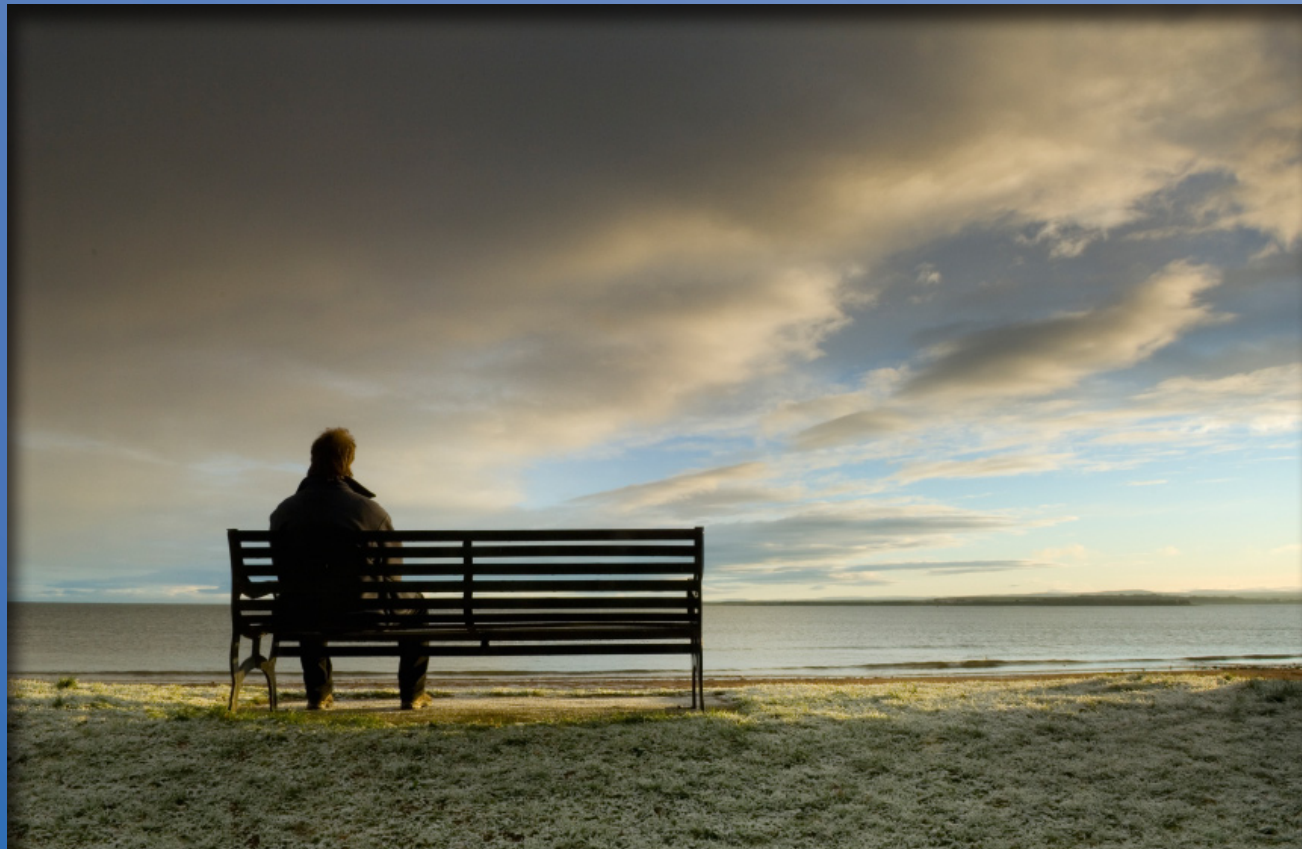


Mental Health Status, Access to Care, and Service Utilization in Ohio: Trends Related to Insurance, Income, Demographic Characteristics and Physical Health

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About the Ohio Family Health Survey

With more than 51,000 households interviewed, the Ohio Family Health Survey is one of the largest and most comprehensive state-level health and insurance surveys conducted in the country. The project was managed by The Ohio State University's Ohio Colleges of Medicine Government Resource Center, and the Health Policy Institute of Ohio and the survey was conducted by Macro International. The Ohio Departments of Insurance, Job and Family Services, Health, and Mental Health, the Cleveland State University, and the Ohio Board of Regents funded the project. This current project is the third in a series of statewide health surveys, following family health surveys in 1998 and 2004.

Ohio Family Health Survey Web site (all sponsored research reports are available for download here):

<http://grc.osu.edu/ofhs>

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I. Abstract

According to the Surgeon General, the cost of untreated mental illness (related to lost productivity and the inability to take care of children) in Ohio is approximately \$3.5 billion per year (Ohio Association, 2003). Consequently, interest in improving mental health in adults and children in Ohio has noticeably increased over the past year. Key agencies including the Ohio Legal Rights Service, the Ohio Department of Mental Health and the Ohio Department of Education have also cited the importance of improving the mental health of residents across Ohio and the nation. A first step to improving mental health status is to understand why disparities in access and utilization exist in relation to insurance status, income, race and other demographic factors. In an effort to learn more about health disparities across the State, the Ohio Family Health Survey (OFHS), a comprehensive state-level health and insurance survey, has been administered to Ohio residents in three cycles since 1998. The 2008 administration of the survey investigated the overall health status, access to care, and utilization of health services of nearly 51,000 Ohio households across the state. Data analyses revealed that approximately 10% of children and adults report having social, emotional, behavioral or substance abuse problems that require counseling. It was documented that with approximately 4% of adults, these mental health problems are so severe that they had resulted in at least 30 days of missed normal activities within the past year. The prevalence of the mental health challenges reported is complicated by the fact that 8.7% of children and 16.7 % of adults did not have mental health coverage at the time of the survey. Furthermore, 23% of adults and 18% of parents were unsure of whether their plans included mental health coverage. Both adults and children experienced unmet mental health needs due to barriers including cost and no insurance coverage. Additionally, the demographic and health risks were similar for children and adults. For children, being ages 13-17 years old, male and African-American or multi-racial backgrounds were all associated with having more emotional, developmental or behavioral problems. Children from low-income families (100% below the federal poverty level), children who were obese, and those with parents with less than a high school education also had more emotional, developmental or behavioral problems. For adults, males were at greatest risk for needing mental health care services; however, females were more likely to seek services. Finally, adults ages 45-64, minorities, separated couples and those with high school or less education were more likely to have 30 or more missed activity days. In general, urban counties reported higher rates of mental health challenges. To further illustrate the connection of mental health problems across generations, 92% of parents who need or receive treatment for a mental health condition also have a child/children that need or receive treatment. These findings provide direction for clinical practice, research and public policy strategies which are reviewed in this report.

I. Introduction

According to the Surgeon General, the cost of untreated mental illness related to lost productivity and the inability to care for children in Ohio is approximately \$3.5 billion per year.^[2] Consequently, interest in improving physical and mental health of adults and children in Ohio has noticeably increased over the past year. Mr. Ted Strickland, Governor of Ohio, recently implemented a major healthcare initiative to reduce the uninsured by 500,000 by 2011^[1] and has also supported the Mental Health Parity Law, which increases coverage for uninsured Ohioans (residents of Ohio). The Ohio Legal Rights Service, the Ohio Department of Mental Health, and the Ohio Department of Education have also cited the importance of improving mental health in children and adults.

A first step to improving mental health is to investigate disparities in access and utilization in relation to insurance status, income, race and other demographic factors. This report examines

mental health status, trends and barriers to care among children and adults in Ohio. Trends in mental health related to insurance, income, demographic characteristics and physical health status were examined using descriptive and multivariate analyses. Specifically, the project's primary goals were to:

- Summarize general mental health status and mental health insurance status (access to care) trends among children and adults in Ohio.
- Identify socio-economic and demographic trends related to poor mental health for children and adults in Ohio.
- Examine any comorbidities between mental and physical health problems in children and adults.

The results showed that for children, males, youth between the ages of 13-17, of African-American or multi-racial background, and families with low-income status (100% below the federal poverty level) were all associated with having more emotional, developmental or behavioral problems. For adults, ages 18-24 or 45-64, of African-American or multi-racial background, separated couples, or an education level of high school or less were all associated with having social and emotional difficulties. Many of these factors were also associated with having missed 30 or more activity days in the past 12 months.

The full report summarizes data on the three aims and presents other analyses to help understand subpopulations (e.g., Parent/Child comparisons, Medicaid only, county comparisons). The report concludes by summarizing policy recommendations. The appendices contain additional analyses, tables and graphs that could not be presented in the report due to space limitations.

II. Methods

The Ohio Family Health Survey (OFHS) is a comprehensive state-level health and insurance survey conducted by the Ohio Department of Job and Family Services. The Ohio Family Health Survey asks various questions about the overall health status, access to care, and utilization of health services of Ohio residents. The Ohio Health Survey is currently in its third cycle; previous data collection cycles were 1998 and 2004. Data from the current 2008 Ohio Family Health Survey (OFHS) were used to generate findings in this report. Nearly 51,000 household interviews were completed throughout the state of Ohio. ^[20] OFHS used a stratified, list-assisted sampling frame that sampled respondents using random digit dialing Computer Assisted Telephone Interviewing (CATI) methods. The sample was stratified by county with several additional samples. The six largest metropolitan counties were sub-sampled to ensure greater representation of African-Americans. Additional targeted supplemental samples were drawn to ensure good representation of Asian and Hispanic residents. Finally, a separate cell phone sample ensured representation of younger people more often reached via mobile devices. A detailed description of the survey methodology can be found in the 2008 OFHS Methodological Report. ^[15]

Key Questions Used in Understanding Mental Health Status in Children and Adults

Descriptive analyses were conducted to achieve the project goals and increase understanding of mental health trends among children and adults in Ohio. Respondents endorsing "Don't Know" or

“Unsure” were eliminated in the results presented in this report (except where noted). The following key questions were used in the analyses:

Questions from the Child Survey: (1) Does the child have any kind of emotional, developmental or behavioral problem for which the child needs treatment or counseling?

Questions from the Adult Survey: (1) For how many days during the past 30 days did your mental health conditions or emotional problems keep you from doing your work or other usual activities? (2) Do you need or get treatment or counseling for any kind of mental health status, substance abuse or emotional problem?

The findings are summarized according to: A. Child Mental Health, B. Adult Mental Health and C. Mental Health in Parents of Children in the next section.

III. Findings and Discussion

A. Child Mental Health Findings

1. Child Mental Health Prevalence and Insurance Trends

- 5% percent of parents rated their child's health as “fair” or “poor.”
- 10% of parents reported that their child has “some kind of emotional, developmental or behavioral problem” for which they need emotional treatment or counseling
- 8.7% of children do not have mental health care coverage (among those who responded “yes” or “no” to the question about coverage); however, 18% of parents were unsure of whether their children had mental health coverage. See Appendix I-A for a complete summary of adult responses to mental health coverage questions including “yes”, “no”, “don’t know” and “refusal” categories.
- 35.7% of children who did not have mental health insurance and reported an emotional, developmental, or behavioral problem delayed treatment, compared to 7.9% of children who have mental health insurance.
- For parents with mental health insurance coverage, 96.3% of them reported that their children also had coverage.

2. Child Unmet Mental Health Care Needs and Barriers to Care

- 3% of parents reported that there was a time in the past year that their child had a health care need that went unmet. Mental health ranked among the top three unmet needs.
- 11.7% of parents reported that their child needed mental health care counseling but did not receive this service. Mental health care counseling ranked third among all unmet health care needs (behind doctor's visits/exams, and eye glasses).
- Among those identifying that they had unmet health or mental health care needs, there were two primary **barriers to care**, both directly or indirectly related to the cost of health care (i.e. fit in the access to health care domain). The two main barriers to care or reasons that children did not get needed healthcare were: (1) too expensive (53.1%) and (2) no insurance (37.9%).

Table 1: Children's Barriers to Seeking Mental Health Care

Question	Category	Unmet Mental Health Need Percent Endorsed	Unmet Doctor's Visit or Exam Need Percent Endorsed
What was the main reason you did not get the healthcare that was needed?	Too expensive	36.9%	49.9%
	No Insurance	36.8%	40.9%
	Difficulty or delay in getting an appointment	17.0%	4.1%

Children Most Likely to Delay Treatment:

Age	13-17 years old (24.6%)
Gender	Female (4.9%) and Male (4.8%)
Race	Black/African-American (6.4%) and Other (6.1%)
Ethnicity	Hispanic (6.4%)
Income	FPL - 101-150% (7.9%) and 151-200% (7.9%)
Insurance Type	Directly Purchased (7.4%)
Insurance Status	Uninsured (25.6%)
Medicaid Coverage	No (5.0%)
Region	Rural, Non-Appalachian (5.8%)

3. Demographic Trends and Risk Factors, including Comorbidity

In the analyses, the following trends were noted in the data:

Gender	Males were rated as having more problems.
Age	13 – 17 years olds were rated as having more problems.
Race/Ethnicity	Multi-racial and African-American children were at highest risk.
Income	Mental health problems increase as family income decreases.
Health	Obesity is a risk factor for poor mental health.

Table 2: Demographics

Question	Category	Percent Endorsed
Does the child have any kind of emotional, developmental or behavioral problem for which the child needs treatment or counseling?	GENDER	
	Male*	12.3%
	Female	7.6%
	AGE	
	1-5	4.3%
	6-12	12.4%
	13-17*	13.0%
	RACE	
	White/Caucasian	9.3%
	Black/African-American	14.1%
	Asian	5.7%
	Other*	18.2%
	ETHNICITY	
	Hispanic*	10.7%
	INCOME	
	100% FPL or below*	15.7%
	101-150% FPL	12.5%
	151-200% FPL	12.2%
	201-300% FPL	7.1%
	300% FPL or above	6.5%
	BODY MASS INDEX	
	Underweight	14.5%
	Normal Weight	11.5%
	Overweight	11.4%
	Obese*	18.4%
	PHYSICAL HEALTH⁽⁺⁾	
	Excellent	4.4%
	Very Good	12.7%
	Good	20.4%

	Fair	40.8%
	Poor*	42.6%
	OTHER HEALTH CONDITIONS	
	Asthma*	18.9%
	Diabetes*	31.7%

*Statistically Significant; p value of $p < .05$

Logistic Regression analyses are consistent with univariate analyses. The child model which included mental health functioning as the dependent variable shows that BMI, age, race, and poverty all as significant covariates in the equation ($p < .01$). Specifically, high BMI, high poverty, minority status and high age are predictive of/related to mental health functioning. Additional details are provided in the Appendix.

