2018 Ohio Medicaid Group VIII Assessment, Executive Summary:

A Follow-Up to the 2016 Ohio Medicaid Group VIII Assessment

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The Ohio Department of Medicaid

John R. Kasich, Governor Barbara R. Sears, Director

Executive Summary: The Ohio Medicaid 2018 Group VIII Assessment

a. What is the 2018 Ohio Medicaid Group VIII Assessment?

In 2015, the Ohio General Assembly required the Ohio Department of Medicaid (ODM) to provide a report evaluating the impact of Ohio's 2014 Medicaid expansion, facilitated by the Affordable Care Act (ACA). Guided by that request, ODM developed the Ohio Medicaid Group VIII Assessment, which examined how Medicaid expansion affected new enrollees with respect to access and utilization of healthcare, physical and mental health status, financial distress/hardship, and employment. The study found that new enrollees reported improved access to care, better management of chronic diseases and health risk factors, and improvements in self-rated health and economic stability. ODM delivered its report and methodological supplement to the General Assembly in December 2016.

The Ohio Medicaid 2018 Group VIII Assessment (2018 Group VIII) is a follow-up report commissioned by the Ohio Department of Medicaid. The 2018 Group VIII focuses on the following research themes and questions:

1. **Enrollment Patterns**: What are the enrollment patterns for Group VIII Enrollees?
2. **Population Characteristics**: Has the Ohio Medicaid Group VIII population remained stable in terms of size and demographic characteristics since the initial assessment?
3. **Employment:** Does Medicaid enrollment impact greater workforce participation?
4. **Financial Hardship**: To what extent does Medicaid enrollment translate into greater financial security?
5. **Health System Capacity and Access**: Is Medicaid provider capacity adequate to meet the needs of Group VIII enrollees? What are the key barriers to accessing needed healthcare services?
6. **Health System Utilization**: How have health care utilization patterns of Medicaid enrollees changed since the initial assessment?
7. **Physical Health**: Does Medicaid enrollment translate into improvements in physical health?
8. **Mental and Behavioral Health:** Does Medicaid enrollment translate into improvements in mental/behavioral health?
9. **Health Risk Behaviors:** Is enrollment in Medicaid associated with changes in unhealthy behaviors, such as smoking?
10. **Family Stability**: Does Medicaid enrollment promote family stability?

The phrase "Group VIII" refers to the section of the Social Security Act that sets requirements for Medicaid expansion eligibility which allowed most Ohioans age 19 through 64 with incomes at or below 138% of the federal poverty level (FPL) to become eligible for Medicaid. Prior to January 1, 2014, Medicaid eligibility for adults was limited to those with certain qualifying characteristics such as parenthood or disability, and the income limitation for most Medicaid eligibility groups was at or below 90% of the FPL.

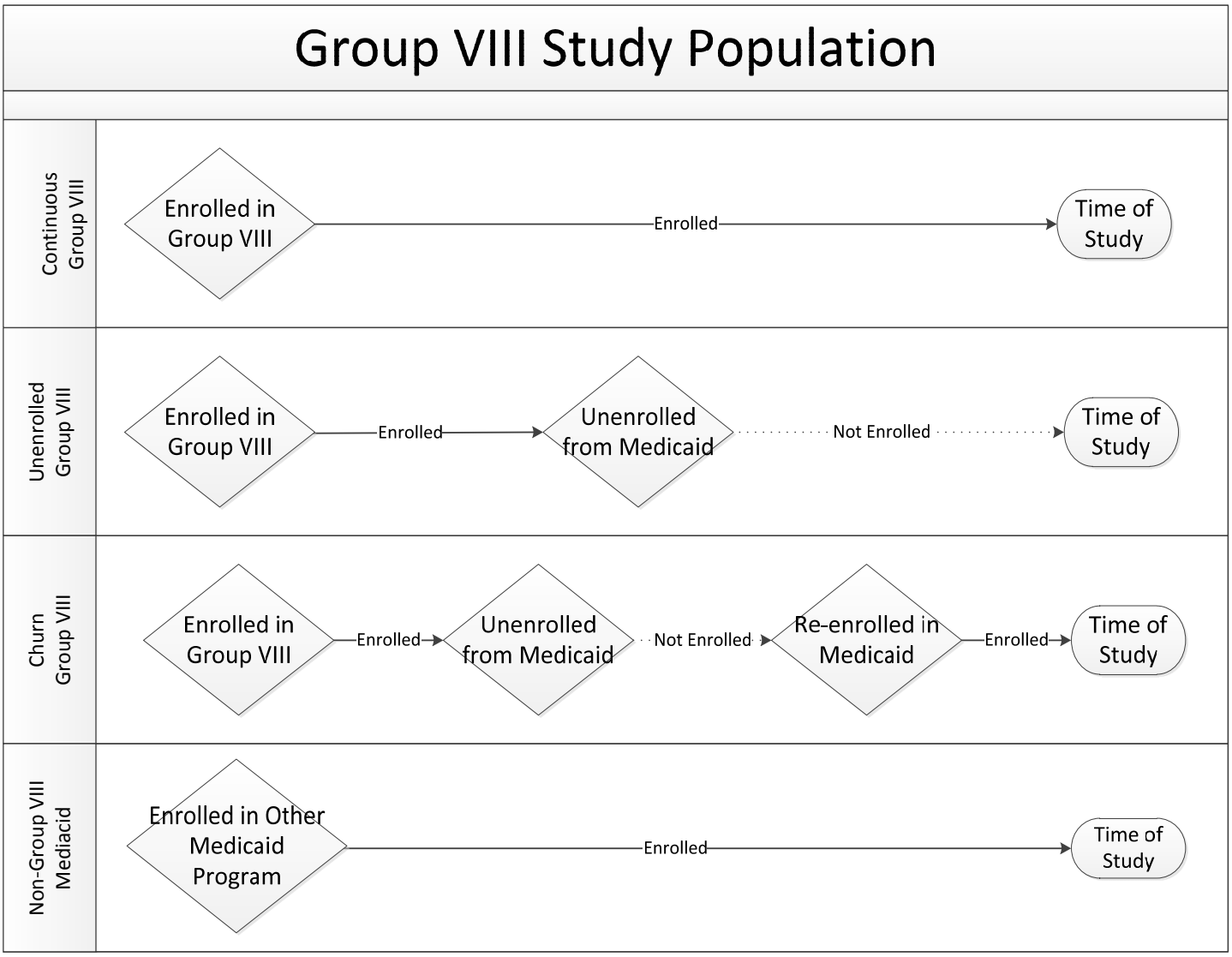
b. Who is Included in the 2018 Ohio Medicaid Group VIII Assessment?

