Mental Health Impairment and Co-occurring Chronic Conditions among Ohioans

Dushka Crane, Ph.D.[1], Yoshie H. Kim, MS[1],
Surendra Bir Adhikari, Ph.D. MedSoc[2]
[1]Ohio State University Government Resource Center
[2]Ohio Department of Mental Health and Addiction Services

January 2019

INTRODUCTION

Functional impairment is a significant outcome of mental illness and can be used as a proxy measure of mental health symptom severity.[1, 2] Previous iterations of the Ohio Medicaid Assessment Survey (OMAS) have established that Ohio adults (19+ years old) with mental health conditions are disproportionately affected by comorbid chronic conditions, poverty, and unemployment.[3] They are also more prone to substance use, including smoking, binge drinking, and misuse of prescription pain killers.[4]

The rate of functional impairment attributed to mental distress in Ohio increased after the economic downturn in 2010 and improved during the economic recovery.[5] Medicaid expansion allowed access to care for adults with incomes under 138% of the federal poverty limit (FPL) ($28,179 annual income for a family of three in 2017), many of whom suffered from mental illness or substance use disorder. Beginning in 2012, the Ohio Departments of Medicaid, Mental Health and Addiction Services, and the Governor's Office of Health Transformation took steps to strengthen the community mental health and addiction services systems, improve consistency across physical and behavioral health services, and improve health outcomes through better care coordination. These reforms were expected to provide broader access to integrated treatment and evidence-based practices to meet the needs of individuals with mental illness.

The objectives of this brief are to: (1) identify the prevalence and trends in mental health-related functional impairment (hereafter referred as Mental Health Impairment [MHI]); and (2) examine the impact of economic and policy changes on health insurance coverage, access to care, and quality of care provided to Ohioans with mental health impairment.

METHODS

The Ohio Medicaid Assessment Survey (OMAS) is a random sampling telephone survey that assesses Ohio resident's access to health care, their health care status, and how they use health care. The 2017 OMAS survey includes interview data from 39,711 Ohio adults and 9,202 proxy interviews from Ohio children. The 2017 OMAS survey is the 7th iteration of the survey. Participants include Ohioans on Medicaid, eligible for Medicaid, and those who are not on Medicaid. This brief adjusts for survey weights and represents non-institutionalized Ohio adults. More information on the findings and methodology of the survey is accessible at: https://grc.osu.edu/OMAS/2017Survey.

KEY FINDINGS

- Based on the 2017 OMAS, approximately 551,619 Ohio adults appear to have mental health-related functional impairment. Demographic characteristics of this population include greater proportions of individuals who are middle-aged, female, and adults with dependent children who could experience detrimental effects due to gaps in care.

- State efforts to expand coverage and improve the system of care appear to have had substantial impact on addressing the healthcare needs of individuals with mental illness. Many adults with mental illness have been able to obtain health insurance because they meet the income requirement to qualify for Medicaid and lack access to employer-based insurance.[11] Therefore, in 2017, for the first time the rate of insurance among adults with MHI is equivalent to that of adults without MHI.

Data from the 2008, 2010, 2012, 2015, and 2017 Ohio Family Health Survey and OMAS were examined to identify trends over time in the prevalence of individuals with mental health impairment and their needs and access to care.

Mental Health-Related Impairment (MHI) was assessed by asking respondents the number of days in the past 30 days when a mental health condition or emotional problem kept adults from doing their work or other usual activities. Respondents who reported 14 or more days of functional impairment are identified as having "MHI" – the 14 day threshold for MHI is in congruence with the Centers for Disease Control and Prevention's recommendations for measurement classification.

