

KEEPING THE PULSE ON OHIO'S HEALTH

Key Findings from the 2017 Ohio
Medicaid Assessment Survey (OMAS)

October 26, 2018 #OMAS17



Department of
Medicaid



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Today's presentations

- 2017 Ohio Medicaid Assessment Survey (OMAS) introduction
- OMAS background
- Select key findings
 - Coverage
 - Utilization
 - Chronic diseases
 - Other findings
- OMAS methodology, for users of these data
- 2017 OMAS Dashboard: An interactive tool for exploring data



2017 OMAS BRIEF INTRODUCTION

2017 OMAS Executive Committee, participating organizations

- The Ohio Department of Medicaid
- The Ohio Department of Health
- The Ohio Department of Mental Health and Addiction Services
- The Ohio Department of Aging
- The Ohio Department of Developmental Disabilities
- The Ohio Commission on Minority Health
- The Ohio State University College of Public Health
- The Ohio State University College of Social Work
- The Ohio State University College of Medicine
- The Ohio State University College of Education and Human Ecology
- The Ohio State University Department of Sociology
- Ohio University Voinovich School of Leadership and Public Affairs
- Bowling Green State University Center for Population Studies
- Research Triangle Institute, International
- The Ohio Colleges of Medicine Government Resource Center

Importance of OMAS

- The OMAS is a critical tool to monitor the effects of health policy and health system changes
- Unique strengths include:
 - Population-based and collects multiple domains of insurance access and use
 - Supports comparison of the enrolled Medicaid population to others, such as the potentially eligible but not enrolled
 - Supports subgroup analysis

OMAS general information

- The 2017 OMAS is the 7th iteration of the survey – key sponsors since inception have included the Ohio Department of Medicaid (ODM) and the Ohio Department of Health (ODH).
- ODM uses OMAS data to study how Medicaid enrollees' health status and health care experiences differ from non-Medicaid-covered populations.
- The OMAS is the key population health data source for Ohio's health-associated agencies, local human services and public health organizations, and health services entities.
- OMAS data are:
 - Used to identify and address gaps in access to care, needed health services, and unmet health needs; and
 - Used to examine Ohio's health risk behaviors, health disparities, determinants of health, and health demographics such as poverty, employment, and family stressors.

OMAS general information (cont.)

- The OMAS employs rigorous data collection, data editing, and analyses techniques and is often presented in peer-reviewed presentations and publications.
- Throughout the years, OMAS data has been used in published reports, briefs, peer-reviewed articles, books, dissertations, and other academic work.

2017 OMAS main topics

- Medicaid status
- Insurance status
- Access to health care
- Health care utilization
- Unmet health needs
- Chronic diseases
- Health risk factors
- Health status
- Mental health distress
- Developmental disabilities
- Population health
- Health demographics

2017 OMAS questionnaire

- The OMAS questionnaire incorporated carefully worded questions using primarily existing, validated items; based in large part on previous OMAS surveys, the Behavioral Risk Factor Surveillance System (BRFSS), American Community Survey (ACS), the Medical Expenditures Panel Survey (MEPS), National Survey of Children's Health (NSCH), and tested items from other federal and state health surveys.

OMAS administration basics

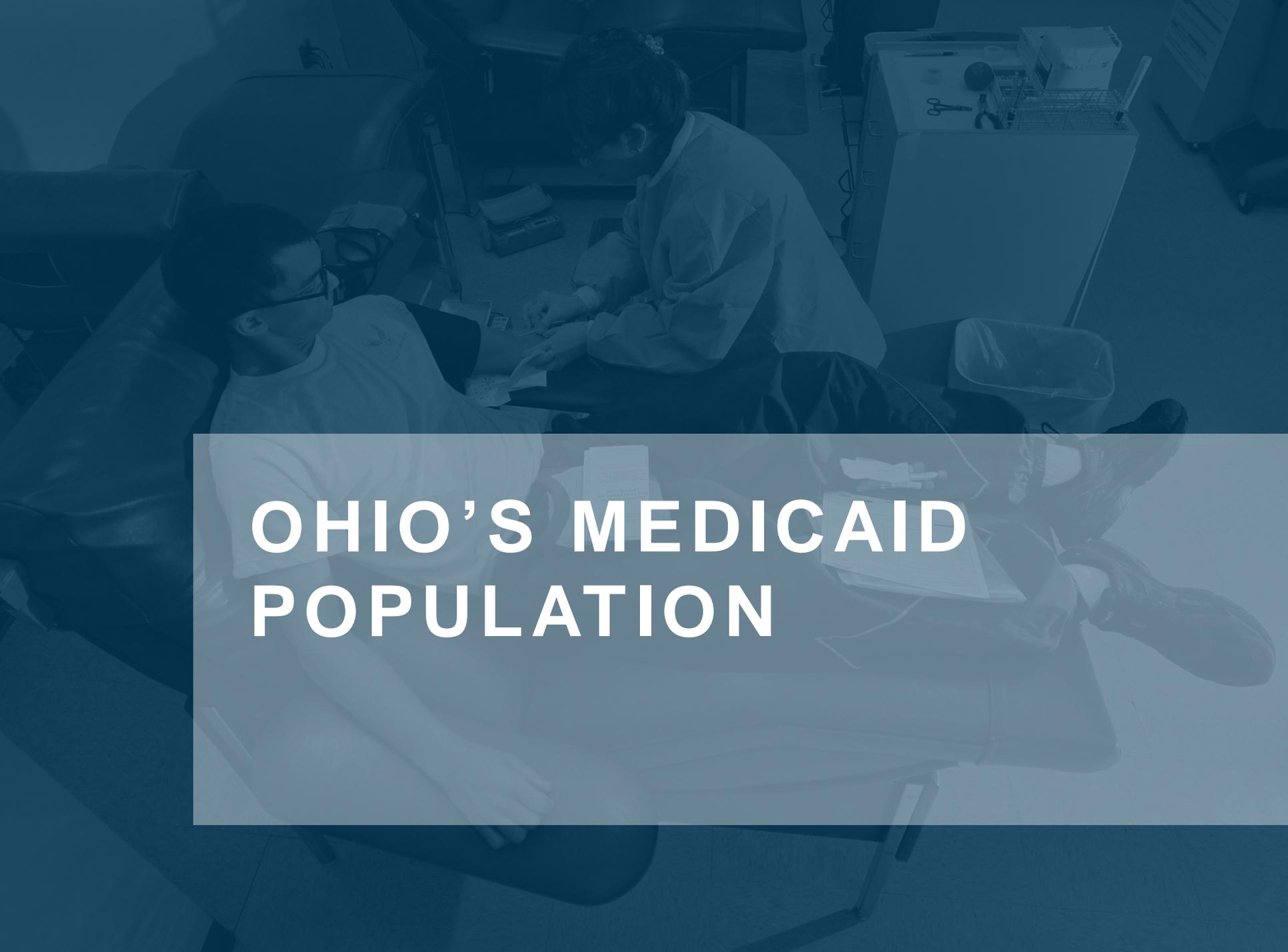
- OMAS questions primarily used are existing, validated items.
- Some Ohio-specific questions were developed, cognitively tested, and then tested in a pilot study.
- Administration method was a mix of landline and cell phone telephone surveys.
- The survey vendor was RTI International.
- The data collection period was from early July to early December 2017.
- Interviews were conducted in English and in Spanish.
- Institutional Review Board (IRB).

2017 OMAS field statistics

- Landline Interviews
 - 8,397 Interviews
(21% of sample)
- Cell Phone Interviews
 - 31,314 Interviews
(79% of sample)
- Final Sample Size
 - 39,711 Adult Interviews
(19 & older)
 - 9,202 Child Interviews
(0 – 18 years)*†

*For the OMAS adult/child classifications, the child sample includes 0-18 years of age to accommodate the Department of Medicaid child enrollment eligibility age criterion.

†Child interview is completed by an adult proxy – most knowing adult relating to child’s health and health care



OHIO'S MEDICAID POPULATION

Medicaid eligibility terms

Throughout this presentation some key terms will be used to describe the Medicaid enrolled in OMAS charts and tables. These include:

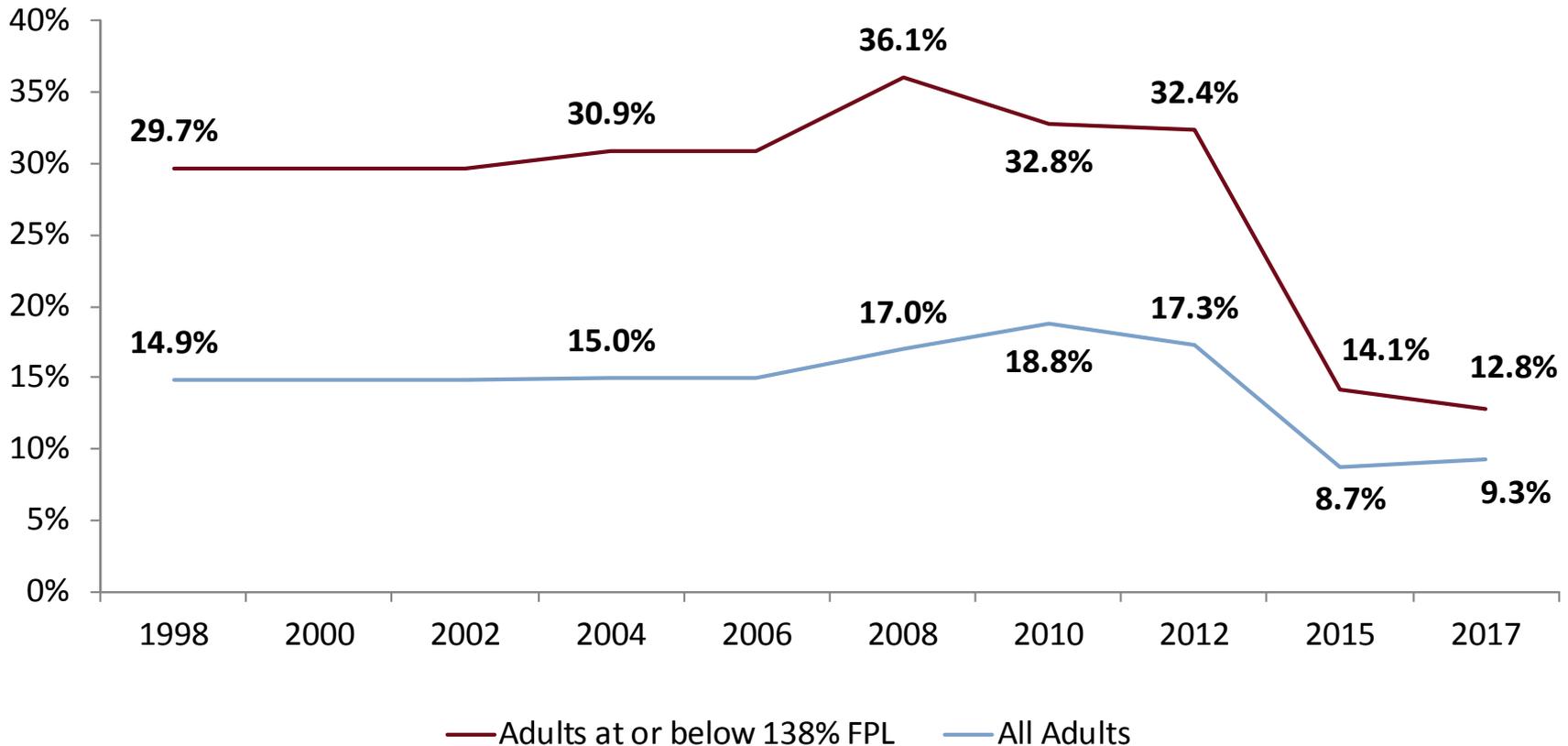
- *Oldly eligible:*
 - Medicaid-eligible based on pre-ACA eligibility requirements
- *Newly eligible:*
 - Medicaid-eligible due to the modified eligibility requirements of Medicaid expansion

Medicaid enrollment terms

- *Enrolled in Medicaid:*
 - Those who are enrolled in Medicaid may be referred to as “enrolled and [newly or oldly] eligible”
- *Eligible for Medicaid coverage, but not enrolled in Medicaid:*
 - Not all Medicaid-eligible citizens enroll in Medicaid. Those who have chosen not to enroll are referred to as: “[newly or oldly] eligible but not enrolled”.

Percentage of uninsured adults

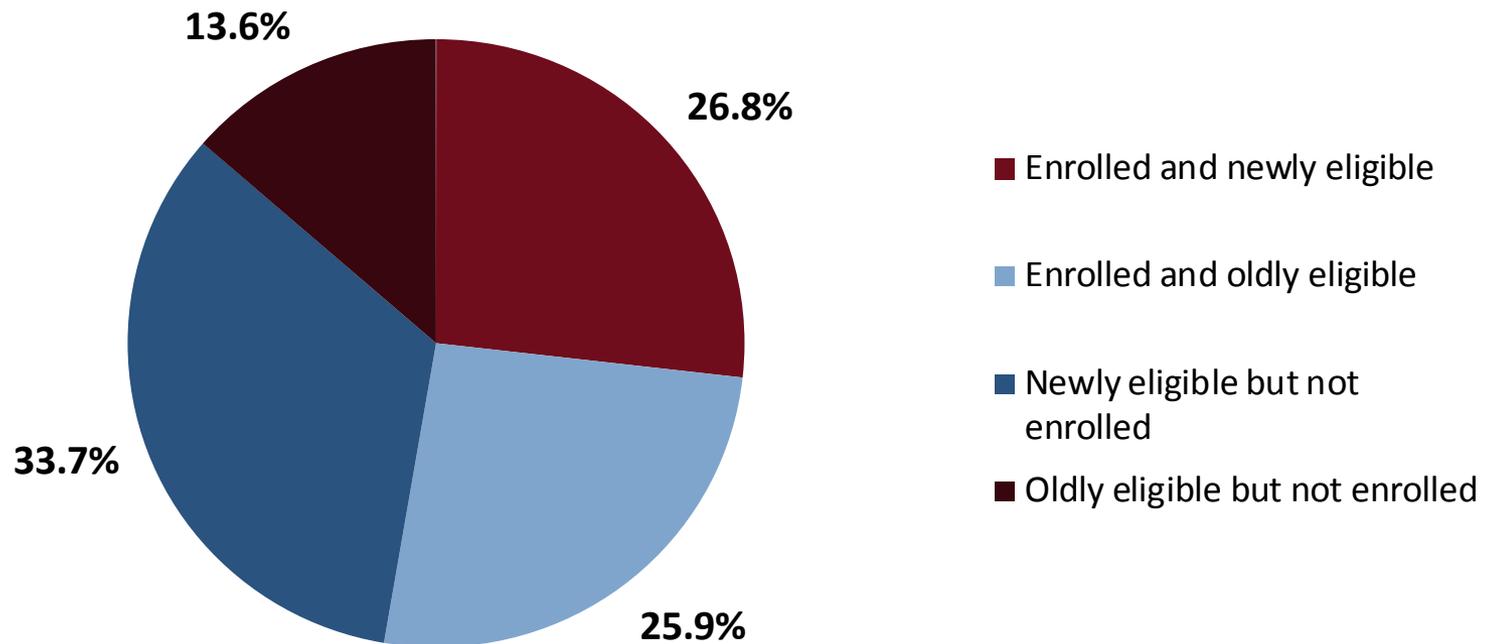
Uninsured Rate Trends among Ohio Adults 19-64 Years



Source: Ohio Medicaid Assessment Survey (1998-2017)

Enrollment among potentially Medicaid eligible adults

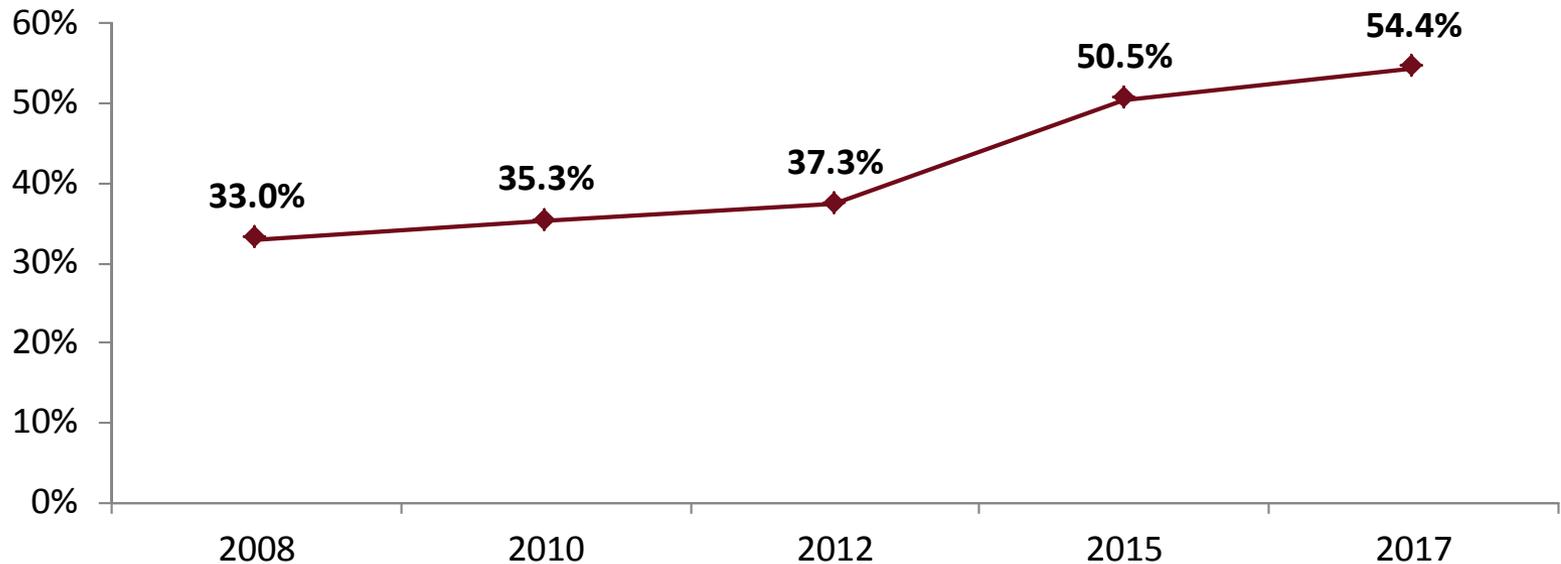
Enrollment among the Potentially Medicaid Eligible Adult Population (19-64 Years), 2017 OMAS