(+) Analyses included the summary of “yes” and “no” response, excluding participants who responded, “don’t know” and “refusal.” See Appendix for full range of responses

Discussion of Child Mental Health Findings

According to parents in Ohio, approximately 10% of children have an emotional, developmental or behavioral problem that is severe enough to require counseling. It is possible that the term “counseling” may have influenced participants’ ratings as parents may have thought that their child had mental health problems but may have thought that they may have not been severe enough to require “counseling.” Of the children identified with mental and behavioral health problems, 4.9% do not have mental health insurance. Overall, in the State of Ohio, 8.7% of children do not have mental health coverage and 35.7% of children who did not have mental health insurance, but reported an emotional, developmental, or behavioral problem delayed treatment, compared to 7.9% of children who have mental health insurance. Twelve percent (12%) of parents who reported that they had an unmet health care need in the past year endorsed mental health care counseling as one of those unmet needs. Males, youth ages 13-17, obese youth, African-Americans or Multi-racial children had more emotional, developmental or behavioral problems. Children from low-income families (100% below the federal poverty level), and with parents with a below high school education also had more emotional, developmental or behavioral problems.

B. Adult Mental Health Findings

1. Adult Mental Health Prevalence, Insurance Trends and Barriers

- 10% of adults reported needing support for social, emotional or health problems.
- 7.3% of adults reported receiving counseling for mental health (mild to moderate mental health problems), substance abuse or emotional problems.
- 4% of adults missed 30 or more “usual activity days” due to mental or emotional problems. This translates into lost productivity, wages, etc. The functional disability in this group is severe and these adults may qualify as having severe emotional disturbance if evaluated clinically.

Table 3: Adults Mental Health Status

Question	Category	Percent Endorsed
For how many days during the past 30 days did your mental health conditions or emotional problems keep you from doing your work or other usual activities?	0 Days	85.6%
	1-14 Days	7.9%
	15-19 Days	2.0%
	20-29 Days	0.6%
	30 or more Days	3.9%

Mental Health Coverage:

- 16.7% of adults do not have mental health coverage (among those who responded “yes” or “no” to the question about coverage); however, 23% of respondents were unsure of whether they had mental health coverage. See Appendix II for a complete summary of adult responses to mental health coverage questions including “yes”, “no”, “don’t know” and “unsure” categories.
- **Subgroups Least Likely to Have Mental Health Coverage:**
 - Gender** Males
 - Age** 18-24 year olds
 - Race/Ethnicity** African-American
 - Income** Families at 101-150% and 151-200% of poverty
 - Education** Families with “less than high school” education

2. Adult Unmet Mental Health Care Needs and Barriers to Care

- 14.3% of adults reported that there was a time when they did not get a health care service that they needed.
- 4.7% of adults reported that they needed mental health counseling but did not get the service. Mental health counseling ranked third among all unmet health care needs.
- 45% of adults needing or receiving Mental Health Services have been to the Emergency Room one or more times in the past 12 months (22% had been to an Urgent Care Center one or more times) compared to 20% percent of adults in the general sample.
- Among adults with unmet mental health needs:
 - o 5.7% missed 30 or more days (3.7% missed 15-20 and 1.1% missed 21-29); these rates were higher than the general sample.
 - o 13.3% were on Medicaid
- 14.3% of adults reported that there was a time when they did not get a health care service that they needed.
- 4.7% of adults reported that they needed mental health counseling but did not get the service. Mental health counseling ranked third among all unmet health care needs.
- 45% of adults needing or receiving Mental Health Services have been to the Emergency Room one or more times in the past 12 months (22% had been to an Urgent Care Center one or more times) compared to 20% percent of adults in the general sample.
- Among adults with unmet mental health needs:
 - o 5.7% missed 30 or more days (3.7% missed 15-20 and 1.1% missed 21-29); these rates were higher than the general sample.
 - o 13.3% were on Medicaid
 - o Of those needing Mental health services, 60.9% needed/ were getting treatment for mental health substance abuse or emotional problems
 - o 39% had visited an ER room one or more times.
 - o 32.5% were uninsured; 33.6% were on Job-based coverage.
 - o 20.2% did not have MH coverage.
 - o 9.5% reported difficulty or delay in getting an appointment.

Table 4: Adult’s Barriers to Seeking Mental Health Care

Question	Category	Unmet Mental Health Need Percent Endorsed	Unmet Doctor’s Visit or Exam Need Percent Endorsed
What was the main reason you did not get the healthcare that was needed?	Too expensive	45.4%	54.2%
	No Insurance/ Insurance didn’t cover care	34.4%	33.6%
	Difficulty or delay in getting an appointment	9.5%	4.8%

3. Adults Most Likely to Delay Treatment:

Age	25-34 years old (24.6%)
Gender	Female (22.8%)
Race	Black/African-American (26.3%) and Other (30.7%)
Ethnicity	Hispanic (22.4%)
Income	FPL - 101-150% (31.7%)
Marital Status	Divorced/Separated (29.8%) and Unmarried Couple (35.5%)
Insurance Type	Directly Purchased (23.2%)
Insurance Status	Uninsured (53.3%)
Medicaid Coverage	Yes (21.2%)
Education	Some College (25.1%)
Region	Appalachian (23.2%)

4. Demographic Trends and Mental Health Risk Factors:

In the analyses, the following trends were noted in the data:

Age	There were two high risk groups: 18-24 and 25-34.
Race/Ethnicity	Multi-racial and African-American children were at highest risk.
Income	Mental health problems increased as income decreased.
Gender	Males reported needing more help than females; females reported getting help more than males.
Education	Mental health problems increased as education decreased.
Marital Status	Adults who were separated were at highest risk.
Health	Obesity, Hypertension, Diabetes, and Smoking were all risk factors.

A Summary of Responses to Mental Health Questions by Demographics is as follows:

Table 5: Demographics

Question	Category	Percent Endorsed	Endorsed Missing 30 or more Days
Do you need or get treatment or counseling for any kind of mental health, substance abuse or emotional problem?	AGE		
	18-24 *	9.2%	3.9%
	25-34	8.7%	3.5%
	35-44	8.0%	4.2%
	45-54	8.1%	4.5%
	55-64	7.5%	4.5%
	65+	2.7%	3.0%
	RACE		
	White/Caucasian	6.9%	3.6%
	Black/African-American**	10.3%	5.5%
	Asian	2.7%	0.9%
	Other*	14.6%	11.5%
	ETHNICITY		
	Hispanic*	9.0%	3.8%
	INCOME		
	100% FPL or below*	15.4%	9.8%
	101-150% FPL	10.7%	7.2%
	151-200% FPL	7.1%	4.4%
	201-300% FPL	5.5%	3.0%

	300% FPL or above	4.4%	1.4%
GENDER			
	Male	6.1%	3.9%
	Female*	8.4%	3.9%
EDUCATION			
	High School or Less*	11.1%	9.5%
	High School Diploma	6.7%	4.2%
	Some College	8.8%	4.0%
	Associate Degree	7.0%	2.9%
	Bachelors Degree	5.4%	1.3%
	Advanced Degree	5.6%	0.9%
MARITAL STATUS			
	Married	5.0%	2.6%
	Divorced	11.9%	7.1%
	Widowed	5.0%	5.0%
	Separated*	19.3%	10.5%
	Never Married	10.3%	4.9%
	Unmarried Couple	10.8%	4.4%
PHYSICAL HEALTH			
	Excellent	3.2%	1.0%
	Very Good	3.9%	0.9%
	Good	7.7%	3.5%
	Fair	14.4%	8.6%
BODY MASS INDEX			
	Underweight	8.3%	8.7%
	Normal Weight	6.2%	3.2%
	Overweight	6.3%	3.3%
	Obese*	9.4%	5.3%
OTHER HEALTH CONDITIONS			
	Hypertension*	9.3%	6.1%
	Congestive Heart Failure*	11.7%	12.2%
	Diabetes*	10.9%	7.6%
	Smoking* (at least 100 cigarettes in lifetime)	9.5%	5.9%

*Statistically Significant; p-value of $p < .05$ based on question: Do you need or get treatment or counseling for any kind of mental health, substance abuse or emotional problem? Wherein "yes" and "no" answers were retained in the analysis. **African-American was designated as the highest rated "specific" at-risk racial category

Logistic Regression analyses are consistent with univariate analyses. The model which included mental health functioning as the dependent variable shows that BMI, age, race, and poverty all as significant covariates in the equation ($p < .01$). Specifically, high BMI, high poverty, minority status and high age are predictive of/related to mental health functioning. Additional details are provided in the Appendix.

Discussion of Adult Mental Health Findings

Approximately 10% of adults in Ohio report needing support for a social, emotional, or a health problem that is severe enough to require counseling. This 10% may not include adults with low to moderate mental health problems that are sub-clinical or those with mental health problems who were unable or unwilling to seek treatment. In addition, 7.3% of adults report receiving counseling for mental health, substance abuse or emotional problems. In addition, nearly 4% of adults report having 30 or more missed activity days, which include work, self-care activities, parenting, etc. The number of adults without mental health coverage is at least twice that of children. Among adults who were certain about their insurance status, there are 16.7% of adults who did not have mental health coverage; however, given the sample as a whole, 23% of adults were unsure of whether or

not their plans included mental health coverage. Adults with an unmet health care need endorsed mental health care counseling as one of the services that they needed but were not able to get. Nearly 40% of adults who reported that mental health care was an unmet need used the ER and more than 20% had used urgent care. These trends were higher than those seen in the general sample. Similarly, adults with unmet mental health care needs were also more likely to have 30 or more missed activity days. Adults were at greatest risk for needing mental health care services if they were male; however, females were more likely to seek services. Finally, adults ages 45-64, minorities, separated couples and those with high school or less education were more likely to have 30 or more missed activity days. Adults who were obese and who had other health challenges reported high rates of mental health challenges. Finally, many groups that were least likely to have mental health coverage (18-24 year olds, African-Americans, etc.), were more likely to have mental health challenges.

C. Medicaid Analyses and Trends

1. Trends among Medicaid Insured Children and Adults

Additional analyses were conducted to understand the unique needs and risk factors of children and adults on Medicaid relative to the general population. It is well-documented that socioeconomic, vocational and disability challenges are reported at higher rates in the Medicaid population compared to the normative population. These factors should be considered when interpreting the data and may account for some of the mental health disparities reported. Given these factors, it is critical that mental health supports be accessible for patients on Medicaid and that these mental health services be integrated with current medical services. Governmental policy implications provided at the end of this report may be especially relevant for the Medicaid population. The data for Medicaid participants is summarized as follows.

Mental Health in Children with Medicaid Insurance

Table 6: Mental Health Status of Children on Medicaid

Question	Category	Children with Medicaid	Children without Medicaid
In general, how would you describe your child's mental health?	Excellent	44.0%	64.6%
	Very Good	21.6%	22.6%
	Good	24.7%	9.9%
	Fair	8.1%	2.2%
	Poor	1.5%	0.7%

Table 7: Mental Health Status of Children on Medicaid

Question	Category	Percent Endorsed
Does the child have any kind of emotional, developmental, or behavioral problem for which the child needs treatment or counseling?	Children with Medicaid	16.2%
	Children without Medicaid	6.7%

2. Demographic Trends and Medicaid Risk Factors for Children

In the analyses, the following trends were noted in the data:

Gender

Males were reported to have more needs for treatment or counseling for developmental or behavioral problems.

Age	As age increased, so did treatment needs and services.
Race/Ethnicity	Caucasians and African-Americans had higher treatment and service needs.
Income	Children in families at 300% of FPL had more needs.
BMI	Underweight and obese children had higher treatment and service needs.
Physical Health	Studies have shown that children with poor mental health generally have poorer physical health as well.
Other Conditions	Treatment and service needs were higher among children with diabetes and asthma.