Table 1. Chronic Disease and Behavioral Risk Factors among Adults with MHI, OMAS 2017

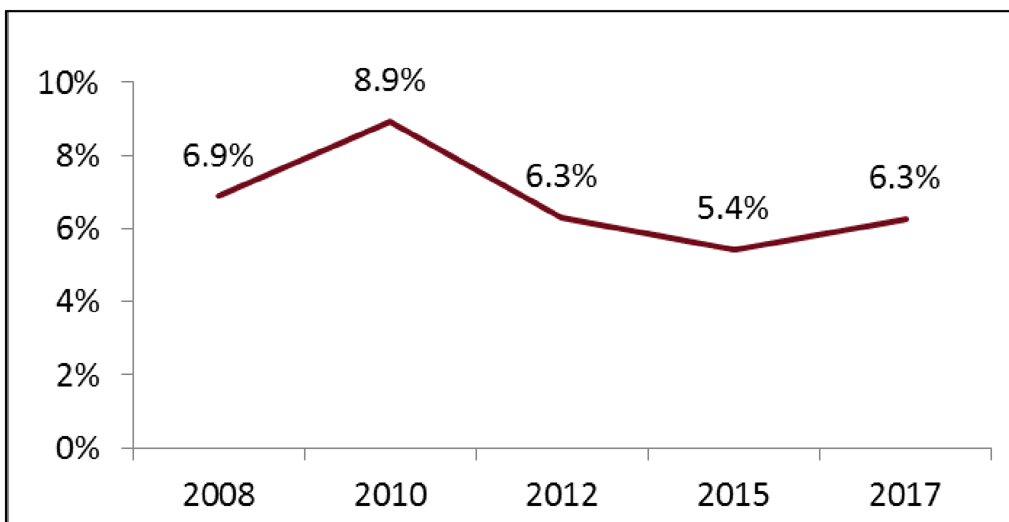
	Adults with MHI (95% CI)	Adults without MHI (95% CI)
Ever Diagnosed Diabetes	19.9% (17.8 – 22.1%)	13.7% (13.2 – 14.2%)
Ever Diagnosed High BP or Hypertension	50.0% (47.2 – 52.8%)	35.1% (34.4 – 35.8%)
Currently Smoking	50.3% (47.5 – 53.1%)	22.1% (21.5 – 22.7%)
Binge Drinking in Past Month	21.8% (19.5 – 24.2%)	19.4% (18.9 – 20.0%)
Obese	41.3% (38.5 – 44.1%)	34.6% (33.9 – 35.3%)

GENERAL RESULTS

Prevalence and Trends in Mental Health Impairment

Based on the OMAS 2017 survey, the estimated prevalence of Ohioans age 19 and over with MHI was 6.3%. This estimate is similar to the prevalence reported in 2012 (6.3%) and 2015 (5.4%) and shows significant improvement from the estimate of 8.9% in 2010 at the height of the economic depression (see Figure 1). MHI was more common among Hispanic (7.6%) and African-American (6.9%) respondents as well as women (7.2%) and peaked between ages 45 and 54 (8.5%). About one third of respondents with MHI (32%) had at least one child living in their household.

Figure 1. Prevalence of Mental Health Related Impairment among Adults in Ohio, OMAS 2008-2017



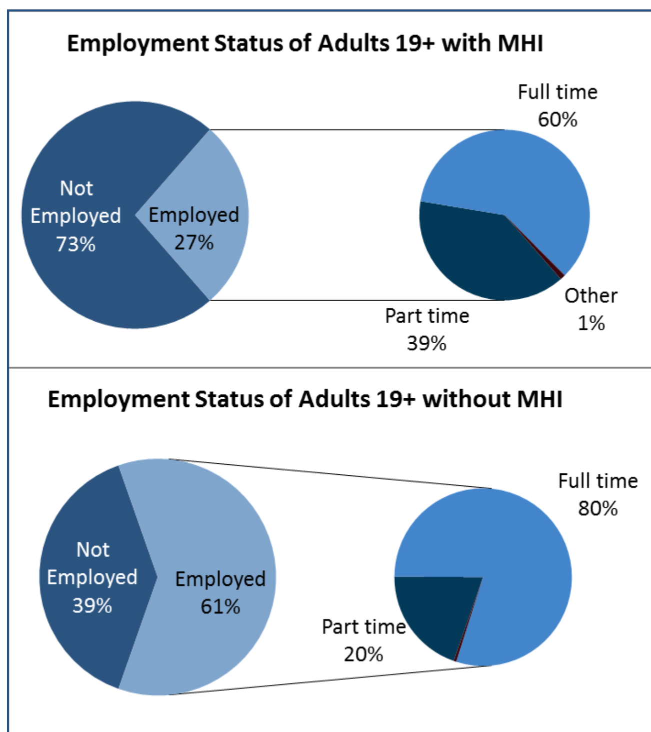
Co-Occurring Chronic Conditions

Consistent with prior research, adults with MHI reported higher rates of co-occurring chronic illness[6]; they also reported higher rates of obesity and smoking[7] (see Table 1). *Binge drinking*[8] *was* reported at similar rates among adults with and without MHI (*22% versus 19%*), which is consistent with previous findings that binge drinking is slightly more prevalent among college-educated and higher-income adults.[9] Overall, these findings are similar to findings of the OMAS 2015 survey.[10]