Source: 2017 Ohio Medicaid Assessment Survey

Medicaid working profile, adults

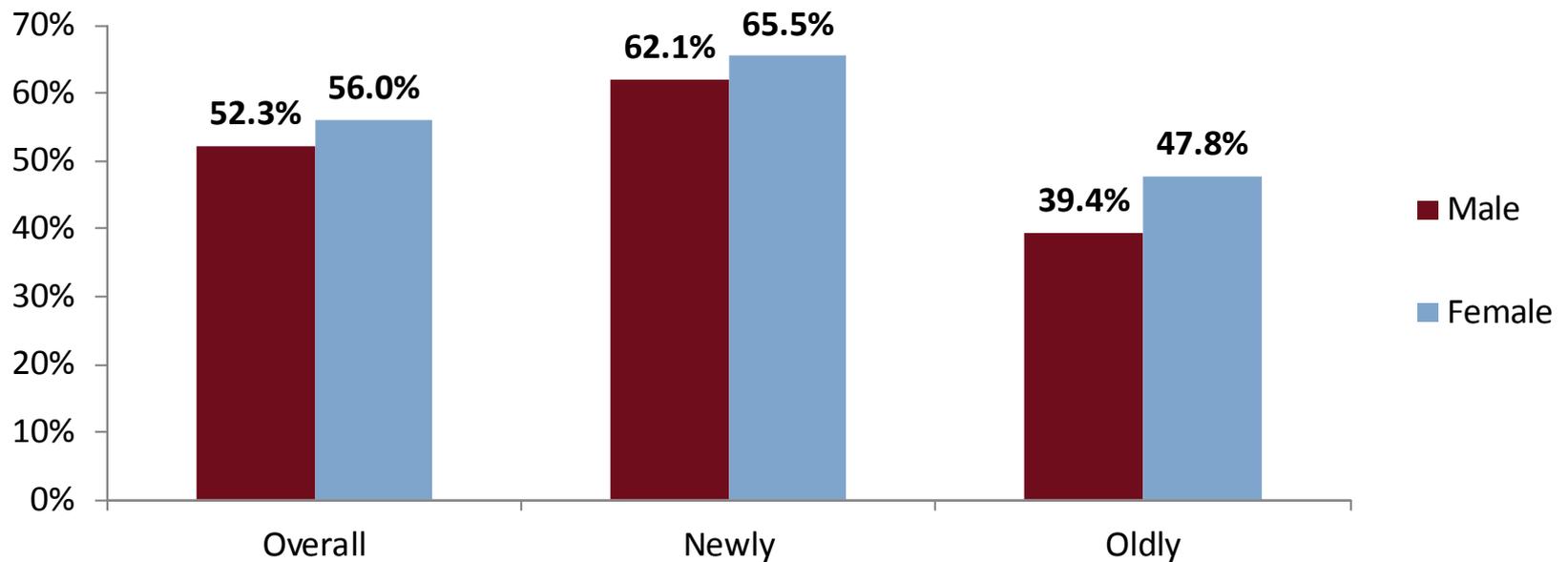
Medicaid Enrolled: Self and/or Spouse Employed, Adults 19-64 Years



Source: Ohio Medicaid Assessment Survey (2008-2017)

Medicaid working profile, adults by gender

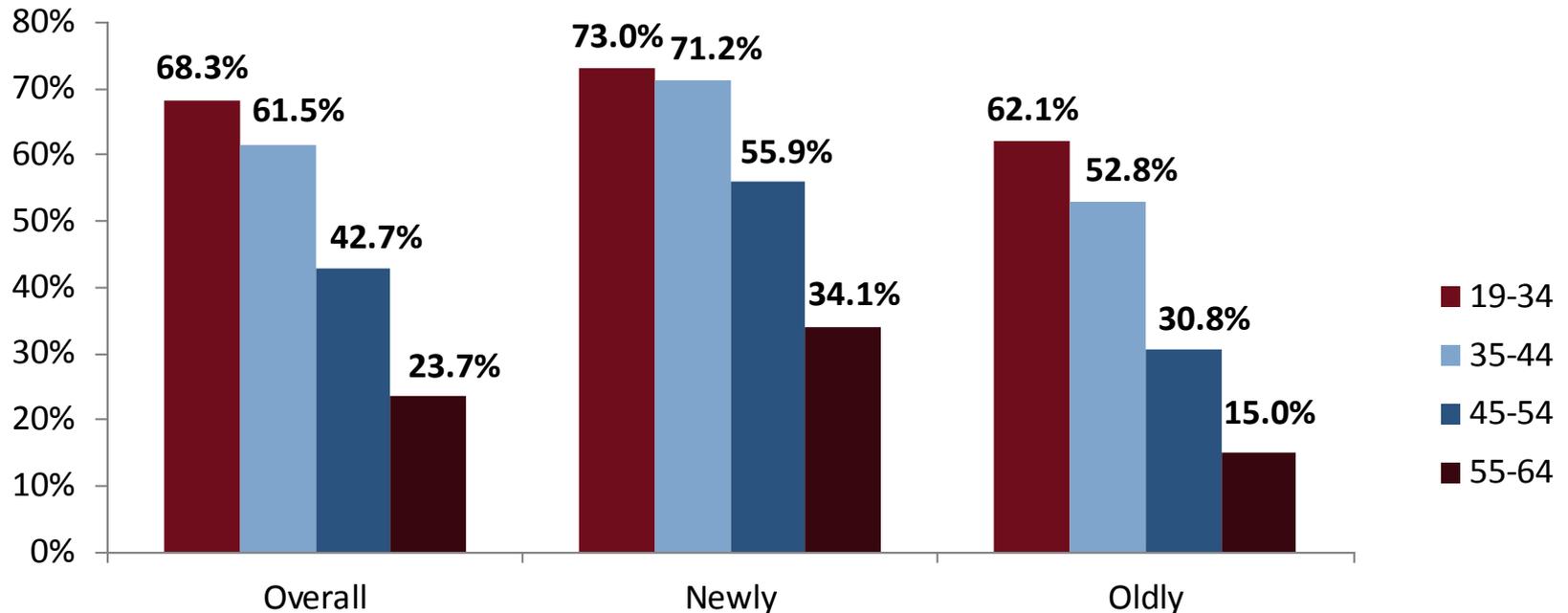
Medicaid enrolled adult, 19-64 years, or spouse (if married)
is currently working , by gender



Source: 2017 Ohio Medicaid Assessment Survey

Medicaid working profile, adults by age

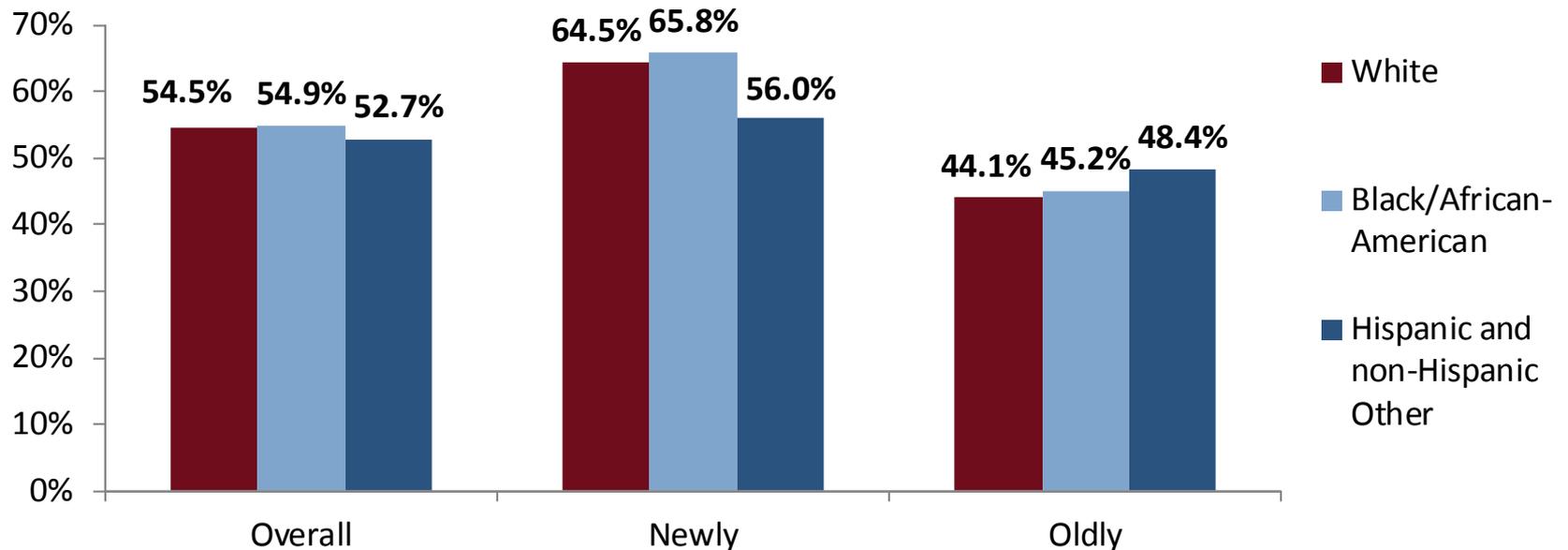
Medicaid enrolled adult, 19-64 years, or spouse (if married) is currently working, by age group



Source: 2017 Ohio Medicaid Assessment Survey

Medicaid working profile, adults by race/ethnic groups

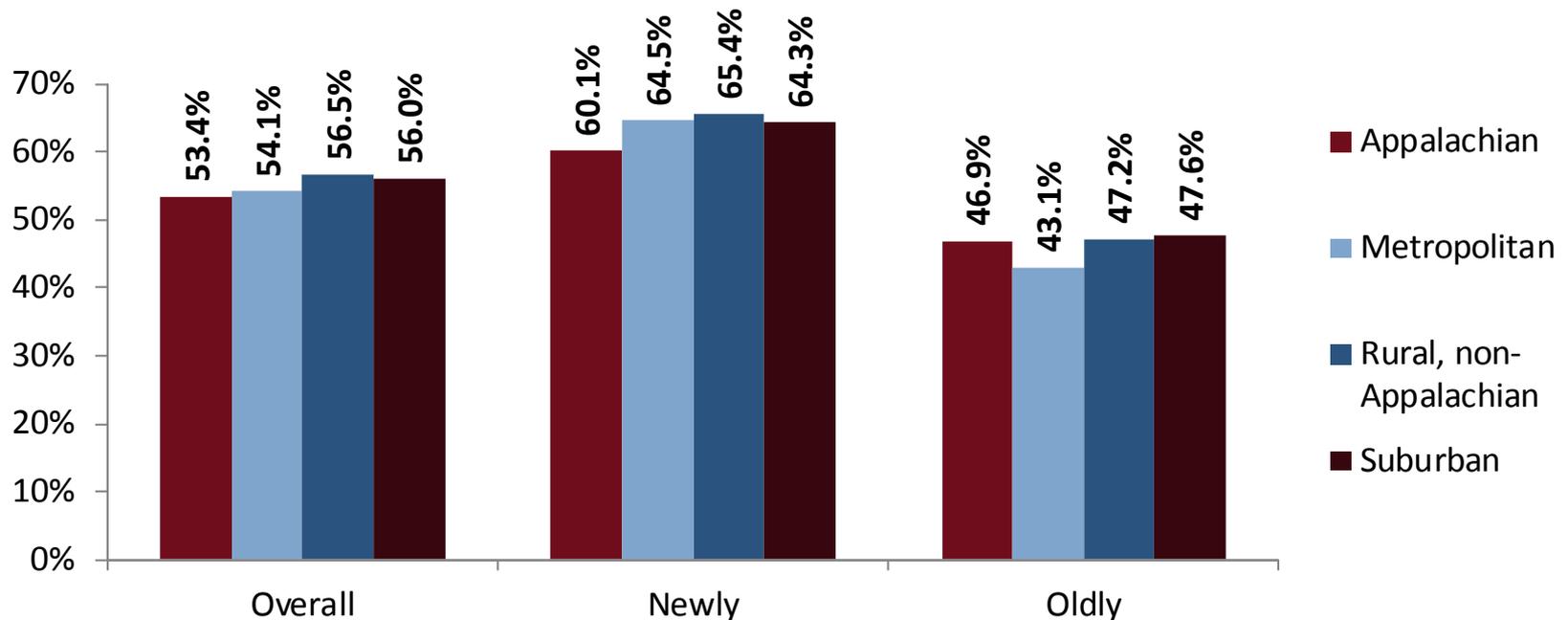
Medicaid enrolled adult, 19-64 years, or spouse (if married) is currently working , by racial/ethnic group



Source: 2017 Ohio Medicaid Assessment Survey

Medicaid working profile, adults by county type

Medicaid enrolled adult, 19-64 years, or spouse (if married) is currently working , by county type



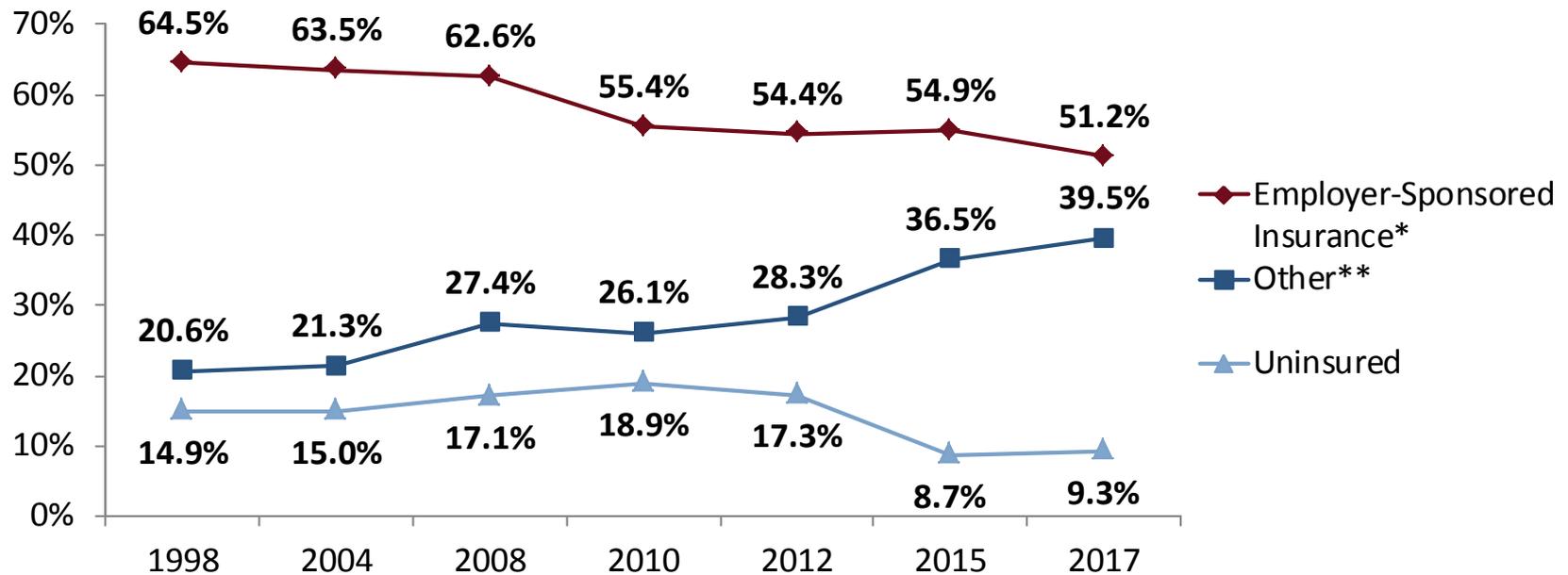
Source: 2017 Ohio Medicaid Assessment Survey