Administrative data from ODM were used to identify study eligible persons with study participants being selected by stratified random sampling techniques. To enable comparisons between different populations, the study examined four different groups:

1) Those continuously enrolled in Group VIII (Continuous Group VIII);
2) Prior Group VIII enrollees no longer enrolled in Medicaid (Unenrolled Group VIII);
3) Those who were enrolled, unenrolled, and re-enrolled in Group VIII (Churn Group VIII); and
4) Those continuously enrolled under pre-ACA Medicaid eligibility criteria (Non-Group VIII Medicaid enrollees).

To enable comparisons, the study excluded those enrolled as dual-eligible, enrolled in the Aged, Blind, and Disabled Medicaid Program, pregnant, or living in institutions. A full elaboration of how Medicaid enrollees were selected for inclusion in the study is included in the 2018 Ohio Medicaid Group VIII Assessment Methodology Report.

Figure 1: Ohio Medicaid 2018 Group VIII Assessment Subpopulations



c. How was the Ohio Medicaid Group VIII Assessment Conducted?

Similar to the 2016 study, the 2018 Ohio Medicaid Group VIII Assessment is one of the nation's most comprehensive assessments of a state's ACA-associated Medicaid expansion. The assessment used the following methods to collect data:

- An analysis of Medicaid administrative data for all individuals who *ever enrolled* in Group VIII who participate in the program for at least 30 days, including individuals who had previously participated in other Medicaid programs (N= 1,263,038 Group VIII enrollees) – the review of administrative data was used to calculate enrollment trajectories, outside insurance status, and healthcare utilization;

- A detailed telephone survey of 5,867 Group VIII and Non-Group VIII Medicaid enrollees, including questions about the connections between enrollment status and access to care, health system utilization, physical and mental health, financial hardship, and employment;

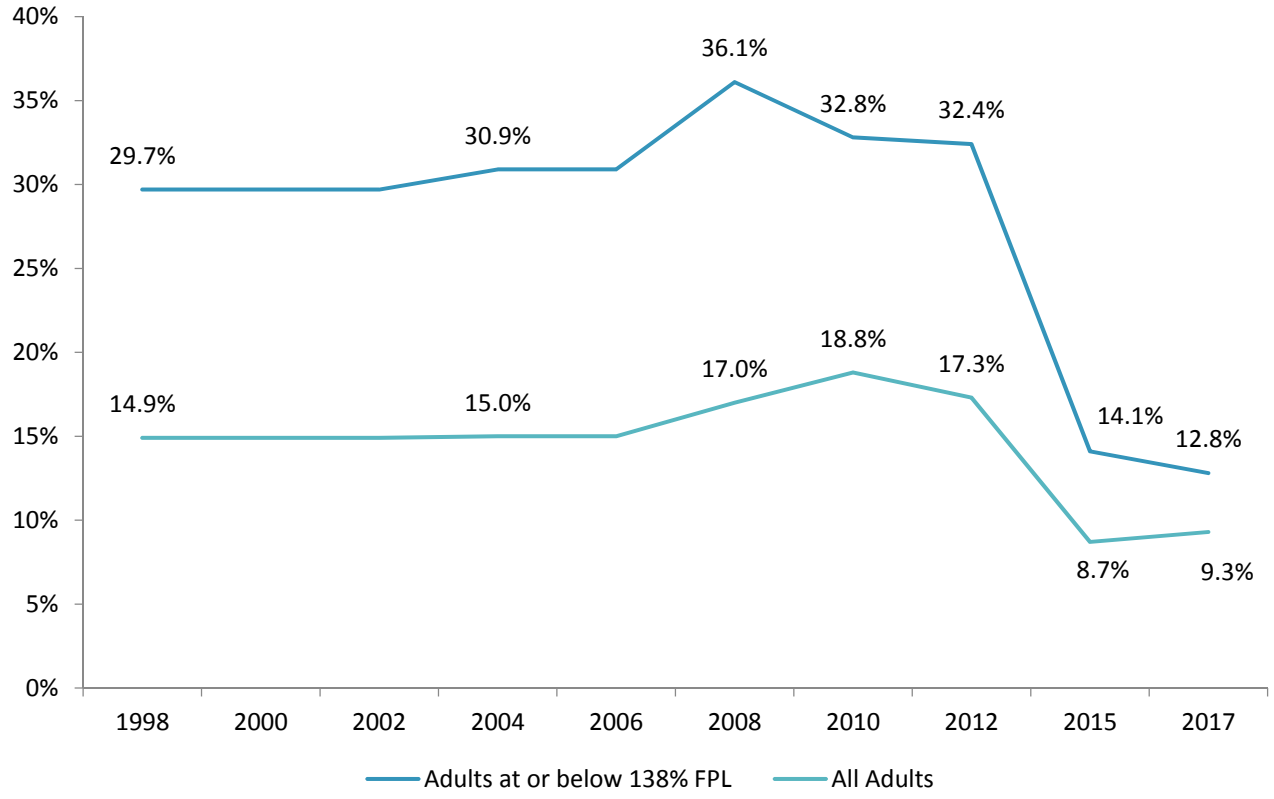
- A biometric screening of 313 respondents who completed the telephone survey, limited to Group VIII enrollees – the biometric screenings allowed for the systematic collection of comprehensive and verifiable clinical health-related data; and