Financial Hardship and Employment

The findings revealed a direct association between MHI, employment status, and financial stability. Individuals with MHI were

Figure 2. **Employment Status of Adults by MHI Status, OMAS 2017**



more likely than those without MHI to report that their financial situation had declined over the past year with regard to: (1) Paying rent or a mortgage; (2) paying off debt; (3) buying food; and (4) paying medical bills (see Table 2). In addition, those with MHI were nearly twice as likely to be unemployed as those without MHI. Among those who were employed, respondents with MHI were more likely to report working only part-time and their income was significantly lower than those without MHI (see Figure 2). Less than half (49.6%) of employed individuals with MHI had an income above 100% FPL, as opposed to 80.4% of employed individuals without MHI (see Figure 3).

Table 2. **Reported Change over Past Year in Financial Situation of Adults with MHI, OMAS 2017**

	Adults with MHI (95% CI)	Adults without MHI (95% CI)
Ability to Pay Rent/Mortgage		
Easier	7.0% (5.5 – 8.5%)	9.1% (8.7 – 9.5%)
Same	44.3% (41.5 – 47.0%)	67.0% (66.3 – 67.6%)
Harder	41.1% (38.4 – 43.9%)	14.8% (14.3 – 15.3%)
Ability to Pay off Debt		
Easier	5.2% (4.0 – 6.5%)	10.3% (9.9 – 10.8%)
Same	34.8% (32.1 – 37.5%)	59.2% (58.5 – 60.0%)
Harder	54.6% (51.8 – 57.4%)	24.5% (23.9 – 25.1%)
Ability to Buy Food		
Easier	6.7% (5.2 – 8.1%)	10.0% (9.6 – 10.5%)
Same	43.2% (40.4 – 46.0%)	71.3% (70.7 – 72.0%)
Harder	49.1% (46.3 – 51.9%)	17.4% (16.9 – 18.0%)
Difficulty Paying Medical Bills		
Yes	48.5% (45.7 – 51.3%)	23.0% (22.4 – 23.6%)
No	51.0% (48.2 – 53.8%)	76.2% (75.6 – 76.8%)

Note: The proportions do not sum to 100% due to "Refused" "Don't Know" "Did not have this"