OHIO'S TRENDS IN HEALTH CARE COVERAGE OVER TIME

Adult insurance trends

Trends in Insurance Coverage among Ohio Adults 19-64



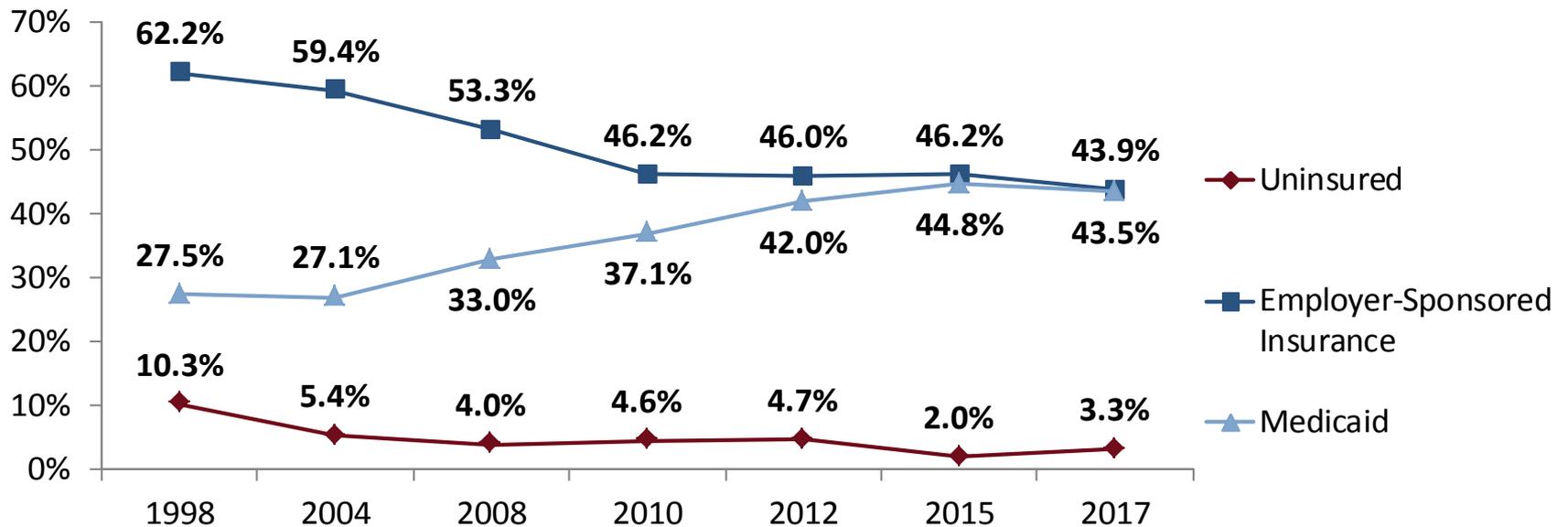
Source: Ohio Medicaid Assessment Survey (1998-2017)

*Primary Coverage

**Other includes Medicaid, Exchange, Privately Purchased, Medicare, Other, Unknown Type of Insurance (does not include ESI or Uninsured)

Child insurance trends (0-17 years*)

Trends in Insurance Coverage Among Ohio Children 0-17*



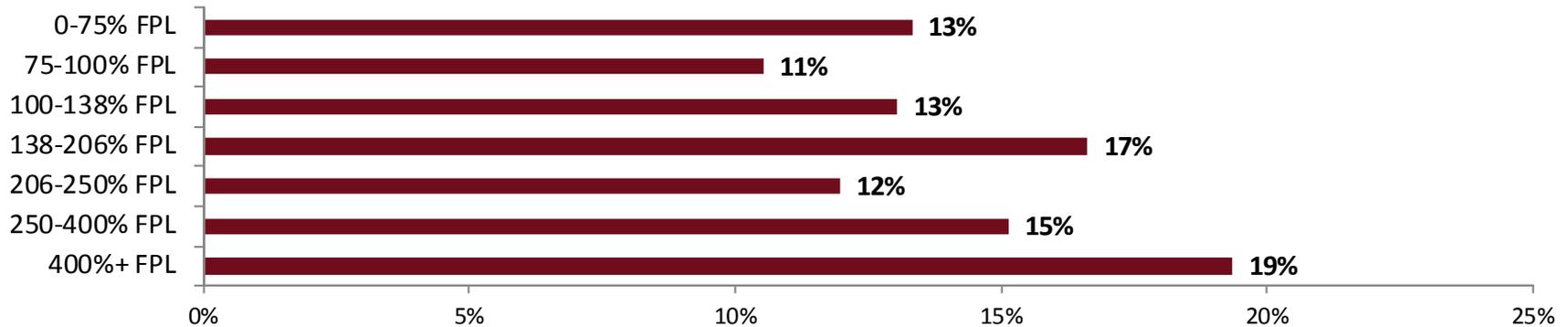
Source: Ohio Medicaid Assessment Survey (1998-2017)

Does not display "Other" insurance types, including Exchange, Privately Purchased, Medicare, Other, and Unknown Type of Insurance.

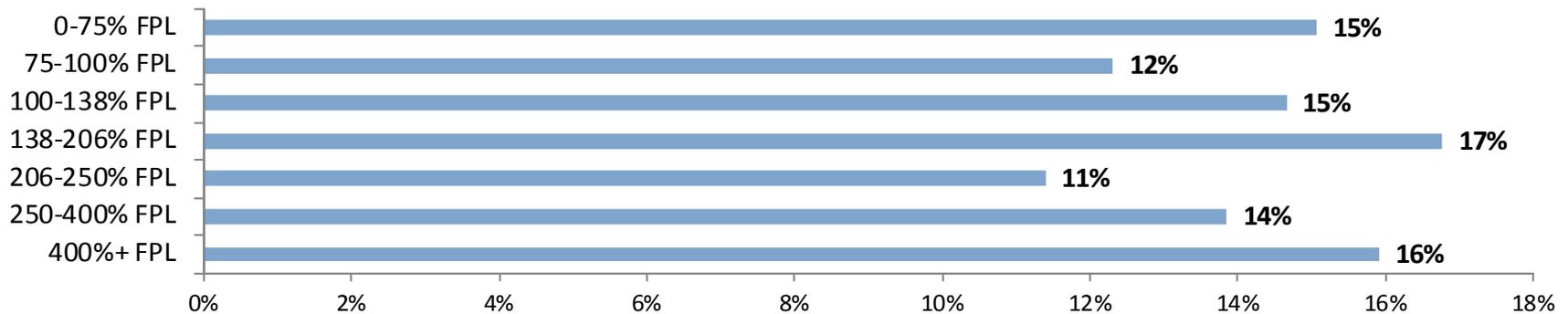
*18-year-olds were classified as adults through 2010, and were then classified as children. They therefore cannot be included in trend analysis. The 2017 OMAS uninsured rate for 0-18 year olds was 3.3%. Primary Coverage Note (91,642).

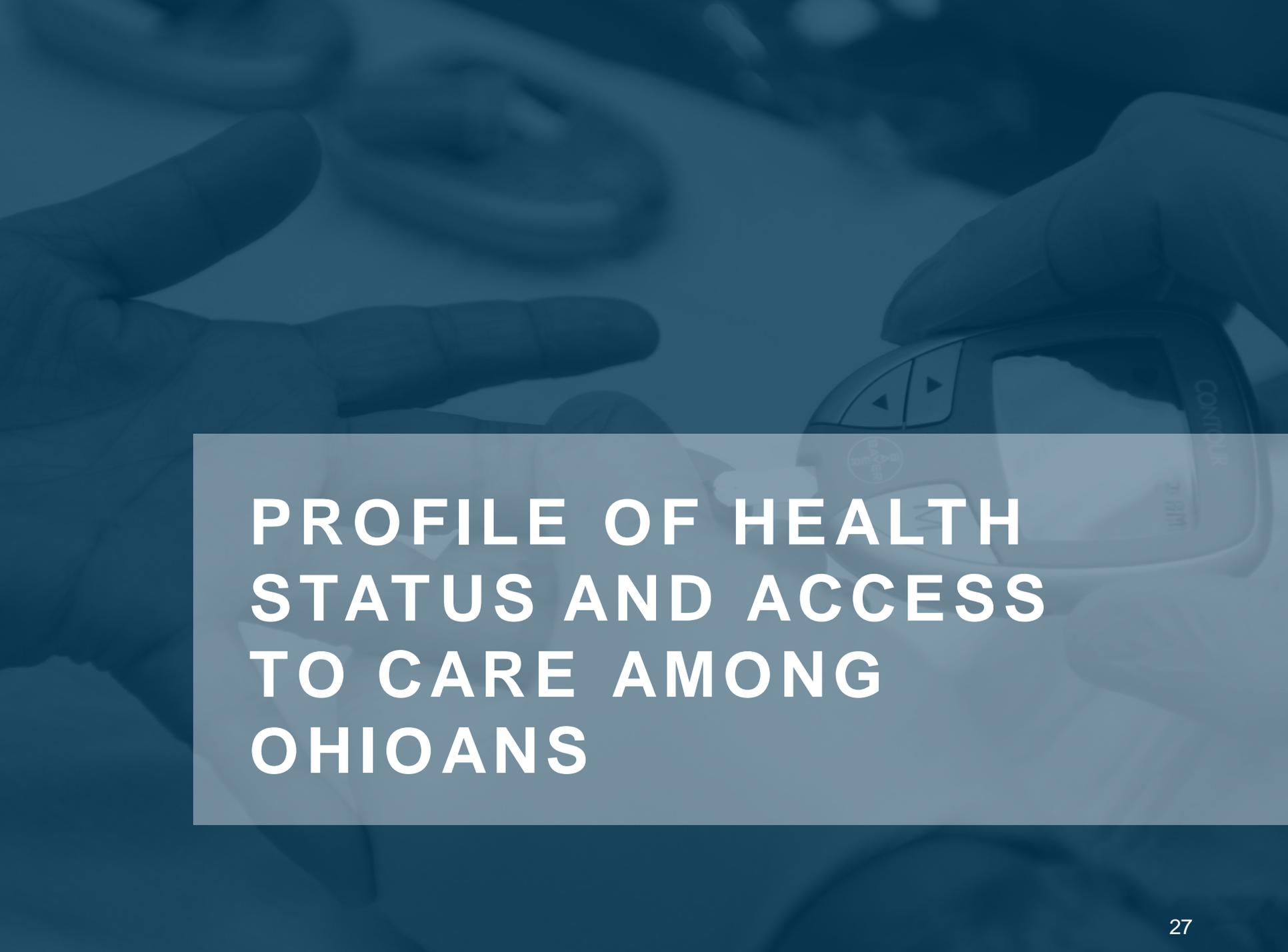
Ohio adult and child demographics by income*

Ohio Adults (19-64 Years)



Ohio Children (0-18 Years)

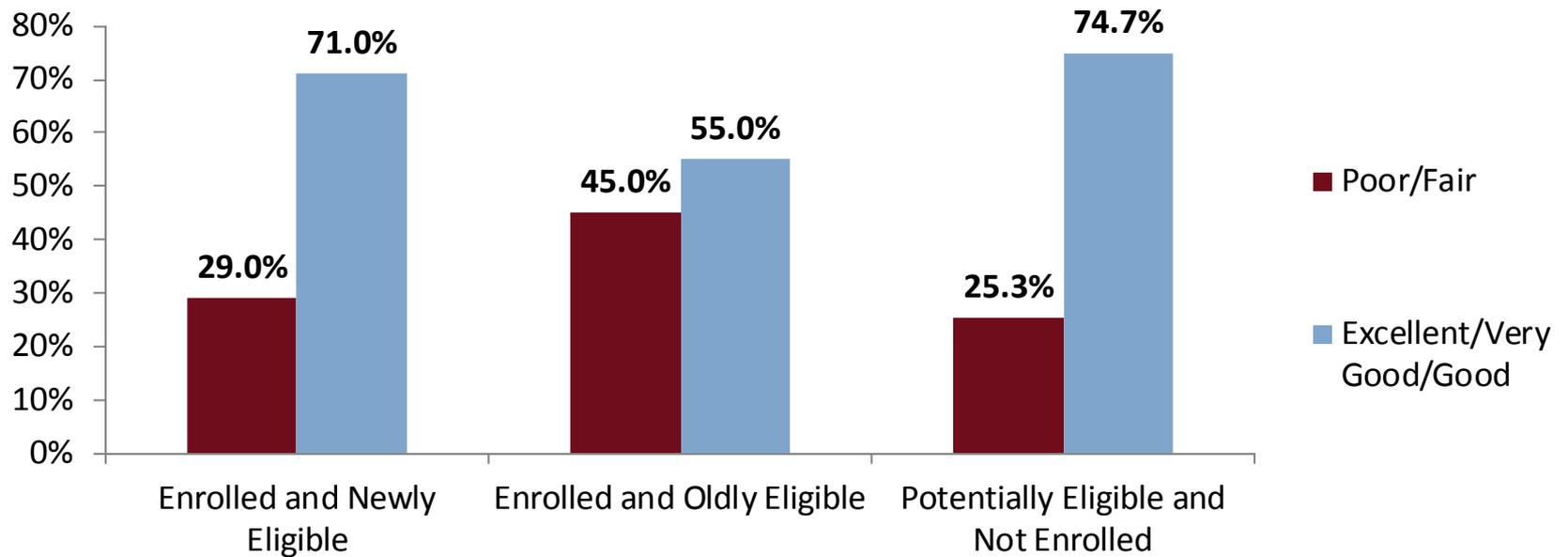




PROFILE OF HEALTH STATUS AND ACCESS TO CARE AMONG OHIOANS

Medicaid profile: self-rated health status in 2017, adult

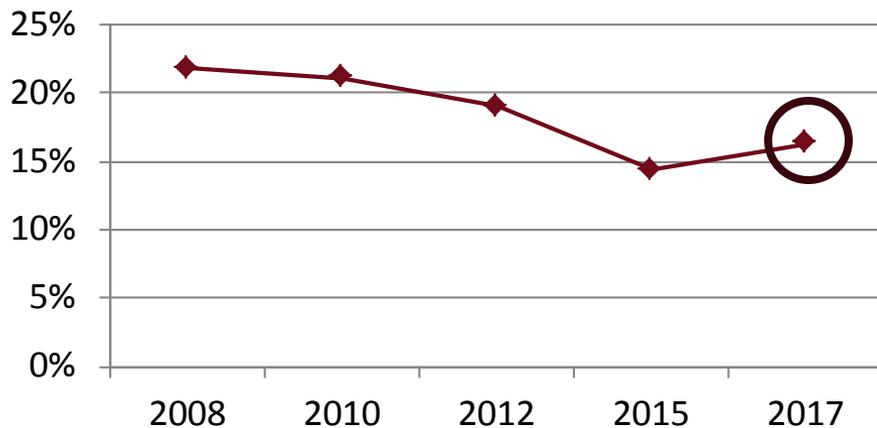
Self-rated health status of Medicaid enrolled adults, 19-64 years



Source: 2017 Ohio Medicaid Assessment Survey

Medicaid profile: Frequent mental distress, adults

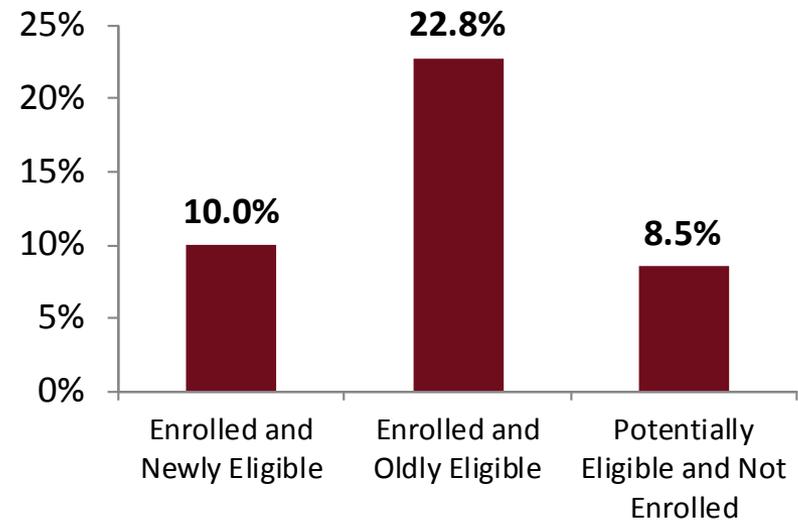
14+ Mentally Distressed Days*, Medicaid Adults 19-64 Years



*Frequent mental distress (FMD) is defined as having 14-30 mentally unhealthy days in the past 30 days (U. S. Center for Disease Control and Prevention, 2013)

Source: Ohio Medicaid Assessment Survey (2008-2017)

14+ Mentally Distressed Days*, Medicaid Adults 19-64 Years in 2017

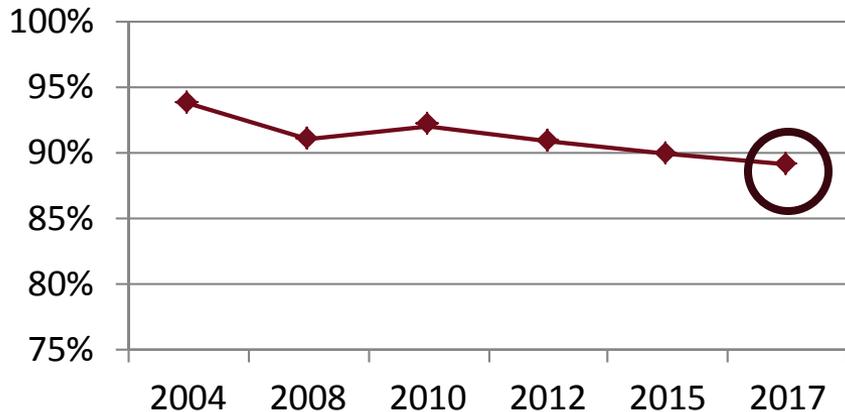


*Frequent mental distress (FMD) is defined as having 14-30 mentally unhealthy days in the past 30 days (U. S. Center for Disease Control and Prevention, 2013)

