from individuals who indicated they have received further education—five percent from those having earned at least a four-year degree.

	Outcomes Received	
	Number	Percent
<H.S. diploma/GED	7,397	32.8%
H.S. diploma/GED	6,210	27.5%
>H.S. diploma/GED & <4 yr degree	4,637	20.5%
4 yr degree and above	1,089	4.8%
Missing	3,241	14.4%
TOTAL	22,574	100%

**Marital Status** (only collected from individuals with Outcomes data)

Thirty-five percent of the ratings in the “Outcomes Received” group are from individuals who reported they have never been married. Another 29% are from divorced or separated individuals.

	Outcomes Received	
	Number	Percent
Never married	7,951	35.2%
Married	2,493	11.0%
Separated	1,279	5.7%
Divorced	5,183	23.0%
Widowed	761	3.4%
Living together	511	2.3%
Missing	4,396	19.5%
TOTAL	22,574	100%

**Living Situation** (only collected from individuals with Outcomes data)

Forty-four percent of the individuals in the “Outcomes Received” group reported living in their own house/apartment; 15% reported living in a relative’s home.

	Outcomes Received	
	Number	Percent
Your own house/apartment	9,944	44.1%
Friend's home	1,036	4.6%
Relative's home	3,434	15.2%
Supervised living	1,619	7.2%
Nursing facility	201	0.9%
Foster care	43	0.2%
MH treatment facility	158	0.7%
Homeless	613	2.7%
Correctional facility	57	0.3%
Other	1,136	5.0%
Missing	4,333	19.2%
TOTAL	22,574	100%

**Employment Status** (only collected from individuals with Outcomes data)

Fifty-eight percent of the ratings in the “Outcomes Received” group are from individuals who reported they are either unemployed or disabled. Twelve percent are from individuals who reported working full or part time.

	Outcomes Received	
	Number	Percent
Full time	1,060	4.7%
Part time	1,530	6.8%
Sheltered employment	208	0.9%
Unemployed	5,965	26.4%
Homemaker	564	2.5%
Student	182	0.8%
Retired	571	2.5%
Disabled	7,179	31.8%
Inmate of institution	74	0.3%
Other	305	1.4%
Missing	4,936	21.9%
TOTAL	22,574	100%

## Adult Consumer Form A: Outcome Status

The following graphs summarize the 26,033 Adult Consumer Form A ratings in the statewide Outcomes database with administration dates during FY04. They demonstrate the impact of time in treatment as measured by the length of time between the date of agency admission and the date of Outcomes survey administration.

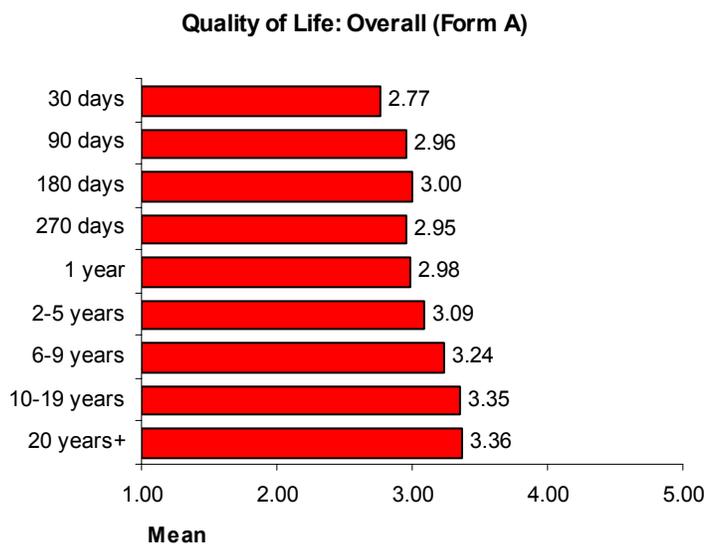
### SCALES

Adult Consumer Form A includes three scales: 1) Quality of Life, 2) Symptom Distress, and 3) Empowerment. In addition, data are presented for the Quality of Life Financial subscale.

#### Quality of Life: Overall

The Overall Quality of Life scale is the average of the first 12 items on Adult Consumer Form A (Part 1, Questions 1-12). These items assess satisfaction with various aspects of consumers' lives including satisfaction with friendships, finances, family relationships, and living arrangements. The scale ranges from one to five, with higher scores indicating greater satisfaction with quality of life.

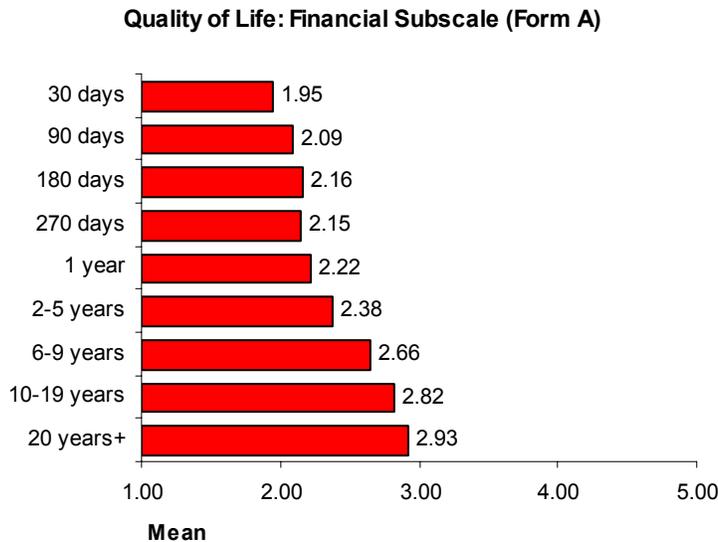
As displayed in the following graph, average Quality of Life scale scores generally increase as the amount of time between the date of admission and date of administration increases.



	N	Mean	SD
30 days	4,917	2.77	0.78
90 days	913	2.96	0.80
180 days	1,073	3.00	0.78
270 days	731	2.95	0.74
1 year	1,949	2.98	0.75
2-5 years	5,930	3.09	0.75
6-9 years	2,883	3.24	0.74
10-19 years	2,635	3.35	0.73
20 years+	491	3.36	0.74

## Quality of Life: Financial Subscale

The Financial subscale is the average of three Overall Quality of Life scale items pertaining to satisfaction with finances (Part 1, Questions 2-4). As with the Overall Quality of Life scale, the Financial subscale ranges from one to five, with higher scores indicating greater satisfaction with finances. Similar to the Overall Quality of Life scale, average Financial subscale scores increase as the amount of time between the date of admission and date of administration increases.

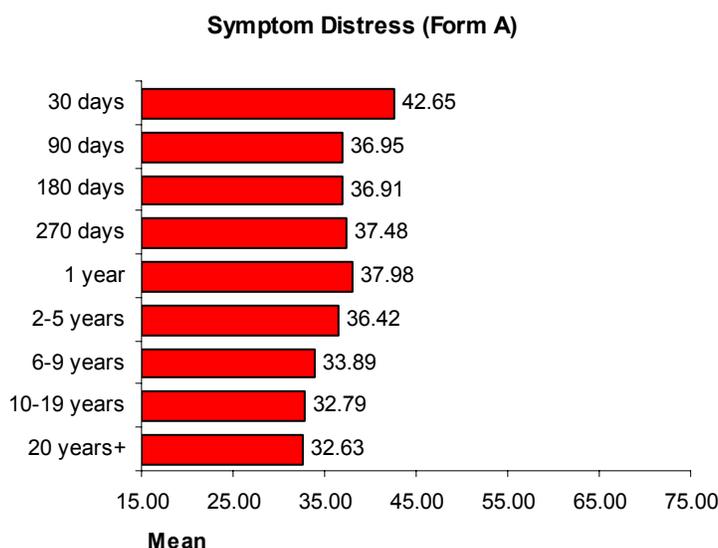


	N	Mean	SD
30 days	4,735	1.95	1.02
90 days	920	2.09	1.10
180 days	1,076	2.16	1.11
270 days	715	2.15	1.08
1 year	1,911	2.22	1.09
2-5 years	5,725	2.38	1.08
6-9 years	2,786	2.66	1.09
10-19 years	2,563	2.82	1.11
20 years+	485	2.93	1.13

## Symptom Distress

The Symptom Distress scale is the sum of 15 Adult Consumer Form A items (Part 3, Questions 17-31), and was designed to measure the amount of distress caused by psychiatric symptoms. Scale scores range from 15 to 75; higher scores indicate more symptom distress.

Average Symptom Distress scale scores generally decrease, indicating improvement, as the amount of time between the date of admission and date of administration increases. The most significant drop occurs between the "30 days" and the "90 days" categories.

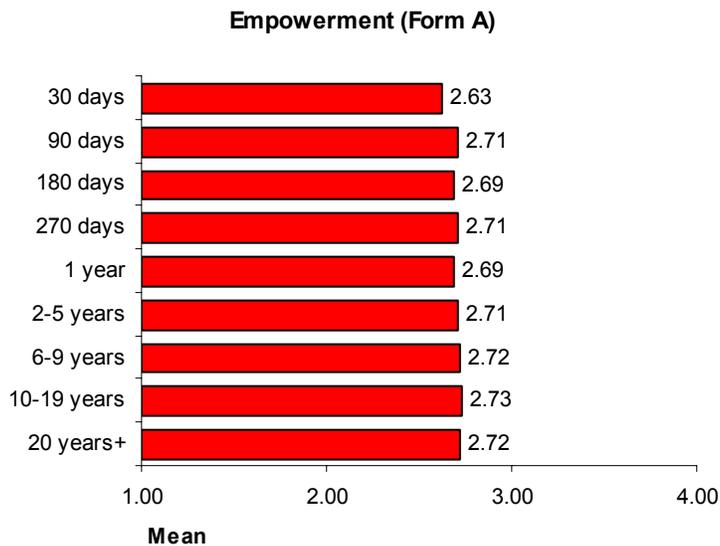


	N	Mean	SD
30 days	5,074	42.65	15.22
90 days	927	36.95	14.67
180 days	1,098	36.91	14.40
270 days	739	37.48	14.33
1 year	1,988	37.98	14.39
2-5 years	6,092	36.42	14.20
6-9 years	2,918	33.89	13.42
10-19 years	2,701	32.79	12.81
20 years+	493	32.62	12.63

## Empowerment: Overall

The Overall Empowerment scale is the average of 28 items on Adult Consumer Form A (Part 4, Questions 34-61). It was designed to measure the construct of personal empowerment as defined from a consumer perspective. Scale scores range from one to four, with higher scores indicative of greater empowerment.

