OMAS
Ohio Medicaid Assessment Survey

The Health of Women, Infants and Children: A Life Course Approach among Medicaid and Comparative Populations

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June2016

INTRODUCTION and BACKGROUND

The health of Ohio women, infants, and children is rated at or near the bottom on various health rankings in numerous state comparisons. There is interest from multiple sectors in improving these outcomes and the opportunity to do so has never been greater. The health care delivery system is undergoing unprecedented change in focus and design, with a major shift towards prevention and wider access to care. Research has provided a robust evidence-base for understanding health status as a result of health-related risks and protective factors across the life course. For example, midlife chronic disease can be linked to an individual's experiences beginning with gestation, and continuing through childhood, adolescence, young adulthood and midlife. Building on this science, the Maternal and Child Health Bureau recommends new models to guide the nation's approach to maternal and child health, and their Populations Health and Life Course Health Development (PH-LCHD) Model is the guiding framework for this project, which considers women's, infants' and children's health in the developmental stages that bear on illness or wellness in later life.

The PH-LCHD Model considers social determinants of health as risk and protective factors in the health status of the study population. During the period analyzed (2004 to 2015), Ohio experienced the Great Recession and resultant economic changes exacerbating a primary social determinant—poverty. The unemployment rate increased significantly between 2008 and 2010 and fell steadily to 4.8 in 2015. Other economic indicators did not demonstrate the same level of recovery. The poverty rate was significantly higher in 2015 than in 2004. At the level of the health system, the study period saw the passage of the Affordable Care Act and the state's expansion of eligibility for the Medicaid program. The uninsured rate rose through 2012 to 12.3% but fell to 8.4% by the end of 2015. Ohio's Medicaid program implemented small, discrete expansions of coverage 2006, 2008, 2010 and 2012, and the number of enrollees grew during most of the study period. After 2013, the eligibility expansion under the ACA accounted for a substantial increase in enrollees. Approximately 600,000 Ohioans gained Medicaid coverage between 2013 and 2015.
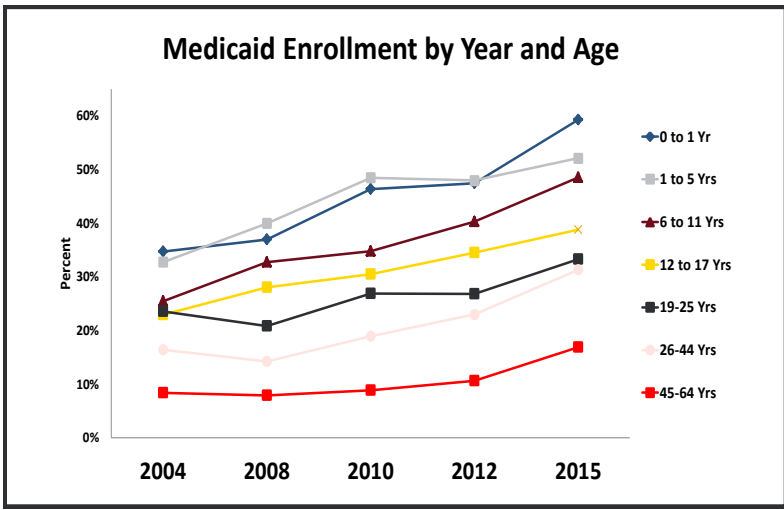
OBJECTIVES

This project assesses the current health and trends in health of Ohio's women, infants and children using a life course lens. There are 3 objectives: 1. Determine the current health (i.e., 2015) of Ohio women, infants, and children with an emphasis on developmental stages between the gestational period and middle age. 2. Determine how this assessment of Ohio women, infant and children has changed over the last decade. 3. Pay special attention to obesity, smoking and adverse/protective childhood experiences as factors that affect health across the life course.

METHODS

DATA SOURCES: This project used data from: the Ohio Medicaid Assessment Survey (OMAS) [formerly Ohio Family Health Survey] for 2004, 2008, 2010, 2012, 2015; Ohio birth certificates for 2006 and 2014; and the National Survey of Children's Health (NSCH) 2012.

MEASURES: Demographic variables included age, race/ethnicity, region type, insurance coverage type, and income/poverty level. Health variables included self-reported health rating as the primary outcome of interest, health behaviors, health services use, and access to care.

ANALYSIS: Prevalence estimates and standard errors were calculated for each of the major variables. Linear and logistic regression models were used to examine effect of various demographic and socioeconomic variables on health outcomes. Logistic regression was used to estimate the odds of the outcome in later years relative to the odds of the outcome in 2004. Descriptive and cross sectional analyses using the 2015 OMAS data utilized the strata and weights provided and the time trends used the strata and weights for each of the five survey years and treated survey year as a hyper strata because the strata were not constant throughout the period of interest.
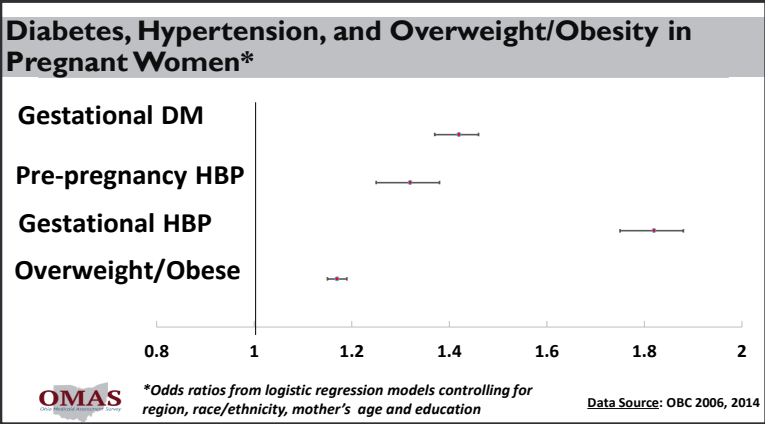
Medicaid Enrollment by Year and Age