Source: 2017 Ohio Medicaid Assessment Survey

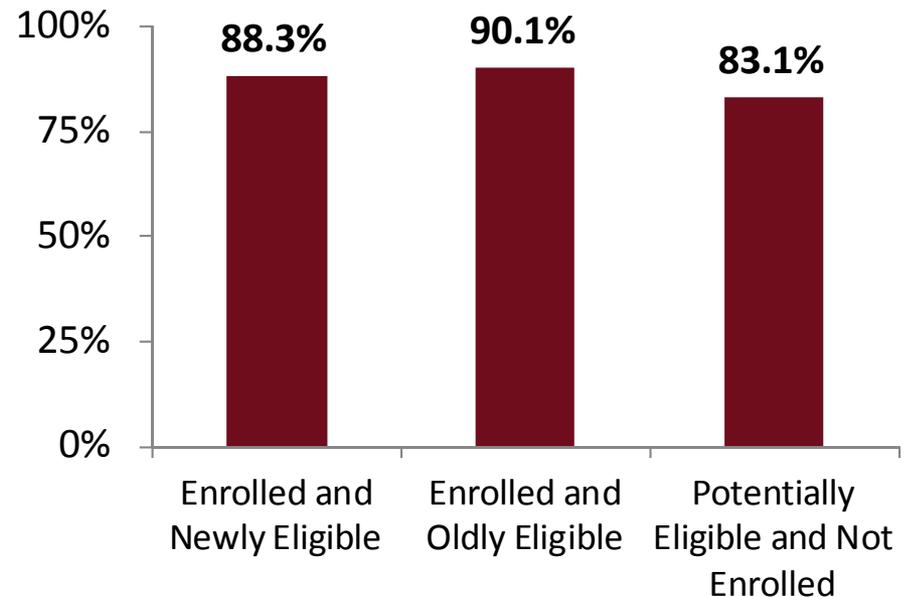
Medicaid profile: Adults with a usual source of health care

Medicaid adults 19-64 years with a usual source of health care, trended



Source: Ohio Medicaid Assessment Survey (2004-2017)

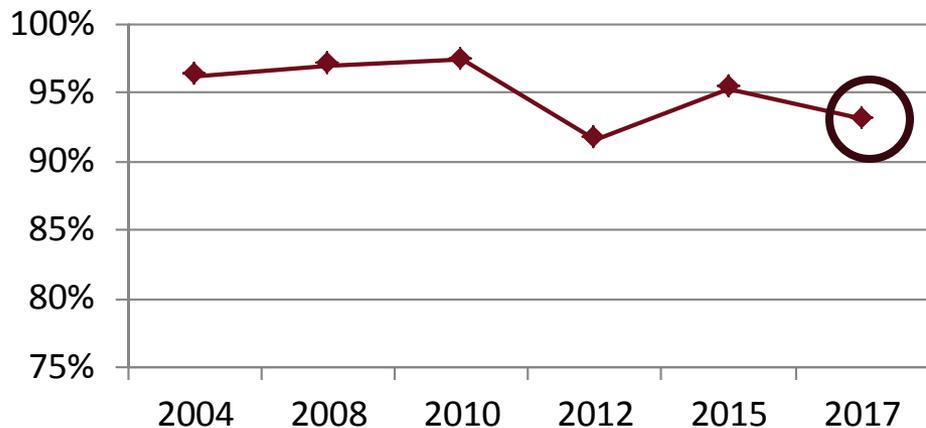
Medicaid-eligible adults 19-64 years with a usual source of health care in 2017



Source: 2017 Ohio Medicaid Assessment Survey

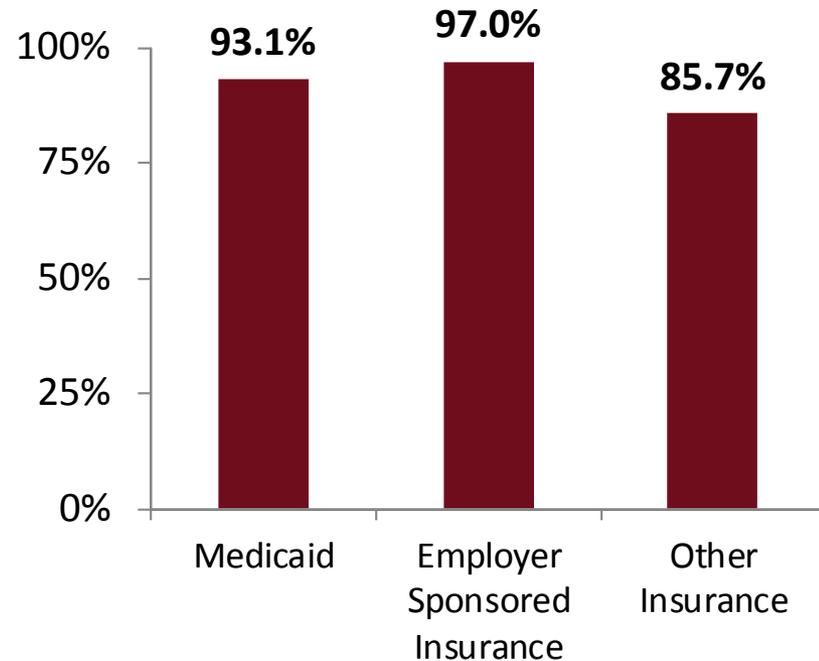
Medicaid profile: Children with a usual source of health care

Medicaid children 0-17 years with a usual source of health care, trended



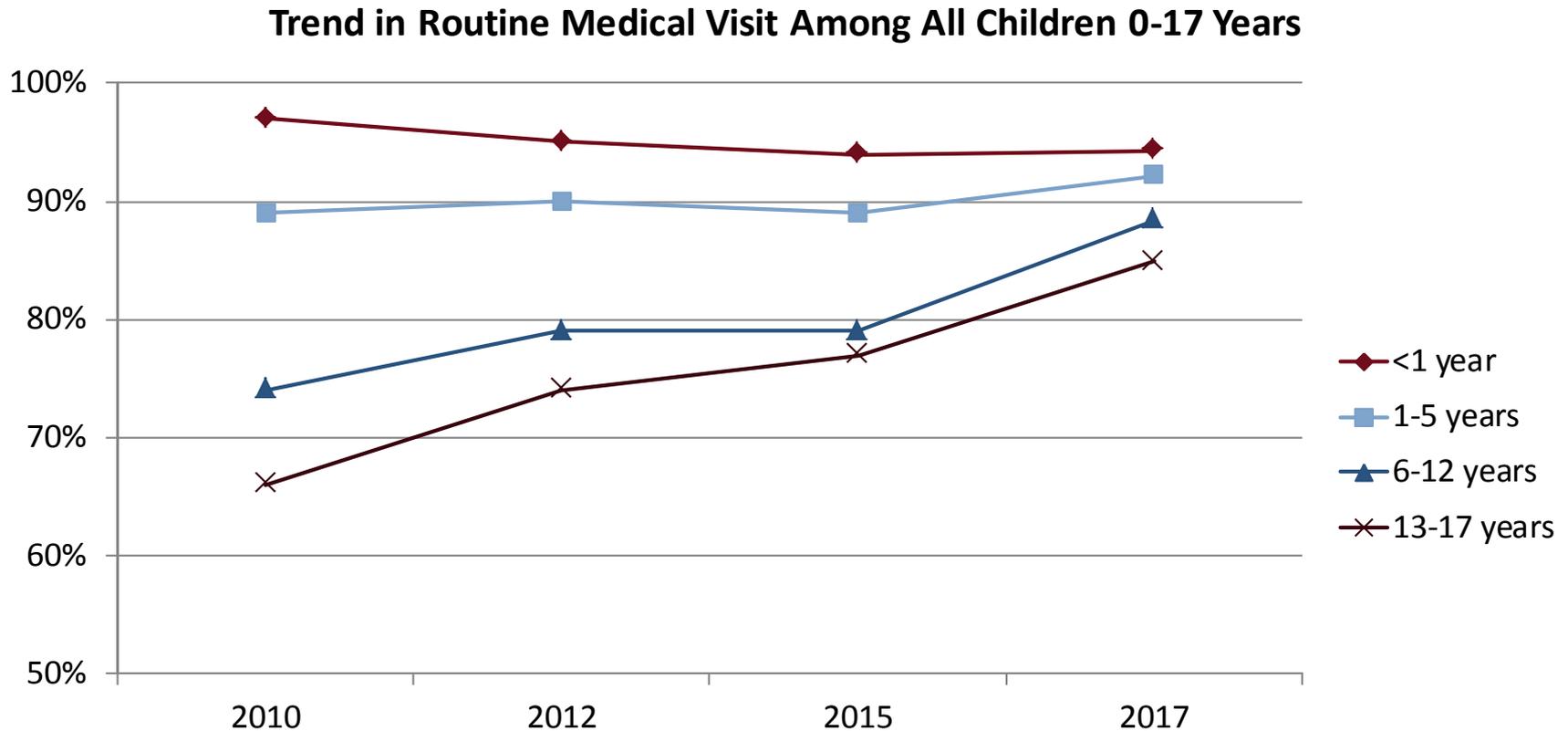
Source: Ohio Medicaid Assessment Survey (2004-2017)

Children 0-18 years with a usual source of health care in 2017



Source: 2017 Ohio Medicaid Assessment Survey

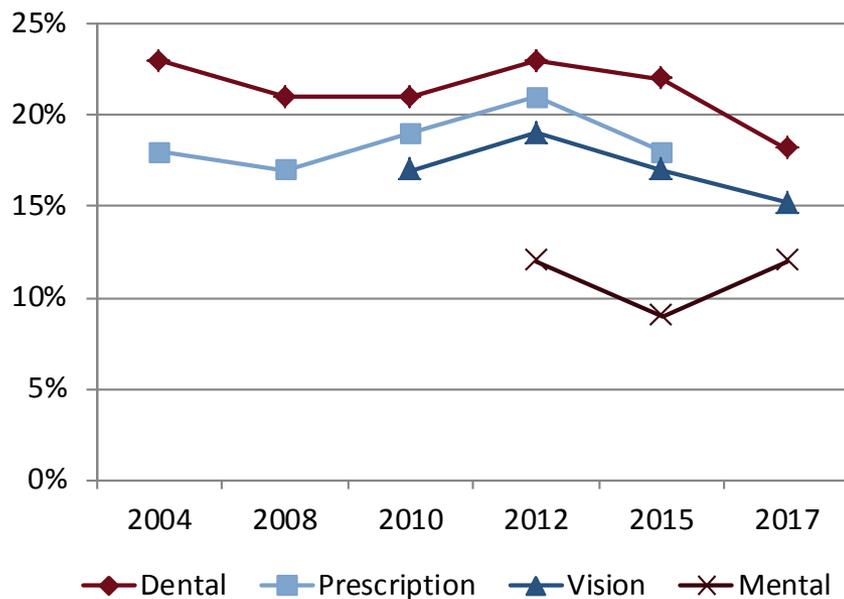
Routine medical visit trends for all Ohio children, within past 12 months



Source: Ohio Medicaid Assessment Survey (2010-2017)

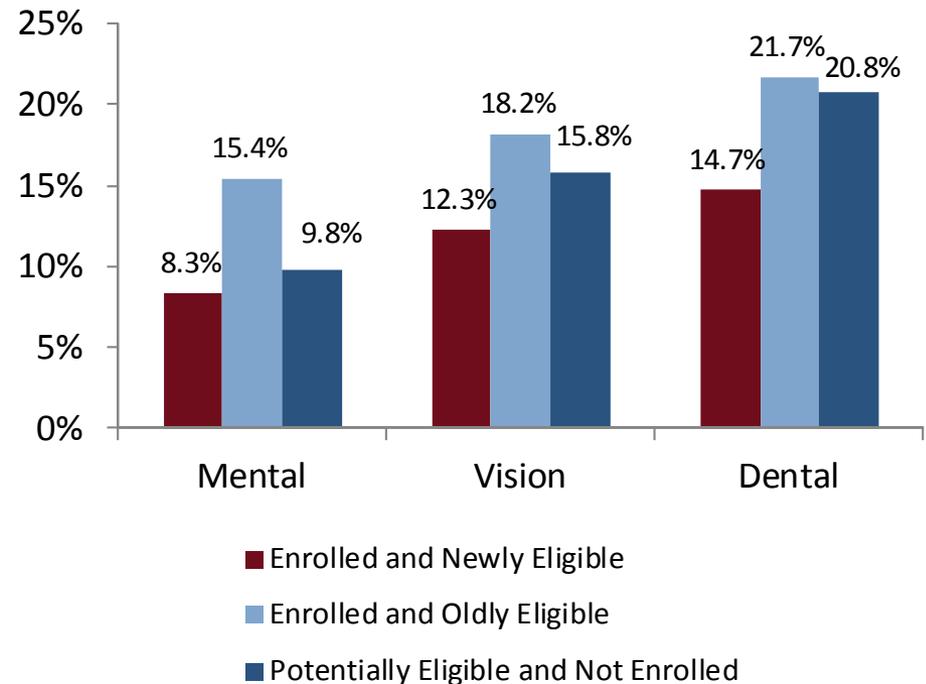
Medicaid profile: Select adult unmet healthcare needs in the past 12 months

Trends among Medicaid-Enrolled Adults 19-64 Years



Source: Ohio Medicaid Assessment Survey (2004-2017)

Unmet Needs among Medicaid-Enrolled Adults 19-64 Years in 2017



Source: 2017 Ohio Medicaid Assessment Survey

Select Key Findings for Medicaid

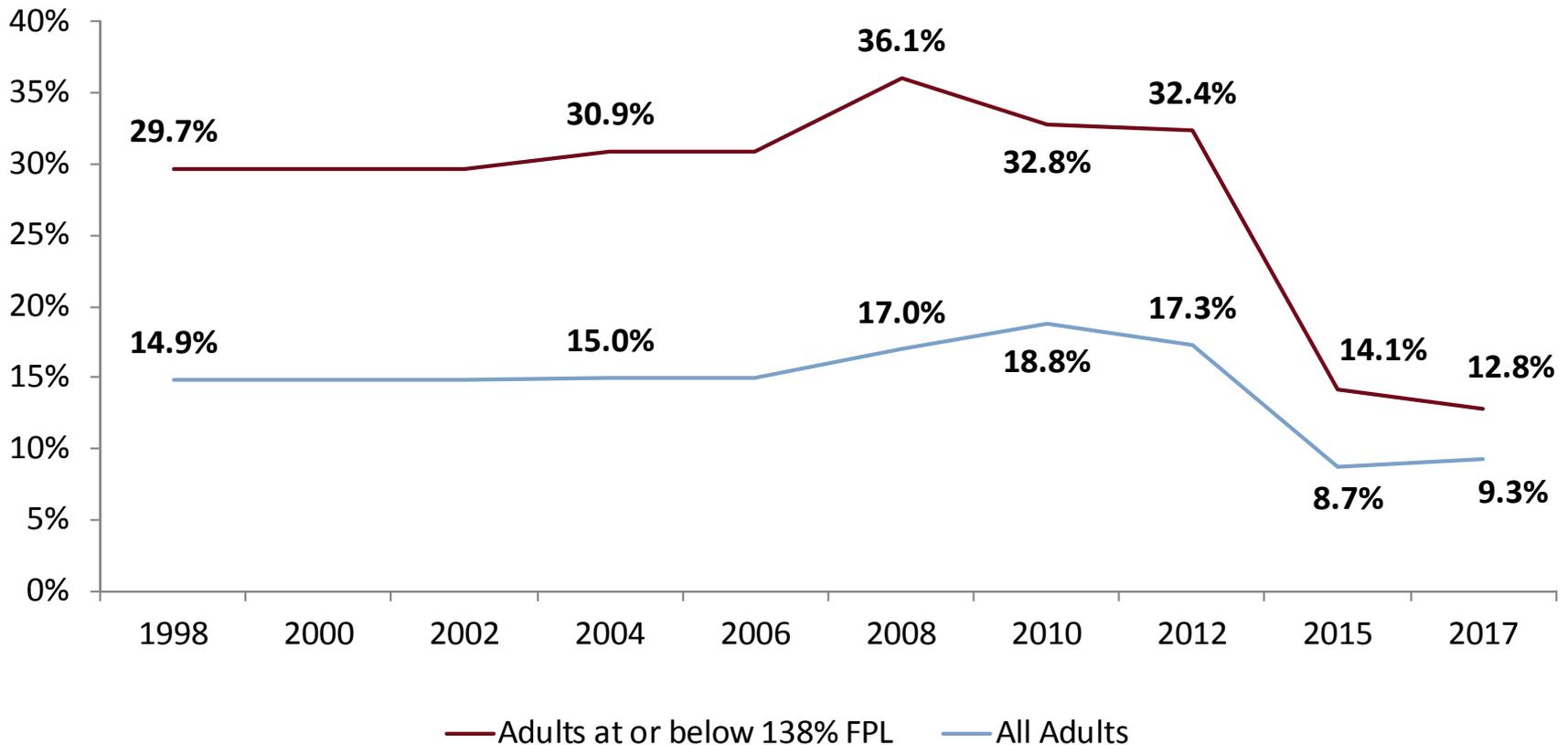
- Around 90% of Ohio's Medicaid-enrollees have a usual source of health care
- Over time, it is becoming easier for Medicaid adults and children to secure care
- Adults who are potentially eligible but not enrolled in Medicaid are relatively healthy



THE UNINSURED AND THOSE WITH OTHER COVERAGE

Percentage of uninsured adults

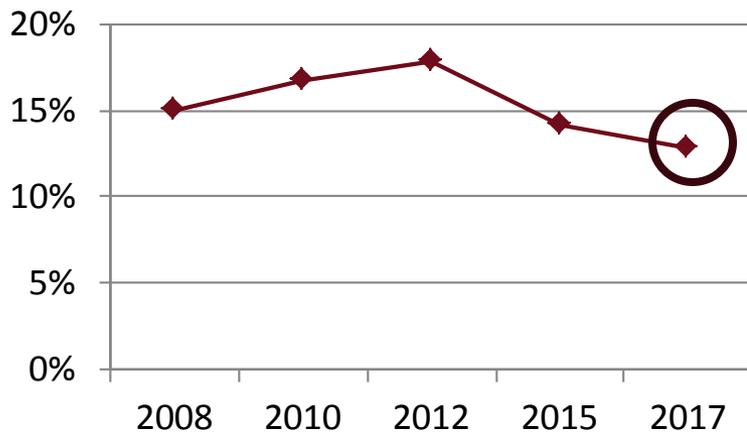
Uninsured Rate Trends among Ohio Adults 19-64 Years