Average Overall Empowerment scale scores remain fairly consistent across the various categories of ratings based on the length of time between the date of agency admission and the date of Outcomes survey administration.



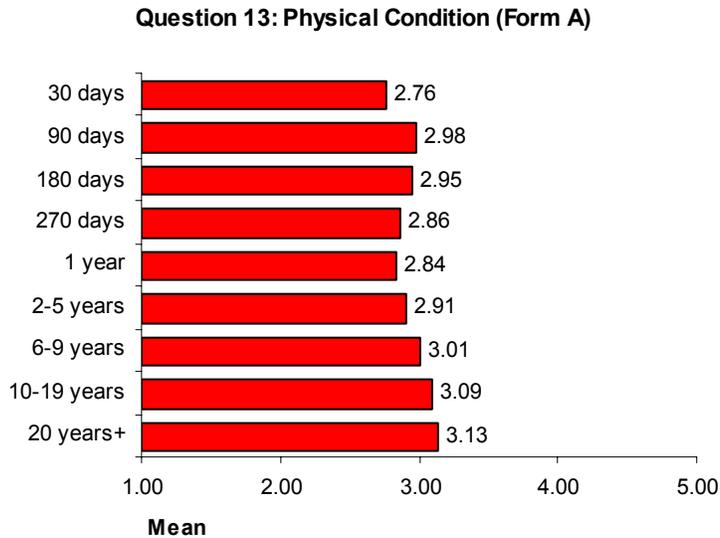
	N	Mean	SD
30 days	4,655	2.63	0.35
90 days	872	2.71	0.35
180 days	1,045	2.69	0.33
270 days	708	2.71	0.32
1 year	1,877	2.69	0.33
2-5 years	5,754	2.71	0.33
6-9 years	2,737	2.72	0.33
10-19 years	2,549	2.73	0.31
20 years+	475	2.72	0.29

## INDIVIDUAL ITEMS

Adult Consumer Form A contains six questions that are not included in any of the scales or subscales (Questions 13-16, 32 and 33). The following graphs display average scores for several categories of ratings based on the length of time between the date of agency admission and the date of Outcomes survey administration.

### Question 13

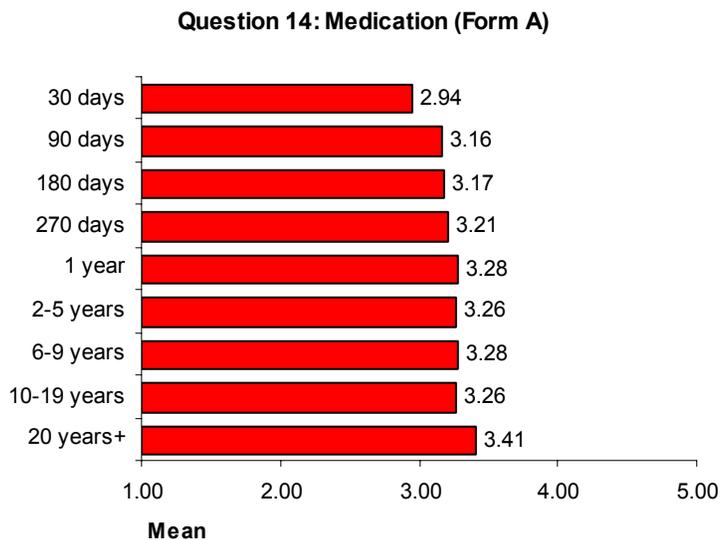
How often does your physical condition interfere with your day-to-day functioning?  
1=Always; 5=Never



	N	Mean	SD
30 days	5,298	2.76	1.34
90 days	897	2.98	1.31
180 days	1,065	2.95	1.31
270 days	721	2.86	1.24
1 year	1,945	2.84	1.28
2-5 years	5,963	2.91	1.26
6-9 years	2,849	3.01	1.23
10-19 years	2,632	3.09	1.20
20 years+	485	3.13	1.17

### Question 14

Concerns about my medications (such as side effects, dosage, type of medication) are addressed:  
1=Never; 5=Always

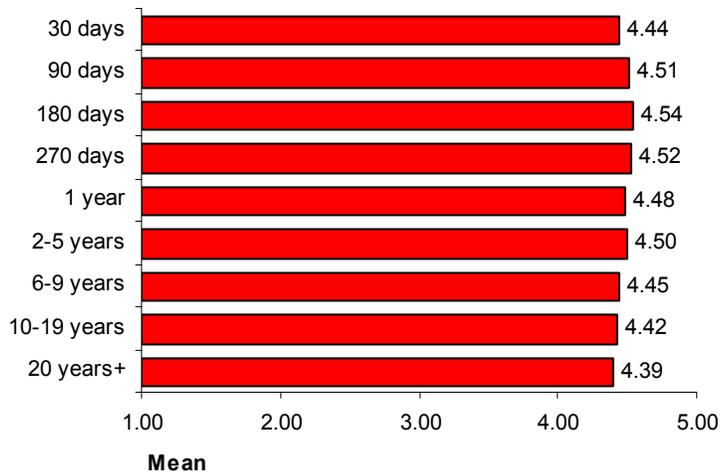


	N	Mean	SD
30 days	4,673	2.94	1.36
90 days	857	3.16	1.34
180 days	1,052	3.17	1.35
270 days	724	3.21	1.31
1 year	1,914	3.28	1.31
2-5 years	5,935	3.26	1.31
6-9 years	2,854	3.28	1.29
10-19 years	2,633	3.26	1.34
20 years+	478	3.41	1.34

### Question 15

I have been treated with dignity and respect at this agency.  
1=Never; 5=Always

**Question 15: Treated with Dignity & Respect (Form A)**

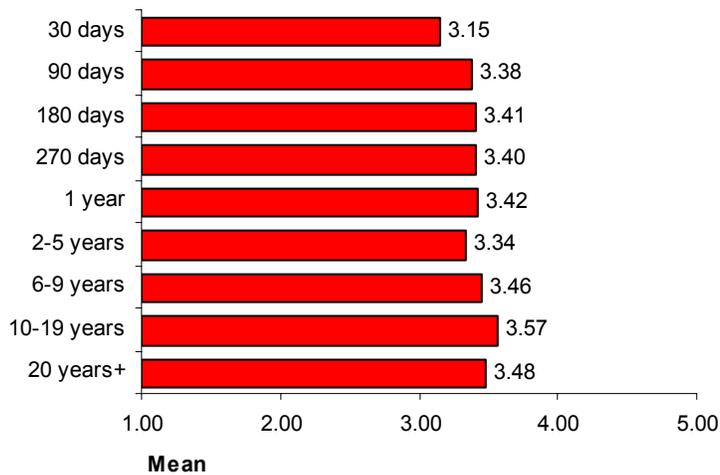


	N	Mean	SD
30 days	4,525	4.39	0.99
90 days	910	4.51	0.87
180 days	1,096	4.54	0.85
270 days	740	4.52	0.85
1 year	2,001	4.48	0.90
2-5 years	6,114	4.50	0.85
6-9 years	2,925	4.45	0.86
10-19 years	2,694	4.42	0.88
20 years+	491	4.39	0.97

### Question 16

How often do you feel threatened by people's reactions to your mental health problems?  
1=Always; 5=Never

**Question 16: Felt Threatened by People's Reactions (Form A)**

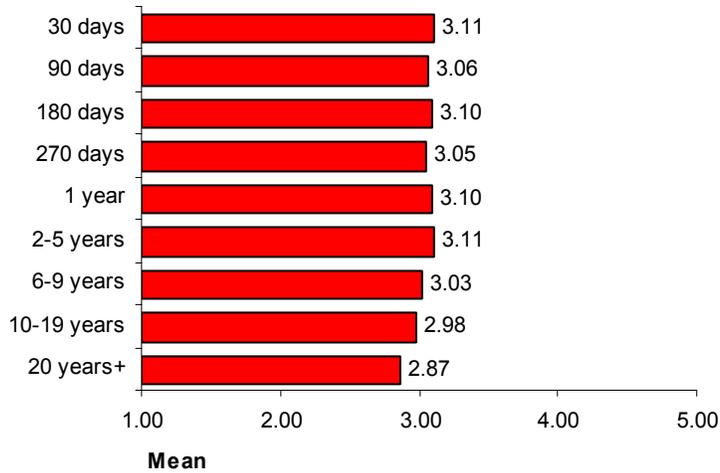


	N	Mean	SD
30 days	5,236	3.15	1.36
90 days	912	3.38	1.31
180 days	1,081	3.41	1.31
270 days	735	3.40	1.26
1 year	1,987	3.42	1.27
2-5 years	6,086	3.34	1.27
6-9 years	2,890	3.46	1.23
10-19 years	2,663	3.57	1.19
20 years+	487	3.48	1.24

### Question 32

How often can you tell when mental or emotional problems are about to occur?  
1=Never; 5=Always

**Question 32: Tell When Problems to Occur (Form A)**

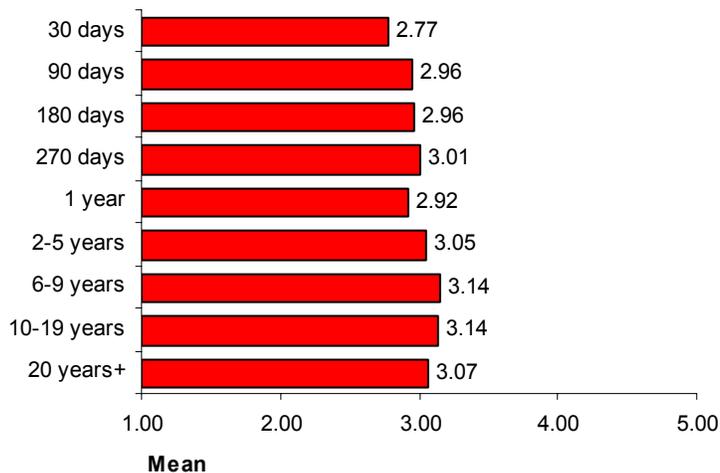


	N	Mean	SD
30 days	5,347	3.11	1.19
90 days	911	3.06	1.20
180 days	1,077	3.10	1.16
270 days	735	3.05	1.11
1 year	1,989	3.10	1.13
2-5 years	6,079	3.11	1.15
6-9 years	2,880	3.03	1.17
10-19 years	1,665	2.98	1.20
20 years+	490	2.87	1.20

### Question 33

When you can tell, how often can you take care of the problems before they become worse?  
1=Never; 5=Always

**Question 33: Take Care of Problems (Form A)**



	N	Mean	SD
30 days	5,255	2.77	1.09
90 days	901	2.96	1.13
180 days	1,078	2.96	1.09
270 days	719	3.01	1.02
1 year	1,980	2.92	1.07
2-5 years	6,031	3.05	1.07
6-9 years	2,836	3.14	1.10
10-19 years	2,644	3.14	1.13
20 years+	481	3.07	1.14

## Provider Form A: Demographics

As of October 6, 2004 the statewide Outcomes database contained 28,677 Provider Form A ratings of 24,460 individuals with administration dates during FY04. These data were submitted by 35 of Ohio's 50 board areas.