- Qualitative interviews of 25 sessions for independent Group VIII enrollees who participated in the telephone survey (some participants completed the biometric screening as well) – the semi-structured interviews were designed to obtain more in-depth interpretive information about Medicaid administrative data findings and survey responses at the individual level.

d. What are the Key Findings of the Ohio Medicaid 2018 Group VIII Assessment?

(Please note that all comparisons stated as differences are statistically significant at $p<0.05$.)

Figure 2: Percentage of Ohioans Ages 19-64 with Family Income at or Below 138% Federal Poverty Level (FPL) who are Uninsured: 1998-2017



Source: Ohio Medicaid Assessment Survey Series (data collection years 1998, 2004, 2008, 2010, 2012, 2015, 2017)
Ohio's Group VIII Medicaid expansion began in 2014.
The Ohio Medicaid Assessment Survey was known as the Ohio Family Health Survey until 2010
Data collection periods not standardized by year

Enrollment Patterns (Section II of the Report)

1. Almost one fifth (17.5%) of Ohioans age 19-64 have participated in the Group VIII program since it began in 2014 (more than 1.26 million individuals).
2. About half (52.5%) of individuals who enrolled in Group VIII since 2014 were enrolled as of November 2017 – only one third (37.3%) of Group VIII have maintained continuous coverage since initial enrollment.
3. Medicaid expansion impacts Ohio's declining uninsured rate (12.8%) for low-income Ohioans ages 19 to 64 – in 2017 70.2% of Ohio adults 19-64 years of age participated in the workforce, full- and part-time.
4. The most common reported reasons why Group VIII enrollees unenrolled from Medicaid were that: 1) household income increased or the respondent got a job (71.1%); and 2) the respondent obtained non-Medicaid health coverage (48.8%).
5. Many participants in the 2018 Group VIII Assessment were unaware of their Medicaid coverage status: 1) only 44.0% of Unenrolled Group VIII knew that they had lost Medicaid coverage; and 2) only 36.0% of Churn Group VIII were aware they had experienced a coverage gap.
6. In November 2017, 34 of Ohio's 88 counties had at least 10% of adults ages 19 to 64 covered by Medicaid expansion. These counties included almost every county in Appalachian Ohio and all major metropolitan counties except Franklin County.
7. From January 2014 through November 2017, 74 Ohio counties (84.1%) had more than 10% of adults ages 19 to 64-year-old population ever enrolled in Medicaid expansion. For 44 Ohio counties, 17% or more of their 19 to 64 year old population has been covered at some point in time through Medicaid expansion. These counties include all but 3 of Ohio's Appalachian counties, most of north Central Ohio counties, Preble County, and all urban counties, except for Franklin County.

Population Characteristics (Section III of the Report)

1. As found in the 2016 Group VIII Assessment, the Continuous Group VIII were more likely to be older, white, and male than the Non-Group VIII Medicaid enrollees.
2. In comparison to Continuous Group VIII enrollees in 2016, the 2018 Continuous Group VIII were more likely to be younger, white, female, and have children.
3. Unenrolled Group VIII were younger and were more likely to be employed than those who were continuously enrolled.
4. Churn Group VIII were younger but were slightly more likely to have chronic conditions than those who remained continuously enrolled.