Responses to Mental Health Questions by Demographics

Table 8: Demographics(+)

Question	Category	Percent Endorsed
Does the child have any kind of emotional, developmental or behavioral problem for which the child needs treatment or counseling?	GENDER	
	Male*	20.8%
	Female	11.9%
	AGE	
	Ages 1-5	7.0%
	Ages 6-12	21.7%
	Ages 13-17*	21.9%
	RACE/ETHNICITY	
	White/Caucasian	16.7%
	Black/African-American	15.7%
	Asian	0.0%
	Other*	33.3%
	ETHNICITY	
	Hispanic*	12.3%
	INCOME	
	100% FPL or below	16.8%
	101-150% FPL	14.4%
	151-200% FPL	17.0%
	201-300% FPL	15.3%
	300% FPL or above*	18.1%
	BODY MASS INDEX	
	Underweight*	45.4%
	Normal Weight	20.1%
	Overweight	21.7%
	Obese	25.1%
	PHYSICAL HEALTH	
	Excellent	8.1%
	Very Good	18.8%
	Good	23.6%
	Fair	42.0%
	Poor*	54.0%
	OTHER HEALTH CONDITIONS	
	Asthma*	26.5%
	Diabetes*	55.1%

*Statistically Significant; p value of p< .05

Table 9: Children on Medicaid: Mental Health Insurance, Mental Health Status and Unmet Needs by Region

Question	Appalachian	Metropolitan	Rural, Non-Appalachian	Suburban
Understands that child's insurance plan covers mental health care	88.1%	91.9%	92.5%	89.2%
Does the child have any kind of emotional, developmental, or behavioral problem for which the child needs treatment or counseling?	13.9%	14.8%	15.1%	11.5%
What was the health care service that your child needed but did not get? (1 st response - Mental Health Care Counseling)	11.5%	13.8%	8.3%	0.0%

Children on Medicaid Most Likely to Delay Treatment:

Age	13-17 years old (7.8%)
Gender	Female (4.4%)
Race	Other (5.7%) and White/Caucasian (4.4%)
Ethnicity	Non-Hispanic (4.5%) and Hispanic (4.0%)
Income	FPL – 301% or more (6.4%)
Region	Rural, Non-Appalachian (7.7%)

Mental Health in Adults with Medicaid Insurance**Table 10: Mental Health Status of Adults on Medicaid**

Question	Category	Percent Endorsed
Do you need or get treatment or counseling for any kind of mental health, substance abuse, or emotional problem?	Adults with Medicaid	21.7%
	Adults without Medicaid	5.9%

Table 11: Mental Health Status of Adults on Medicaid

Question	Category	Adults with Medicaid	Adults without Medicaid
For how many days during the past 30 days did your mental health condition or emotional problem keep you from doing your work or other usual activities?	0-14 days	80.9%	94.7%
	15-20 days	6.2%	1.6%
	21-29 days	2.0%	0.5%
	30 or more days	11.0%	3.2%

2. Demographic Trends and Medicaid Risk Factors: Adult

Adults on Medicaid were compared to the general population of adults that were not on Medicaid. These trends were summarized as follows:

In the Medicaid-only analyses, the following trends were noted in the data:

Age	The older the population, the more treatment needed (except for 65+ - this can be attributed to Medicaid eligibility).
Race/Ethnicity	Hispanic and Caucasian populations needed the most treatment or services.
Income	Families at 100% of poverty or below needed the most services.
Gender	Treatment needs and services were higher among females.
Education	Service and treatment needs decreased as education increased
Marital Status	Separated and divorced individuals needed more treatment and counseling than any other group.

BMI

Obese individuals had higher reports of mental health services and treatment needs.

Physical Health

Poor physical health was related to higher service and treatment needs.

Other Conditions

Diabetes, hypertension, and smoking were the top three health problems experienced by the Medicaid population.

Table 12: Demographics

Question	Category	Percent Endorsed	Endorsed Missing 30 or more Days
Do you need or get treatment or counseling for any kind of mental health, substance abuse or emotional problem?	AGE		
	18-24	18.9%	7.6%
	25-34	22.3%	10.2%
	35-44	28.7%	13.2%
	45-54*	32.1%	17.6%
	55-64	22.2%	17.1%
	65+	4.7%	3.8%
	RACE		
	White/Caucasian	22.3%	12.2%
	Black/African-American	19.7%	7.6%
	Asian	9.0%	6.0%
	Other*	27.4%	13.4%
	ETHNICITY		
	Hispanic	22.4%	9.4%
	INCOME		
	100% FPL or below*	24.2%	12.6%
	101-150% FPL	18.2%	7.7%
	151-200% FPL	19.4%	10.8%
	201-300% FPL	13.4%	9.7%
	300% FPL or above	16.3%	5.6%
	GENDER		
	Male	20.4%	11.8%
	Female*	22.3%	10.6%
	EDUCATION		
	High School or Less*	21.7%	13.5%
	High School Diploma	20.8%	9.8%
	Some College	24.5%	10.1%
	Associate Degree*	25.8%	9.5%
	Bachelors Degree	20.0%	6.8%
	Advanced Degree	20.2%	9.7%
	MARITAL STATUS		
	Married	14.6%	10.1%
	Divorced	28.9%	16.4%
	Widowed	15.9%	8.5%
	Separated*	23.4%	9.0%
	Never Married	20.1%	9.6%
	Unmarried Couple	14.6%	10.1%
	BODY MASS INDEX		
	Underweight	15.2%	15.8%
	Normal Weight	17.9%	8.7%
	Overweight	22.0%	11.3%

	Obese*	24.5%	12.5%
	PHYSICAL HEALTH		
	Excellent	12.6%	6.1%
	Very Good	12.1%	2.0%
	Good	20.0%	7.9%
	Fair	26.8%	13.7%
	Poor*	37.0%	30.0%
	OTHER HEALTH CONDITIONS		
	Hypertension*	25.9%	15.1%
	Congestive Heart Failure*	22.1%	18.8%
	Diabetes*	26.3%	16.5%
	Smoking* (at least 100 cigarettes in lifetime)	25.6%	13.4%

*Statistically Significant; p value of $p < .05$

Logistic Regression analyses are consistent with univariate analyses. Like the standard adult analyses, the Medicaid model included mental health functioning as the dependent variable shows that BMI, age, race, and poverty all as significant covariates in the equation ($p < .01$). Specifically, high BMI, high poverty, minority status and high age are predictive of/related to mental health functioning. Additional statistical details are provided in the Appendix.

Table 13: Adults on Medicaid: Mental Health Insurance, Mental Health Status and Unmet Needs by Region

Question	Appalachian	Metropolitan	Rural, Non-Appalachian	Suburban
Insurance Plan Covers Mental Health Care	83.3%	86.5%	86.4%	83.7%
Do you need or get treatment or counseling for any kinds of mental health, substance abuse or emotional problem?	20.5%	20.9%	21.3%	27.9%
For how many days during the past 30 days did your mental health condition or emotional problem keep you from doing your work or other usual activities? 30 or more days	14.0%	9.6%	12.6%	11.6%
What was the health care service that you needed but did not get? (1 st response - Mental Health Care Counseling)	3.2%	4.8%	2.7%	2.7%

Adults on Medicaid Most Likely to Delay Treatment:

Age	35-44 years old (27.7%) and 45-54 years old (27.6%)
Gender	Female (21.1%)
Race	Other (28.5%) and Asian (23.3%)
Ethnicity	Hispanic (20.5%) and Non-Hispanic (20.0%)
Income	FPL - 101-150% (22.5%)
Marital Status	Unmarried Couple (26.7%)
Education	4 year College Graduate (28.1%)
Region	Appalachian (21.7%)

• **Barriers to seeking Mental health Care in the Medicaid Population**

- o 35.3% reported difficulty or delay in getting an appointment.
- o 52.0% reported that they had “no insurance/insurance did not cover”
- o 4.8% reported they couldn’t find a doctor.

Table 14: Barriers — Medicaid Population

Question	Category	Percent Endorsed	Endorsed Missing 30 or more Days
Do you need or get treatment or counseling for any kind of mental health, substance abuse or emotional problem?	No Children	7.3%	4.2%
	Parent of Child	7.0%	2.7%
	Relative of Child	8.1%	6.1%

Summary of Medicaid Analyses

In summary, 16.2% of children in Ohio who are on Medicaid were described by their parents as having an emotional, developmental or behavioral problem for which they seek treatment or counseling (compared to 6.7% in children who were not on Medicaid). In addition, 9.6% of parents described their children as having fair or poor mental health (in comparison to 2.9% of non-Medicaid families that described their children as having fair or poor mental health). Males (20.8%), children between the ages of 13-17 (21.9%), and children with poor physical health (54%) reported the highest treatment or counseling needs. For adults, 21.7% of adults on Medicaid reported they had a mental health, substance abuse, or emotional problem for which they needed counseling (compared to 5.9% of adults who were non-Medicaid). Eleven percent (11%) of adults on Medicaid also reported that their mental health condition or emotional problem has kept them from their work or usual activities for 30 or more days, in comparison to 3.2% of non-Medicaid adults. The groups most at-risk for mental health problems were adults between the ages of 45-54 who reported needing more treatment or counseling for their mental health, substance abuse or emotional problem, as well as adults at the 100% poverty Level (compared to those at higher incomes). Interestingly, service and treatment needs decreased as education increased; also, treatment needs or services were higher for females than males (a trend that was the reverse of that of the general population).

D. Other Analyses and Trends

1. Parent/Child Comparisons

- Children of parents who reported needing or getting treatment for mental health, substance abuse or emotional problems were more likely to also need or receive treatment (26.4%), compared to children of parents who did not need or receive treatment (8.4%).
- Parents that reported needing or getting treatment for Mental Health, Substance Abuse, or emotional problems were also more likely to rate their child's mental health as fair or poor (14.1%), compared to parents not receiving or needing treatment (4.2%).
- Step-parents and foster parents and legal guardians were most likely to need or get treatment or counseling as well as miss 30 or more days of usual activity due to mental health needs.

Table 15: Mental Health Status

Question	Category	Percent Endorsed	Endorsed Missing 30 or more Days
Do you need or get treatment or counseling for any kind of mental health, substance abuse or emotional problem?	No Children	7.3%	4.2%
	Parent of Child	7.0%	2.7%
	Relative of Child	8.1%	6.1%
	Step-Parent to Child*	13.7%	6.0%
	Foster Parent/ Legal Guardian of Child*	11.1%	8.0%

*Statistically Significant; p value<.05

2. Employment and Insurance Trends:

The following trends were noted with respect to employment and insurance:

- Persons who were unemployed were more likely to have 30 or more days of missed usual activities.
- Of those without mental health coverage, 74% missed 30 or more days and were unemployed.
- If the employer didn't offer health insurance plans to their employees, the rates of missed activity days were more than double (2.7% missed 30 or more days compared to 1.1% for individuals whose employers did offer coverage).
- 8% of adults listed as "uninsured" missed 30 or more days of work (compared to 3.3% of the insured population).
- 2.5% of employees that did not buy into the employer health insurance plan because it was too expensive reported having missed 30 or more days. 5.4% of those that did not buy in because they did not like the plans/benefits reported having missed 30 or more days.
- 54% of those individuals who missed 30 or more days and did not have mental health coverage reported that they did not buy into employee benefits because it was too expensive.
- Of those without mental health coverage:
 - o 63% were employed.
 - o 74.5% worked in private industry.
 - o 87% were offered health benefits through their employer.
 - o 87% were offered health benefits for the employee as well as their family.
 - o 26% did not buy into coverage because it was too expensive (53% of these individuals reported that they had other insurance).
 - o 61% were not eligible for their employer insurance because they were not working enough hours

3. Geographic Trends

The geographic trends for the major mental health questions used for child and adult analyses are summarized below.

Geographic Trends-Adults

Table 16: Mental Health Status

Do you need or get treatment or counseling for any kind of mental health, substance abuse or emotional problems?	County	Percent Endorsed	30+Days
	Butler (Hamilton)	3.0%	3.1%
	Cuyahoga (Cleveland)	11.8%	9.3%
	Franklin (Columbus)	11.6%	9.7%
	Hamilton (Cincinnati)	8.1%	7.3%
	Lucas (Toledo)*	4.6%	5.0%
	Montgomery (Dayton)*	4.6%	5.7%
	Summit (Akron)	5.3%	4.5%

Major urban counties are noted; counties with the highest rates are highlighted in yellow
Suburban counties are noted; counties with the highest rates are highlighted in orange

Table 17: Geographic Trends Data

Mental Health Questions	Butler (Hamilton)	Cuyahoga (Cleveland)	Franklin (Columbus)	Hamilton (Cincinnati)	Lucas (Toledo)*	Montgomery (Dayton)*	Summit (Akron)
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Do you need or get treatment or counseling for any kind of mental health, substance abuse or emotional problems?	3.0%	11.8%	11.6%	8.1%	4.6%	4.6%	5.3%
For how many days during the past 30 days did your mental health condition or emotional problem keep you from your work or other usual activities?(30+ Days)	3.1%	9.3%	9.7%	7.3%	5.0%	5.7%	4.5%

Major urban counties are noted; highest-rated counties are highlighted in yellow

Regional Trends

Table 18: Adults Mental Health Insurance, Mental Health Status and Unmet Needs by Region(+)

Question	Appalachian	Metropolitan	Rural, Non-Appalachian	Suburban
Adult has mental health care insurance coverage	78.2%	85.1%	79.3%	84.0%
Do you need or get treatment or counseling for any kinds of mental health, substance abuse or emotional problem?	7.4%	7.7%	6.5%	6.5%
For how many days during the past 30 days did your mental health condition or emotional problem keep you from doing your work or other usual activities? (30+ days)	5.3%	3.8%	3.8%	3.4%
What was the health care that you needed but did not get? (1 st response - Mental Health Care or Counseling)	5.1%	4.9%	4.6%	2.5%

Geographic Trends –Child

Table 19: Mental Health Status of Children by County

In general, how would you describe the child's mental health?	Category	Cuyahoga	Franklin	Hamilton	Lucas	Montgomery
	Excellent	12%	9.8%	6.6%	3.8%	4.0%
	Very Good	9.4%	9.8%	6.7%	3.9%	5.9%
	Good	11.3%	10.8%	8.5%	4.7%	4.1%
	Fair	7.9%	12.3%	6.9%	5.0%	6.0%
	Poor	10.7%	11.8%	4.4%	1.7%	11.1%

Table 20: Mental Health Status of Children by County

Does the child have any kind of emotional, developmental or behavioral problem for which the child needs treatment or counseling?	County	Percent Endorsed
	Cuyahoga	9.9%
	Franklin	9.3%
	Hamilton	7.3%
	Montgomery	6.2%
	Lucas	4.7%

Regional Trends

Table 21: Children Mental Health Insurance, Mental Health Status and Unmet Needs by Region

Question	Appalachian	Metropolitan	Rural, Non-Appalachian	Suburban
Child has mental health insurance coverage	88.4%	92.0%	89.5%	93.1%
Does the child have any kind of emotional, developmental, or behavioral problem for which the child needs treatment or counseling?	10.2%	10.1%	9.8%	9.8%
What was the health care that your child needed but did not get? (1 st response - Mental Health Care or Counseling)	8.2%	13.2%	13.2%	6.9%

IV. Public Policy Recommendations

Given the above mental health challenges for children and adults in Ohio, a number of implications and strategies are recommended:

A. Implications for Ohio Local, State and Federal Government

1. To address mental health needs for Ohio residents with severe mental illness and with disabilities, the government will need to assume many of the functions of the private sector:

- **Providing mental health education and interventions** for persons with severe mental illness and disabilities. Without proper mental health care interventions, the cost of untreated mental illness related to lost productivity and the inability to care for children will increase over time.
- **Educating individuals about public insurance options.** Individuals and families with public insurance coverage need to understand the benefits included in their plans. Of adults on Medicaid, 24.5% did not know if their plan covered mental health services. 18.7% of parents whose children had Medicaid did not know if their child's plan covered mental health.
- **Identifying the gaps in mental health insurance coverage.** Large groups of citizens (e.g. adults without children who are at the FPL limit), would benefit from receiving mental health coverage as well. This would require expanding eligibility to lower income adult Ohio residents.
- **Targeting high-risk and vulnerable child and adult populations in Ohio including** offering prevention and intervention services. Ohio has several high risk groups (e.g. demographics, regions, ability status, mental health status, etc.) that could be targeted.