In the following tables, the “**Outcomes Received**” group includes the 24,460 individuals in the statewide database. MACSIS Claims and Enrollment data were used in order to determine the extent to which the data received are representative of what is expected in terms of major demographic characteristics. The “**Outcomes Expected**” group<sup>4</sup> includes 76,781 individuals who were at least 18 years of age with an eligible claim submitted for FY04<sup>5</sup>.

The following tables compare the demographic characteristics of the “Outcomes Received” group with the “Outcomes Expected” group<sup>6</sup>.

### Gender

The distribution of gender in both the “Outcomes Received” group and the “Outcomes Expected” group show very little difference.

	Outcomes Received (N=24,460)	Outcomes Expected (N=76,781)
Female	56.1%	55.7%
Male	42.2%	44.3%
Missing	1.7%	<0.1%
TOTAL	100%	100%

### Race

Compared to the “Outcomes Expected” group, the “Outcomes Received” group is made up of 2.7% fewer Blacks/African-Americans. Differences of less than two percent exist between the two groups for the other racial categories.

	Outcomes Received (N=24,460)	Outcomes Expected (N=76,781)
White/Caucasian	69.4%	69.3%
Black/African-Am.	22.9%	25.6%
Hispanic/Latino	0.2%	0.4%
Native Am./P.I.	0.3%	0.4%
Asian	0.4%	0.4%
Multi-racial	1.5%	1.6%
Unknown/Missing	4.1%	2.3%
TOTAL	100%	100%

<sup>4</sup> The “Outcomes Expected” group for Provider Form A is equivalent to the “Outcomes Expected” group for Adult Consumer Form A.

<sup>5</sup> Eligible claims were determined by the criteria set forth in The Ohio Mental Health Consumer Outcomes System: Procedural Manual, p. 3-9. However, 3,498 (14.3%) individuals submitted Outcomes on Provider Form A for persons who had claims only for individual counseling, group counseling, or medication somatic from the MACSIS data.

<sup>6</sup> Gender, race, age and primary diagnosis data are from MACSIS Claims and Enrollment.

## Age

On average, the “Outcomes Received” group (mean=43.0, S.D.=13.2) is similar to the “Outcomes Expected” group (mean 43.1, S.D.=13.9).

	Outcomes Received (N=24,460)	Outcomes Expected (N=76,781)
≤24	9.3%	10.7%
25-34	18.0%	17.2%
35-44	26.9%	25.8%
45-54	27.9%	27.4%
55-64	12.5%	12.5%
65+	5.4%	6.5%
Missing	-	<0.1%
TOTAL	100%	100%

## Primary Diagnosis

Approximately 85% of the ratings in the “Outcomes Received” group are from individuals who have primary diagnoses that fall under the categories of “Schizophrenia and Other Psychotic Disorders” or “Mood Disorders.” There is a similar pattern in the distribution of various diagnostic groups between “Outcomes Received” group and “Outcomes Expected” group, but there is a higher percentage of mood disorders in the “Outcomes Received” group.

	Outcomes Received (N=24,460)	Outcomes Expected (N=76,781)
Substance-Related Disorders	<b>1.6%</b>	<b>2.1%</b>
Schizophrenia & Other Psychotic Disorders	<b>32.3%</b>	<b>34.2%</b>
Mood Disorders (includes Depressive, Bipolar, Other)	<b>52.7%</b>	<b>49.1%</b>
A. Depressive Disorders	32.3%	30.9%
B. Bipolar Disorders	17.7%	16.5%
C. All Other Mood Disorders	2.9%	1.7%
Anxiety Disorders	<b>5.3%</b>	<b>4.7%</b>
Adjustment Disorders	<b>3.2%</b>	<b>3.6%</b>
Personality Disorders	<b>0.9%</b>	<b>1.2%</b>
All Other Diagnoses <sup>7</sup>	<b>2.7%</b>	<b>3.5%</b>
Missing	<b>1.1%</b>	<b>1.6%</b>
TOTAL	100%	100%

<sup>7</sup> Other diagnoses include attention-deficit and disruptive behavior disorders, delirium, dementia, amnesic disorders, impulse-control disorders, mental disorders due to a general medical condition, dissociative disorders, and sexual and gender identity disorders.

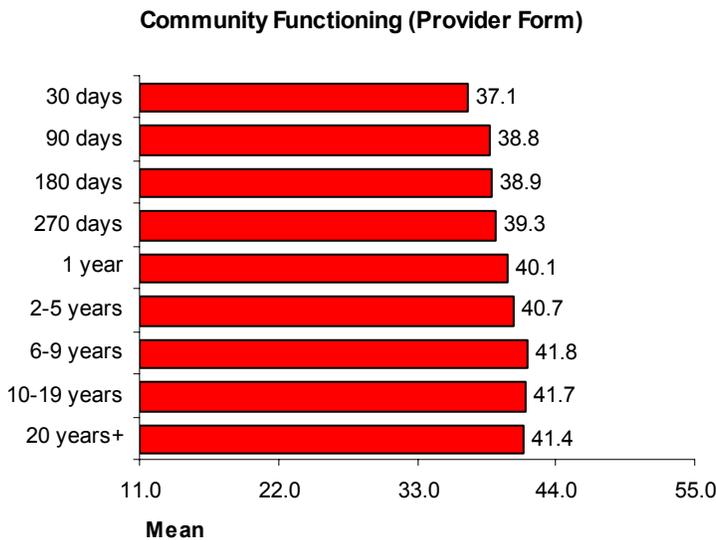
## Provider Form A: Outcome Status

The following graphs summarize the 28,677 Provider Form A ratings in the statewide Outcomes database with administration dates during FY04. They demonstrate the impact of time in treatment as measured by the length of time between the date of agency admission and the date of Outcomes survey administration.

### Community Functioning

The Community Functioning scale is the sum of recoded questions one through eleven<sup>8</sup>. These items measure functional status, as well as safety and health, and include questions pertaining to social support, housing stability, performance of day-to-day living activities, and participation in meaningful activities. The scale ranges from 11 to 55, with higher scores indicating better community functioning.

Average Community Functioning scale scores gradually increase as the amount of time between the date of admission and administration increases.



	N	Mean	SD
30 days	5,386	37.1	6.9
90 days	1,121	38.8	6.9
180 days	1,388	38.9	6.8
270 days	995	39.3	6.9
1 year	2,434	40.1	6.6
2-5 years	7,320	40.7	6.1
6-9 years	3,245	41.8	5.6
10-19 years	3,235	41.7	5.4
20 years+	663	41.4	5.6

<sup>8</sup> Details regarding the computation of this scale can be found in [The Ohio Mental Health Consumer Outcomes System: Procedural Manual](#), p. 6-14.

## **ADULT B: Adults with Less Severe Mental Illnesses (General Mental Health Population)**

The Ohio Mental Health Consumer Outcomes System includes one instrument for adults with less severe mental illnesses: Adult Consumer Form B. There is not a Provider Form for this population.

### **Adult Consumer Form B: Demographics**

As of October 6, 2004 the statewide Outcomes database contained 24,824 Adult Consumer Form B ratings from 20,975 individuals with administration dates during FY04. These data were submitted by 38 of Ohio's 50 board areas.

In the following tables, the “**Outcomes Received**” group includes the 20,975 individuals in the statewide database. MACSIS Claims and Enrollment data were used in order to determine the extent to which the data received are representative of what is expected in terms of major demographic characteristics. The “**Outcomes Expected**” group includes 77,520 individuals who were at least 18 years of age with an eligible claim submitted for FY04<sup>9</sup>

The following tables compare the demographic characteristics of the “Outcomes Received” group with the “Outcomes Expected” group for a number of variables, and also present demographic variables that are only collected from the “Outcomes Received” group<sup>10</sup>.

#### **Gender**

The percentages of females in the “Outcomes Received” and “Outcomes Expected” groups are similar.

	Outcomes Received (N=20,975)	Outcomes Expected (N=77,520)
Female	59.9%	61.7%
Male	39.7%	38.3%
Missing	0.4%	<0.1%
TOTAL	100%	100%

#### **Race**

Compared to the “Outcomes Expected” group, the “Outcomes Received” group is made up of fewer Whites/Caucasians and about 10% with missing/unknown racial information. Differences of less than two percent exist between the two groups for the other racial categories.

	Outcomes Received (N=20,957)	Outcomes Expected (N=77,520)
White/Caucasian	71.2%	82.6%
Black/African-Am.	13.4%	13.5%
Hispanic/Latino	1.0%	0.4%
Native Am./P.I.	0.7%	0.3%
Asian	0.3%	0.2%
Multi-racial	3.0%	1.3%
Unknown/Missing	10.5%	1.7%
TOTAL	100%	100%

<sup>9</sup> Eligible claims were determined by the criteria set forth in The Ohio Mental Health Consumer Outcomes System: Procedural Manual, p. 3-9. However, 3,459 (16.5%) individuals submitting Outcomes with Adult Consumer Form B had claims other than those in individual counseling, group counseling, or medication somatic from the MACSIS data, i.e. they should have been submitted on Adult Consumer Form A instead.

<sup>10</sup> Gender, race, age and primary diagnosis data are from MACSIS Claims and Enrollment.

## Age

On average, the “Outcomes Received” group (mean=37.3, S.D.=13.0) is slightly younger than the “Outcomes Expected” group (mean=38.3, S.D.=13.4).