Employment (Section IV of the Report)

1. Approximately half of Continuous Group VIII (49.6%) reported being employed, compared to 43.2% in 2016 – a 6.4 percentage point increase.
2. A large majority of employed Group VIII enrollees (83.5%) reported that Medicaid made it easier to work; most unemployed enrollees (60.0%) reported that Medicaid made it easier to look for work.
3. Many Group VIII enrollees reported that Medicaid made it easier to work because they were able to obtain care for previously untreated health conditions. In the words of one enrollee: *"[Medicaid] allows me to get surgery which has allowed me to return to work."*

4. Most (93.8%) Continuous Group VIII were either employed, in school, taking care of family members, participating in an alcohol and drug treatment program, or dealing with intensive physical health or mental health illness (many had comorbid conditions).
5. Unenrolled Group VIII were more likely than Continuous Group VIII to be employed (62.3% vs. 49.6%).
6. Churn Group VIII were employed at nearly identical rates to Continuous Group VIII.

Financial Hardship (Section V of the Report)

1. Nearly half of the Continuous Group VIII reported strained family budgets (47.8%) and housing instability (49.8%) during the past two years, similar to the 2016 Group VIII Assessment findings.
2. Continuous Group VIII were almost four times as likely (29.8%) to say that their financial situation had improved (e.g. paying for groceries, housing, and paying down debt) since enrolling in Medicaid than that their financial situation had worsened (7.7%).
3. Continuous Group VIII were less likely to have medical debt than Unenrolled Group VIII (29.5% vs. 43.7%).
4. Use of SNAP (food stamps) in the last twelve months was much less common among Continuous (48.5%) and Unenrolled Group VIII (31.6%) than among Non-Group VIII Medicaid enrollees (73.8%).

Provider Capacity and Access to Care (Section VI of the Report)

1. The percentage of working age Medicaid enrollees (including Group VIII enrollees and participants in other Medicaid programs) with at least one primary care visit increased from 60.3% in 2013 to 64.5% in 2017 – a 4.2 percentage point increase.
2. The percentage of working age Medicaid enrollees receiving a primary care visit has remained level for the past two years (calendar years 2016 and 2017). This period of stability follows a three-year period where primary care access increased in all regions.
3. Rural and Appalachian regions had the highest primary care visit level for enrollees.
4. Provider participation in the Medicaid program continued to increase to meet higher health services demand. This growth was driven by increases in the number of participating Advance Practice Nurse Practitioners (APNPs) (53.4% increase from 2013 to 2017) and Physician Assistants (PAs) (95.8% increase from 2013 to 2017).
5. Unenrolled Group VIII were considerably more likely than Continuous to report problems accessing at least one type of needed care than those who remained continuously enrolled (55.4% vs. 37.5%).
6. From the 2017 Ohio Medicaid Assessment Survey, privately insured individuals at or below 138% FPL were equally likely to avoid obtaining needed health care as the Group VIII enrolled (31.7% versus 29.5%) – comparatively, the uninsured at or below 138% FPL were significantly more likely to avoid needed care (41.0%).

Health System Utilization (Section VII of the Report)

1. Most of the Continuous Group VIII enrollees in the 2018 telephone survey who reported having a chronic condition were receiving treatment for that condition (73.2% for hypertension, 66.2% for high cholesterol, and 85.8% for diabetes).

2. Use of primary care as a usual source of care has increased. Most (78.7%) Continuous Group VIII reported having a *non*-emergency department usual source of care in 2018, an increase from 71.2% in 2016.
3. As duration of enrollment increased, Group VIII enrollees' emergency department utilization declined (16.8% decline after two years since onset of enrollment according to Medicaid administrative data).

Physical and Mental Health, and Health Risk Behaviors (Section VIII of the Report)

A. Physical Health

1. 30.6% of Continuous Group VIII reported that their physical health had improved since enrolling in Medicaid, compared to 9.5% who reported that their health was worse, and 59.3% who reported that their health was the same.
2. When asked what Medicaid meant to them, 35.7% of survey respondents specifically mentioned either their health or access to care. In the words of one respondent: "If it wasn't for Medicaid, I would not have been able to pay for surgery that was needed for a heart condition I was born with."
3. Almost one-third (28.3%) of Unenrolled Group VIII dropped Medicaid coverage because their health had improved or because they no longer thought they needed coverage (includes Unenrolled Group VIII who were aware that their coverage had ended).
4. Among Churn Group VIII, 25.7% cited declining health as a reason for reenrolling in Medicaid (includes Churn Group VIII who were aware of having had a coverage gap).

B. Mental Health

1. Continuous Group VIII were 3.4 times as likely to report that their mental health had improved since enrolling on Medicaid, compared to those reporting that it had worsened.
2. Around 1 in 4 (24.6%) individuals in the Continuous Group VIII, Churn, and Non-Group VIII Medicaid groups screened positive for depression, while the Unenrolled Group had lower rates (17.4%).
3. Continuous Group VIII enrollees who met screening criteria for depression and anxiety were significantly less likely to report being employed (26.9% versus 60.7%).
4. More than half (51.2%) of Unenrolled Group VIII who met screening criteria for anxiety or depression reported difficulties obtaining needed prescriptions, compared to less than one-fourth (22.1%) of the Continuous Group VIII who met such screening criteria.
5. The majority of Continuous Group VIII enrollees with depression or anxiety (84.3%) reported that access to mental health treatment was "not a problem".

C. Health Risk Behaviors

1. More than one third (37.0%) of Group VIII enrollees who quit smoking in the last two years said that Medicaid helped them to quit. This translates to approximately 26,000 Ohioans.