Figure 3. **Income Status of Adults Age 19+ by MHI Status, OMAS 2017**

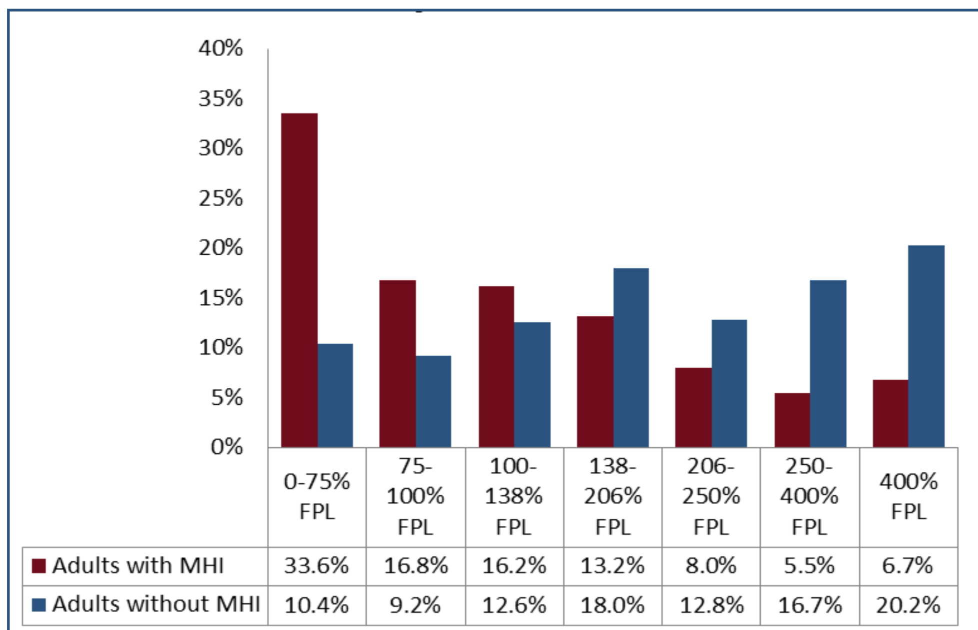
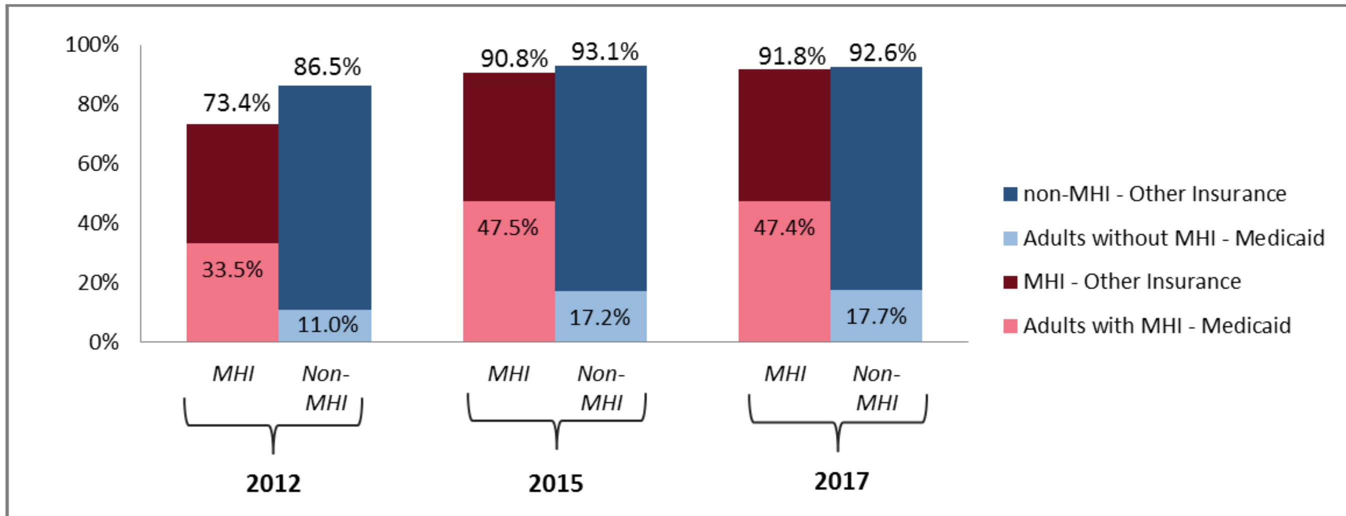