	Outcomes Received (N=20,975)	Outcomes Expected (N=77,520)
≤24	17.4%	17.0%
25-34	29.9%	26.3%
35-44	26.0%	25.6%
45-54	17.2%	19.4%
55-64	6.1%	8.2%
65+	3.3%	3.5%
Missing	-	-
TOTAL	100%	100%

## Primary Diagnosis

Forty-four percent of the ratings in the “Outcomes Received” group are from individuals who have primary diagnoses that are included in the “Mood Disorders” category; 21% have diagnoses in the “Adjustment Disorders” category. The “Outcomes Received” group contains fewer individuals with mood disorders, and more individuals with adjustment disorders and substance-related disorders, than the “Outcomes Expected” group.

	Outcomes Received (N=20,975)	Outcomes Expected (N=77,520)
Substance-Related Disorders	<b>6.4%</b>	<b>3.6%</b>
Schizophrenia & Other Psychotic Disorders	<b>5.1%</b>	<b>6.7%</b>
Mood Disorders (includes Depressive, Bipolar, Other)	<b>44.0%</b>	<b>50.8%</b>
A. Depressive Disorders	31.5%	36.4%
B. Bipolar Disorders	8.9%	11.4%
C. All Other Mood Disorders	3.6%	3.0%
Anxiety Disorders	<b>10.4%</b>	<b>11.4%</b>
Adjustment Disorders	<b>20.7%</b>	<b>15.5%</b>
Personality Disorders	<b>0.6%</b>	<b>1.2%</b>
All Other Diagnoses <sup>11</sup>	<b>7.7%</b>	<b>5.2%</b>
Missing	<b>5.0%</b>	<b>2.5%</b>
TOTAL	100%	100%

<sup>11</sup> Other diagnoses include attention-deficit and disruptive behavior disorders, delirium, dementia, amnesic disorders, impulse-control disorders, mental disorders due to a general medical condition, dissociative disorders, and sexual and gender identity disorders.

**Education** (only collected from individuals with Outcomes data)

Twenty-eight percent of the ratings in the “Outcomes Received” group are from individuals who indicated they do not have a high school diploma/GED; 35% are from individuals who indicated the highest degree they have obtained is a high school diploma/GED. Twenty-nine percent are from individuals who indicated they have received further education—five percent from those having earned at least a four-year degree.

	Outcomes Received	
	Number	Percent
<H.S. diploma/GED	5,894	28.1%
H.S. diploma/GED	7,266	34.6%
>H.S. diploma/GED & <4 yr degree	5,050	24.1%
4 yr degree and above	1,056	5.0%
Missing	1,709	8.1%
TOTAL	20,975	100%

**Marital Status** (only collected from individuals with Outcomes data)

Twenty-seven percent of the ratings in the “Outcomes Received” group are from individuals who reported they have never been married. Slightly less than a third of the sample is divorced or separated individuals, and 15% are individuals who reported they are married.

	Outcomes Received	
	Number	Percent
Never married	5,587	26.6%
Married	3,172	15.1%
Separated	1,295	8.8%
Divorced	3,397	23.2%
Widowed	477	3.3%
Living together	742	5.1%
Missing	6,305	30.1%
TOTAL	20,975	100%

**Living Situation** (only collected from individuals with Outcomes data)

Forty-five percent of the individuals in the “Outcomes Received” group reported living in their own house/apartment; another 20% reported living in a relative’s home.

	Outcomes Received	
	Number	Percent
Your own house/apartment	9,422	44.9%
Friend's home	1,627	7.8%
Relative's home	4,293	20.5%
Supervised living	549	2.6%
Nursing facility	328	1.6%
Foster care	15	0.1%
MH treatment facility	113	0.5%
Homeless	458	2.2%
Correctional facility	164	0.8%
Other	1,041	5.0%
Missing	2,965	14.1%
TOTAL	20,975	100%

**Employment Status** (only collected from individuals with Outcomes data)

Slightly less than half of the ratings in the “Outcomes Received” group are from individuals who reported they are either unemployed or disabled. Sixteen percent of the ratings are from individuals who reported working full-time and another 10% reported working part-time.

	Outcomes Received	
	Number	Percent
Full time	3,403	16.2%
Part time	2,032	9.7%
Sheltered employment	192	0.9%
Unemployed	7,437	35.5%
Homemaker	753	3.6%
Student	281	1.3%
Retired	476	2.3%
Disabled	2,698	12.9%
Inmate of institution	85	0.4%
Other	440	2.1%
Missing	3,178	15.2%
TOTAL	20,975	100%

## Adult Consumer Form B: Outcome Status

The following graphs summarize the 24,824 Adult Consumer Form B ratings in the statewide Outcomes database with administration dates during FY04. They demonstrate the impact of time in treatment as measured by the length of time between the date of agency admission and the date of Outcomes survey administration.

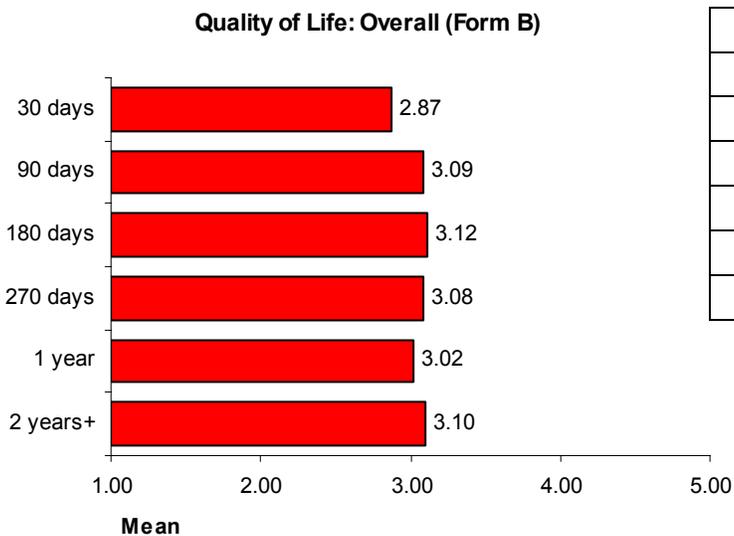
### SCALES

Adult Consumer Form B includes two scales: 1) Quality of Life, and 2) Symptom Distress. In addition, data are presented for the Quality of Life Financial subscale.

#### Quality of Life: Overall

The Overall Quality of Life scale is the average of the first 12 items on Adult Consumer Form B (Part 1, Questions 1-12). These items assess satisfaction with various aspects of consumers' lives including satisfaction with friendships, finances, family relationships, and living arrangements. The scale ranges from one to five, with higher scores indicating greater satisfaction with quality of life.

Average Overall Quality of Life scale scores improve from the "30 days" category to the "90 days" category and then remain fairly consistent across the various categories of ratings based on the length of time between the date of agency admission and the date of Outcomes survey administration.

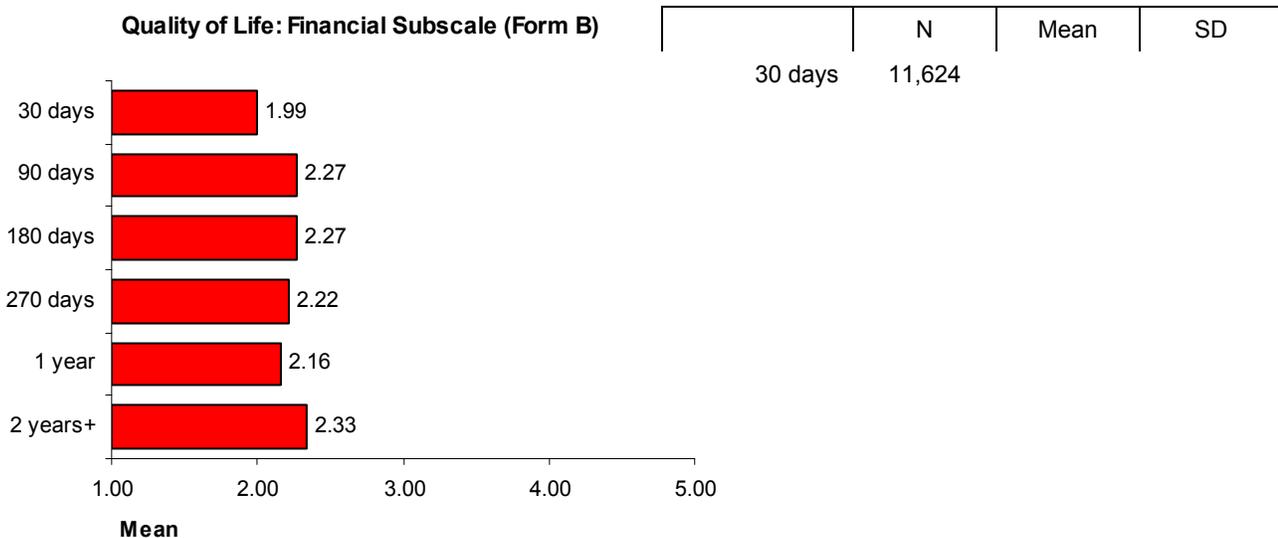


	N	Mean	SD
30 days	11,711	2.87	0.78
90 days	1,465	3.09	0.79
180 days	979	3.12	0.76
270 days	560	3.08	0.77
1 year	979	3.02	0.73
2 years+	2,013	3.10	0.76

## Quality of Life: Financial Subscale

The Financial subscale is the average of three Quality of Life scale items pertaining to satisfaction with finances (Part 1, Questions 2-4). As with the Overall Quality of Life scale, the Financial subscale ranges from one to five, with higher scores indicating greater satisfaction with finances.