2. One in ten (9.8%) Group VIII enrollees received a primary diagnosis for any substance use disorder and 7.9% received a primary diagnosis for opioid use disorder in 2017. The majority (64.1%) of those diagnosed with OUD filled at least one prescription for medication-assisted treatment, and 85.8% received psychosocial treatment.
3. Obtaining behavioral health care made a significant difference in the lives of many enrollees with substance use disorder. In the words of one respondent: "[Medicaid] means a lot, it means I can get help with my addiction, gets me the counseling I need. If I didn't have it I would probably end up back in jail."
4. A small percentage (7.4%) of Continuous Group VIII reported having misused pain medications in the past, although the majority of those who did (60.0%) said that such misuse had occurred more than one year ago. (Note that misuse is not necessarily *abused*, defined as the habitual taking of addictive or illegal drugs.)
5. About one in five (18.2%) Continuous Group VIII reported that they drank more than four alcoholic beverages in a single day in the last thirty days (compared to 15.5% for Non-Group VIII Medicaid, 19.7% for Churn, and 23.8% for Unenrolled; the differences between these groups are not significant).

Family Stability (Section IX of the Report)

1. A significant amount of Continuous Group VIII reported being a parent to a non-adult child in the household (29.5%), or the primary caregiver of a family member with mental or physical health issues (22.0%).
2. More than three-fourths (75.7%) of Continuous Group VIII who are family caregivers reported that Medicaid made it easier for them to care for their family member(s), as did more than four-fifths of parents (81.6%).
3. Continuous Group VIII who are parents were more likely to report that Medicaid made it easier to buy food and pay rent or a mortgage than non-parents (57.6% vs. 37.5%).

e. Conclusions

1. Medicaid reduces the rate of uninsured in Ohio.

Since 2014, more than 1.26 million individuals have enrolled in Ohio Medicaid through the ACA-associated Medicaid expansion, nearly one-fifth (18.1%) of the Ohio population ages 19-64. Even though Ohio' s total uninsured rate for 19-64 year olds is now trending slightly upwards (9.3%, up from 8.7% in 2015), Medicaid expansion has dramatically reduced the uninsured rate among the lowest-income Ohioans.

2. Medicaid benefits the health of enrollees.

"SINCE I ENROLLED IN MEDICAID) I DON'T HAVE A LOT OF STRESS. I WAS DIAGNOSED WITH IRRITABLE BOWEL SYNDROME AND YOU CAN'T BE STRESSED WITH THAT!"
(RURAL SINGLE WORKING WHITE FEMALE IN HER 40S)

As found in the 2016, Group VIII Assessments, Medicaid enables low income Ohioans to access primary care for non-emergency conditions. In many cases, this leads to a diagnosis or treatment of previously undetected chronic diseases and more time sensitive treatment of non-emergency acute conditions. Many Group VIII enrolled respondents reported that their Medicaid coverage: 1) was perceived as potentially lifesaving; 2) facilitated a better state of wellness; 3) was beneficial to mental health; 4) enabled participation in preventive health and mental health services; 5) aided in relief of psychological distress related to health concerns and socioeconomic circumstances; and 6) fostered better life functioning (e.g., work, family participation, and community engagement).

3. Medicaid reduces costly Emergency Department (ED) visits and may reduce long-term costs.

After initial enrollment, Group VIII enrollees' utilization of Emergency Department (ED) services declined (16.8% decline after two years of enrollment compared to initial enrollment period) while primary care utilization increased, indicating a shift towards preventative, cost-effective care.

"BEFORE I HAD INSURANCE, I WOULD) JUST GO TO THE EMERGENCY ROOM AT THE HOSPITAL AND LET THEM BILL ME. SOMETIMES I WOULDN'T PAY THEM. I COULDN'T AFFORD IT."
(RURAL SINGLE DISABLED WHITE MALE IN HIS 50S)

4. Medicaid enrollment facilitates/enables employment.

In qualitative interviews and open-ended 2018 Group VIII Survey responses, a common theme was that Medicaid enrollment enabled access to treatment for debilitating conditions, thereby making it possible for enrollees to return to work or seek employment. It should be noted, however, that the ability to find work is mediated by local (geographically specific) economic conditions, particularly for those living in financially distressed counties and communities. For instance, the study found that many Medicaid enrollees who live in socioeconomically distressed counties (i.e., interior Appalachian counties) are less likely to find work and to leave Medicaid. Accordingly, these counties have a higher rate of Continuous Group VIII enrolled.

The study also found a strong association between the ability to work and one's mental health status. The 2018 Group VIII Survey found a strong association between meeting the screening criteria for depression/anxiety and being unemployed. By facilitating treatment for mental health, Medicaid removed barriers to employment readiness and employment retention – these results were cross-confirmed from responses to the 2018 Group VIII Survey and qualitative interview questions.

5. Ohio Medicaid 1115 Waiver on Work Requirements, 2018.

At the request of the Ohio General Assembly, the Ohio Department of Medicaid has applied for a Section 1115 waiver from the U.S. Department of Health and Human Services to implement work and community engagement requirements for Group VIII enrollees. This assessment finds that most (93.8%) Group VIII enrollees are currently either employed or meet one of the exception criteria noted in the Ohio Department of Medicaid's *Group VIII Work Requirement and Community Engagement 1115 Demonstration Waiver Application*.[i] Future Group VIII Assessments will be designed to evaluate the primary and secondary impacts of Medicaid expansion on work and community engagement.