2. *To ensure parity in mental health and mental health coverage for high-risk and high-poverty Ohioans, the government should offer reduced rates for mental health insurance.*

- Those at risk for mental health problems are also least likely to have mental health insurance.
- Demographics of individuals at greater risk of suffering from mental health problems include adults 18-24, males, minorities, poor, and individuals with low education.

B. Recommendations for Ohio's Insurers

1. *Clearly document mental health benefits included in plans so that residents of all demographic and educational backgrounds understand their benefits.*

- Ohio residents report not knowing whether their insurance covers mental health care (23% of adults), and parents report not knowing whether their child is covered (18% of parents).
- Insurance companies should provide detailed information to participants about their health care coverage as well as be available to answer questions.
- This information should be easily accessible via multi-media formats, including the internet, printed materials, and automated or live communication systems.

2. *Offer more competitive mental health insurance plans at lower prices to move toward ensuring that all Ohioans have mental health coverage.*

- Having mental health care coverage may encourage individuals with mental health care needs to seek preventative services from a professional rather than waiting until the need becomes too great and results in missed work/activity days.
- Twenty-six percent (26%) of those who are offered health insurance, but do not have mental health insurance did not buy in to their plans because it was too expensive.
- Affordable mental health insurance may discourage crisis-oriented treatment seeking given that adults without mental health insurance sought emergency room treatment at a higher rate than those with mental health insurance.

C. Recommendations for Employers in Ohio

1. *Offer mental health benefits as part of a comprehensive insurance plan to all employees.*

- Sixty-three percent (63%) of individuals who did not have mental health care coverage were employed.
- Part-time employees may be underinsured as 61% of employees without mental health insurance reported that they were not eligible because they did not work enough hours.
- Individuals with mental health insurance coverage were less likely to miss 30 or more days of work.
- *Median Annual Income for Ohio Workers in 2007 was \$46,645* (latest data available; updated March 2009 <http://www.ers.usda.gov/statefacts/>); *Employees missing a month of work (30+ activity days) would cost \$3,887 in family income.* The literature supports that financial stress resulting from lost income may be a contributing factor to mental health stress.
- For employers, when employees are inactive for 30+ days, they experience lost productivity, profitability, and they experience turnover (which also has a financial cost) as a result of

employees' mental health challenges.

2. *Inform employees about mental health risks, disorders and available intervention and prevention services.*

- Twenty-three percent (23.0%) of adults did not know whether their plan covered mental health care.
- Eighteen percent (18.5%) of parents did not know if their children were covered.
- Employers need to provide resources, including written materials and contact persons for easier access to information concerning employee health benefits (e.g., plans, services covered, co-pays, etc.).

3. *Inform employees about mental health risks, disorders and available intervention and prevention services.*

- More than six percent (6.5%) of the 7 million employed in Ohio lost 15 or more days of work or usual activities.
- Many of these adult workers are also parents who may have unique mental health care needs that require prevention and intervention services (for themselves or for their children).
 - 16.9% of parents with a child having an emotional, developmental or behavioral problem missed 15 or more days of work/usual activity.

4. *Provide competitive mental health benefits for employees, particularly for workers in smaller companies to help decrease missed days and perhaps stabilize productivity,*

- Employers with fewer than 50 employees were more likely to have employees miss 30 or more days of work/usual activity.
- Smaller companies and businesses have fewer employees to draw from when an employee misses work or when there is turnover. Therefore, the loss of productivity may be greater and have a more negative impact for these smaller companies compared to larger companies.

D. Recommendations for Mental Health Clinicians and Care Providers

Provide adults and parents with best practices in promoting positive mental health and in accessing intervention and prevention services.

- Mental health and other health care providers will need to collaborate to identify patient needs and develop treatment plans according to the patient's age, gender, individual needs and risk factors.
- In addition, it will be important to consider developmental, cultural, and educational factors to ensure that interventions are well targeted and effective.
- It may be useful to consult the risk factors identified in this report to better understand trends and risk factors identified among Ohio adults and children.
- It is also important to consult best practices in assessing and treating adults depending on the specific referral issue.
- Finally, with respect to children, the data showed that approximately 4% of preschoolers ages 1 to 5 were identified as having social, emotional and behavioral difficulties that may require some intervention. For children ages 6 to 12 and 13 to 17, the rates were much higher. In any case, the data suggest that interventions have to be developmentally

appropriate and behaviorally targeted to address youths' specific needs. Similarly, interventions will need to be evidence-based and culturally sensitive.

E. Implications for Pediatricians, Hospitals, Child Care Clinics, and other Health Professionals

Integrate mental health care into primary health care and other health care settings in order to facilitate assessment/screening, early detection, coordination of referrals and the co-morbidities associated with physical and mental health.

- Health care providers are often the first point of contact and sometimes the only point of contact for families. With mental and other physical health problems co-existing in many individuals, health care providers should be aware of mental health conditions and make necessary referrals.
- More than twenty-eight percent (28.5%) of parent's of children rated both their mental and physical health as fair/poor; 42.8% of adults with a mental health problem rated their physical health as fair/poor.
- Forty-three percent (43.0%) of adults with mental health problems also had hypertension or high blood pressure.
- There is a high co-morbidity between mental health difficulties and obesity in both children and adults.
 - 41.5% of children with an emotional, developmental or behavioral need were overweight or obese.
 - 69.7% of adults needing or receiving treatment for mental health problems were overweight or obese.
- One critical first step to integration is to conduct mental health screenings and assessments.
- It is particularly important for health care providers to implement age-appropriate and time-efficient mental health screening for children and adolescents (i.e. screening that can be completed in a clinical or outpatient setting).
- Sixty-three percent (63.0%) of children with fair/poor mental health had received a check-up. Health care providers need to implement early detection and intervention strategies.
- Health professionals may also need training on how to engage youth so that these screenings yield accurate results, particularly in cases where they may need to conduct a risk or needs assessment.
- The integration of mental and physical health care may also be cost-effective from a public health perspective as it may prevent ER use and other inefficient uses of mental health crises given the integration of medical health records.

F. Implications for School Administrators and Staff in Ohio

Serve as the first point of contact for students: Properly screen and address the mental health needs of students so that they can function optimally at school.

- Ten percent (10%) of parents report their child has some kind of emotional, developmental or behavioral problem.
- More than eight percent (8.7%) of children do not have mental health care coverage.
- One notable change in Medicaid billing is that school systems can now bill for mental health services received in school for children with learning disabilities. Learning problems are commonly associated with behavioral health problems. Such billing changes should improve access for children on Medicaid.

- Schools may need to be trained to screen and refer students as needed to ensure that students do not “fall through the cracks” and to identify other at-risk students who may not have been referred for mental health treatment.
- All schools should have a mental health referral resource bank which should consist of Medicaid providers and private insurers.
- Schools should also be trained in classroom behavioral management strategies and should have classroom level or school-wide level Prevention and Intervention Programs that could be easily implemented, particularly for common, but socially and emotionally threatening issues such as bullying.
- Schools should play a vital role in implementing and refining cost-effective best practices models for mental health treatment in schools.
- School counselors, teachers and other school staff may provide an important point of contact for students who are at-risk. They may also be a critical referral source for students who are experiencing moderate to severe mental illness.
- For children and youth who are engaged in traditional mental health care services, the literature suggests that collaboration with school personnel is essential to promoting optimal mental health outcomes, particularly when youth are experiencing academic failure that may yield long-term negative consequences (e.g., dropping out of high school, etc.).
- Early childhood educators and care providers are often overlooked as a cohort. Given the data, which shows that 4% of preschoolers are affected, they too should use age-appropriate measures to detect early mental health problems and provide early intervention.

G. Implications for Parents of Preschool and School-Age Children in Ohio

Parents’ role is to advocate for their children so that they can promote positive mental health and development.

- Parents should make sure they understand their child’s health insurance benefits.
- Parents should insist upon ensuring that their child receives necessary assessments and interventions when they have a concern or suspect that their child has a developmental disability or delay.
- Parents need to follow up on referrals that are made for their children by primary care physicians, schools and teachers.
- In addition, parents are responsible for their own mental health, as well as for the mental health of their child(ren). Data show that parent and child mental health are often related. Hence, if parents are experiencing mental and emotional difficulties, they should seek help to prevent long-term consequences that might affect their children.
- Finally, employers and health care providers must recognize the challenges that parents face when their children do not have insurance. These parents may need support in completing paperwork or overcoming emotional and logistical barriers that prevent their child from being insured.

H. Implications for General Public

Advocate for personal positive mental health and benefits. Some suggestions are provided as follows:

- Know your mental health insurance coverage.

- Consider including mental health coverage when you are selecting your benefits plan or when making changes to your existing plan in the future.
- Be sure to visit your health care provider regularly and disclose any information that you think might be symptoms of, or situations that may lead to a mental health problem.
- Feel comfortable requesting mental health services from your providers as needed, but also ask about up-front costs. .
- Feel comfortable asking for mental health support when you need it. Mental health disorders such as depression, anxiety, alcoholism and drug abuse do not go away on their own. Without treatment, a mild disorder can become severe, requiring a much longer and more intensive treatment regimen.
- Community members and agencies should advocate for mental health prevention and intervention services on behalf of individuals who cannot afford services and for those who may be impaired or disabled.

V. Report Summary

A. Project Strengths, Limitations, and Next Steps

This project has a number of strengths that should be acknowledged. First, the methodology, including sophisticated weighting procedures, allowed for the sample to be representative and improved the generalizability of the findings. At the same time, analyses may be specific to a county or a region providing implications for policy changes at the local or county level. Secondly, the data are rich and allow for independent child, adult and paired child/adult analyses across a number of variables. Finally, this project is one of several funded and coordinated projects being conducted simultaneously, allowing for an integrated understanding of health, mental health, as well as policy and systems issues. One primary limitation of this project is that mental health was assessed using a limited number of questions, which were not consistent with clinical definitions of mental health problems in most cases. Future surveys should consider how to strengthen the assessment of mental and behavioral health in children and adults and its impact on social, emotional and vocational functioning. Specifically, it is recommended that a future survey include questions on the child and adult survey that allow for more specificity in the kinds of mental health challenges symptoms (e.g. a quick checklist of symptoms and a question where participants could endorse whether they have been diagnosed by a mental health specialist or other specialist with depression, anxiety, attention-deficit disorder, etc.). Another suggestion is to ask specifically whether they had an unmet mental health need rather than to wait for participants to self-report this. Finally, it is hoped that these questions, though some of them may be imperfect, can be retained for the next survey to allow for a comparison over time. Our ability to do longitudinal analyses was limited by the pool of questions that was consistent across each of the survey instruments.

B. Implications for Clinical Practice and Research

There are a number of implications for clinical practice and research. First, the findings of this project confirm many recently published studies that have found declining mental health coverage among children and adults, either as a result of added cost to consumers (and their election to decline coverage), fewer options available, rising unemployment and/ or an increase in those who do not qualify for plans (part-time, temp employees, etc.). As the research has shown, for many persons, clinical practice has shifted from mental health prevention/intervention to being more crisis oriented, which may explain why there is high ER usage among children and adults with unmet mental health needs (a trend also found in the literature). The findings also speak to the

need for integrated mental and physical health care in general and for collaborative care models in which mental health care providers work together with primary care physicians, school nurses and other school personnel, and parents and families (in the case of children). Next steps for research should include better understanding the mild to moderate severity group which are not technically disabled but who are either dysfunctional in a single vocation/job or are transitional across vocations/jobs. For those persons who are transitional, they may change jobs before securing insurance for themselves or their children/families. Understanding how we can better support these individuals would improve their collective productivity and may significantly reduce health care costs. A second area for research would be to conduct a cost analysis study to understand what strategies are working to improve mental health access and reduce the need for higher level of care/inappropriate ER use. Useful indicators may include mental health insurance/access, vocational stability, missed vocational days, mental health need/utilization, ER usage, and return on investment (ROI)/cost savings.

C. Implications for Policy

Public policy should focus on increased education for employees about their mental health benefits and plans given the high rates of persons who “did not know” whether they had coverage. Initiatives may also target insurers who may benefit from offering more competitively priced comprehensive insurance packages that include mental health so that their clients may be less inclined to miss work and/or use the emergency room as a mental health crisis center. In light of the comorbidity data, mental health providers and health professionals should work more collaboratively. For health providers in particular, including pediatricians, they are often the first point of contact for persons with mental health problems. For this reason, they should be more proactive in referring patients for mental health prevention and intervention programs that are warranted based on developmental and diagnostic information as appropriate. Finally, those at highest risk for poor mental health outcomes are those on Medicaid and other governmental insurance programs, possibly because disability factors, poverty, and income factors. These factors, reinforce the need to ensure the policy changes are enacted to improve equality in mental health and to meet the needs of high risk subpopulations in Ohio. Specifically, given opportunities with respect to Health Care and Mental Health Care Report Reform, we will need to meet the pharmacological, transportation, and scheduling needs of persons with disabilities, low-income persons and persons on Medicaid. It is essential that mental and physical health care be integrated and coordinated. Determining ways to reduce transition in care will be important to improving mental health care. Transition will need to be reduced both on the side of provider, who may find paperwork and reimbursement as barriers, and for the patients who are highly transitional and may be forced to choose a new provider based on their location and changes in insurance plan.