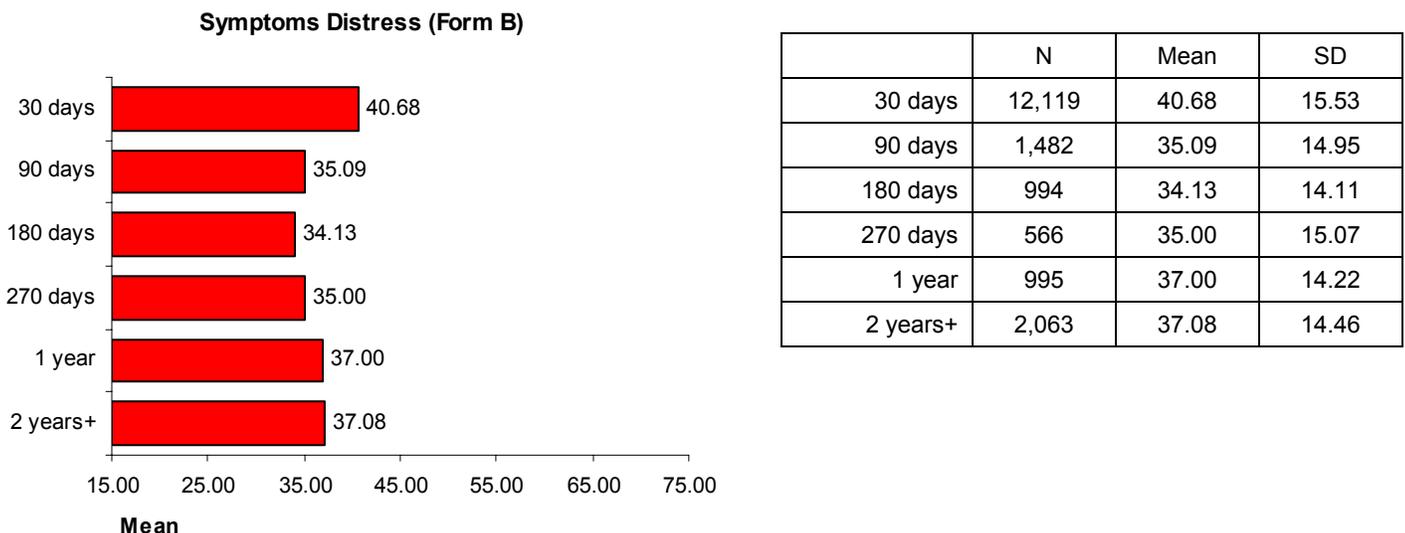
For the Quality of Life Financial Subscale the average score improves from the “30 days” category to the “90 days” category and then remains fairly consistent.



## Symptom Distress

The Symptom Distress scale is the sum of 15 Adult Consumer Form B items (Part 3, Questions 17-31), and was designed to measure the amount of distress caused by psychiatric symptoms. Scale scores range from 15 to 75; higher scores indicate more symptom distress.

The average Symptom Distress scale scores decrease, indicating improvement, within the first 180 days between the date of admission and survey administration. The average scores after 180 days show slightly higher levels of symptom distress.



## INDIVIDUAL ITEMS

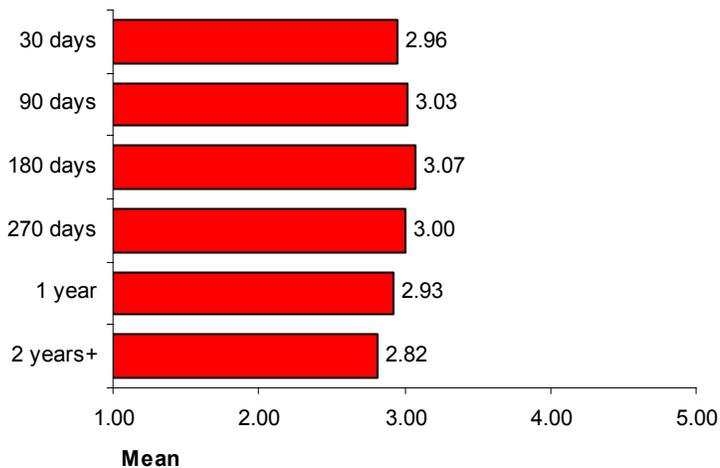
Adult Consumer Form B contains six questions that are not included in any of the scales (Questions 13-16, 32 and 33). The following graphs display average scores for several categories of ratings based on the length of time between the date of agency admission and the date of Outcomes survey administration.

### Question 13

How often does your physical condition interfere with your day-to-day functioning?

1=Always; 5=Never

**Question 13: Physical Condition (Form B)**



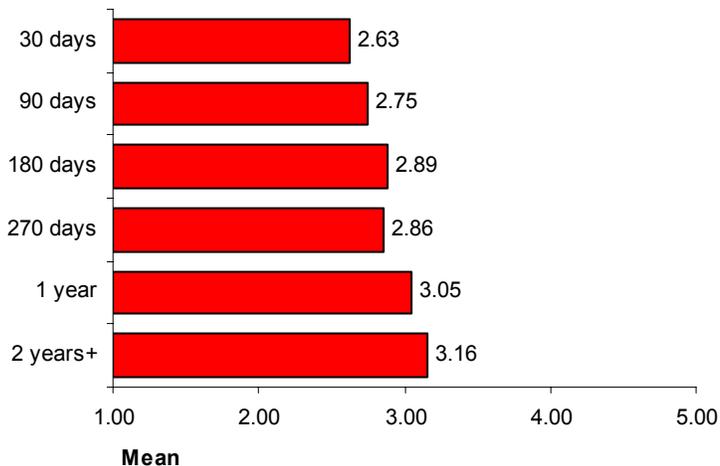
	N	Mean	SD
30 days	11,630	2.96	1.40
90 days	1,414	3.03	1.36
180 days	953	3.07	1.32
270 days	536	3.00	1.39
1 year	962	2.93	1.32
2 years+	2,020	2.82	1.26

### Question 14

Concerns about my medications (such as side effects, dosage, type of medication) are addressed:

1=Never; 5=Always

**Question 14: Medication (Form B)**

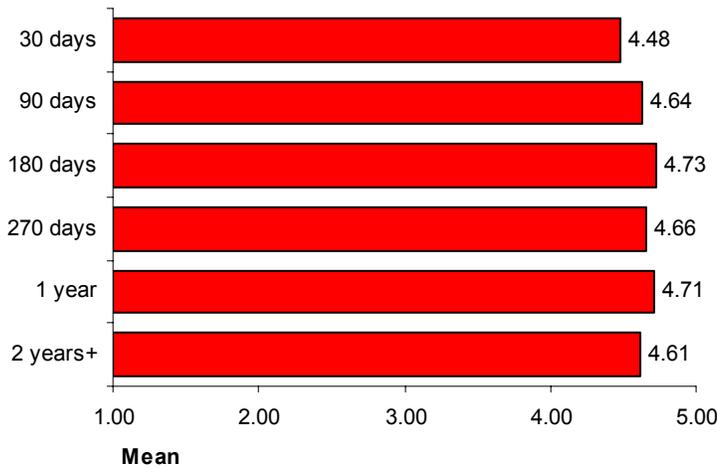


	N	Mean	SD
30 days	9,033	2.63	1.42
90 days	1,205	2.75	1.41
180 days	796	2.89	1.40
270 days	462	2.86	1.39
1 year	873	3.05	1.36
2 years+	1,876	3.16	1.34

### Question 15

I have been treated with dignity and respect at this agency.  
1=Never; 5=Always

**Question 15: Treated with Dignity & Respect (Form B)**

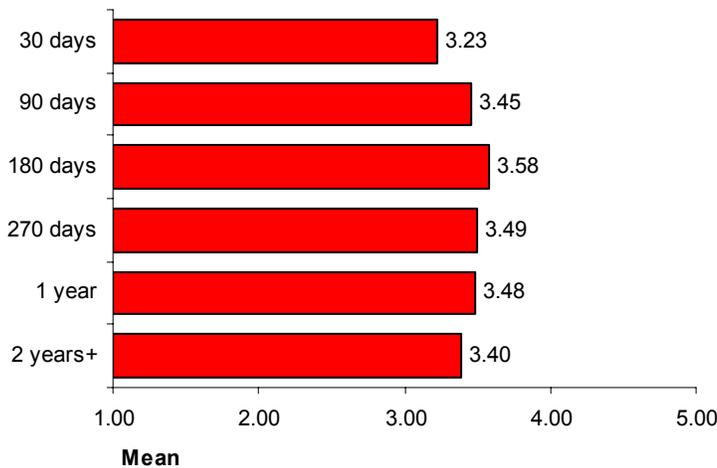


	N	Mean	SD
30 days	9,299	4.48	0.98
90 days	1,405	4.64	0.85
180 days			

### Question 16

How often do you feel threatened by people's reactions to your mental health problems?  
1=Always; 5=Never

**Question 16: Felt Threatened by People's Reactions (Form B)**

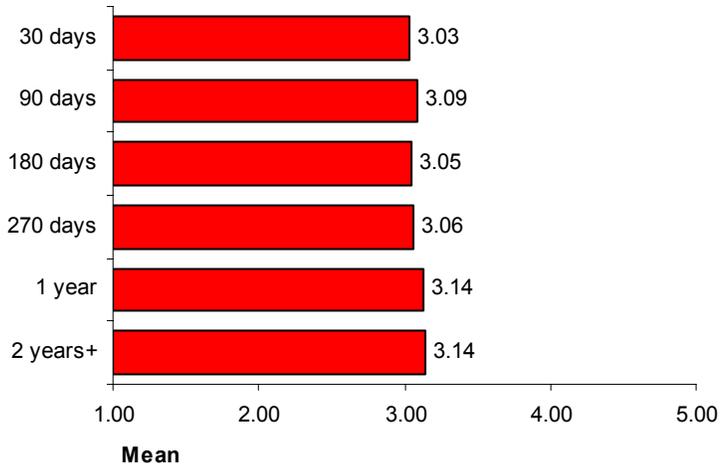


	N	Mean	SD
30 days	11,151	3.23	1.42
90 days	1,451	3.45	1.37
180 days	982	3.58	1.31
270 days	559	3.49	1.29
1 year	977	3.48	1.32
2 years+	2,053	3.40	1.27

### Question 32

How often can you tell when mental or emotional problems are about to occur?  
1=Never; 5=Always

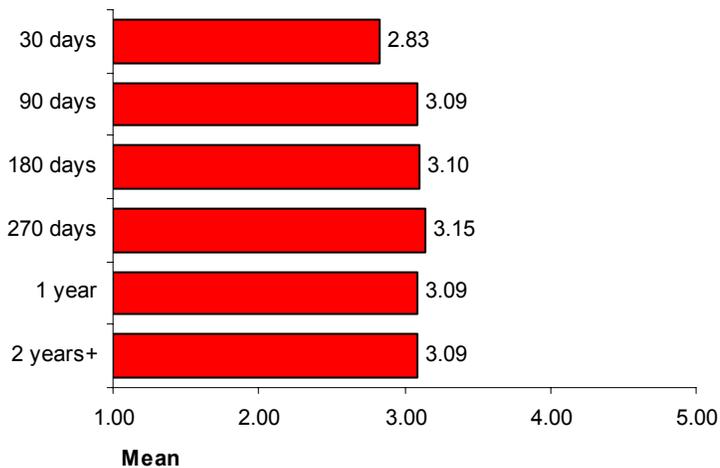
**Question 32: Tell When Problems to Occur (Form B)**



### Question 33

When you can tell, how often can you take care of the problems before they become worse?  
1=Never; 5=Always

**Question 33: Take Care of Problems (Form B)**



	N	Mean	SD
30 days	11,456	2.83	1.10
90 days	1,439	3.09	1.07
180 days	970	3.10	1.06
270 days	553	3.15	1.10
1 year	970	3.09	1.03
2 years+	2,021	3.09	1.03

## YOUTH

The Ohio Mental Health Consumer Outcomes System includes three instruments for youth: 1) Ohio Youth Problem, Functioning, and Satisfaction Scales *Youth Rating*—Short Form (Ages 12-18), 2) Ohio Youth Problem, Functioning, and Satisfaction Scales *Parent Rating*—Short Form, and 3) Ohio Youth Problem, Functioning, and Satisfaction Scales *Agency Worker Rating*—Short Form.