6. Medicaid enrollment assists with access to care and lessened medical debt.

A minority of Continuous Group VIII enrollees reported difficulty accessing routine health care (37.5%) and having medical debt (29.5%). Comparatively, a larger percentage of Unenrolled Group VIII enrollees reported difficulty accessing care (55.4%) and having medical debt (43.7%).

"BEFORE I HAD MEDICAID] I'D AVOID [GOING TO THE DOCTOR] AS MUCH AS POSSIBLE. I'D ONLY GO IF I ABSOLUTELY HAD TO. THOSE AMBULANCE RIDES, THEY COST $6-700 IF NOT A THOUSAND. I DON'T HAVE THAT!"
(URBAN SINGLE DISABLED WHITE FEMALE IN HER 40S)

[i] * https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/oh/oh-work-requirement-community-engagement-pa.pdf

7. General findings from the qualitative interviews.

The qualitative interviews were conducted with a demographically and geographically diverse group of current and former enrollees and supported the main findings from the telephone survey and Medicaid administrative data findings. Nearly all respondents reported feeling relieved once they learned that they were enrolled in Medicaid, with some saying that Medicaid allowed them to seek care for conditions that they had previously ignored and others saying that Medicaid enabled them to avoid Emergency Department visits. Many respondents said that Medicaid made it easier to work and care for family members because they were able to get care for chronic and mental health conditions that enabled better physical and mental functioning.

8. General conclusion.

In general, Medicaid expansion has been beneficial to Ohio Group VIII enrollees by: 1) facilitating continued employment, new employment, and job-seeking; 2) increasing primary care and reducing emergency department use; 3) lessening medical debt and financial hardship; 4) improving mental health; 5) assisting in addressing unhealthy behaviors such as tobacco use; and 6) enabling enrollees to act as caregivers for family members. Compared to the 2016 Group VIII Assessment, a higher percentage of all Group VIII enrollees are now employed, access primary care providers, use emergency department services less, report better mental health, and are optimistic about their individual functioning.

9. How does Ohio compare? Literature considerations and other's findings.

An overall literature review from more than 60 recent peer-reviewed studies found that the 2018 Ohio Medicaid Group VIII Assessment results are similar to the consensus of research performed nationally and regionally relating to Medicaid expansion. Comparatively, this assessment of Ohio's ACA-associated Medicaid expansion more inclusively addresses the overall health and wellbeing of Group VIII enrollees. All studies have shown significant benefits accruing to people living in Medicaid expansion states compared to similar people living in non-Medicaid expansion states, with no negative effects – in all instances the benefit generally gets stronger over time[ii,iii]. Notable benefits include:

- Greater access to health care accompanied by reduced delays to getting care[iv]
- Lessening of unmet health care needs[v]
- Improved health status[vi]
- An increase in people getting preventive care[vii]

[ii] Larisa Antonissse, Rachel Garfield, Robin Rudowitz and Samantha Artiga. (2018) The Effects of Medicaid Expansion Under the ACA: Updating Findings From A Literature Review. Henry J. Kaiser Family Foundation. https://www.kff.org/medicaid/issue-brief/the-effects-of-medicaid-expansion-under-the-aca-updated-findings-from-a-literature-review-march-2018/

[iii] Olena Mazurenko, Casey P. Bailo, Rajnder Agarwal, Aarong E. Carroll and Nir Menachemi. (2018). The Effects of Medicaid Expansion Under the ACA: A Systematic Review. *Health Affairs, 37*(6), 944-950.

[iv] Benjamin D. Sommers, Bethany Maylone, Robert Blendon, E. John Orav, Arnold Epstein (2017). Three-year Imapcts of the Affordable Care Act: Improved Medical Care and Health Among Low-Income Adults. *Health Affairs, 36*(6), 1119-112.

[v] Katherine Baicker, Heidi L. Allen, Bill J Wright, Sarah L. Taubmann and Amy N. Finelstein. Forthcoming. The Effect of Medicaid on Dental Care of Poor Adults: Evidence From the Oregon Health Insurance Experiment. *Health Services Research Journal,* 1-18.

[vi] Kosali Simon, Aparna Soni and John Cawley. (2017). The Impact of Health Insurance on Preventive Care and Health Behaviors: Evidence From the First Two Years of the ACA Medicaid Expansion. *Journal of Policy Analysis and Management, 36*(2), 390-417.

[vii] Hugo Torres, Elisabeth Portman, Uma Tadepalli, Cynthia Schoettler, Chin Ho Fung, Nicole Mushero, Laruen Campbell, Gaurab Basu and Danny McCormick. (2017). Coverage and Access for Americans With Chronic Disease Under the Affordable Care Act: A Quasi-Experimental Study. *Annals of Internal Medicine, 166*(7), 472-480.

- Increased use of tobacco cessation services[viii]
- Increased use of mental health and drug addiction services[ix]
- Earlier detection of serious health care conditions, such as cancer[x]
- Reduced stress[xi]
- Improved financial stability[xii]
- Reductions in health disparities[xiii]
- An increase in employment, with less likelihood of unemployment because of a disability and a greater probability of working more than 30 hours per week[xiv].