D. Report Conclusions and Summary

Approximately 10% of children and adults report having social, emotional, behavioral or substance abuse problems that require counseling. It was documented that for approximately 4% of adults, these mental health problems are so severe that they had resulted in at least 30 days of missed normal activities within the past year. The prevalence of the mental health challenges reported is complicated by the fact that 8.7% of children and 16.7 % of adults did not have mental health coverage at the time of the survey. Furthermore, 23% of adults and 18% of parents were unsure of whether their plans included mental health coverage. Both adults and children experienced unmet mental health needs and for those reporting unmet mental health needs, ER usage was high. Finally, the demographic and health risks were similar for children and adults. For children, being a male, age 13-17, African-American, Multi-racial, or obese was associated with having more emotional, developmental or behavioral problems. Children from low-income families (100% below

the federal poverty level), and with parents with a below high school education also had more emotional, developmental or behavioral problems. For adults, males were at the greatest risk for needing mental health care services; however, females were more likely to seek services. Finally, adults ages 45-64, minorities, separated couples and those with high school or less education were more likely to have 30 or more missed activity days.

Future endeavors will need to ensure that clinical practice, research and policy support mental health and health integration, the development of new models of mental health care service delivery (including partnerships with community physicians and schools), and target children and adults at highest risk for mental health care challenges, notably those with disabilities, and low-income. At the same time, and as the survey findings suggest, mental health problems are prevalent among every age and income bracket, as well as in every county and region of the state. It will be essential that Ohio develop creative, yet data-based, comprehensive, and personalized strategies for ensuring that children and adults have mental health insurance and access to quality care and providers. Improving care and access, as well as improving integration, coordination, and advocacy will be the means to the end of improving mental health and quality of life in children and adults in Ohio.

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Appendices

Appendix I – Child Data

- A. Mental Health Status, Insurance, Barriers
- B. Demographics Trends
- C. Health Trends
- D. Analyses of Subpopulations/County Trends

Appendix II – Adult Data

- A. Mental Health Status, Insurance, Barriers
- B. Demographics Trends
- C. Health Trends
- D. Analyses of Subpopulations/County Trends

Appendix I – Child Data

A. Mental Health Status, Insurance, Barriers

Mental Health Status

Table I: Child's - Mental Health Status		
Question	Category	Percent Endorsed
In general how would you describe your child's mental health...?	Excellent	58%
	Very Good	22.3%
	Good	14.7%
	Fair	4.1%
	Poor	.9%
	Don't Know	.1%
	Refused	.3%

Table II: Child's – Mental Health Status		
Question	Category	Percent Endorsed
Does the child have any kind of emotional, developmental or behavioral problem for which the child needs treatment or counseling?	Yes	9.9%
	No	89.6%
	Don't Know	.2%
	Refused	.3%

Insurance Status

Table III: Child's Insurance Coverage		
Question	Category	Percent Endorsed
Last week was the child's health insurance coverage the same as your insurance coverage that you told me about earlier?	Yes	85.4%
	No	14.6%

Table IV: Child's Insurance Coverage		
Question	Category	Percent Endorsed
In the past 12 months, was there a time that the child did not have health insurance?	Yes	21.7%
	No	78.3%

Table V: Child's Insurance Coverage		
Question	Category	Percent Endorsed
In the past 12 months, how long was the child without health insurance coverage?	No, months was insured all year	58.7%
	Days	2.2%
	Weeks	2.8%
	Months	36.3%

Table VI: Child's Insurance Coverage		
Question	Category	Percent Endorsed
In the past 12 months, did any of the following things happen to the child while he or she was uninsured during the past 12 months? The child have any major medical costs while he or she was uninsured	Yes	14.9%
	No	85.1%

Table VII: Child's Insurance Coverage		
Question	Category	Percent Endorsed
In the past 12months, did any of the following things happen to the child? Did you or your family delay or avoid getting care for the child that you felt he or she needed but could not afford?	Yes	3.3%
	No	96.7%

Table VIII: Child's Insurance Coverage		
Question	Category	Percent Endorsed
During the past 12 months, did any of the following things happen to the child? Did you or your family have any problems getting needed care for the child	Yes	3.0%

Table IX: Child's Insurance Coverage		
Question	Category	Percent Endorsed
Do any of the child's insurance plans cover...Mental health care	Yes	74.1%
	No	7.1%
	Don't Know	18.5%
	Refused	.3%

Table X: Child's Insurance Coverage		
Question	Category	Percent Endorsed
Previous insurance type	Medicaid	43.7%
	Employer	49.1%
	Direct purpose	5.9%
	Other	1.4%

Table XI: Child's Insurance Coverage		
Question	Category	Percent Endorsed
Child uses Medicaid	Medicaid	35.4%
	Not Medicaid	64.6%

Table XII: Child's Insurance Coverage		
Question	Category	Percent Endorsed
Barriers to care	Insurance plan restriction	31.9%
	Cant afford	27.1%
	No convenient	12.2%
	No specialist	10.1%
	Other	18.6%

Barriers

Table XIII: Child's Unmet Needs		
Question	Category	Percent Endorsed
During the past 12 months, was there any time when the child did not get other health care that he or she needed, such as a medical exam, medical supplies, mental care or eye glasses?	Yes	3.0%
	No	97%

Table XIV: Child's Unmet Needs		
Question	Category	Percent Endorsed
What was the health care that the child needed but did not get?	Doctor's visit, check-up, or exam	21.8%
	Mental healthcare counseling	11.7%
	Eye glasses	36.8%
	Medical supplies	6.5%
	Appointment or referral to a specialist	2.4%
	Dental	6.6%
	Other medical treatment	5.4%
	Medications/prescriptions	7.3%
	Care for other ailment	.8%
	No more healthcare needed but did not get	.8%

Table XV: Child's Unmet Needs		
Question	Category	Percent Endorsed
What was the main reason you did not get the healthcare that was needed?	Too expensive	53.1%
	No Insurance	37.9%
	Couldn't find doctor or dentist	1.0%
	Doctor or dentist wouldn't accept medical card	.8%
	Difficulty or delay in getting an appointment	4.4%
	Doctor/dentist someone besides insurer SD care not needed	1.6%
	Transportation	.8%
	Didn't have the time/ too busy	.1%
	Chose not/ didn't feel like it/ didn't think was important	.2%

Table XVI: Child's Unmet Needs		
Question	Category	Percent Endorsed
Compared with 3 years ago, is getting medical care you need- becoming easier, harder, or has it stayed the same?	Easier	7.7%
	Harder	21.7%
	Stayed the same	70.6%

Table XVII: Child's Unmet Needs		
Question	Category	Percent Endorsed
Does the child need or use more medical care, mental health or educational services than is usual for most children of the same age?	Yes	14.4

TableXVIII: Child's Unmet Needs (Follow-up to previous question)		
Question	Category	Percent Endorsed
Is the child in need of medical care, mental health or educational services because of any medical, behavioral or other health condition?	Yes	75%

Statistical Analysis

Logistic Regression - Does the child have any kind of emotional, developmental or behavioral problem for which the child needs treatment or counseling?

Child Dependent Variable: Question L126m, Covariates: POVERTY, AGE_C, RACE_C, BMI_C_CAT

Variables in the Equation

Table: XIX		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1(a)	POVERTY	.238	.002	14635.212	1	.000	1.268
	AGE_C	-.027	.006	17.140	1	.000	.974
	RACE_C			2344.927	3	.000	
	RACE_C(1)	.798	.024	1105.668	1	.000	2.220
	RACE_C(2)	.488	.025	385.413	1	.000	1.629
	RACE_C(3)	.877	.035	632.199	1	.000	2.404
	BMI_C_CAT	-.144	.004	1645.485	1	.000	.866
	Constant	.923	.036	659.116	1	.000	2.517

a Variable(s) entered on step 1: POVERTY, AGE_C, RACE_C, BMI_C_CAT.

Medicaid Population Only

Child Dependent Variable: Question L126m, Covariates: POVERTY, AGE_C, RACE_C, BMI_C_CAT

Variables in the Equation

Table XX		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1(a)	POVERTY	-.146	.004	1234.850	1	.000	.864
	AGE_C	.089	.011	63.605	1	.000	1.093
	RACE_C			1363.239	3	.000	
	RACE_C(1)	1.553	.042	1360.970	1	.000	4.727
	RACE_C(2)	1.503	.043	1227.144	1	.000	4.493
	RACE_C(3)	21.378	1799.271	.000	1	.991	19246920 96.786
	BMI_C_CAT	-.041	.006	49.619	1	.000	.960
	Constant	-.262	.060	18.738	1	.000	.770

a Variable(s) entered on step 1: POVERTY, AGE_C, RACE_C, BMI_C_CAT.

B. Demographic Trends

Trends by Mental Health Status, Insurance Status, Age, Race/Ethnicity, Income

Mental Health

Table XXI: Child's Mental Health Trends by Insurance Types

Question	Category	Medicaid and Medicare	Medicaid, no medicare	Medicare, no Medicaid	Job-based coverage	Directly purchase	Other	Unknown	Uninsured
In general how would you describe the child's mental health	Excellent	25.9%	45.4%	45.4%	65.6%	68.2%	69.2%	49.8%	52.5%
	Very Good	27.7%	21.2%	23.2%	22.6%	21%	19%	22.1%	24.7%
	Good	34.5%	23.9%	20.5%	9.2%	9.8%	3.9%	22.8%	16.7%
	Fair	10%	8.0%	9.9%	2.1%	.8%	.1.6%	5%	3.2%
	Poor	2.0%	1.5%	1.0%	.5%	.2%	6.3%	.3%	2.9%

Table XXII: Child's Mental Health Trends by Insurance Status

Question	Category	Insured	Uninsured
In general how would you describe the child's mental health	Excellent	58.3%	52.5%
	Very Good	22.2%	24.7%
	Good	14.5%	16.7%
	Fair	4.2%	3.2%
	Poor	.9%	2.9%

Table XXIII: Child's Mental Health Needs by Insurance Types

Question	Category	Medicaid and Medicare	Medicaid, no medicare	Medicare, no Medicaid	Job-based coverage	Directly purchase	Other	Unknown	uninsured
Does the child have any kind of emotional, developmental or behavioral problem for which the child needs treatment or counseling?	Yes	19%	16.1%	14.8%	6.5%	6.3%	11.4%	9.6%	7.1%

Table: XXIV Child's Mental Health Trends by Insurance Status

Question	Category	Insured	Uninsured
Does your child have any kind of emotional, developmental or behavioral problem for which the child needs treatment or counseling?	Yes	10.1%	7.1%

Age

Table XXV: Child's Mental Health by Age				
Question	Category	1-5	6-12	13-17
In general how would you describe the child's mental health	Excellent	8.4%	54.2%	37.4%
	Very Good	5.2%	48.3%	46.5%
	Good	5.3%	44%	50.8%
	Fair	4.0%	42.5%	53.5%
	Poor	1.2%	47.6%	51.2%

Table: XXVI Child's Unmet Needs by Age					
Question	Category	<1	1-5	6-12	13-17
During the past 12 months, was there any time when the child did not get any other health care that he or she needed, such as a medical exam, medical supplies, mental healthcare, or eye glasses	Yes	.4%	.1.8%	2.9%	4.4%

Table XXVII: Child's Unmet Needs by Age					
Question	Category	<1	1-5	6-12	13-17
What was the healthcare you needed but did not get?	Doctor's Visit	41.2%	53.6%	17.5%	15.3%
	Mental Health care	.0%	.4%	17.2%	10.9%
	Eye glasses	.0%	15.5%	38.4%	42.4%
	Medical Supplies	.0%	10.6%	6.7%	4.6%
	Appointment	.0%	2.0%	1.5%	3.2%
	Dental	.0%	3.9%	4.3%	9.4%
	Other Medical	23%	4%	5.5%	5.6%
	Medications	35.8%	9.6%	8.2%	5.8%
	Care for other aliment or body part	.0%	.3%	.7%	1.0%
	No More healthcare needed	.0%	.0%	.0%	1.8%

Insurance

Table XXVIII : Child's Unmet Needs by Insurance Status			
Question	Category	Insured	Uninsured
During the past 12 months was there any time when the child did not get any other health care that he or she needed such as medical exam, medical supplies, mental healthcare, or eye glasses	Yes	2.4%	17.2%

Table XXIX: Child's Unmet Needs by Insurance Types									
Question	Category	Medicaid and medicare	Medicaid, no medicare	Medicare, no Medicaid	Job based coverage	Directly purchase	Other	unknown	Uninsured
During the past 12 months was there any time when the child did not get any other health care that he or she needed such as medical exam, medical supplies, mental healthcare, or eye glasses(1 response)									
	Yes	2.8%	3.1%	1.6%	1.8%	5.6%	.0%	1.9%	17.2%

Table XXX : Child's Unmet Needs by Insurance Status											
Question	Category	Doctor's Visit	Mental Health care	Eye glasses	Medical Supplies	Appointment	Dental	Other Medical	Medications	Care for other aliment or body part	No More healthcare needed
What was the healthcare you needed but did not get (1 response)?											
	Insured	16.7%	14.6%	37.5%	7.4%	2.3%	7.8%	5.5%	7.1%	1.0%	.0%
	Uninsured	38.5%	2.2%	35%	2.3%	2.5%	2.7%	5.0%	8.3%	.0%	3.5%