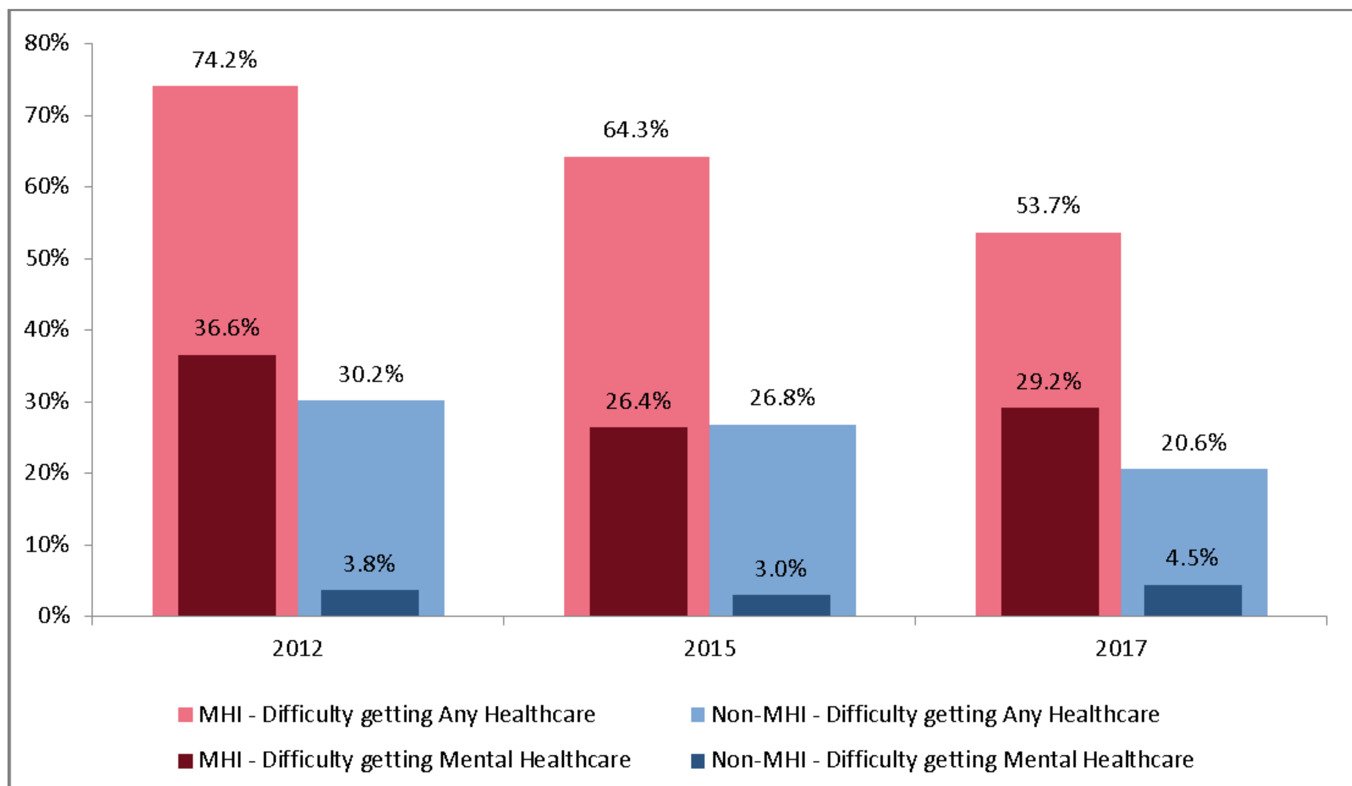
Figure 4. Health Insurance Trends Among Adults 19+ by MHI Status, OMAS 2012-2017



Insurance and Access to Care

The OMAS showed that among adults with MHI, health insurance coverage increased significantly from 2012 to 2017 and is now equivalent to the rate of coverage among adults without MHI (see Figure 4). Much of this change is due to enrollment of individuals with MHI into Medicaid, which increased from 33.5% in 2012 to nearly 50% in 2015 and 2017, post-Medicaid expansion. During the same time period, respondents with MHI reported less difficulty getting needed healthcare and mental healthcare (see Figure 5). Despite these improvements, over half of adults with MHI who responded to the 2017 OMAS reported unmet healthcare needs, nearly 30% reported unmet mental health needs, and half reported that they either avoided or delayed getting care within the past year. Common reasons included the cost of healthcare (46.3%), lack of transportation (27.8%), and provider availability (27.7%).

Figure 5. Difficulty Accessing Care Among Adults 19+ by MHI Status, OMAS 2012-2017



CONCLUSIONS

Based on the 2017 OMAS, approximately 551,619 Ohio adults appear to have mental health-related functional impairment. Demographic characteristics of this population include greater proportions of individuals who are middle-aged, female, and adults with dependent children who could experience detrimental effects due to gaps in care. In addition, Hispanic and African-American adults were more likely to experience impairment than adults in the general population.

State efforts to expand coverage and improve the system of care appear to have had substantial impact on addressing the healthcare needs of individuals with mental illness. Many adults with mental illness have been able to obtain health insurance because they meet the income requirement to qualify for Medicaid and lack access to employer-based insurance.[11] Therefore, in 2017, for the first time, the rate of insurance among adults with MHI is equivalent to that of adults without MHI.