These benefits are especially significant for people who have chronic conditions. The benefits are also more prevalent in states, like Ohio, that provide their population a more inclusive benefit package – covering more optional services such as adult dental, vision, mental, and special needs.

[viii] Johanna Catherine Maclean, Micahel F. Pesko and Steven C. Hill. (2017). The Effect of Insurance Expansions on Smoking Cessation Medication Use: Evidence From Recent Medicaid Expansions. NBER Working Paper Series, Working Paper 23450 May 2017, revised September 2017 http://www.nber.org/papers/w23450.

[ix] Hefei Wen, Jason M. Hockenberry, Tyrone Borders and Benjamin G. Druss. (2017). Impact of Medicaid Expansion on Medicaid-covered Utilization of Buprenorphine for OUD Treatment. *Medical Care, 55*, 336-341.

[x] Aparna Soni, Kosali Simon, John Cawley, Linsday Sabik. (2018). Effect of Medicaid Expansions of 2014 on Overall and Early-Stage Cancer Diagnoses. *American Journal of Public Health, 108*(2), 216-218.

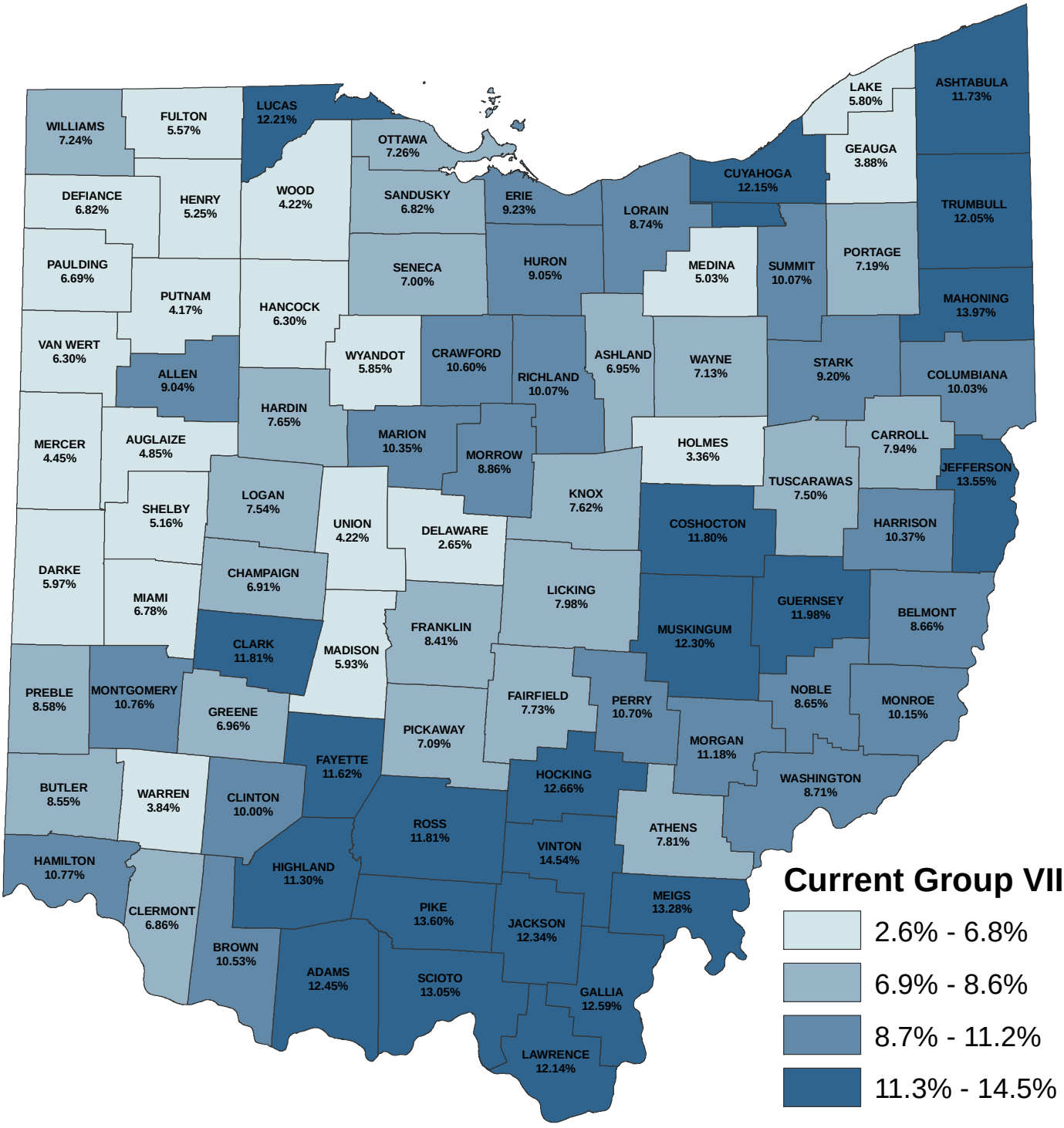
[xi] Kosali Simon, Aparna Soni and John Cawley. (2017). The Impact of Health Insurance on Preventive Care and Health Behaviors: Evidence From the First Two Years of the ACA Medicaid Expansion. *Journal of Policy Analysis and Management, 36*(2), 390-417.