Source: Ohio Medicaid Assessment Survey (1998-2017)

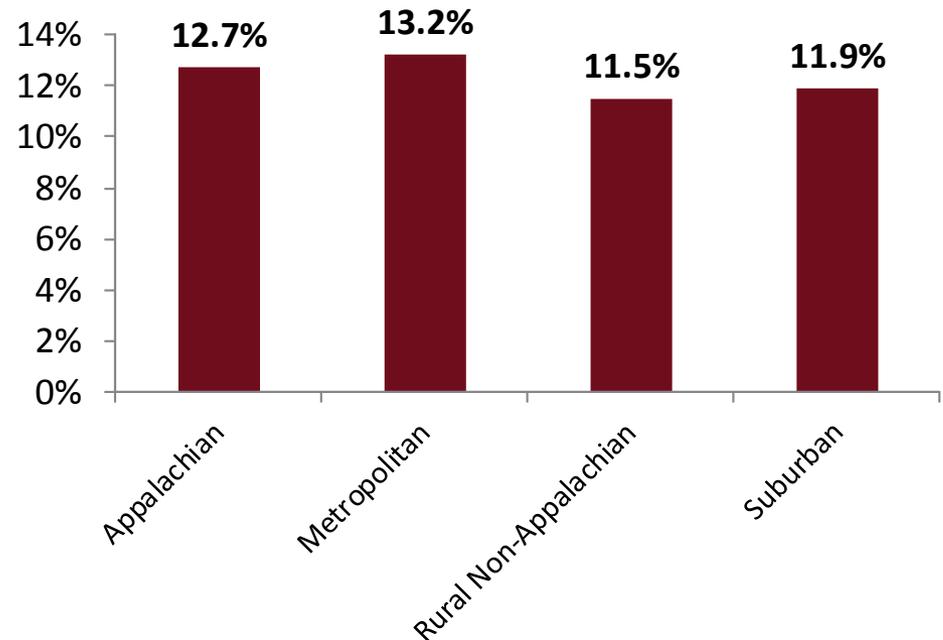
Unmet need for dental care among all adults

Trend in Unmet Dental Care Needs among All Adults 19-64 Years



Source: Ohio Medicaid Assessment Survey (2008-2017)

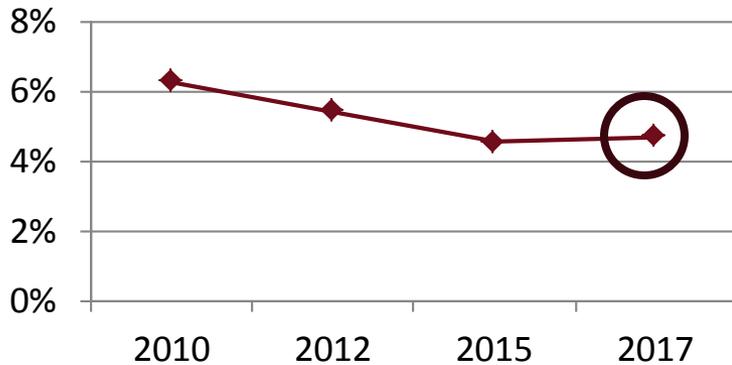
Unmet Dental Care Needs among All Adults 19-64 Years in 2017, Stratified by County Type



Source: 2017 Ohio Medicaid Assessment Survey

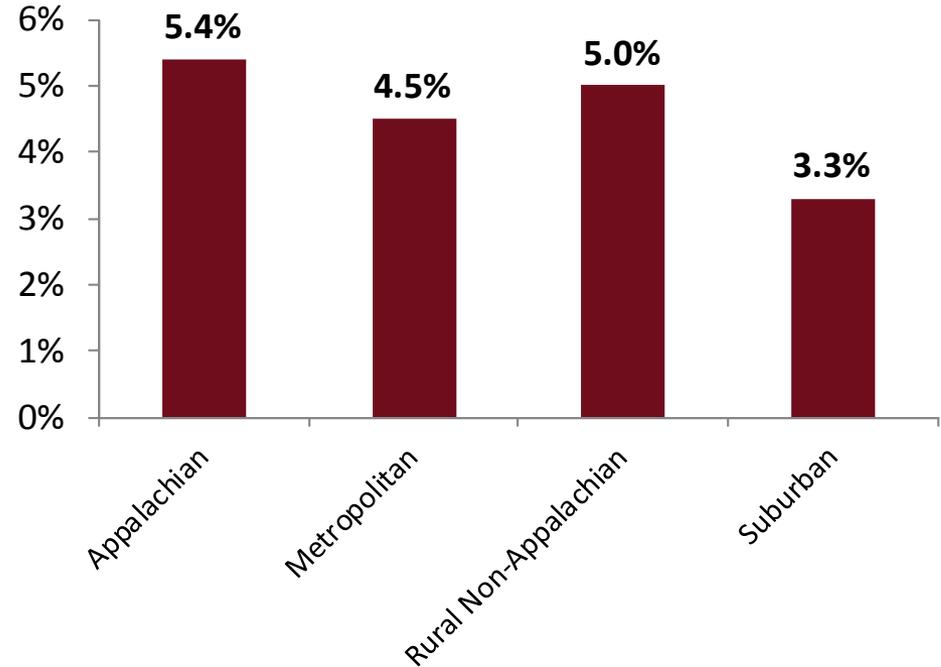
Unmet need for dental care among all children 3-17

Trend in Unmet Dental Care Needs Among All Children 3-17



Source: Ohio Medicaid Assessment Survey (2008-2017)

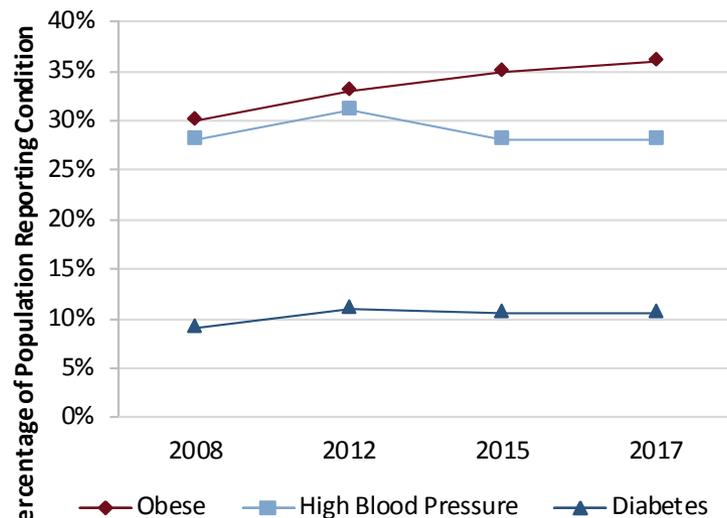
Unmet Dental Care Needs among All Children 3-17 Years in 2017, Stratified by County Type



Source: 2017 Ohio Medicaid Assessment Survey

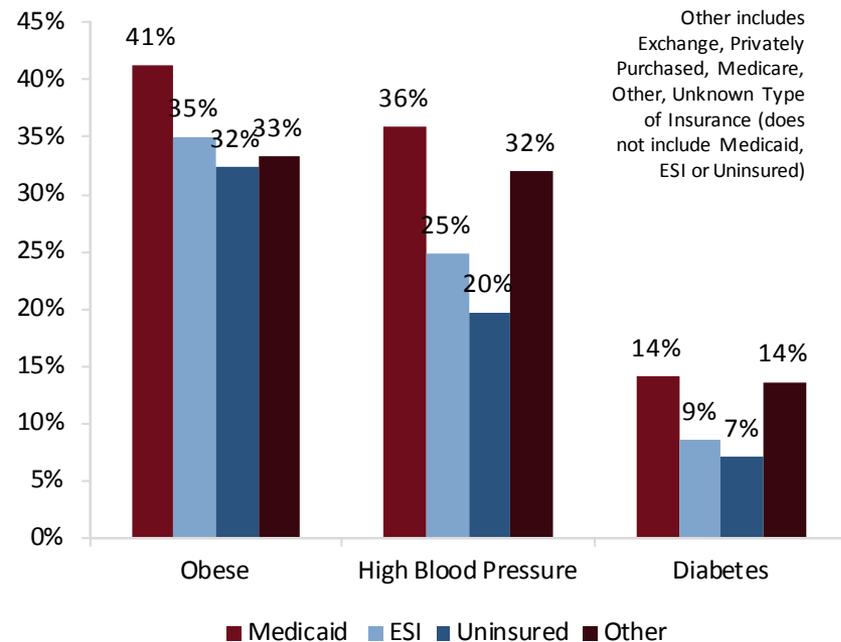
Select chronic conditions among adults 19-64 years

All Adults 19-64 Years



Source: Ohio Medicaid Assessment Survey (2008-2017)

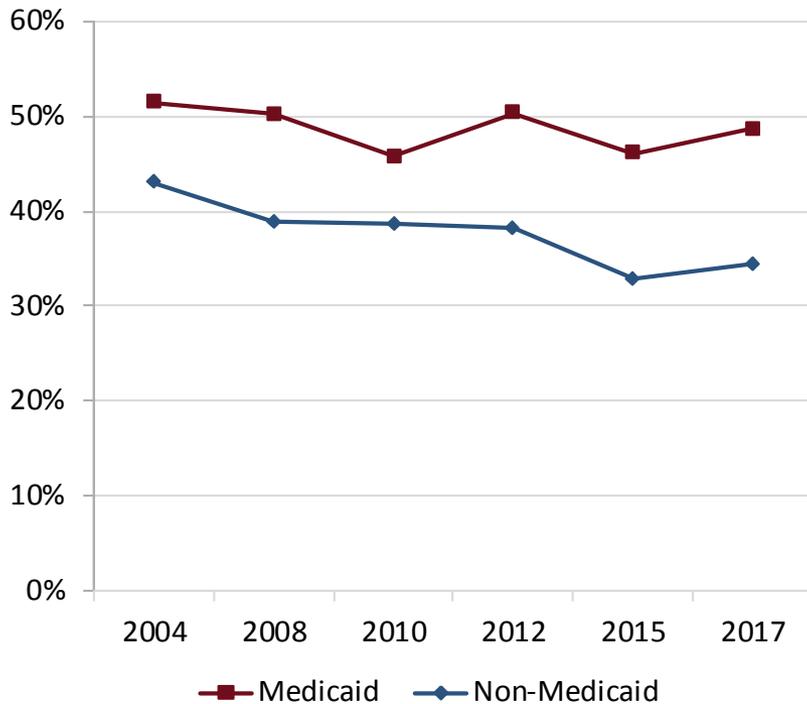
Chronic Health Conditions by Insurance Type 2017, Adults 19-64



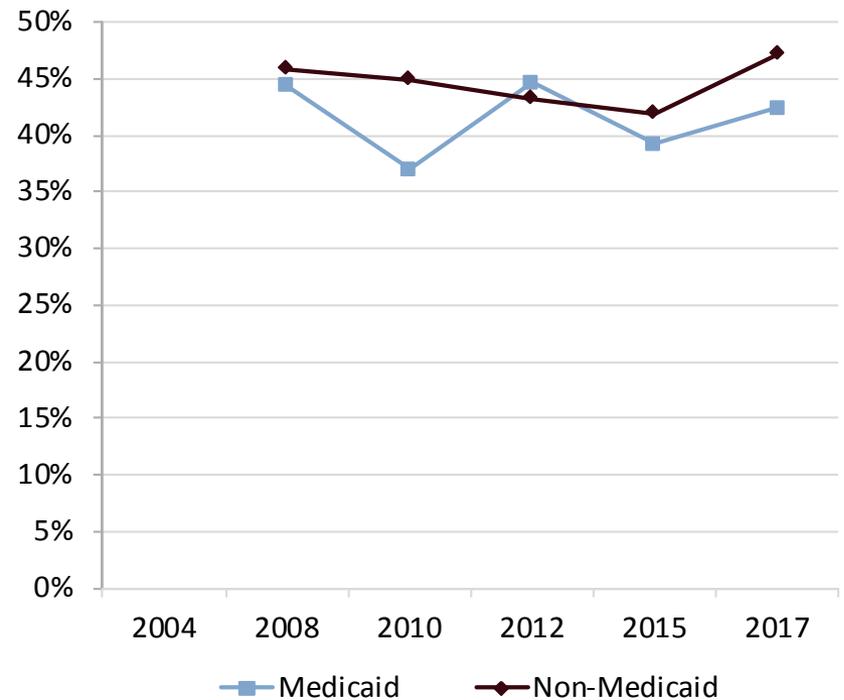
Source: 2017 Ohio Medicaid Assessment Survey

Smoking & Binge Drinking (Adults 19-64 years)*

Proportion of smokers among adults 19-64 by Medicaid status



Proportion binge drinking in past 30 days among adults 19-64 by Medicaid status



Source: 2017 Ohio Medicaid Assessment Survey

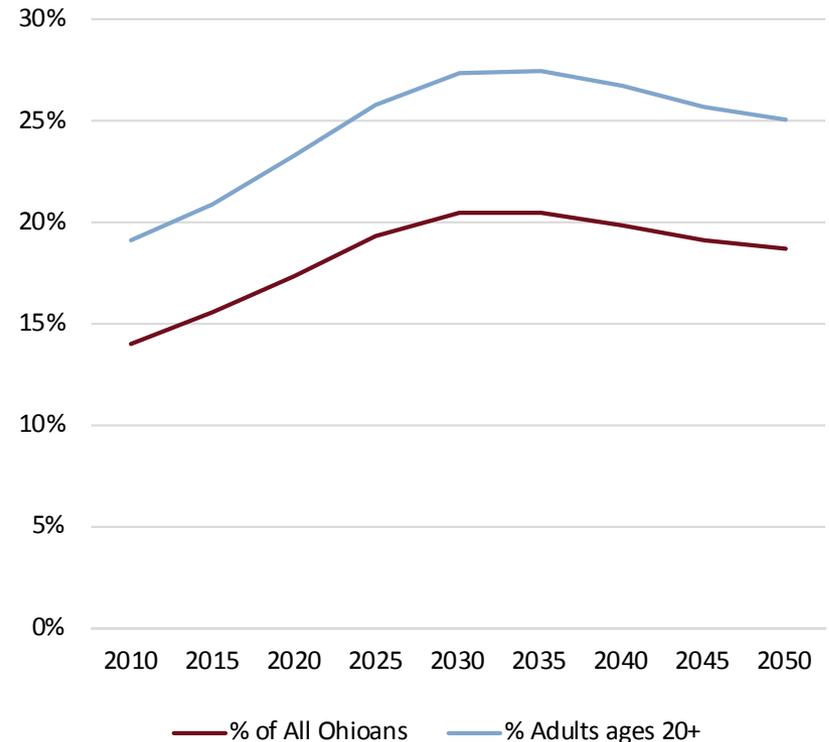
Source: 2017 Ohio Medicaid Assessment Survey

*Medicaid versus non-Medicaid Adults at or below 138% Federal Poverty Level

Ohio's Elder Population

- Long-term, Ohio's 65+ population projected to grow.
- OMAS-based Senior Health Profile to be released EOY 2018.
- OMAS Dashboard expands age range to include 65-74 and 75+, and stratifying results by Area Agency on Aging Region.