Future Efforts. Despite greater access to health insurance for adults with MHI, the 2017 OMAS findings indicate the need for continuing improvement efforts focused on preventive measures for individuals with MHI. To support this population's ability to function, find employment, and raise children, it is crucial to address several critical areas with sensitivity to the demographic characteristics of this population. As in previous surveys, these areas of concern include ***chronic disease, risk behaviors, and financial instability*** that continue to impede employment, physical and mental health, and social integration disproportion-ately in adults with mental health conditions.

POLICY CONSIDERATIONS

Adults with MHI are half as likely to be employed and more than twice as likely to live at or below 100% FPL compared to adults without MHI. The link between employment, financial stability and recovery from mental illness is well known. Efforts to identify and treat mental illness early in its course can prevent secondary impairments, including the inability to work.[12] In addition, certain employment programs have been shown to improve employment and recovery outcomes among individuals with serious mental illness.[13] State policy makers may consider expanding access to these evidence-based programs.

Consistent with prior research, adults with MHI reported higher rates of co-occurring chronic illness than adults without MHI. In addition, over half of adults with MHI reported that they had healthcare needs that were unmet. Policy makers may consider continued development and support of efforts to prevent and address chronic illness among individuals with mental health conditions.

References

1. McKnight PE, Kashdan TB. The importance of functional impairment to mental health outcomes: A case for reassessing our goals in depression treatment research. Clinical psychology review. 2009;29(3):243. doi:10.1016/j.cpr.2009.01.005.

2. ÜSTÜN B, KENNEDY C. What is "functional impairment"? Disentangling disability from clinical significance. World Psychiatry. 2009;8(2):82-85.

3. Carstens, Carol, Tam, Kwok. Medicaid recipients with functional impairment due to mental health conditions or emotional problems. Ohio Medicaid Assessment Survey 2012: Taking the pulse of health in Ohio. May, 2013. Policy Brief

4. Ferketich, Amy and Hall, Orman. An examination of substance use among Medicaid-enrolled adults and comparison populations in Ohio. Ohio Medicaid Assessment Survey 2012: Taking the pulse of health in Ohio. May, 2013. Policy Brief

5. Carstens, C., Tam, K. (2013). *Medicaid Recipients with Functional Impairment Due to a Mental Health Condition or Emotional Problem* (Ohio Department of Mental Health). Retrieved from: http://grc.osu.edu/sites/default/files/inline-files/Medicaid%20Recipients%20with%20Functional%20Impairment%20Due%20to%20a%20Mental%20Health%20Condition%20or%20Emotional%20Problem.pdf

6. Scott KM, Lim C, Al-Hamzawi A, et al. Association of Mental Disorders With Subsequent Chronic Physical Conditions: World Mental Health Surveys From 17 Countries. JAMA psychiatry. 2016;73(2):150-158. doi:10.1001/jamapsychiatry.2015.2688.

7. Defined as currently smoking every day or some days

8. Defined as consuming 5 or more drinks on one occasion for men or 4 or more drinks on one occasion for women at least once in the past month

9. Ferketich, Amy and Wang, Ling. Chronic disease prevalence among adults in Ohio. Ohio Medicaid Assessment Survey 2012: Taking the pulse of health in Ohio. May, 2013. Policy Brief

10. Adhikari, Surendra B. 2016. Mental Health Impairment Disparities among Ohioans. 2015 Ohio Medicaid Assessment Survey Chart Book Series. Ohio Department of Mental Health & Addiction Services; Ohio State University Medical Center, Government Resource Center.

11. Ohio Department of Medicaid. (2016). *Ohio Medicaid Group VIII Assessment: A Report to the Ohio General Assembly*. Retrieved from: https://medicaid.ohio.gov/Portals/0/Resources/Reports/Annual/Group-VIII-Assessment.pdf.

12. Mechanic, D., Bilder, S., & McAlpine, D. D. (2002, September/October). Employing Persons With Serious Mental Illness. Retrieved from https://www.healthaffairs.org/doi/full/10.1377/hlthaff.21.5.242

13. Gordon, S. Y., J.D., Reeder, S., M.Ed., CRC, CPRP, & Hansen, E., MSSW. (2018, August). Achieving Recovery and Attaining Full Employment through ... Retrieved from https://www.nasmhpd.org/sites/default/files/TACPaper9_SupportedEmployment_508C.pdf

For more information about the methodology and findings in this brief, please visit http://grc.osu.edu/OMAS.

Department of Medicaid