### Youth: Demographics

As of October 6, 2004 the statewide Outcomes database contained 17,846 Youth ratings from 13,496 individuals, 34,890 Parent ratings by 25,803 parents, and 34,989 Agency Worker ratings for 24,252 individuals with administration dates during FY04. These data were submitted by 39 of Ohio's 50 board areas.

In the following tables, the “**Outcomes Received**” groups include the 13,496 individuals completing Youth ratings, 25,803 Parent, and 24,252 from Agency Workers ratings in the statewide database. MACSIS Claims and Enrollment data were used in order to determine the extent to which the data received are representative of what is expected in terms of major demographic characteristics. For the Parent and Agency Worker forms, the “**Outcomes Expected**” group includes 78,383 individuals who were at least five years of age and less than 18 years of age with an eligible claim submitted for FY04<sup>12</sup>. Since only youth who are at least 12 years of age are expected to complete the Youth form, the “Outcomes Expected” group for the Youth form includes 45,076 individuals.

The following tables compare the demographic characteristics of the “Outcomes Received” groups with the “Outcomes Expected” groups<sup>13</sup>.

### Gender

There are more males than females in all three “Outcomes Received” groups from the three rating sources. For the Youth ratings, the “Outcomes Received” group is comprised of 2.5% fewer males than the “Outcomes Expected” group. For Parent and Agency Worker ratings, the distributions between the genders are very similar between “Outcomes Received” groups and the “Outcomes Expected” groups.

	RATING SOURCE					
	YOUTH		PARENT		AGENCY WORKER	
	Outcomes Received (N=13,496)	Outcomes Expected (N=45,076)	Outcomes Received (N=25,803)	Outcomes Expected (N=78,383)	Outcomes Received (N=24,252)	Outcomes Expected (N=78,383)
Female	46.2%	44.2%	40.5%	40.6%	40.7%	40.6%
Male	53.3%	55.8%	59.2%	59.4%	58.7%	59.4%
Missing	0.5%	-	0.3%	-	0.6%	-
TOTAL	100%	100%	100%	100%	100%	100%

<sup>12</sup> Eligible claims were determined by the criteria set forth in *The Ohio Mental Health Consumer Outcomes System: Procedural Manual*, p. 3-9.

<sup>13</sup> Gender, race, age and primary diagnosis data are from MACSIS Claims and Enrollment.

## Race

For all three ratings, the “Outcomes Received” groups of youth are made up of a smaller percentage of Whites/Caucasians and a larger percentage of Blacks/African-Americans than the “Outcomes Expected” groups. For Youth ratings the “Outcomes Received” group is comprised of 7.2% fewer Whites/Caucasians and 4.1% more Blacks/African-Americans. Differences between the two groups are slightly larger for both Parent ratings and the Agency Worker ratings. Across all three rating sources, there are differences of two percent or less between the two groups in other racial categories.

	RATING SOURCE					
	YOUTH		PARENT		AGENCY WORKER	
	Outcomes Received (N=13,496)	Outcomes Expected (N=45,076)	Outcomes Received (N=25,803)	Outcomes Expected (N=78,383)	Outcomes Received (N=24,252)	Outcomes Expected (N=78,383)
White/Caucasian	61.7%	68.9%	59.3%	67.9%	57.2%	67.9%
Black/African-Am.	30.2%	26.1%	31.8%	26.7%	33.5%	26.7%
Hispanic/Latino	1.5%	0.7%	1.6%	0.8%	1.6%	0.8%
Native Am./P.I.	0.5%	0.2%	0.3%	0.2%	0.4%	0.2%
Asian	0.1%	0.1%	0.2%	0.1%	0.1%	0.1%
Multi-racial	3.7%	1.8%	4.1%	2.1%	4.2%	2.1%
Unknown/Missing	2.8%	2.1%	2.8%	2.2%	3.0%	2.2%
TOTAL	100%	100%	100%	100%	100%	100%

## Age

Comparing the mean ages of the “Outcomes Received” group and the “Outcomes Expected” group, all three groups --Youth ratings (mean=14.9, S.D.=1.9), the Parent ratings (mean=12.1, S.D.=3.6), and the Agency Worker ratings (mean=12.2, S.D.=3.6)-- show very close means to the “Outcomes Expected” group (Youth mean=14.8, S.D.=1.9, and Overall mean=12.1, S.D.=3.6).

	RATING SOURCE					
	YOUTH		PARENT		AGENCY WORKER	
	Outcomes Received (N=13,496)	Outcomes Expected (N=45,076)	Outcomes Received (N=25,803)	Outcomes Expected (N=78,383)	Outcomes Received (N=24,252)	Outcomes Expected (N=78,383)
5-8	-	-	23.1%	20.0%	22.5%	20.0%
9-11	-	-	23.8%	22.5%	23.7%	22.5%
12-14	52.6%	46.8%	28.5%	26.9%	28.4%	26.9%
15+	47.4%	53.2%	24.5%	30.5%	25.3%	30.5%
Missing	-	-	-	-	-	-
TOTAL	100%	100%	100%	100%	100%	100%

## Primary Diagnosis

Over three-quarters of the ratings in the “Outcomes Received” groups are from individuals who have primary diagnoses that are included in the following three categories: “Attention-Deficit and Disruptive Behavior Disorders,” “Adjustment Disorders,” and “Mood Disorders.” Across all three rating sources, there are very small differences between the “Outcomes Received” group and the “Outcome Expected” group from all diagnostic groups. The largest difference is that there are three to four percent fewer cases from the “Attention Deficient/Hyperactive Disorder” category in the “Outcomes Received” group.

	RATING SOURCE					
	YOUTH		PARENT		AGENCY WORKER	
	Outcomes Received (N=13,496)	Outcomes Expected (N=45,076)	Outcomes Received (N=25,803)	Outcomes Expected (N=78,383)	Outcomes Received (N=24,252)	Outcomes Expected (N=78,383)
Attention-Deficit & Disruptive Behavior Disorders	<b>40.0%</b>	<b>40.9%</b>	<b>45.1%</b>	<b>45.1%</b>	<b>45.8%</b>	<b>45.1%</b>
A. Attention Deficit/Hyperactivity Disorder	13.4%	17.3%	20.5%	23.6%	20.2%	23.6%
B. Conduct Disorder	4.4%	3.9%	2.5%	2.6%	2.8%	2.6%
C. Oppositional Defiant Disorder	17.2%	15.4%	15.4%	13.8%	15.9%	13.8%
D. Disruptive Behavior Disorder NOS	5.0%	4.2%	6.7%	5.1%	6.9%	5.1%
Adjustment Disorders	<b>17.4%</b>	<b>19.0%</b>	<b>21.7%</b>	<b>22.5%</b>	<b>21.5%</b>	<b>22.5%</b>
Mood Disorders (includes Depr., Bipolar, Other)	<b>26.3%</b>	<b>25.5%</b>	<b>17.7%</b>	<b>18.0%</b>	<b>18.0%</b>	<b>18.0%</b>
A. Depressive Disorders	19.3%	17.6%	12.4%	11.9%	12.8%	11.9%
B. Bipolar Disorders	4.3%	5.7%	3.2%	4.3%	3.2%	4.3%
C. All Other Mood Disorders	2.7%	2.3%	2.1%	1.8%	2.1%	1.8%
Schizophrenia & Other Psychotic Disorders	<b>0.9%</b>	<b>1.0%</b>	<b>0.6%</b>	<b>0.7%</b>	<b>0.5%</b>	<b>0.7%</b>
Anxiety Disorders	<b>7.0%</b>	<b>6.2%</b>	<b>6.7%</b>	<b>6.2%</b>	<b>6.9%</b>	<b>6.2%</b>
Pervasive Developmental Disorders	<b>0.6%</b>	<b>0.8%</b>	<b>0.8%</b>	<b>1.1%</b>	<b>0.8%</b>	<b>1.1%</b>
All Other Disorders Usually First Diagnosed in Infancy, Childhood, or Adolescence	<b>2.0%</b>	<b>1.6%</b>	<b>2.4%</b>	<b>2.1%</b>	<b>2.4%</b>	<b>2.1%</b>
All Other Diagnoses	<b>3.7%</b>	<b>2.6%</b>	<b>3.1%</b>	<b>1.8%</b>	<b>2.9%</b>	<b>1.8%</b>
Missing	<b>2.1%</b>	<b>2.4%</b>	<b>1.9%</b>	<b>2.5%</b>	<b>1.2%</b>	<b>2.5%</b>
TOTAL	100%	100%	100%	100%	100%	100%

## Youth: Outcome Status

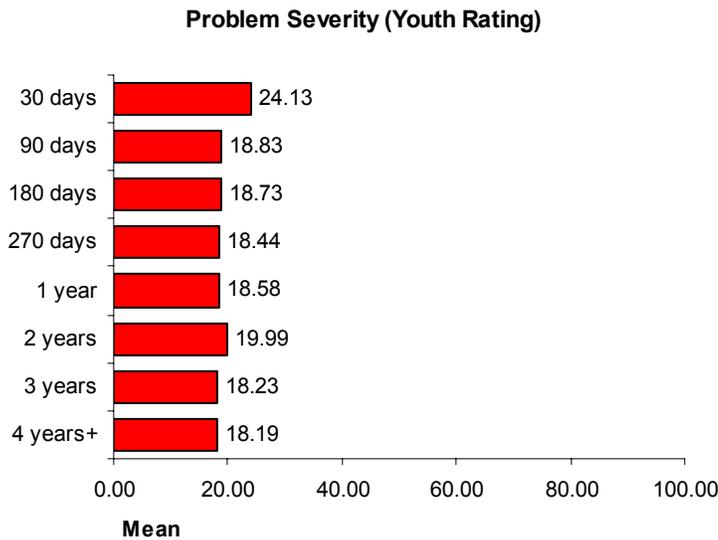
The following graphs summarize the 17,849 Youth ratings, 34,890 Parent ratings, and 34,989 Agency Worker ratings in the statewide Outcomes database with administration dates during FY04. They demonstrate the impact of time in treatment as measured by the length of time between the date of agency admission and the date of Outcomes survey administration.