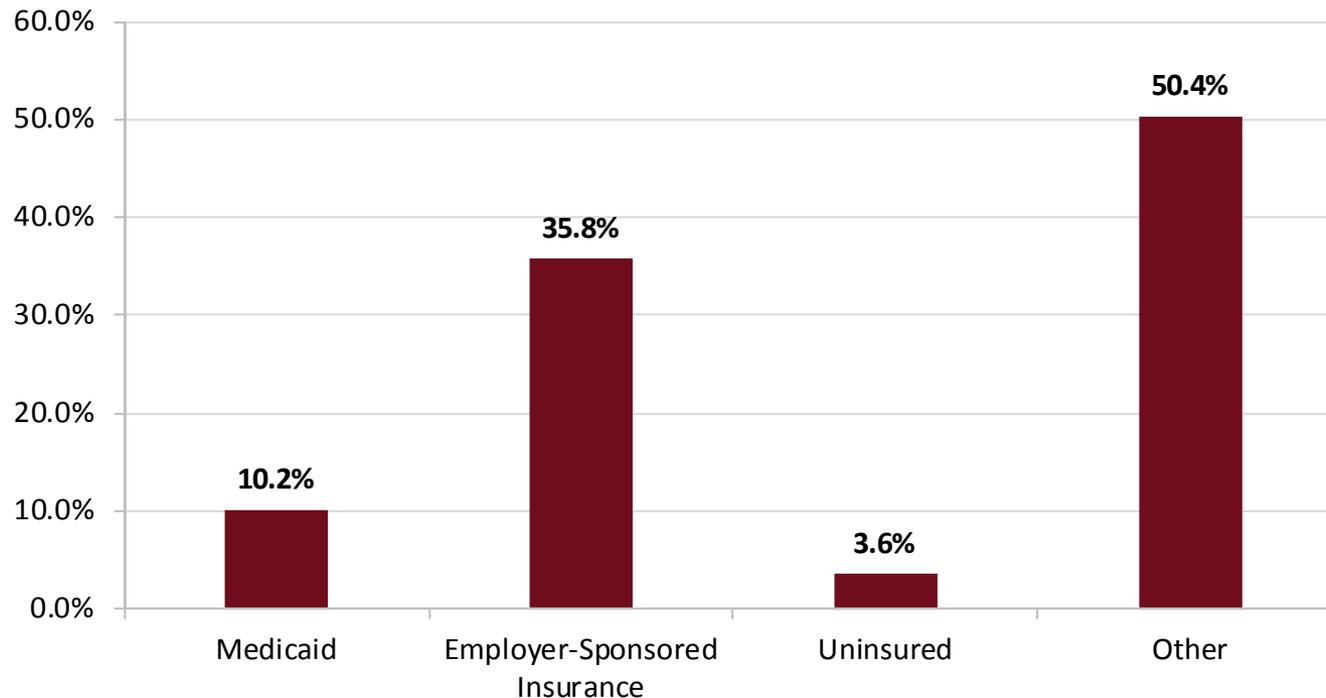
Proportion of Ohioans Ages 65+



Source: Ohio Developmental Services Agency. (2018, April). State of Ohio Population Projections by Age and Sex, 2015 to 2050. Retrieved from <https://development.ohio.gov/files/research/P6001.pdf>

Proportion of Veterans Covered by Insurance Type

**Veteran Insurance Coverage,
by Insurance Type (Adults 19-64)**

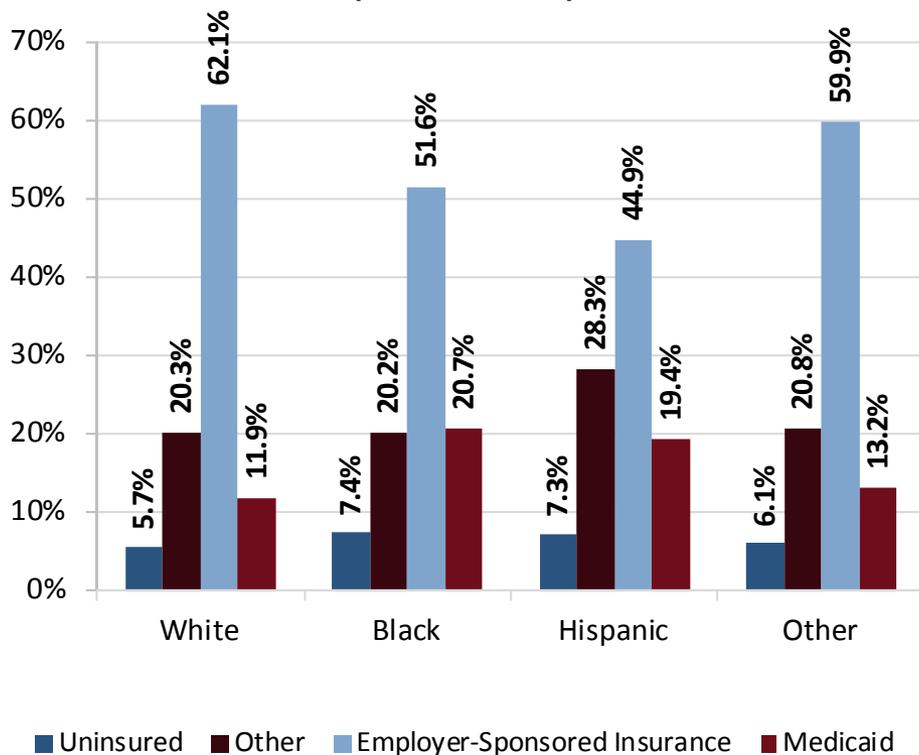


Other includes Exchange, Privately Purchased, Medicare, Other, Unknown Type of Insurance (does not include Medicaid, ESI or Uninsured)

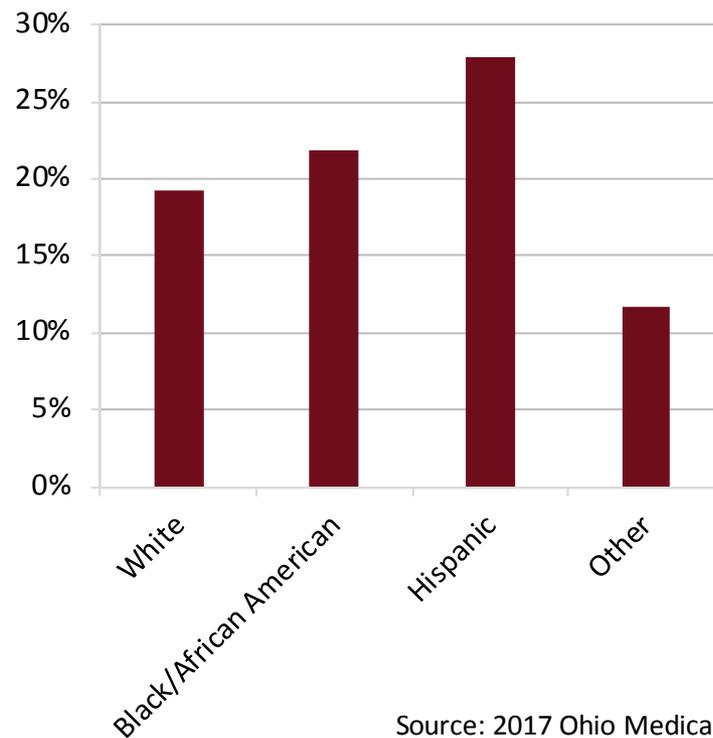
Source: 2017 Ohio Medicaid Assessment Survey

Veterans insurance and health status (Adults 19-64 years)

Veteran Insurance Coverage, by race (Adults 19-64)



Proportion of veterans reporting fair/poor health status, by race (Adults 19-64)



Other includes Exchange, Privately Purchased, Medicare, Other, Unknown
Type of Insurance (does not include Medicaid, ESI or Uninsured)

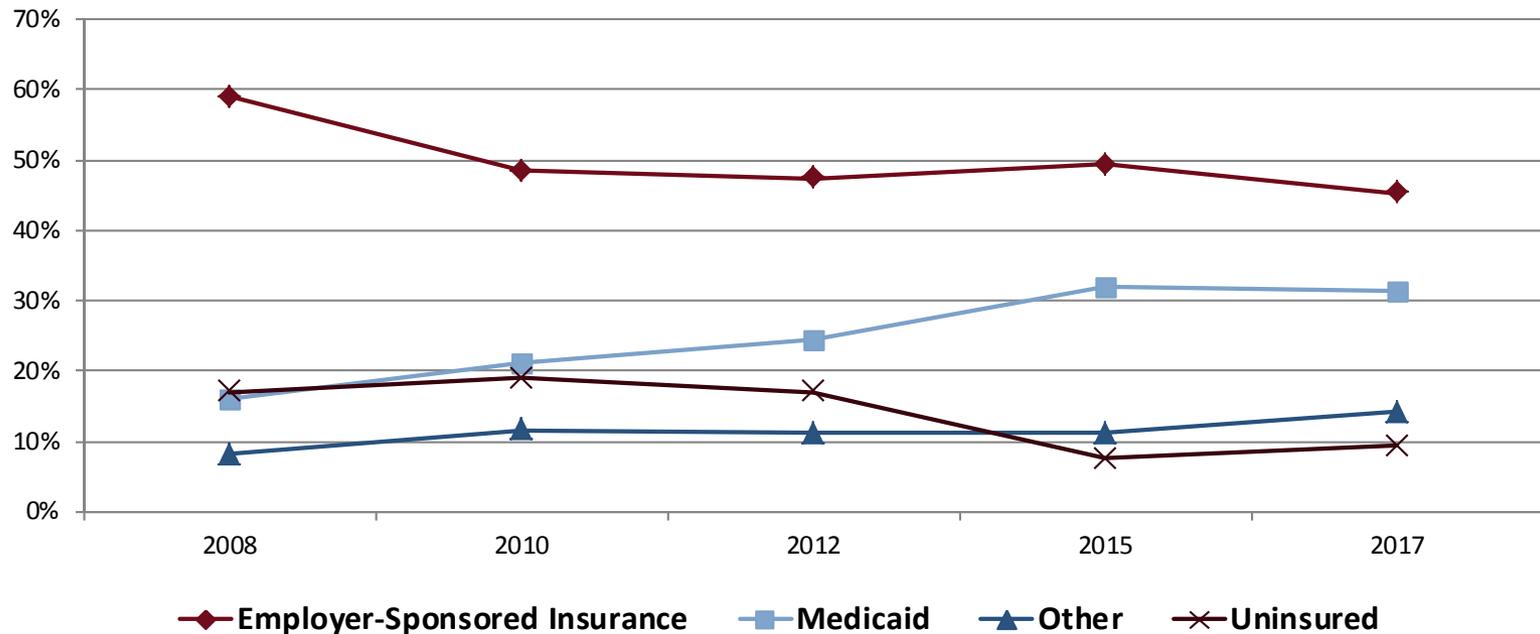
Source: 2017 Ohio Medicaid Assessment Survey



**WOMEN OF
REPRODUCTIVE AGE
(19-44 YEARS)**

Insurance coverage trends for women of reproductive age

Trends in Insurance Coverage among Women 19-44 Years

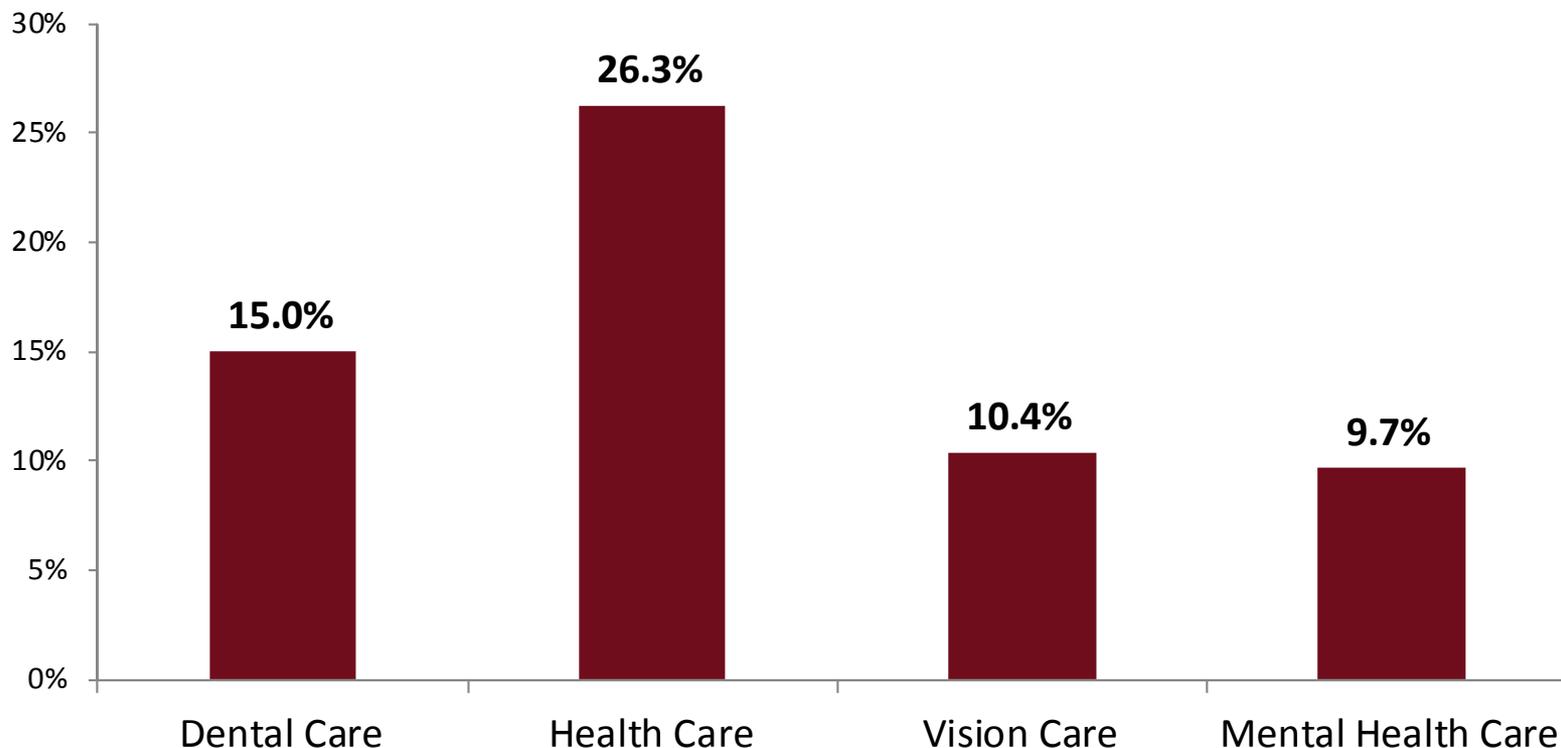


Other includes exchange, directly purchased, Medicare only, other, unknown type of insurance (does not include employer-sponsored insurance or uninsured)

Source: Ohio Medicaid Assessment Survey (2008-2017)

Percentage of women of reproductive age with an unmet need for health care

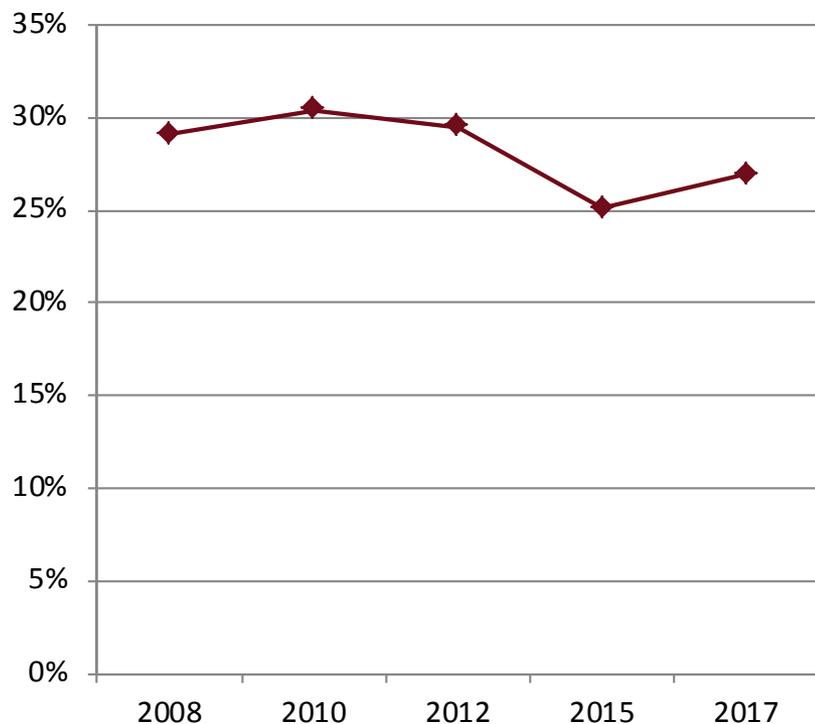
Unmet Health Care Needs among Women 19-44 Years



Source: 2017 Ohio Medicaid Assessment Survey

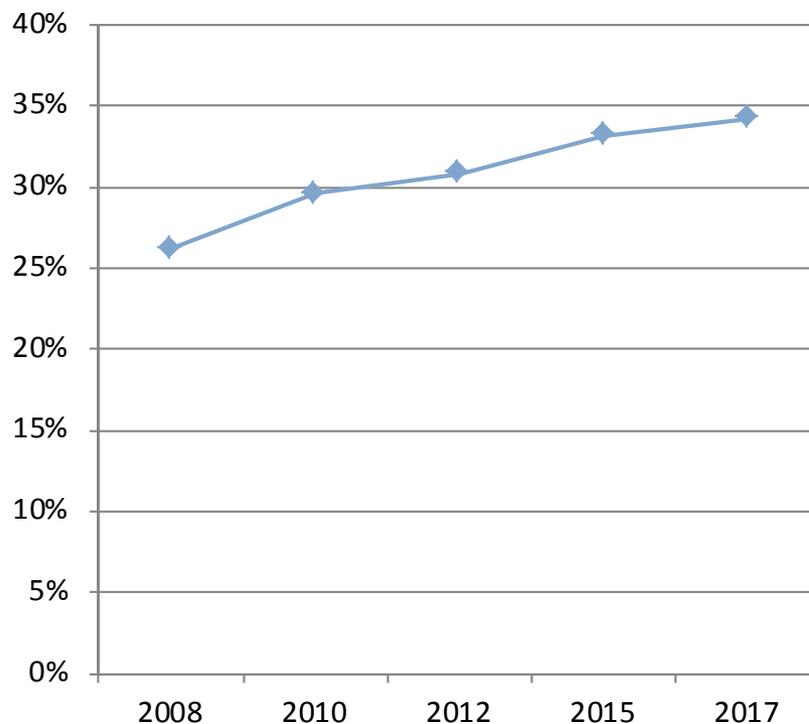
Prevalence of smoking and obesity among women of reproductive age

Percentage of Women 19-44 Years who Currently Smoke



Source: Ohio Medicaid Assessment Survey (2008-2017)