[xii] Stacey McMorrow, Jason A. Gates, Sharon K. Long, Genevieve M. Kenney. (2017). Medicaid Expansion Increase Coverge, Improved Affordability and Reduce Psychological Distress for Low-Income Adults. *Health Affairs, 5,* 808-818.

[xiii] Charles Courtemanche, James Marton, Benjami Ukert, Aaron Yelowitz and Daniela Zapata. (2017). Early Impact of the Affordable Care Act on Health Insurance Coverage in Medicaid Expansion and Non-expansion States. *Journal of Policy Analysis and Management, 36*(1), 178-210.

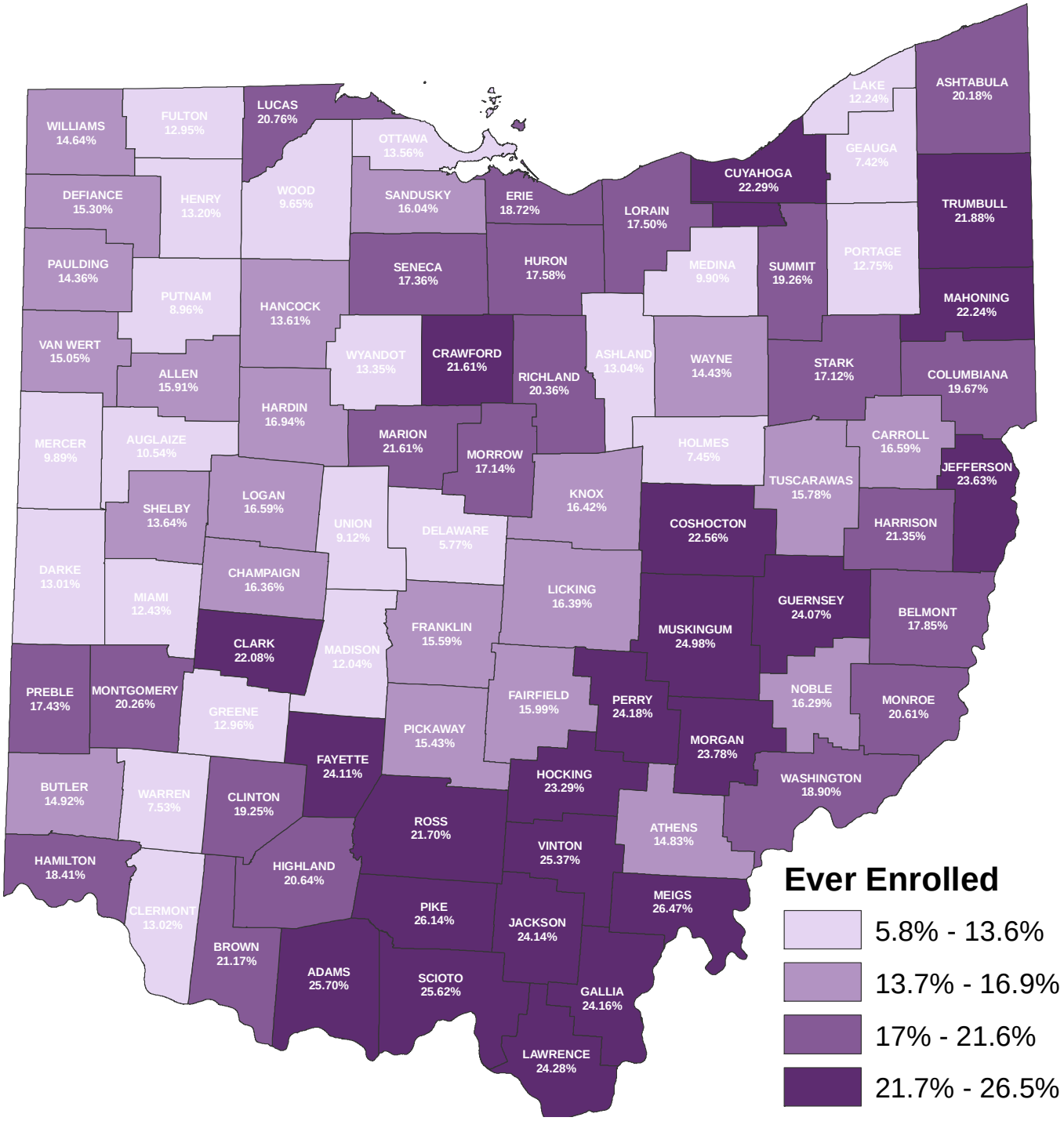
[xiv] Jean P. Hall, Adele Shartzer, Noelle K. Kurth and Kathleen C. Thomas. (2018). Effect of Medicaid Expansion on Workforce Participation For People with Disabilities. *American Journal of Public Health, 108*(2), 262-264.

Map 1: Percentage of All Adults Ages 19-64 Currently Enrolled in Group VIII by County, November 2017



Source: Medicaid Administrative Data
Enrollment Status as of November 30, 2017

Map 2: Percentage of All Adults Ages 19-64 Who Have Ever Enrolled (Since 2014) in Group VIII by County



Source: Medicaid Administrative Data
Enrollment Status as of November 30, 2017