### PROBLEM SEVERITY

The Problem Severity scale is the sum of the first 20 items on the Ohio Scales Youth, Parent and Agency Worker forms. The scale ranges from 0 to 100, with higher scores indicating more problems or increased severity of problems.

#### Youth Rating

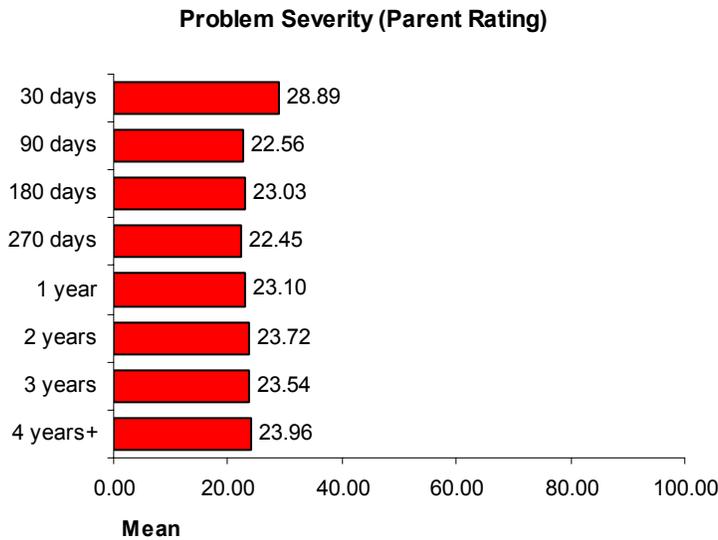
For the first four categories of ratings based on the length of time between the date of agency admission and the date of Outcomes survey administration, average Youth Problem Severity scale scores slightly improve, with the largest improvement occurring between the "30 days" and the "90 days" categories.



	N	Mean	SD
30 days	8,238	24.13	15.99
90 days	1,391	18.83	14.49
180 days	1,539	18.73	14.32
270 days	744	18.44	14.95
1 year	1,471	18.58	14.04
2 years	973	19.99	15.54
3 years	487	18.23	14.15
4 years+	827	18.19	15.34

## Parent Rating

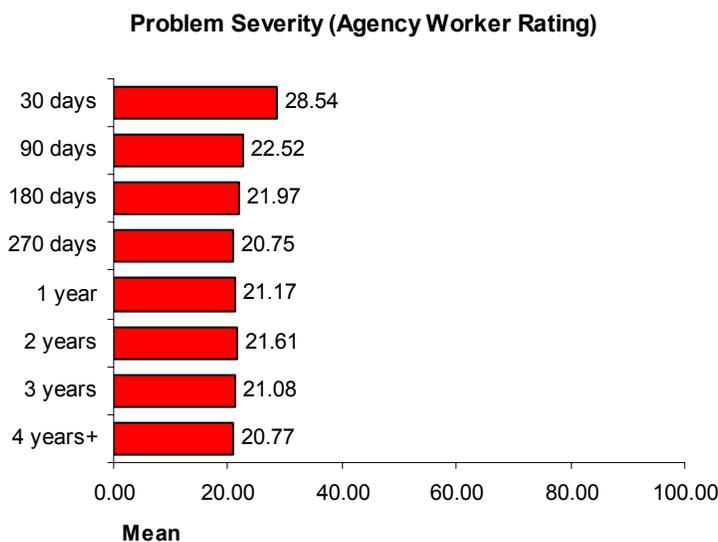
The Parent-rated Problem Severity scale scores significantly decrease between the “30 days” and the “90 days” categories, indicating an improvement. However, the average Problem Severity scale scores slightly increase as the time of services increases after “90 days”.



	N	Mean	SD
30 days	16,415	28.89	16.30
90 days	2,784	22.56	14.89
180 days	3,038	23.03	15.14
270 days	1,538	22.45	15.15
1 year	2,993	23.10	15.32
2 years	1,989	23.72	15.36
3 years	875	23.54	14.95
4 years+	1,283	23.96	15.15

## Agency Worker Rating

On average, Agency Worker Problem Severity scale scores significantly decrease between the “30 days” and the “90 days” categories, indicating an improvement. The average scores then remain rather consistent after the “180 days” point.



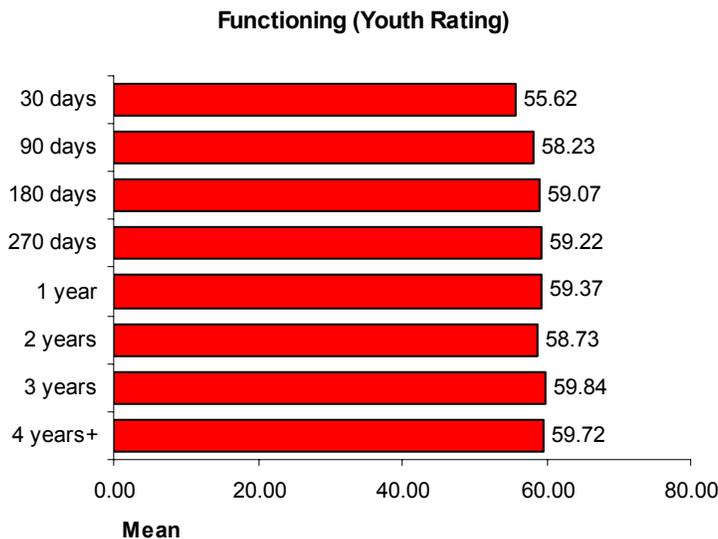
	N	Mean	SD
30 days	14,138	28.54	14.3
90 days	4,008	22.52	13.4
180 days	4,338	21.97	12.9
270 days	2,284	20.75	12.9
1 year	3,914	21.17	12.9
2 years	2,460	21.61	13.1
3 years	1,068	21.08	12.7
4 years+	1,395	20.77	12.9

## FUNCTIONING

The Functioning scale is the sum of the last 20 items on the Ohio Scales Parent, Youth and Agency Worker forms. The scale ranges from 0 to 80, with higher scores indicative of better functioning.

### Youth Rating

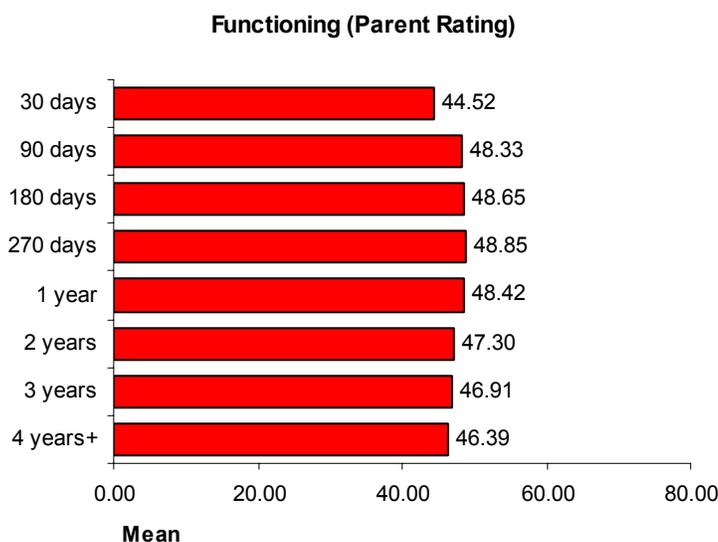
The average Youth Functioning scale scores slightly improve as the length of time between the date of agency admission and the date of Outcomes survey administration increases.



	N	Mean	SD
30 days	8,076	55.62	13.33
90 days	1,375	58.23	13.81
180 days	1,516	59.07	13.43
270 days	734	59.22	13.06
1 year	1,449	59.37	12.95
2 years	958	58.73	13.20
3 years	484	59.84	13.06

### Parent Rating

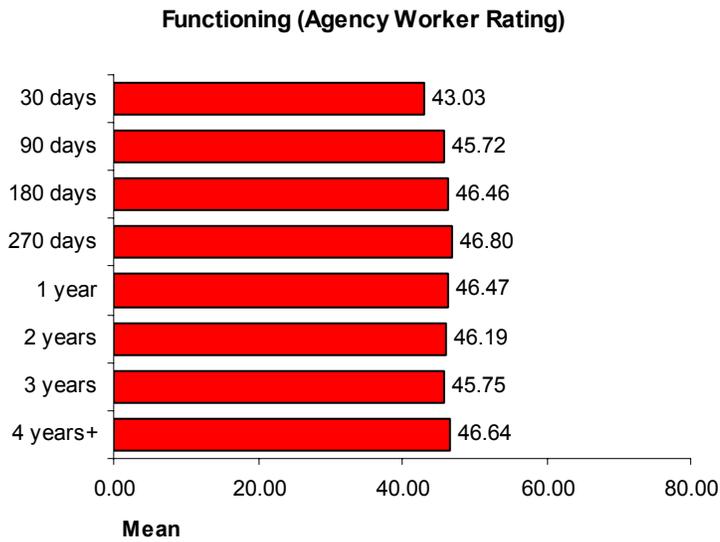
On average, Parent-rated Functioning scale scores increase between the “30 days” and the “90 days” categories of ratings and remain consistent afterwards, with a decrease at the 2 year point.