Percentage of Women 19-44 Years with Obese BMI



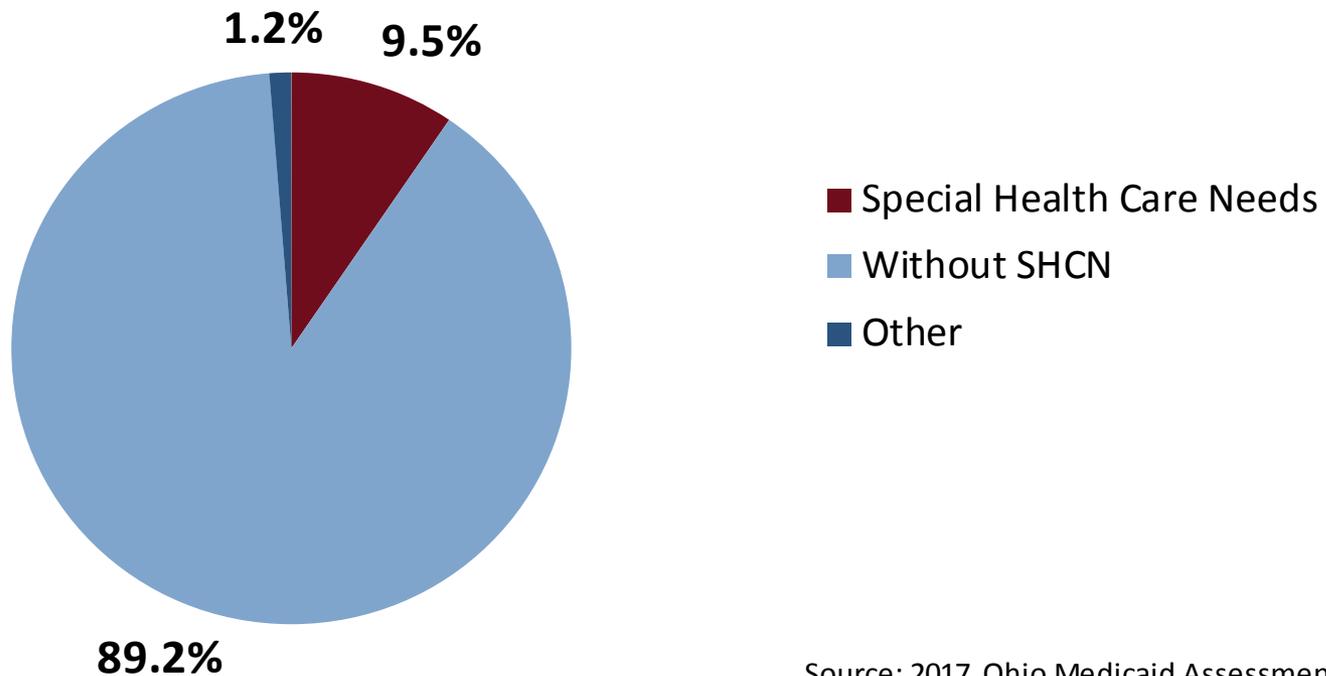
Source: Ohio Medicaid Assessment Survey (2008-2017)

A photograph of a family walking on a beach. A baby is being held up by the parents, looking up at the sky. The image is overlaid with a semi-transparent blue rectangle containing white text.

CHILDREN WITH SPECIAL HEALTHCARE NEEDS

Children with special healthcare needs (SHCN)

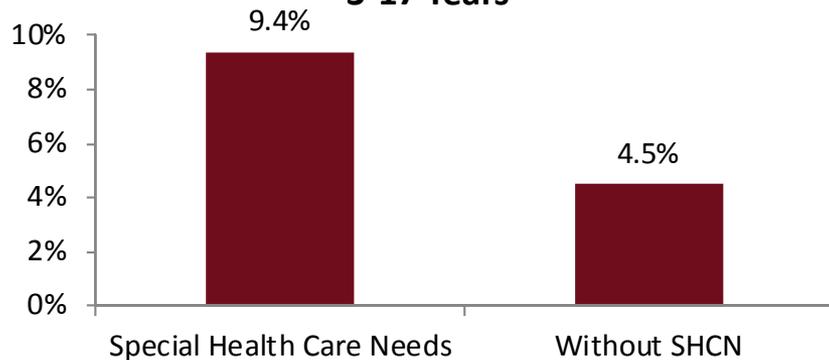
Distribution of Children with Special Health Care Needs, 0-17 Years in 2017



Source: 2017 Ohio Medicaid Assessment Survey

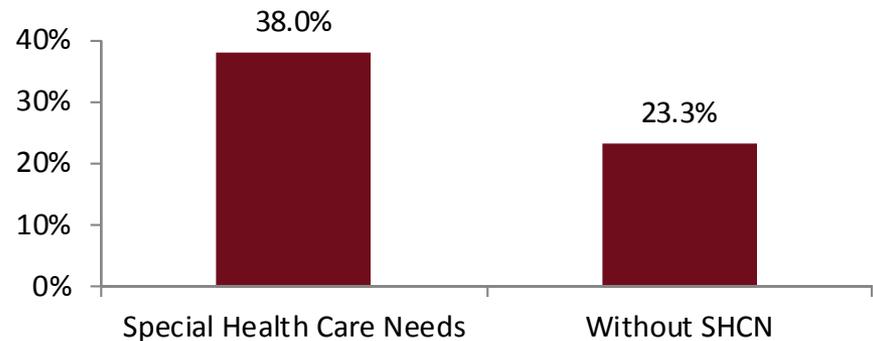
Profile of children with SHCN in 2017

Unmet Dental Health Care Need, Children 3-17 Years



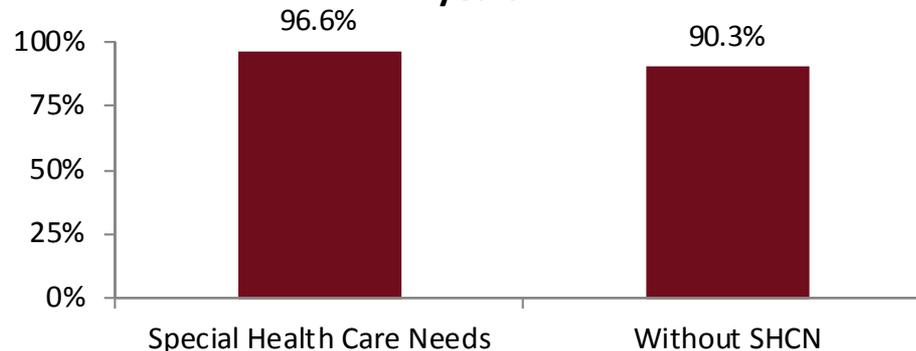
Source: 2017 Ohio Medicaid Assessment Survey

One or More ER Visit in Past Year, Children 0-17 Years



Source: 2017 Ohio Medicaid Assessment Survey

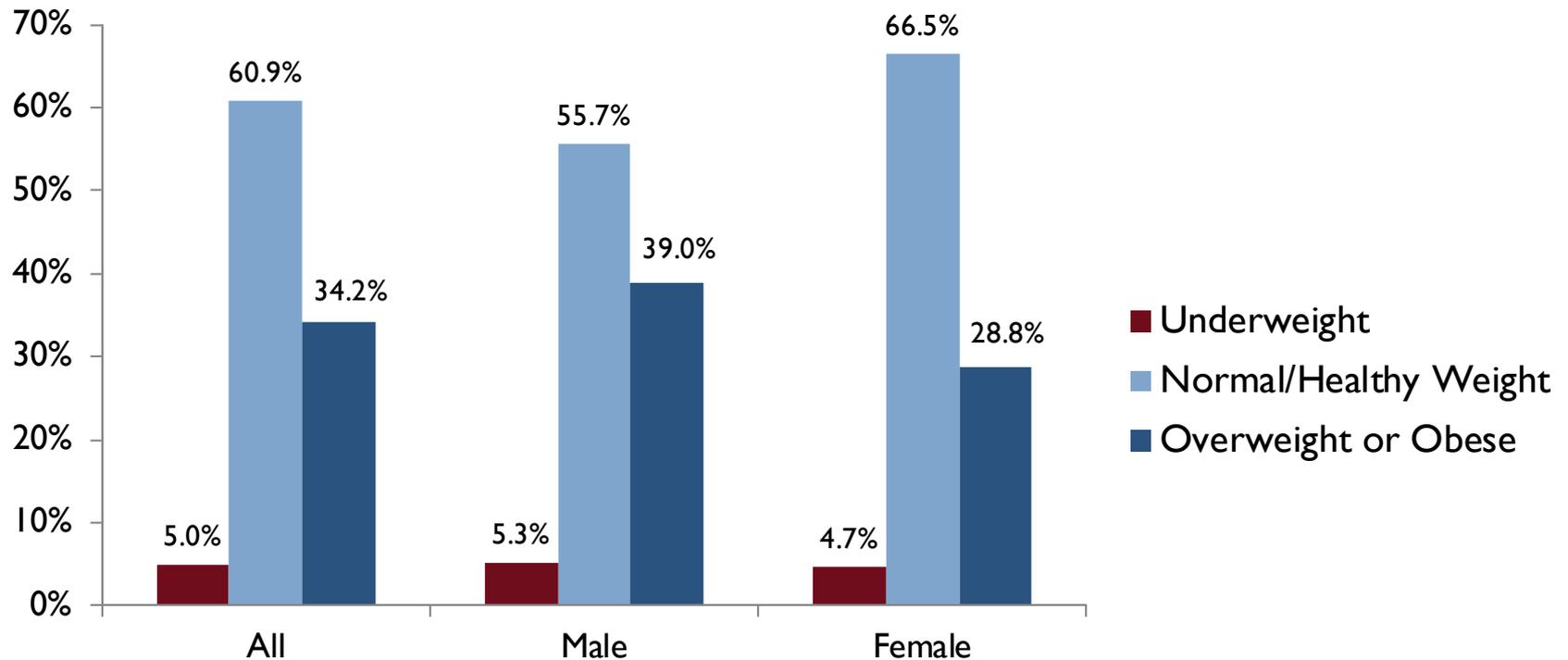
Routine Medical Visit Past Year, Children 0-17 years



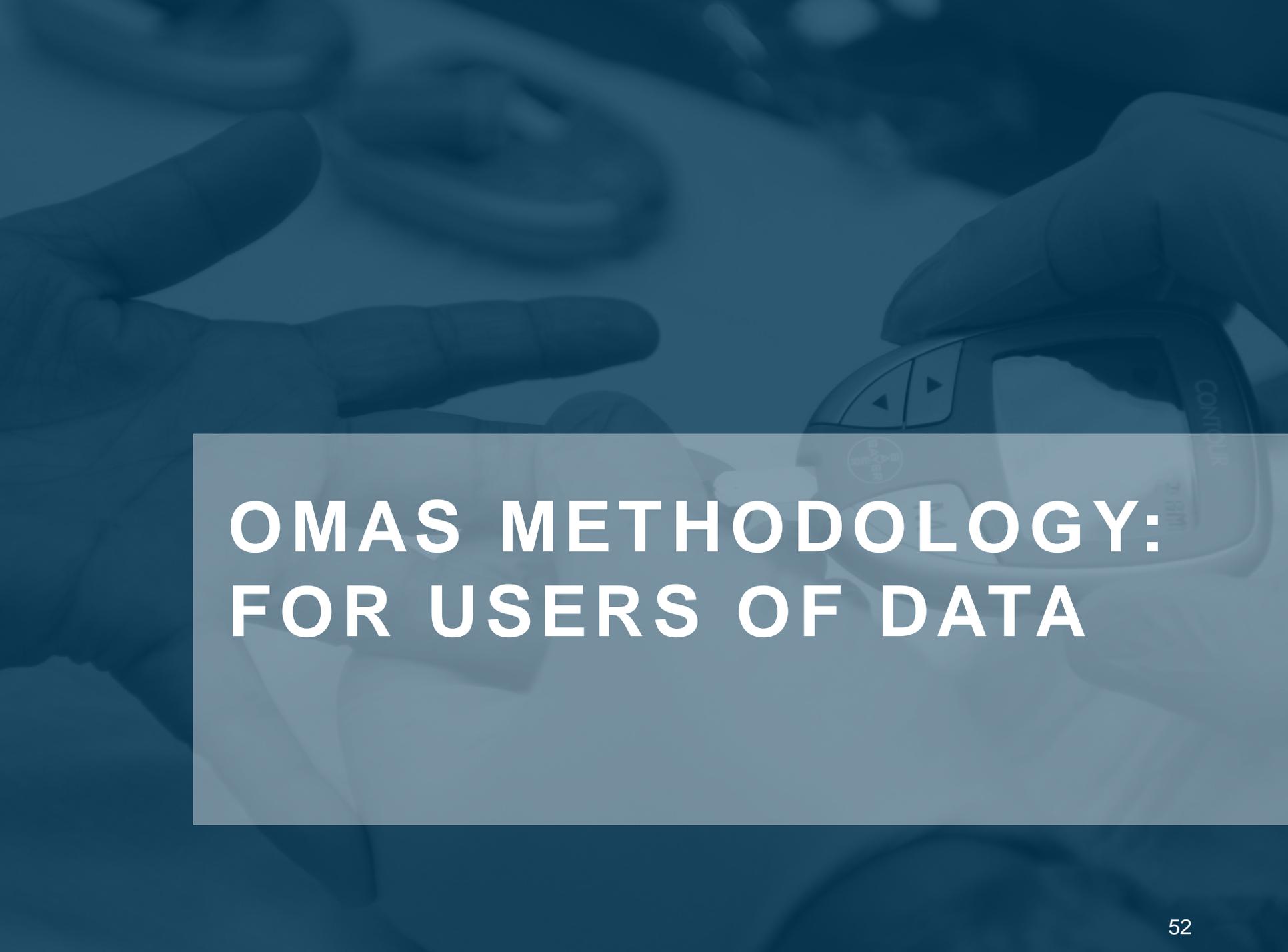
Source: 2017 Ohio Medicaid Assessment Survey

Overweight or obese BMI among children

BMI-based weight categorizations for children 11-17 years



Source: 2017 Ohio Medicaid Assessment Survey



OMAS METHODOLOGY: FOR USERS OF DATA

2017 OMAS general sampling plan

- The sampling goal was to obtain a representative sample of Ohio's Medicaid, Medicaid-eligible, and other non-institutional residential populations:
 - Based on a dual-frame, stratified, list-assisted random digit dialing (RDD) sample; and
 - The RDD system contains information on all area code-exchange combinations in Ohio, and Census-based demographic information (ACS) for individuals and households for geographic areas defined by ZIP codes and Census tracts.

2017 OMAS sampling plan, landline & cell phones

- The population of those who rely solely or mostly on a cell phone continues to grow (over 75% in 2017).
- Cell phone users tend to be younger, unmarried, lower income, and of a racial-ethnic minority group.
- Landline-only methodology can negatively impact representation within these groups (e.g., some have a probability of selection=0).
- The cell phone sample frame was over 78% of all 2017 OMAS interviews.

2017 OMAS sampling plan, cell phones

- The cell phone sample frames were purchased from Telecordia.
- The sampling unit for cell phone sample was the cell phone number and not the household.
- The sample used cell phone rate centers to refine the cell phone sample to better target specific counties.
- Using these techniques, Ohio's rural counties were oversampled using cell phone contacts.

2017 OMAS data collection

- Data were collected via the Case Management System (CMS) for call center management and the Voxco, Inc. Computer-Assisted Telephone Interviewing (CATI) package.
- Interviews were conducted in English and in Spanish.
- CATI automates movement through the questionnaire, streamlining interviews and allows for instant data collection and data checks.

2017 OMAS response rates

- The overall response rate for the 2017 OMAS was 20.5%.
- By landline and cell phone, the specific AAPOR Response Rate #3 results were:

	<u>Response Rate</u>	<u>Cooperation Rate (upper bound)</u>
Landline RR#3	21.3%	38.3%
Cell Phone RR#3	20.3%	41.8%
Overall RR#3	20.5%	41.8%

2017 OMAS data weighting

- The 2017 OMAS weighting factors for dual-frames (landline and cell phone).
- The weights adjust the representation of each case to the expected in the population and enable inference from the sample to the total Ohio non-institutional population.
- Post-stratification techniques were used to ensure that the values in the 2017 OMAS sum to the known population totals in Ohio – using ACS values for the adjustments.

OMAS sample setup code

- The Ohio Medicaid Assessment Survey, as a complex design setup, should not be analyzed with Excel, Access, or other spreadsheet or database software. With over 100 strata, these software programs will not be able to handle the data design/format.
- To answer a question from some of our public health colleagues, EPI-INFO, which can handle weighting and basic strata setup, will have difficulty with the OMAS setup.