Race/Ethnicity

Table XXXI: Child's Mental Health Status by Race					
Question		White/Caucasian	Black/African-American	Asian	Other
In general, how would you describe the child's mental health?	Excellent/Very Good	82.7%	70.3%	77.5%	68.7%
	Good	13.1%	21.1%	15.3%	20.9%
	Fair/Poor	4.2%	8.7%	7.2%	10.4%

Table XXXII: Child's Service Needs by Race		
Question	Category	Percent Endorsed
Does the child have any kind of emotional, developmental or behavioral problem for which the child needs treatment or counseling?	White/Caucasian	9.3%
	Black/African-American	14.1%
	Asian	5.7%
	Other	18.2%

Gender

Table XXXIII: Child's Mental Health Status by Gender			
Question		Male	Female
In general, how would you describe the child's mental health?	Excellent/Very Good	79.5%	81.3%
	Good	15.0%	14.1%
	Fair/Poor	5.5%	4.6%

Table XXXIV: Child's Service Needs by Gender		
Question	Category	Percent Endorsed
Does the child have any kind of emotional, developmental or behavioral problem for which the child needs treatment or counseling?	Male	12.3%
	Female	7.6%

Income

Table XXXV: Child's Service Needs by Income		
Question	Category	Percent Endorsed
Does the child have any kind of emotional, developmental or behavioral problem for which the child needs treatment or counseling?	100% FPL or below	15.7%
	101-150% FPL	12.5%
	151-200% FPL	12.2%
	201-300% FPL	7.1%
	300% FPL or above	6.5%

C. Health Trends

Table XXXVI: Child's Mental by BMI		
Question	Category	Percent Endorsed
Children with Fair or Poor Mental Health and Children's BMI Status	Underweight	3.0%
	Normal	55.1%
	Overweight	14.2%
	Obese	27.7%

Table XXXVII: Child's Mental Health by Race		
Question	Category	Percent Endorsed
Children identifying Fair or Poor Mental Health and Fair or Poor Physical Health	White/Caucasian	25.2%
	Black/African-American	34.1%
	Asian	1.8%
	Other	20.0%

Table XXXIII: Child's Mental Health Status by Gender			
Question	Category	Male	Female
In general, how would you describe the child's mental health?	Excellent/Very Good	79.5%	81.3%
	Good	15.0%	14.1%
	Fair/Poor	5.5%	4.6%

Table XXXIX: Child's Mental Health by Age		
Question	Category	Percent Endorsed
Children identifying Fair or Poor Mental Health and Fair or Poor Physical Health	Ages 1-5	4.9%
	Ages 6-12	47.9%
	Ages 13-17	47.2%

D. Subpopulations/County Trends

Geographic Trends –Child

Table XL: Child's Location by Mental Health Status						
Question	Category	Excellent	Very Good	Good	Fair	Poor
In what county in the state of Ohio do you live in?	Adams	1.5%	2.1%	1.9%	1.7%	.0%
	Allen	1.1%	1.0%	.8%	.9%	.0%
	Ashland	.5%	.5%	.7%	.5%	.3%
	Ashtabula	1.0%	.8%	1.7%	1.2%	.0%
	Athens	.5%	.6%	.7%	.4%	1.3%
	Auglaize	.4%	.5%	.4%	1.4%	.0%
	Belmont	.5%	.7%	.8%	.0%	.0%
	Brown	.4%	.5%	.2%	.2%	.0%

	Butler	3.5%	3.4%	2.8%	4.4%	6.8%
	Carroll	.2%	.4%	.3%	.0%	.1%
	Champaign	.3%	.5%	.3%	.2%	.0%
	Clark	.9%	.8%	.9%	1.0%	5.6%
	Clermont	2.0%	1.5%	1.6%	1.8%	3.1%
	Clinton	.3%	.5%	.5%	1.0%	.0%
	Columbiana	.9%	.8%	1.2%	.9%	5.2%
	Coshocton	.4%	.2%	.3%	.4%	1.6%
	Crawford	.3%	.6%	.3%	.3%	1.2%
	Cuyahoga	11.3%	9.7%	10.2%	8.4%	8.4%
	Darke	.3%	.1%	.1%	.0%	.0%
	Defiance	.%	.3%	.3%	.2%	.2%
	Delaware	1.8%	2.0%	.7%	.4%	4.2%
	Erie	.4%	1.3%	.4%	1.2%	.0%
	Fairfield	1.2%	1.6%	1.1%	1.5%	.0%
	Fayette	.2%	.3%	.3%	.0%	.0%
	Franklin	9.6%	9.3%	11.5%	13.4%	6.6%
	Fulton	.3%	.5%	.5%	.0%	1.2%
	Gallia	.3%	.3%	.1%	.0%	.0%
	Geauga	1.2%	1.5%	.5%	.0%	.0%
	Greene	2.3%	1.6%	1.1%	.9%	.0%
	Guernsey	.3%	.5%	.2%	.2%	.0%
	Hamilton	5.6%	6.2%	7.9%	5.4%	4.4%
	Hancock	.8%	.4%	.7%	.8%	.4%
	Hardin	.2%	.2%	.7%	.2%	.0%
	Harrison	.1%	.1%	.3%	.2%	.0%
	Henry	.2%	.2%	.1%	.2%	.0%
	Highland	.4%	.3%	.5%	.3%	4.9%
	Hocking	.3%	.2%	.2%	.9%	.0%
	Holmes	.6%	.4%	.2%	.1%	.0%
	Huron	.7%	.8%	.5%	.0%	.0%
	Jackson	.2%	.2%	.1%	.2%	.0%
	Jefferson	.5%	.3%	.8%	.5%	.0%
	Knox	.5%	.4%	.7%	.2%	.0%
	Lake	2.2%	2.1%	1.6%	2.6%	8.5%
	Lawrence	.5%	.5%	.4%	2.6%	.0%
	Licking	2.0%	1.9%	1.2%	1.9%	1.4%
	Logan	.3%	.4%	.2%	.4%	3.6%
	Lorain	2.7%	2.2%	2.9%	3.1%	5.1%
	Lucas	3.4%	3.3%	3.3%	3.7%	1.8%
	Marion	.5%	.8%	.8%	.2%	.6%
	Medina	2.1%	1.4%	.4%	2.1%	.0%
	Meigs	.2%	.3%	.3%	.1%	.1%
	Mercer	.4%	.3%	.2%	.0%	.0%
	Miami	.9%	1.7%	1.2%	.2%	1.1%
	Monroe	.1%	.1%	.0%	.0%	.0%
	Montgomery	4.4%	6.3%	4.3%	6.8%	10.7%
	Morgan	.1%	.1%	.1%	.1%	.0%
	Morrow	.2%	.5%	.1%	.1%	.4%
	Muskingum	.8%	.5%	1.2%	.2%	.0%
	Noble	.1%	.3%	.1%	.2%	.0%

	Ottawa	.3%	.6%	.3%	.1%	.0%
	Paulding	.1%	.1%	.3%	.1%	.0%
	Perry	.2%	.3%	.3%	.3%	.0%
	Pickaway	.7%	.4%	.7%	1.0%	1.7%
	Pike	.2%	.2%	.2%	.4%	.6%
	Portage	1.6%	1.5%	2.2%	.3%	.0%
	Preble	.3%	.5%	.2%	.2%	.0%
	Putnam	.3%	.2%	.6%	.1%	.0%
	Richland	.9%	1.1%	1.1%	1.6%	.0%
	Ross	.8%	.6%	.7%	.6%	.7%
	Sandusky	.5%	.3%	.5%	.5%	.0%
	Scioto	.55	.4%	.9%	.2%	.8%
	Seneca	.4%	.3%	.4%	.3%	.0%
	Shelby	.4%	.5%	.6%	.2%	1.5%
	Stark	3.5%	4.4%	2.7%	4.4%	.0%
	Summit	4.4%	4.1%	4.5%	4.4%	1.9%
	Trumbull	1.7%	1.2%	2.9%	1.6%	.0%
	Tuscarawas	.8%	1.0%	.6%	.3%	.0%
	Union	.3%	.8%	.2%	.2%	.0%
	Van Wert	.2%	.2%	.1%	1.2%	.0%
	Vinton	.2%	.0%	.1%	.0%	.0%
	Warren	2.4%	1.6%	1.3%	2.2%	.0%
	Washington	.6%	.4%	.6%	.9%	1.1%
	Wayne	1.0%	.6%	1.5%	.2%	.8%
	Williams	.3%	.4%	.5%	.3%	.0%
	Wood	1.1%	1.3%	.7%	1.0%	1.6%
	Wyandot	.2%	.1%	.0%	.4%	.0%
	Other	.0%	.1%	.4%	.0%	.0%
	Don't Know	.1%	.2%	.6%	.5%	.0%

Table XLI: Does the child need or use more medical care, mental health or educational services than is usual for most children of the same age?

Question	Category	Yes
What county in Ohio do you live in?	Adams	1.7%
	Allen	.5%
	Ashland	.4%
	Ashtabula	.9%
	Athens	.65
	Auglaize	.4%
	Belmont	.3%
	Brown	.2%
	Butler	3.7%
	Carroll	.2%
	Champaign	.5%
	Clark	.7%
	Clermont	1.9%
	Clinton	.3%
	Columbiana	.3%
	Coshocton	.3%
	Crawford	.5%

	Cuyahoga	9.0%
	Darke	.5%
	Defiance	.3%
	Delaware	1.1%
	Erie	.6%
	Fairfield	1.3%
	Fayette	.2%
	Franklin	10.1%
	Fulton	.6%
	Gallia	.7%
	Geauga	1.1%
	Greene	1.8%
	Guernsey	.1%
	Hamilton	7.7%
	Hancock	.8%
	Hardin	.3%
	Harrison	.2%
	Henry	.3%
	Highland	.2%
	Hocking	.1%
	Holmes	.2%
	Huron	.6%
	Jackson	.3%
	Jefferson	.5%
	Knox	.8%
	Lake	2.8%
	Lawrence	.6%
	Licking	.9%
	Logan	.3%
	Lorain	3.1%
	Lucas	4.0%
	Marion	.4%
	Medina	1.8%
	Meigs	.1%
	Mercer	.6%
	Miami	.8%
	Monroe	.0%
	Montgomery	6.8%
	Morgan	.2%
	Morrow	.4%
	Muskingum	1.2%
	Noble	.1%
	Ottawa	.2%
	Paulding	.1%
	Perry	.2%
	Pickaway	.5%
	Pike	.1%
	Portage	1.8%
	Preble	.1%
	Putnam	.3%
	Richland	.9%

	Ross	.2%
	Sandusky	.8%
	Scioto	.6%
	Seneca	.5%
	Shelby	.5%
	Stark	4.3%
	Summit	4.2%
	Trumbull	1.2%
	Tuscarawas	.8%
	Union	.3%
	Van Wert	.1%
	Vinton	.1%
	Warren	1.7%
	Washington	.9%
	Wayne	1.0%
	Williams	.2%
	Wood	.7%
	Wyandot	.4%
	Other	.2%
	Don't Know	.4%

Table XLII: Does the child have any kind of emotional, developmental or behavioral problem for which the child needs treatment or counseling

Question	Category	Yes
In what county in Ohio do you live in?	Adams	1.2%
	Allen	.4%
	Ashland	.6%
	Ashtabula	1.2%
	Athens	.6%
	Auglaize	.6%
	Belmont	.1%
	Brown	.3%
	Butler	3.7%
	Carroll	.2%
	Champaign	.7%
	Clark	1.4%
	Clermont	2.1%
	Clinton	.3%
	Columbiana	.4%
	Coshocton	.3%
	Crawford	.5%
	Cuyahoga	9.9%
	Darke	.3%
	Defiance	.3%
	Delaware	1.9%
	Erie	1.1%
	Fairfield	.8%
	Fayette	.2%
	Franklin	9.3%
	Fulton	.3%

	Gallia	.1%
	Geauga	.5%
	Greene	.9%
	Guernsey	.2%
	Hamilton	7.3%
	Hancock	.6%
	Hardin	.3%
	Harrison	.1%
	Henry	.1%
	Highland	.2%
	Hocking	.5%
	Holmes	.1%
	Huron	.7%
	Jackson	.4%
	Jefferson	.9
	Knox	.8%
	Lake	3.3%
	Lawrence	.9%
	Licking	1.8%
	Logan	.9%
	Lorain	2.5%
	Lucas	4.7%
	Marion	.3%
	Medina	1.0%
	Meigs	.1%
	Mercer	.5%
	Miami	1.1%
	Monroe	.1%
	Montgomery	6.2%
	Morgan	.2%
	Morrow	.5%
	Muskingum	.9%
	Noble	.3%
	Ottawa	.1%
	Paulding	.3%
	Perry	.3%
	Pickaway	1.0%
	Pike	.4%
	Portage	1.1%
	Preble	.3%
	Putnam	.3%
	Richland	1.0%
	Ross	.9%
	Sandusky	.4%
	Scioto	.7%
	Seneca	.4%
	Shelby	.6%
	Stark	3.8%
	Summit	5.3%
	Trumbull	1.1%

	Tuscarawas	.4%
	Union	.1%
	Van Wert	.1%
	Vinton	.0%
	Warren	.7%
	Washington	.8%
	Wayne	1.0%
	Williams	.2%
	Wood	.8%
	Wyandot	.1%
	Other	.0%
	Don't Know	.2%

Appendix II – Adult Data

Mental Health Status

Table I: Adults Mental Health Status		
Question	Category	Percent Endorsed
For how many days during the past 30 days did your mental health conditions or emotional problems keep you from doing your work or other usual activities	0-14 Days	93.4%
	15-19 Days	2.0%
	20-29 Days	0.6%
	30 or more Days	3.9%

Table II: Adults Mental Health Status		
Question	Category	Percent Endorsed
Do you need or get treatment or counseling for any kind of mental health status, substance abuse or emotional problem	Yes	7.3%
	No	92.5%

Table III: Adults Mental Health Status		
Question	Category	Percent Endorsed
Do you currently need social or emotional support for your health problems?	Yes	10%

Insurance

Table IV: Adults Insurance Coverage		
Question	Category	Percent Endorsed
Do any your health insurance plans cover mental health services?	Yes	64.1%
	No	12.9%
	Don't Know	23%
	Refused	.0%

Table V: Adults Insurance		
Question	Category	Percent Endorsed
Insurance Status	No, Uninsured	14.1%

Barriers

Table VI: Adults Unmet Needs		
Question	Category	Percent Endorsed
During the past 12 months, was there any time when you did not get any other healthcare that you needed such as a medical exam, medical supplies, mental care, or eye glasses?	Yes	14.3%

Table VII: Adults Unmet Needs		
Question	Category	Percent Endorsed
What was health care that you needed but did not get? (Responses 1-5)	Doctor visit, check-up, or exam	17.5%
	Mental health care (counseling)	4.5%
	Eyeglasses	37.0%
	Medical Supplies	2.7%
	Appointment or referral	5.5%
	Dental	11.3%
	Other medical treatment	10.2%
	Medications	7.5%
	Care for other Ailment	3.3%
	No more treatment needed	0.5%

Logistic Regression - Do you/Does [FILL IN] need or get treatment or counseling for any kind of mental health, substance abuse or emotional problem?