	N	Mean	SD
30 days	16,040	44.52	15.12
90 days	2,757	48.33	15.09
180 days	3,026	48.65	14.59
270 days	1,523	48.85	14.57
1 year	2,971	48.42	14.36
2 years	1,961	47.30	14.47
3 years	867	46.91	14.88
4 years+	1,276	46.39	14.73

## Agency Worker Rating

Agency Worker rated Functioning scale scores slightly increase, on average, between the first two categories of ratings, and then level off.



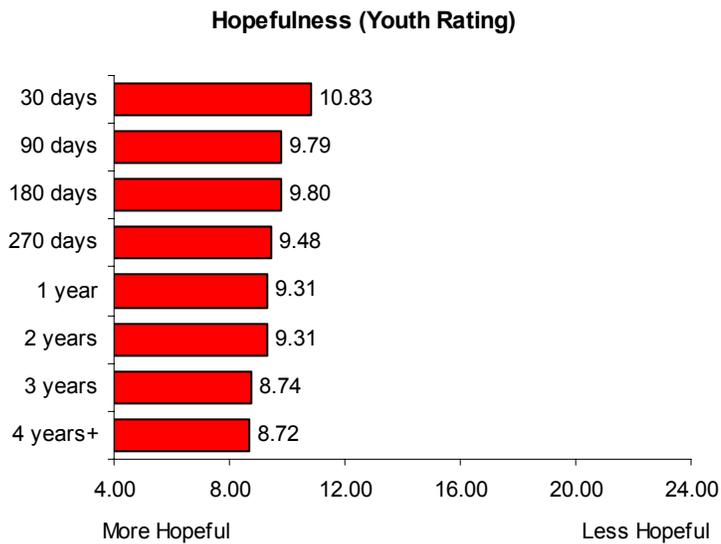
	N	Mean	SD
30 days	14,017	43.03	12.44
90 days	3,950	45.72	13.04
180 days	4,310	46.46	12.41
270 days	2,282	46.80	12.65
1 year	3,899	46.47	12.29
2 years	2,439	46.19	12.40
3 years	1,062	45.75	12.27
4 years+	1,381	46.64	12.80

## HOPEFULNESS (only rated by Youth and Parents)

The Hopefulness scale is the sum of the first four items on the second page of the Ohio Scales Youth and Parent forms. Youth rate their own well-being/optimism; Parents rate the degree to which they are hopeful about their ability to parent. The scale ranges from 4 to 24, with higher scores indicating less hopefulness.

### Youth Rating

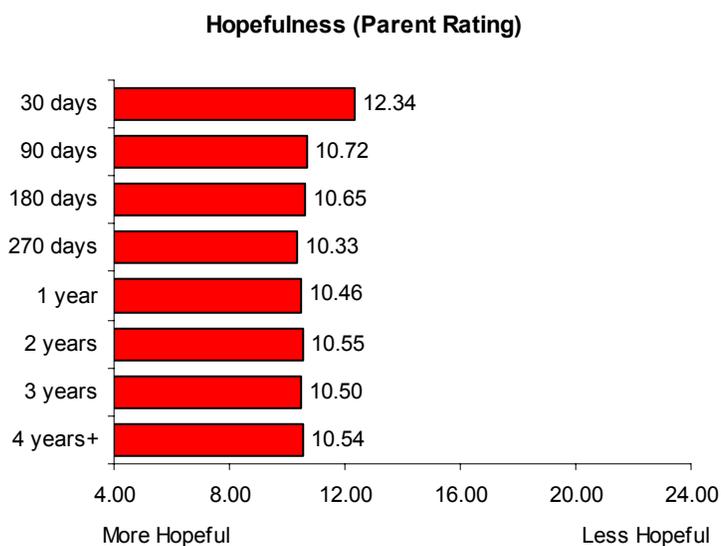
For ratings based on the length of time between the date of agency admission and the date of Outcomes survey administration, average Youth Hopefulness scale scores gradually improve.



	N	Mean	SD
30 days	7,546	10.83	4.27
90 days	1,307	9.79	4.07
180 days	1,447	9.80	4.16
270 days	703	9.48	3.99
1 year	1,386	9.31	4.03
2 years	931	9.31	3.97
3 years	476	8.74	3.84
4 years+	792	8.72	3.93

### Parent Rating

On average, Parent Hopefulness scale scores decrease, indicating improvement, between the first two categories of ratings and then remain fairly constant.



	N	Mean	SD
30 days	15,379	12.34	4.46
90 days	2,689	10.72	4.17
180 days	2,955	10.65	4.18
270 days	1,491	10.33	4.03
1 year	2,909	10.46	4.07
2 years	1,927	10.55	4.16
3 years	853	10.50	4.09
4 years+	1,244	10.54	4.33

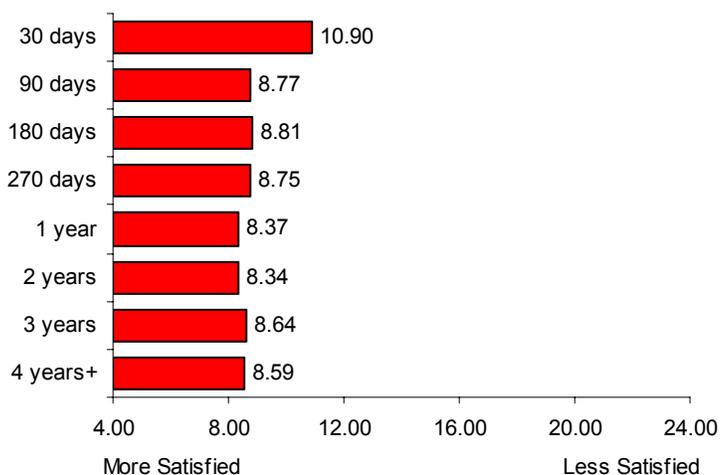
## SATISFACTION (only rated by Youth and Parents)

The Satisfaction scale is the sum of the second four items on the second page of the Ohio Scales Youth and Parent forms and measures overall satisfaction with behavioral health services. The scale ranges from 4 to 24, with higher scores indicating less satisfaction.

### Youth Rating

With the exception of the last two categories, “3 years” & “4 years+,” average Youth Satisfaction scale scores decrease, indicating improvement, as the amount of time between the date of admission and administration increases. The largest difference occurs between the “30 days” and the “90 days” categories.

Satisfaction (Youth Rating)



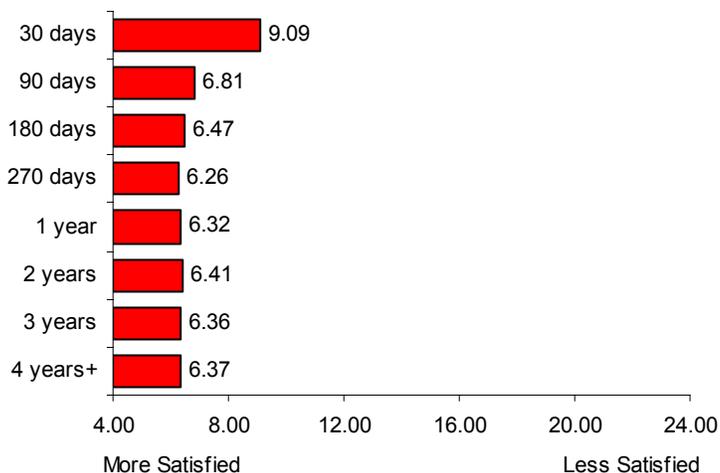
	N	Mean	SD
30 days	4,554	10.90	5.03
90 days	1,175	8.77	4.70
180 days	1,393	8.81	4.60
270 days	667	8.75	4.61

1 year

### Parent Rating

The largest difference in the average scores is between the “30 days” and the “90 days” categories, indicating a significant improvement in satisfaction for the first two categories of ratings. The average Satisfaction scores then remain rather consistent afterwards.

Satisfaction (Parent Rating)



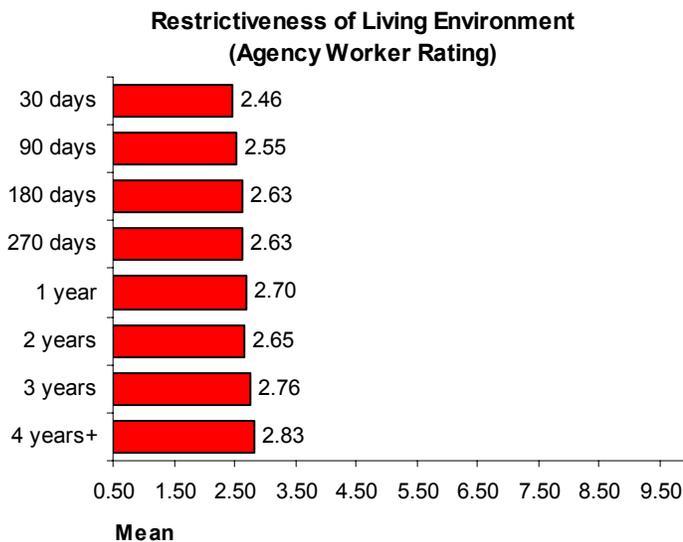
	N	Mean	SD
30 days	7,971	9.09	4.92
90 days	2,370	6.81	3.54
180 days	2,813	6.47	3.38
270 days	1,408	6.26	3.17
1 year	2,796	6.32	3.34
2 years	1,858	6.41	3.30
3 years	824	6.36	3.22
4 years+	1,208	6.37	3.31

## RESTRICTIVENESS OF LIVING ENVIRONMENTS (only rated by Agency Workers)

The Restrictiveness of Living Environments (ROLES) scale provides a measure of the average restrictiveness of living settings. The scale ranges from 0.5 to 10, with higher scores indicative of more restrictive living environments.

### Agency Worker Rating

As displayed in the following graph, average ROLES scale scores slightly increase, indicating greater restrictiveness of living settings, as the amount of time between the date of admission and date of administration increases.



	N	Mean	SD
30 days	13,641	2.46	1.04
90 days	3,857	2.55	1.15
180 days	4,208	2.63	1.25
270 days	2,198	2.63	1.25
1 year	3,793	2.70	1.30
2 years	2,340	2.65	1.21
3 years	1,020	2.76	1.27
4 years+	1,341	2.83	1.24