Design Variables

- **WT_A:**
 - adjusted survey weights for adult-level estimates and analyses, weights based off of the 2017 ACS interim population estimates
- **WT_C:**
 - adjusted survey weights for child-level estimates and analyses, weights based off of the 2017 ACS interim population estimates
- **STRATA:**
 - a stratum indicator for generating design-based variance estimators for sample targets

Examples of appropriate statistical software for analyzing the 2017 OMAS

- SAS (if desired, SUDAAN is contained in SAS)
- Stata
- R-system

SAS sample code

Weighted percentage of uninsured adults statewide:

```
Proc Surveymeans Data= OMAS mean;  
Stratum STRATA;  
Weight WT_A;  
Var INSRD_A_IMP;  
Class INSRD_A_IMP;  
Domain REGION;  
run;
```

STATA sample code

Weighted percentage of uninsured adults statewide:

```
svyset _n [pweight=wt_a], strata(strata) vce(linearized)  
singleunit(certainty)
```

```
xi, noomit: svy: tabulate INSRD_A_IMP, level(90) ci deff
```

R sample code

Install required packages:

- `install.packages("tidyverse")`
 - “tidyverse” allows for easy to read code
- `install.packages("srvyr")`
 - “srvyr” is needed for survey analysis
- `install.packages("naniar")`
 - “naniar” works with missing data

Weighted percentage of uninsured adults statewide:

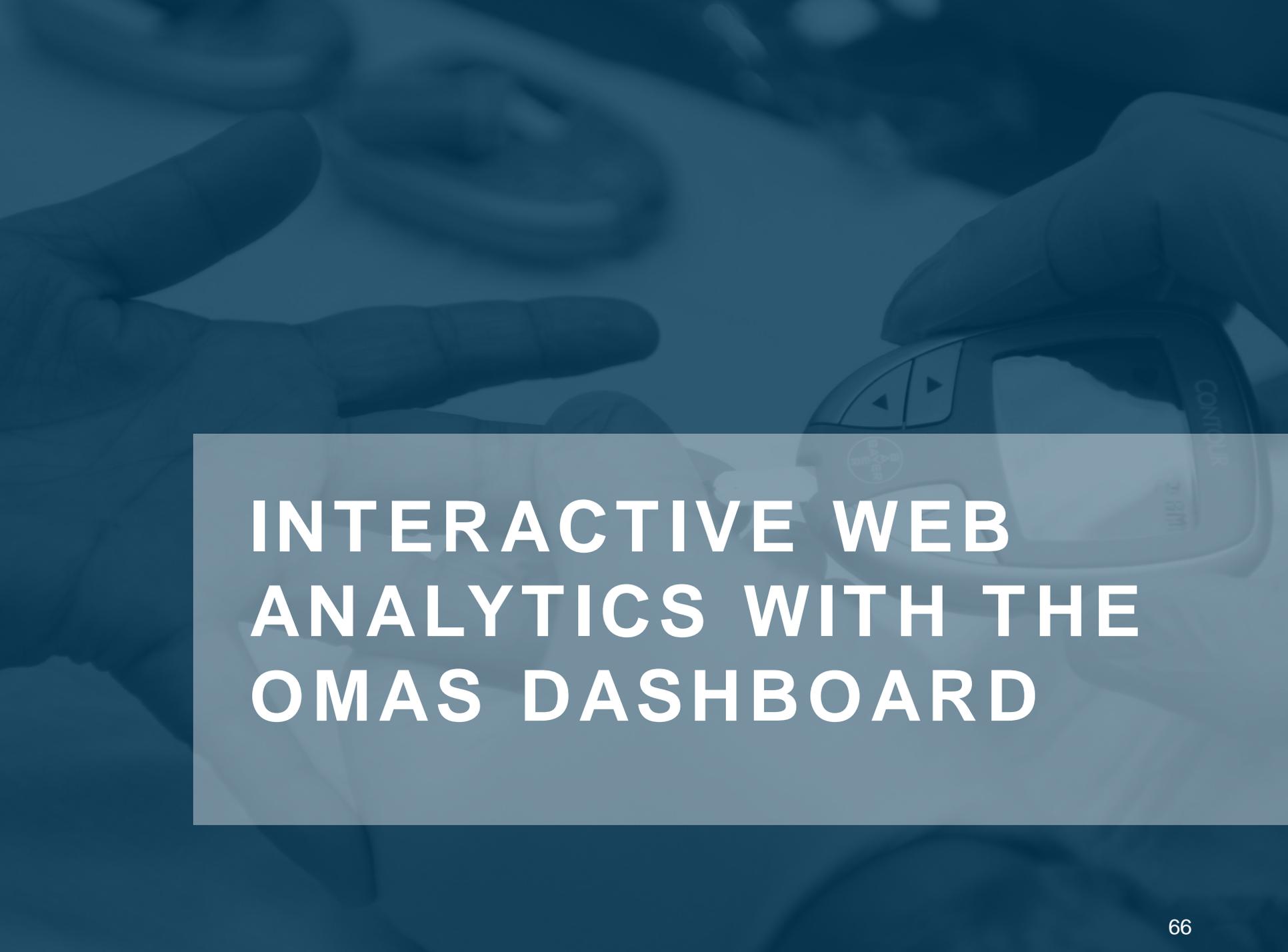
```
#Load necessary packages  
library(tidyverse)  
library(srvyr)  
library(naniar)
```

```
OMAS_TSL <- OMAS %>%  
as_survey(weights=WT_A,  
strata=strata)
```

```
OMAS_TSL %>%  
group_by(INSRD_A_IMP) %>%  
summarize(Proportion=survey_mean())
```

Analyses setup assistance

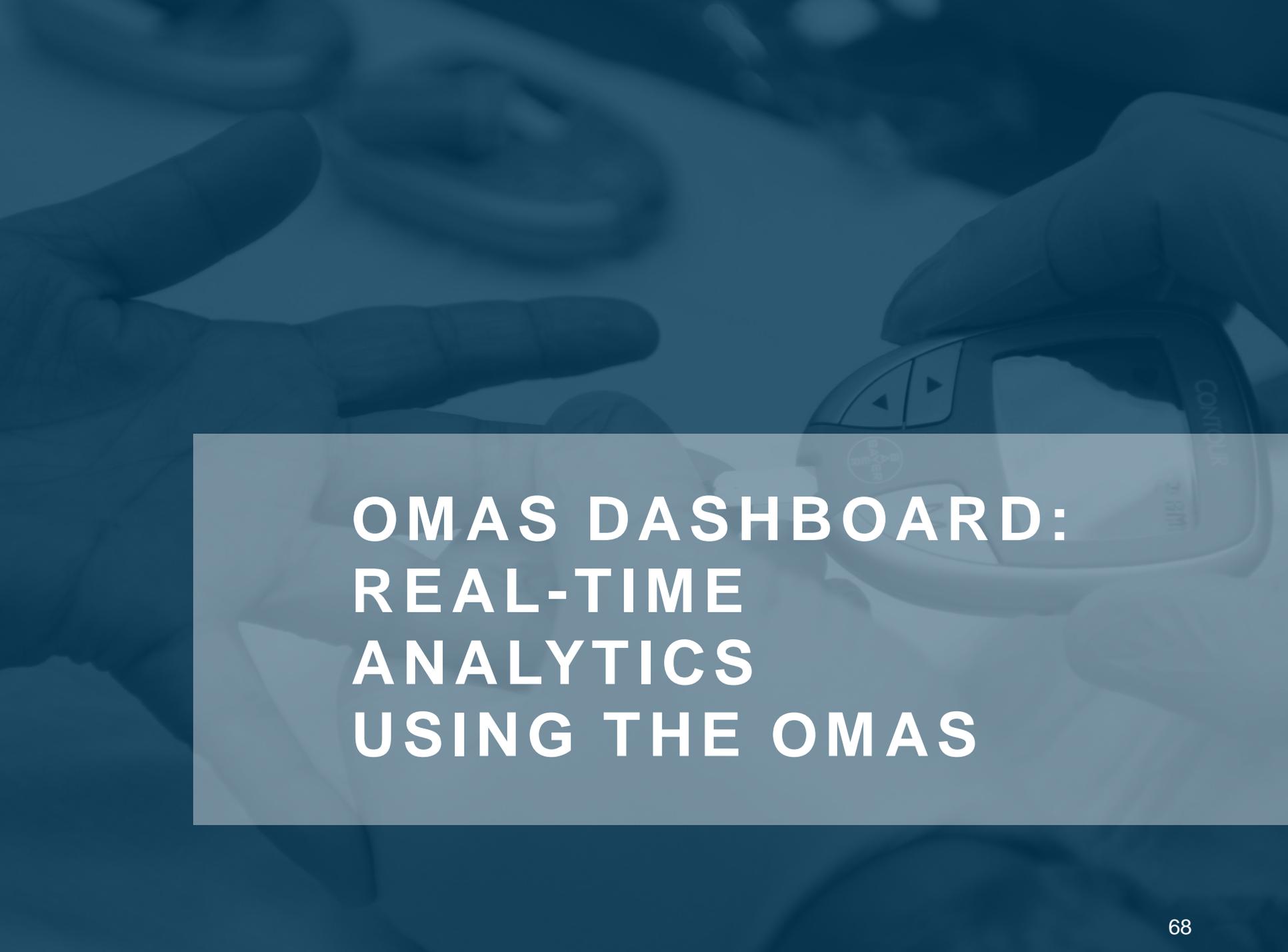
If technical assistance is needed to setup 2017 OMAS data for accurate estimations in one of the recommended statistical software packages, please request assistance through the 2017 OMAS Dashboard at: www.grc.osu.edu/omas



INTERACTIVE WEB ANALYTICS WITH THE OMAS DASHBOARD

OMAS Dashboard – the basics

- User chooses the data and analysis
- No programming required
- Results in real time
- Allows trend analysis, subpopulations
- Outputs can be used in presentations and reports



**OMAS DASHBOARD:
REAL-TIME
ANALYTICS
USING THE OMAS**

Select dashboard type: ?

Adult Child

Select an Indicator: ?

Poor/Fair Overall Health

Select Year(s): ?

2004

2017

Subpopulation: ?

All

Age Range (years): ?

19

75+

Income Range (%FPL): ?

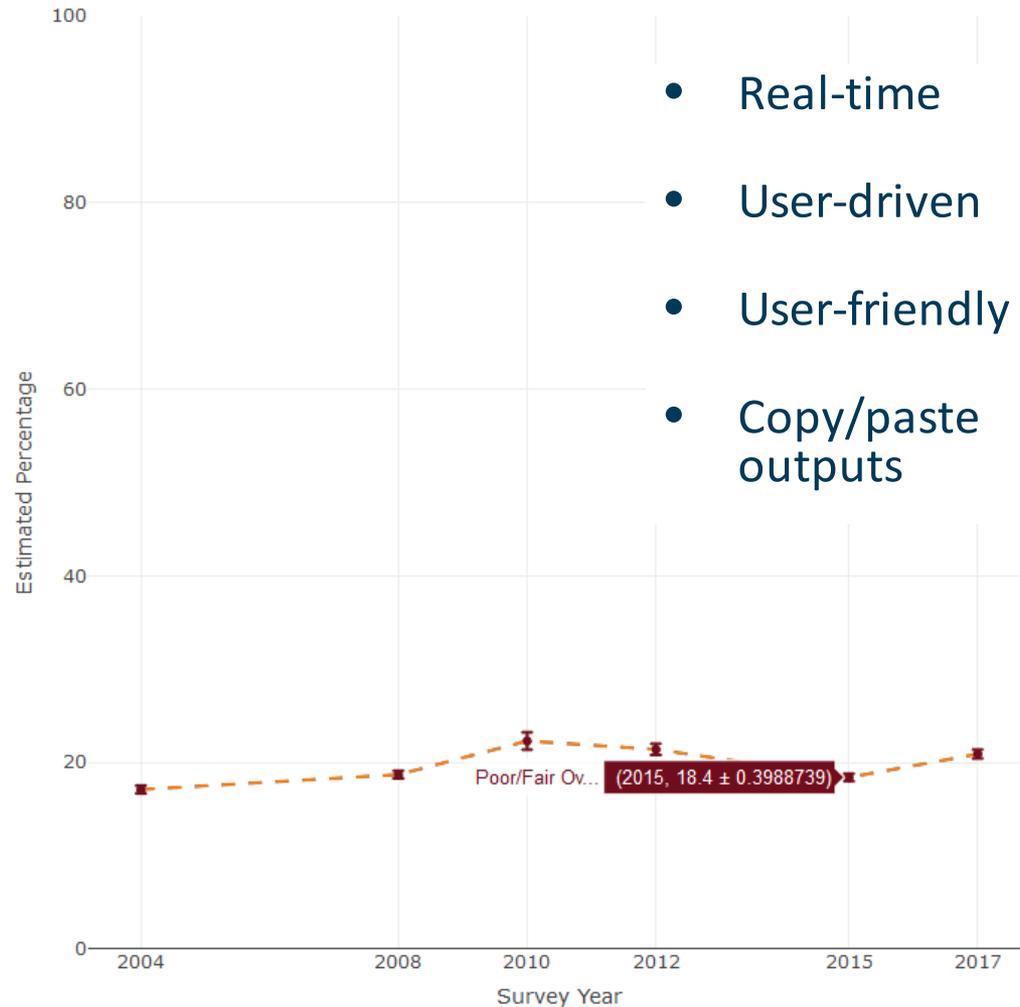
0%

>301%

Stratification: ?

None

Adults with Poor/Fair Overall Health



- Real-time
- User-driven
- User-friendly
- Copy/paste outputs

Source: Ohio Medicaid Assessment Survey, 2004, 2008, 2010, 2012, 2015 and 2017. Population: Adult Ohioans ages 19 and older with household income 0% and greater

OMAS Dashboard Improvements

- Expanded data years
 - 2004, 2008, 2010, 2012, 2015 & 2017
- New indicators and comparison options
 - New chronic disease indicator
 - Interactive plots and maps
 - New geographic comparisons
 - Expanded adult age range
- More user friendly
 - Single combined dashboard for adults and children
 - Easier to copy results for later use
 - Simplified controls and faster performance
 - Automatic selection of plot type
 - Inline context-sensitive help
 - All outputs are interactive
 - Expanded download options
 - New server (coming soon)



**OMAS
DASHBOARD:
USE CASE
DEMONSTRATION**

OMAS Dashboard: what's coming

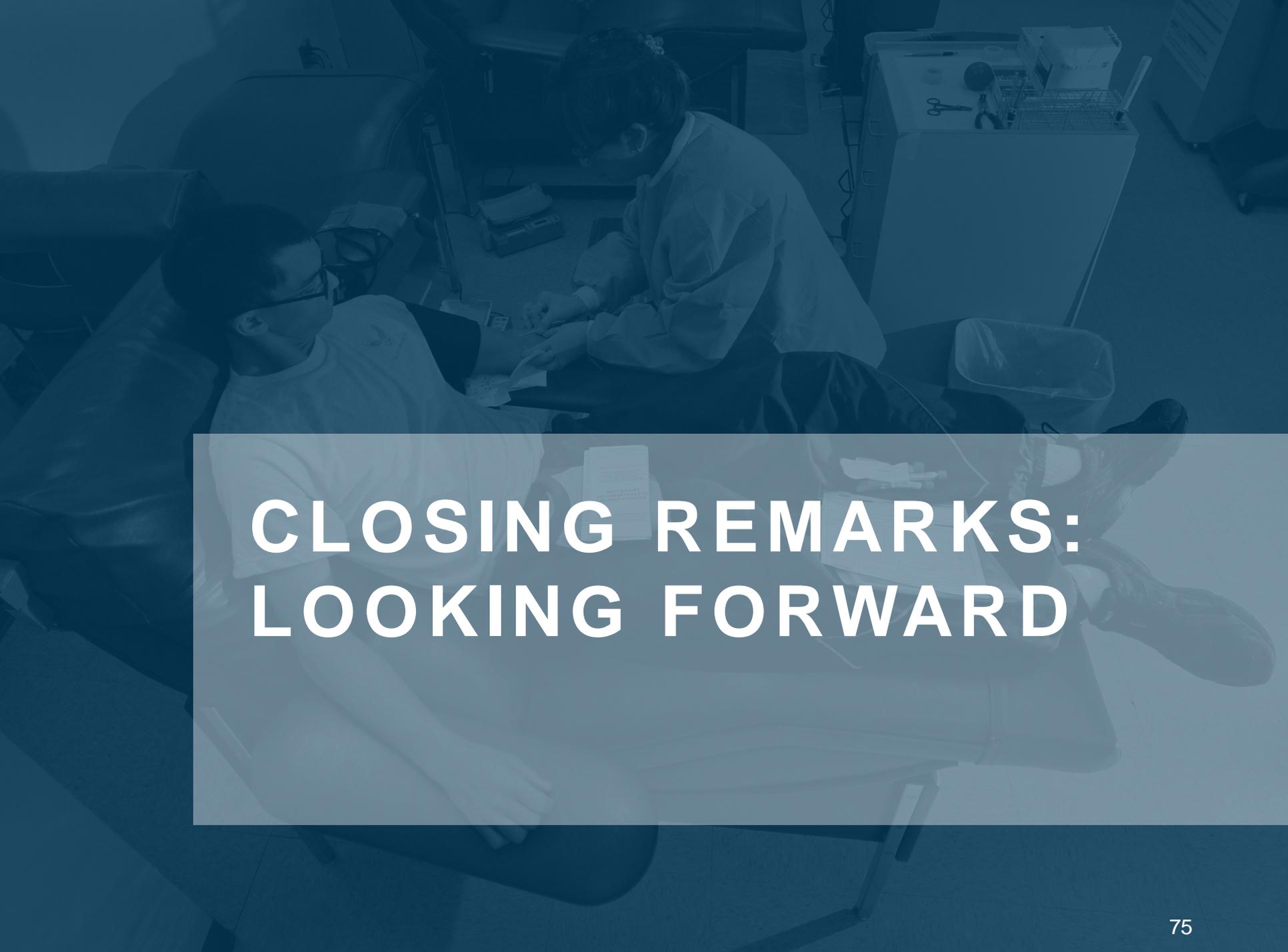
- Release: Autumn 2018
- Ongoing refinements for all iterations (2004 through 2017) will be continuous
- Technical assistance support is available via omas@osumc.edu
- Future OMAS iterations will be incorporated

In-Depth Project Analyses

- Reports from previous OMAS iterations are available at: www.grc.osu.edu/OMAS
- The newest reports from the 2017 OMAS will be posted in late 2018/early 2019

2019 Ohio Medicaid Assessment Survey development process

- 2019 OMAS instrument development: November 2018 start
- Current Executive Committee representatives continuing
- State health-associated agencies will recommend domains/topics of interest
- 2019 OMAS sample: approximately 85% cell phones
- Fielding of the 2019 OMAS will begin in the summer of 2019
- Topic suggestions: please post a note on the technical assistance option on the 2019 OMAS Dashboard at www.grc.osu.edu/OMAS



CLOSING REMARKS: LOOKING FORWARD