Adult Dependent Variable: Question D31L, Covariates: POVERTY, EDUC, AGE_A, RACE_A, BMI_A_CAT

Variables in the Equation

Table VIII		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1(a)	POVERTY	.343	.001	134018.205	1	.000	1.409
	AGE_A	.136	.001	27078.845	1	.000	1.146
	EDUC	-.034	.001	1194.560	1	.000	.967
	BMI_A_CAT	-.212	.002	16764.225	1	.000	.809
	RACE_A			6591.195	3	.000	
	RACE_A(1)	.530	.009	3697.290	1	.000	1.699
	RACE_A(2)	.461	.009	2478.378	1	.000	1.585
	RACE_A(3)	1.405	.019	5386.281	1	.000	4.076
	Constant	1.142	.010	12135.042	1	.000	3.134

a Variable(s) entered on step 1: POVERTY, AGE_A, EDUC, BMI_A_CAT, RACE_A.

Medicaid Population Only

Adult Dependent Variable: Question D31L, Covariates: POVERTY, EDUC, AGE_A, RACE_A, BMI_A_CAT

Variables in the Equation

Table IX		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1(a)	POVERTY	.217	.003	5989.849	1	.000	1.243
	AGE_A	.077	.002	1810.317	1	.000	1.080
	EDUC	-.091	.003	1166.683	1	.000	.913
	BMI_A_CAT	-.204	.003	3772.053	1	.000	.816
	RACE_A			1186.170	3	.000	
	RACE_A(1)	.187	.019	102.126	1	.000	1.206
	RACE_A(2)	.362	.019	360.762	1	.000	1.436
	RACE_A(3)	1.072	.049	469.988	1	.000	2.922
	Constant	1.291	.022	3378.370	1	.000	3.635

a Variable(s) entered on step 1: POVERTY, AGE_A, EDUC, BMI_A_CAT, RACE_A.

Linear Regression – For how many days, during the past 30 days, did your mental health condition or emotional experience keep you from doing your work or other usual activities?

Table X

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	BMI category - adult, Income as a % of Poverty, Adult's Age, Level of education, imputed(a)	.	Enter

a All requested variables entered.

b Dependent Variable: MHRECODE12

Table XI

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.247(a)	.061	.061	.84660

a Predictors: (Constant), BMI category - adult, Income as a % of Poverty, Adult's Age, Level of education, imputed

Table XII

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	387287.408	4	96821.852	135088.690	.000(a)
	Residual	5979138.372	8342269	.717		
	Total	6366425.780	8342273			

a Predictors: (Constant), BMI category - adult, Income as a % of Poverty, Adult's Age, Level of education, imputed

b Dependent Variable: MHRECODE12

Table XIII
Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.894	.002		560.929	.000
	Adult's Age	-.018	.000	-.034	-99.086	.000
	Income as a % of Poverty	-.116	.000	-.201	-546.592	.000
	Level of education, imputed	-.039	.000	-.074	-201.562	.000
	BMI category - adult	.032	.000	.031	90.029	.000

a. Dependent Variable: MHRECODE12

A. Demographic Trends by Mental Health Status, Insurance Status, Age, Race/Ethnicity, Income, Education, Marital Status Mental Health

Table XIV : Adults Mental Health Status by Insurance Type

Question	Category	Medicaid and medicare	Medicaid, no medicare	Medicare, no Medicaid	Job based coverage	Directly purchase	Other	Unknown	Uninsured
Do you need treatment or counseling for any kind of mental health, substance abuse or emotional problem?									
	Yes	8.1%	18.2%	14.7%	32.6%	1.8%	2.8%	1.3%	20.6%

Table XV: Adults Mental Health Status by Age

Question	Category	Percent Endorsed
Do you need or get treatment or counseling for any kind of mental health, substance abuse or emotional problem?	Ages 18-24	9.2%
	Ages 25-34	8.7%
	Ages 35-44	8.0%
	Ages 45-54	8.1%
	Ages 55-64	7.5%
	Ages 65+	2.7%

Insurance

Table XVI : Adults Mental Health Status by Insurance Status

		Insurance Trends	
Question	Category	Insured	Uninsured
During the past 12 months, was there any time when you did not get any other healthcare that you needed such as a medical exam, medical supplies, mental care, or eye glasses?	Yes	60.1%	39.9%

Table XVIII: Adults Mental Health Status by Age					
Question	Category	None (0 Days)	Mild (1-14 Days)	Moderate (15-19 Days)	Severe (20+ Days)
For how many days during the past 30 days did your mental health condition or emotional problem keep you from doing your work or other usual activities?	Ages 18-24	80.3%	12.8%	1.3%	5.6%
	Ages 25-34	83.4%	10.6%	1.3%	4.7%
	Ages 35-44	85.2%	8.3%	0.8%	5.7%
	Ages 45-54	85.5%	6.9%	1.5%	6.1%
	Ages 55-64	86.5%	6.1%	1.3%	6.1%
	Ages 65+	90.9%	4.5%	0.7%	3.9%

Age

Table XVIII: Adults Mental Health Status by Age					
Question		None (0 Days)	Mild (1-14 Days)	Moderate (15-19 Days)	Severe (20+ Days)
For how many days during the past 30 days did your mental health condition or emotional problem keep you from doing your work or other usual activities?	Ages 18-24	80.3%	12.8%	1.3%	5.6%
	Ages 25-34	83.4%	10.6%	1.3%	4.7%
	Ages 35-44	85.2%	8.3%	0.8%	5.7%
	Ages 45-54	85.5%	6.9%	1.5%	6.1%
	Ages 55-64	86.5%	6.1%	1.3%	6.1%
	Ages 65+	90.9%	4.5%	0.7%	3.9%

Race/Ethnicity

Table XVIII: Adults Mental Health Status by Race		
Question	Category	Percent Endorsed
Do you need or get treatment or counseling for any kind of mental health, substance abuse or emotional problem?	White/Caucasian	6.9%
	Black/African-American	10.3%
	Asian	2.7%
	Other	14.6%

Table XIX: Adults Support Systems by Race		
Question	Category	Percent Endorsed
Do you currently need social or emotional support because of that/those health problems you just told me about?	White/Caucasian	9.0%
	Black/African-American	17.5%
	Asian	6.8%
	Other	24.7%

Table XX: Adults Mental Health Status by Race					
Question	Category	None (0 Days)	Mild (1-14 Days)	Moderate (15-19 Days)	Severe (20+ Days)
For how many days during the past 30 days did your mental health condition or emotional problem keep you from doing your work or other usual activities?	White/Caucasian	86.7%	7.5%	1.0%	4.8%
	Black/African-American	78.2%	11.3%	2.4%	8.1%
	Asian	89.1%	9.2%	0.4%	1.3%
	Other	71.4%	14.2%	1.6%	12.8%

Gender

Table XXI: Adults Mental Health Status by Gender		
Question	Category	Percent Endorsed
Do you need or get treatment or counseling for any kind of mental health, substance abuse or emotional problem?	Male	6.1%
	Female	8.4%

Table XXII: Adults Support Systems by Gender		
Question	Category	Percent Endorsed
Do you currently need social or emotional support because of that/those health problems you just told me about?	Male	10.3%
	Female	9.8%

Table XXIII: Adults Mental Health Status by Gender			
Question	Category	Average Days (SD)	
For how many days during the past 30 days did your mental health condition or emotional problem keep you from doing your work or other usual activities?	Male	1.89 (6.48)	
	Female	2.25 (6.77)	

Table XXIV: Adults Mental Health Status by Gender					
Question	Category	None (0 Days)	Mild (1-14 Days)	Moderate (15-19 Days)	Severe (20+ Days)
For how many days during the past 30 days did your mental health condition or emotional problem keep you from doing your work or other usual activities?	Male	87.7%	6.5%	0.9%	4.9%
	Female	83.5%	9.6%	1.4%	5.5%

Education

Table XXV: Adults Mental Health Status by Education		
Question	Category	Percent Endorsed
Do you need or get treatment or counseling for any kind of mental health, substance abuse or emotional problem?	High School or Less	11.1%
	High School Diploma	6.7%
	Some College	8.8%
	Associate Degree	7.0%
	Bachelors Degree	5.4%
	Advanced Degree	5.6%

Table XXVI: Adults Mental Health Status by Education		
Question	Category	Percent Endorsed
Do you currently need social or emotional support because of that/those health problems you just told me about?	High School or Less	18.2%
	High School Diploma	10.3%
	Some College	10.5%
	Associate Degree	10.0%
	Bachelors Degree	5.7%
	Advanced Degree	3.6%

Table XXVII: Adults Mental Health Status by Education(Avg. Days)		
Question	Category	Average Days (SD)
For how many days during the past 30 days did your mental health condition or emotional problem keep you from doing your work or other usual activities?	High School or Less	4.66 (9.57)
	High School Diploma	2.24 (6.87)
	Some College	2.21 (6.78)
	Associate Degree	1.61 (5.81)
	Bachelors Degree	0.85 (4.04)
	Advanced Degree	0.54 (3.22)

Table XXVIII: Adults Mental Health Status by Education					
Question		None (0 Days)	Mild (1-14 Days)	Moderate (15-19 Days)	Severe (20+ Days)
For how many days during the past 30 days did your mental health condition or emotional problem keep you from doing your work or other usual activities?	High School or Less	73.5%	11.2%	2.6%	12.7%
	High School Diploma	85.5%	7.6%	1.2%	5.7%
	Some College	84.4%	8.7%	1.2%	5.7%
	Associate Degree	87.3%	6.9%	1.1%	4.7%
	Bachelors Degree	91.2%	6.5%	0.4%	1.9%
	Advanced Degree	93.5%	5.1%	0.2%	1.2%

Marital Status

Table XXIX: Adults Mental Health Status by Marital Status		
Question	Category	Percent Endorsed
Do you need or get treatment or counseling for any kind of mental health, substance abuse or emotional problem?	Married	5.0%
	Divorced	11.9%
	Widowed	5.0%
	Separated	19.3%
	Never Married	10.3%
	Unmarried Couple	10.8%

Table XXX: Adults Support Systems by Marital Status		
Question	Category	Percent Endorsed
Do you currently need social or emotional support because of that/those health problems you just told me about?	Married	5.5%
	Divorced	15.0%
	Widowed	10.5%
	Separated	24.1%
	Never Married	20.5%
	Unmarried Couple	16.9%

Table XXXI: Adults Mental Health Status by Marital Status		
Question	Category	Average Days (SD)
For how many days during the past 30 days did your mental health condition or emotional problem keep you from doing your work or other usual activities?	Married	1.38 (5.46)
	Divorced	3.53 (8.56)
	Widowed	2.39 (7.24)
	Separated	5.24 (10.02)
	Never Married	2.72 (7.32)
	Unmarried Couple	2.74 (7.33)

Table XXXII: Adults Mental Health Status by Marital Status					
Question	Category	None (0 Days)	Mild (1-14 Days)	Moderate (15-19 Days)	Severe (20+ Days)
For how many days during the past 30 days did your mental health condition or emotional problem keep you from doing your work or other usual activities?	Married	89.9%	5.9%	0.7%	4.5%
	Divorced	79.3%	9.0%	1.7%	10.0%
	Widowed	85.7%	5.9%	0.9%	7.5%
	Separated	71.0%	12.3%	2.6%	14.1%
	Never Married	79.5%	12.2%	1.9%	6.4%
	Unmarried Couple	78.1%	13.7%	1.6%	6.6%

B. Health Trends

Table XXXIII: Adults Mental Health Status by Health Status		
Question	Category	Percent Endorsed
Health Status of adults needing or getting treatment or counseling for any kind of mental health, substance abuse or emotional problem	Excellent/Very Good	26.4%
	Good	30.8%
	Fair/Poor	42.8%

Table XXXIV: Adults Mental Health Status by BMI		
Question	Category	Percent Endorsed
BMI Categories of adults needing or getting treatment or counseling for any kind of mental health, substance abuse or emotional problem	Underweight	2.0%
	Normal Weight	28.3%
	Overweight	32.4%
	Obese	37.3%

Table XXV: Adults Mental Health Status by Health Condition		
Question	Category	Percent Endorsed
Health Conditions of adults needing or getting treatment or counseling for any kind of mental health, substance abuse or emotional problem	High Blood Pressure or Hypertension	43.4%
	Heart Attack or Myocardial Infraction	7.8%
	Coronary Heart Disease	9.1%
	Congestive Heart Failure	4.8%
	Stroke	5.5%
	Diabetes or Sugar Diabetes	17.2%
	Cancer	10.4%

Table XXXVI: Adults Mental Health Status by Smoking Habits		
Question	Category	Percent Endorsed
Smoking Habits of Adults needing or getting treatment or counseling for any kind of mental health, substance abuse or emotional problem	Every Day	53.0%
	Some Days	14.6%
	Not at All	32.4%

C. Subpopulations/County Trends

Table XXXVII: Adults Location by Mental Health Status	For how many days during the past 30 days did your mental health condition or emotional problem keep you from your work or other usual activities?	
Question	Category	30+Days
In what county in the state of Ohio do you live in?	Adams	.5%
	Allen	.7%
	Ashland	.5%
	Ashtabula	1.1%
	Athens	.6%
	Auglaize	.3%
	Belmont	1.1%
	Brown	.4%
	Butler	3.1%
	Carroll	.2%
	Champaign	.2%
	Clark	1.7%
	Clermont	2.4%
	Clinton	.4%
	Columbiana	1.1%
	Coshocton	.2%
	Crawford	.6%
	Cuyahoga	9.3%
	Darke	.3%
	Defiance	.1%
	Delaware	1.1%
	Erie	1.1%
	Fairfield	.9%
	Fayette	.2%
	Franklin	9.7%
	Fulton	.1%
	Gallia	.4%
	Geauga	1.1%
	Greene	1.4%
	Guernsey	.4%
	Hamilton	7.3%
	Hancock	.7%
	Hardin	.2%
	Harrison	.2%
	Henry	.3%
	Highland	.4%
	Hocking	.2%

	Holmes	.1%
	Huron	.7%
	Jackson	.4%
	Jefferson	.5%
	Knox	.3%
	Lake	1.4%
	Lawrence	.9%
	Licking	1.6%
	Logan	.8%
	Lorain	.8%
	Lucas	5.0%
	Marion	1.2%
	Medina	1.7%
	Meigs	.4%
	Mercer	.1%
	Miami	1.0%
	Monroe	.2%
	Montgomery	5.7%
	Morgan	.1%
	Morrow	.5%
	Muskingum	1.9%
	Noble	.2%
	Ottawa	.4%
	Paulding	.5%
	Perry	.6%
	Pickaway	.4%
	Pike	.5%
	Portage	.8%
	Preble	.4%
	Putnam	.0%
	Richland	1.1%
	Ross	1.1%
	Sandusky	.6%
	Scioto	1.1%
	Seneca	.2%
	Shelby	.3%
	Stark	3.3%
	Summit	4.5%
	Trumbull	1.7%
	Tuscarawas	.6%
	Union	.2%
	Van Wert	.1%
	Vinton	.2%
	Warren	1.0%
	Washington	.6%
	Wayne	.8%
	Williams	.4%
	Wood	.8%
	Wyandot	.0%
	Other	.4%
	Don't Know	.4%

Table XXXVIII: Adults Location by Mental Health Status	Do you need or get treatment or counseling for any kind of mental health, substance abuse or emotional problems?	
Question	Category	Yes
In what county in the state of Ohio do you live in?	Adams	2.1%
	Allen	.6%
	Ashland	.2%
	Ashtabula	1.0%
	Athens	.7%
	Auglaize	.3%
	Belmont	.7%
	Brown	.2%
	Butler	3.0%
	Carroll	.1%
	Champaign	.2%
	Clark	1.0%
	Clermont	1.4%
	Clinton	.4%
	Columbiana	1.1%
	Coshocton	.2%
	Crawford	.2%
	Cuyahoga	11.8%
	Darke	.3%
	Defiance	.3%
	Delaware	1.2%
	Erie	.9%
	Fairfield	1.0%
	Fayette	.1%
	Franklin	11.6%
	Fulton	.2%
	Gallia	.4%
	Geauga	.7%
	Greene	1.4%
	Guernsey	.2%
	Hamilton	8.1%
	Hancock	.4%
	Hardin	.2%
	Harrison	.0%
	Henry	.3%
	Highland	.4%
	Hocking	.3%
	Holmes	.1%
	Huron	.7%
	Jackson	.4%
	Jefferson	.7%
	Knox	.5%
	Lake	1.9%
	Lawrence	.5%
	Licking	1.3%
	Logan	.4%

	Lorain	2.8%
	Lucas	4.6%
	Marion	.8%
	Medina	1.3%
	Meigs	.3%
	Mercer	.2%
	Miami	.8%
	Monroe	.0%
	Montgomery	4.6%
	Morgan	.3%
	Morrow	.4%
	Muskingum	1.3%
	Noble	.2%
	Ottawa	.3%
	Paulding	.3%
	Perry	.4%
	Pickaway	.4%
	Pike	.2%
	Portage	1.4%
	Preble	.5%
	Putnam	.1%
	Richland	.7%
	Ross	1.0%
	Sandusky	.3%
	Scioto	.7%
	Seneca	.4%
	Shelby	.3%
	Stark	2.3%
	Summit	5.3%
	Trumbull	1.8%
	Tuscarawas	.6%
	Union	.4%
	Van Wert	.1%
	Vinton	.1%
	Warren	1.3%
	Washington	.6%
	Wayne	1.2%
	Williams	.4%
	Wood	.8%
	Wyandot	.1%
	Other	.1%
	Don't Know	.3%

Table XXXIV: Adults Location by Mental Health Status	Do you currently need of the following types assistance because of those health problems you just told me about? Social or emotional support such as companionship, recreation and socialization?	
Question	Category	Yes
In what county in the state of Ohio do you live in?	Adams	2.5%
	Allen	.7%
	Ashland	.2%
	Ashtabula	1.3%
	Athens	.4%
	Auglaize	.4%
	Belmont	.9%
	Brown	.4%
	Butler	2.5%
	Carroll	.2%
	Champaign	.4%
	Clark	1.1%
	Clermont	1.8%
	Clinton	.4%
	Columbiana	.7%
	Coshocton	.2%
	Crawford	.3%
	Cuyahoga	11%
	Darke	.3%
	Defiance	.1%
	Delaware	.8%
	Erie	.9%
	Fairfield	1.0%
	Fayette	.2%
	Franklin	10%
	Fulton	.3%
	Gallia	.6%
	Geauga	.8%
	Greene	1.1%
	Guernsey	.3%
	Hamilton	8.4%
	Hancock	.9%
	Hardin	.2%
	Harrison	.2%
	Henry	.3%
	Highland	.6%
	Hocking	.2%
	Holmes	.2%
	Huron	.5%
	Jackson	.5%
	Jefferson	1.1%
	Knox	.5%
	Lake	1.7%
	Lawrence	.6%
	Licking	.9%
	Logan	.1%

	Lorain	2.6%
	Lucas	4.3%
	Marion	.6%
	Medina	1.4%
	Meigs	.3%
	Mercer	.1%
	Miami	1.5%
	Monroe	.2%
	Montgomery	5.8%
	Morgan	.2%
	Morrow	.4%
	Muskingum	1.0
	Noble	.2%
	Ottawa	.2%
	Paulding	.1%
	Perry	.4%
	Pickaway	.2%
	Pike	.3%
	Portage	1.0%
	Preble	.4%
	Putnam	.1%
	Richland	.7%
	Ross	1.1%
	Sandusky	.3%
	Scioto	.9%
	Seneca	.2%
	Shelby	.3%
	Stark	3.0%
	Summit	4.8%
	Trumbull	2.3%
	Tuscarawas	.9%
	Union	.3%
	Van Wert	.2%
	Vinton	.3%
	Warren	1.2%
	Washington	.4%
	Wayne	.8%
	Williams	.3%
	Wood	1.1%
	Wyandot	.2%
	Other	.2%
	Don't Know	.5%

Table XXXVI: Adults Location by Poverty						
Question	Category	100% or less	101-150%	151%-200	201%-300%	301% or more
In what county in the state of Ohio do you live in?	Adams	.5%	.4%	.3%	.3%	.1%
	Allen	.8%	1.0%	1.1%	1.0%	.9%
	Ashland	.3%	.6%	.7%	.6%	.5%
	Ashtabula	1.2%	1.1%	1.0%	.9%	.7%
	Athens	.9%	.7%	.6%	.8%	.5%
	Auglaize	.3%	.4%	.5%	.4%	.4%
	Belmont	.8%	.7%	1.0%	.7%	.4%
	Brown	.5%	.4%	.6%	.4%	.3%
	Butler	2.2%	1.8%	2.2%	3.6%	3.7%
	Carroll	.3%	.4%	.3%	.3%	.2%
	Champaign	.3%	.4%	.4%	.4%	.3%
	Clark	1.4%	1.1%	1.3%	1.6%	1.1%
	Clermont	1.8%	1.5%	1.6%	1.8%	1.7%
	Clinton	.6%	.4%	.3%	.4%	.3%
	Columbiana	1.2%	1.6%	1.1%	1.1%	.7%
	Coshocton	.4%	.5%	.4%	.4%	.2%
	Crawford	.6%	.4%	.5%	.4%	.3%
	Cuyahoga	12.2%	10.9%	10.2%	10.5%	12.3%
	Darke	.5%	.4%	.7%	.5%	.4%
	Defiance	.2%	.4%	.4%	.5%	.3%
	Delaware	.5%	1.0%	1.1%	1.0%	2.0%
	Erie	.4%	.6%	.9%	1.0%	.6%
	Fairfield	1.0%	1.2%	1.0%	1.1%	1.4%
	Fayette	.3%	.3%	.4%	.2%	.2%
	Franklin	11.5%	9.7%	8.8%	8.0%	10.5%
	Fulton	.2%	.3%	.5%	.4%	.4%
	Gallia	.5%	.4%	.2%	.3%	.2%
	Geauga	.5%	.5%	.7%	.7%	1.1%
	Greene	1.2%	.7%	1.5%	1.3%	1.7%
	Guernsey	.4%	.6%	.5%	.4%	.2%
	Hamilton	8.0%	7.1%	6.9%	6.0%	7.9%
	Hancock	.4%	.6%	1.2%	.7%	.7%
	Hardin	.6%	.2%	.2%	.3%	.2%
	Harrison	.2%	.2%	.1%	.2%	.1%
	Henry	.2%	.2%	.4%	.3%	.3%
	Highland	.4%	.6%	.4%	.4%	.3%
	Hocking	.3%	.5%	.2%	.3%	.2%
	Holmes	.4%	.5%	.5%	.3%	.2%
	Huron	.6%	.6%	.6%	.7%	.4%
	Jackson	.5%	.4%	.4	.3%	.2%
	Jefferson	.7%	.9%	.8%	.7%	.5%
	Knox	.4%	.4%	.7%	.6%	.5%
	Lake	1.6%	2.1%	1.5%	2.0%	2.5%
	Lawrence	.9%	.8%	.6%	.6%	.4%
	Licking	1.0%	1.1%	1.2%	1.2%	1.7%
	Logan	.4%	.4%	.6%	.5%	.3%
	Lorain	1.7%	2.8%	2.4%	2.9%	3.0%

	Lucas	4.6%	4.2%	3.7%	4.0%	3.5%
	Marion	.7%	.4%	.8%	.7%	.5%
	Medina	.6%	.9%	1.2%	1.4%	2.0%
	Meigs	.4%	.3%	.2%	.2%	.1%
	Mercer	.2%	.4%	.4%	.6%	.3%
	Miami	.7%	.8%	1.4%	1.0%	.9%
	Monroe	.2%	.1%	.1%	.2%	.1%
	Montgomery	5.6%	4.6%	4.4%	5.1%	4.6%
	Morgan	.2%	.2%	.4%	.1%	.1%
	Morrow	.3%	.3%	.6%	.4%	.2%
	Muskingum	1.0%	1.2%	.8%	.8%	.6%
	Noble	.2%	.2%	.1%	.1%	.1%
	Ottawa	.3%	.3%	.4%	.5%	.4%
	Paulding	.2%	.2%	.1%	.2%	.2%
	Perry	.4%	.5%	.5%	.3%	.2%
	Pickaway	.4%	.5%	.5%	.4%	.5%
	Pike	.4%	.3%	.5%	.1%	.2%
	Portage	.9%	1.2%	1.6%	1.4%	1.7%
	Preble	.2%	.6%	.6%	.4%	.3%
	Putnam	.2%	.4%	.3%	.4%	.3%
	Richland	1.4%	1.3%	1.2%	1.2%	.9%
	Ross	.8%	.7%	.7%	.7%	.6%
	Sandusky	.5%	.6%	.7%	.6%	.4%
	Scioto	1.3%	1.1%	.5%	.6%	.4%
	Seneca	.5%	.6%	.7%	.6%	.4%
	Shelby	.4%	.3%	.5%	.5%	.4%
	Stark	2.7%	3.9%	3.3%	4.2%	3.2%
	Summit	5.1%	4.5%	5.1%	4.7%	4.8%
	Trumbull	1.7%	2.0%	2.3%	2.2%	1.8%
	Tuscarawas	.7%	1.1%	1.0%	1.1%	.6%
	Union	.0%	.5%	.2%	.6%	.5%
	Van Wert	.2%	.2%	.3%	.3%	.2%
	Vinton	.2%	.2%	.1%	.2%	.1%
	Warren	.8%	1.0%	1.4%	1.6%	2.3%
	Washington	.5%	.8%	.9%	.6%	.5%
	Wayne	.8%	1.4%	1.3%	.9%	.9%
	Williams	.3%	.4%	.4%	.4%	.3%
	Wood	.8%	.9%	.7%	1.2%	1.4%
	Wyandot	.2%	.2%	.1%	.3%	.2%
	Other	.2%	.1%	.0%	.1%	.0%
	Don't Know	1.2%	.5%	.4%	.1%	.1%