(Legend: 0 to 1 Yr, 1 to 5 Yrs, 6 to 11 Yrs, 12 to 17 Yrs, 19-25 Yrs, 26-44 Yrs, 45-64 Yrs)

RESULTS

Medicaid Enrollment: In 2015, almost half of all **children** in Ohio (45.2%) received their health insurance through Medicaid, with another half covered through job-based insurance (45.5%). Medicaid covered an increasing percent of children during this period. Among children ages 0 to 5, 33% were enrolled in Medicaid in 2004 and this percentage increased steadily to 50%. A similar pattern was observed among children ages 6 to 11 (26% to 48%) and ages 12 to 17 (23% to 37%). About three quarters of Medicaid income-eligible children were also enrolled. The Medicaid-eligible-but-not-enrolled children were covered primarily through a job-based plan (18%), with small percentages covered under Medicare or an exchange plan respectively, or they remained uninsured (3%). Approximately 25% of **women** 19 to 64 years of age were covered by Medicaid in 2015. Medicaid covered an increasing percentage of women during this period: for women ages 19 to 25, the percentage rose steadily from 16% to 33%; for women 26 to 44, the percentage rose from 12% to 31%; and for women ages 45 to 64 years, the percentage rose from 7% to 17%. Of Medicaid-eligible women, 59% were enrolled, 17% were covered through a job-based plan, and small percentages were covered through other means respectively. Four percent remained uninsured.
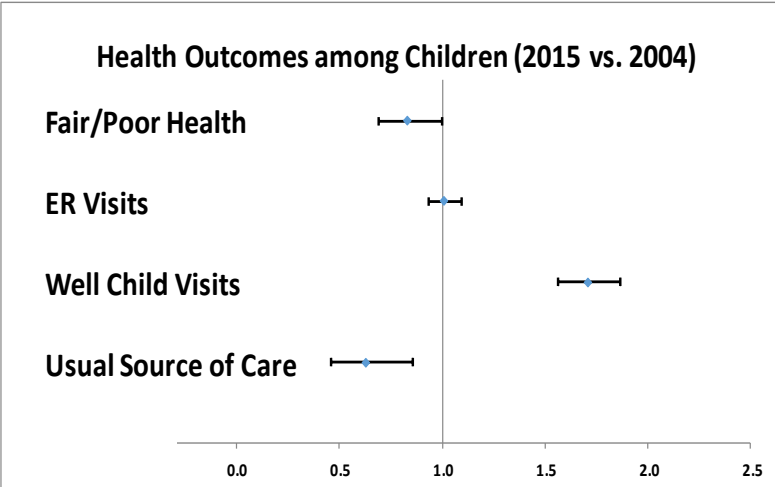
Maternal and Newborn Health: A 2006—2014 Comparison

In 2014 there were 143,510 births in Ohio, which was 10,613 fewer than in 2004; there was a significant drop in the number of teen births during this period. Overall, the percentages of infants born at either low or high birth weight were similar in 2006 and 2014, but a significant drop in preterm births was observed. Mothers' health conditions, such as gestational diabetes (GDM), pre-pregnancy hypertension (PPG HBP), and gestational hypertension (GHBP), all increased in 2014 compared to 2004 (see chart).

Diabetes, Hypertension, and Overweight/Obesity in Pregnant Women*

(Categories: Gestational DM, Pre-pregnancy HBP, Gestational HBP, Overweight/Obese; x-axis 0.8 to 2)

OMAS *Ohio Medicaid Assessment Survey*

Odds ratios from logistic regression models controlling for region, race/ethnicity, mother's age and education

Data Source: OBC 2006, 2014

Children's Health Outcomes from 2004 to 2015

<u>Health:</u> In 2015, approximately 3.5% of all children (aged 0 to 17 years) were reported by a caregiver to be in fair/poor health. Health status differed by: insurance status, with more Medicaid-insured (5.5%) and uninsured children (6%) reported to be in fair/poor health; and by race/ethnicity, with Hispanic children in worse health than all other race/ethnic groups. Across the study period, children were less likely to be reported in fair/poor health in 2010 and 2015 when compared with 2004. This pattern was also seen in Medicaid-insured children. Younger children were less likely to be reported in fair/poor health when compared to adolescents, and the prevalence of various health conditions increased with age. Medicaid and uninsured children were more likely to be reported in fair/poor across the study period, controlling for year, age, poverty status, race/ethnicity, and region.

<u>Health Care Utilization:</u> Overall the odds of using the ER in 2015 were no different than in 2004; not shown in figure, but children in households at or below 200% of the FPL, were more likely to use the ER than those in households at 300% of FPL or above, and those insured through Medicaid were also more likely to use the ER in 2015 than in 2004. Children were more likely to have a well child visit in 2015 when compared with 2004.

Health Outcomes among Children (2015 vs. 2004)

(Categories: Fair/Poor Health, ER Visits, Well Child Visits, Usual Source of Care; x-axis 0.0 to 2.5)

<u>Access:</u> Overall, children were less likely to have a usual source of care. This pattern was similar for Medicaid-insured children also, with Medicaid insured children less likely to have a usual source of care in 2015 and 2008 compared to 2004 .
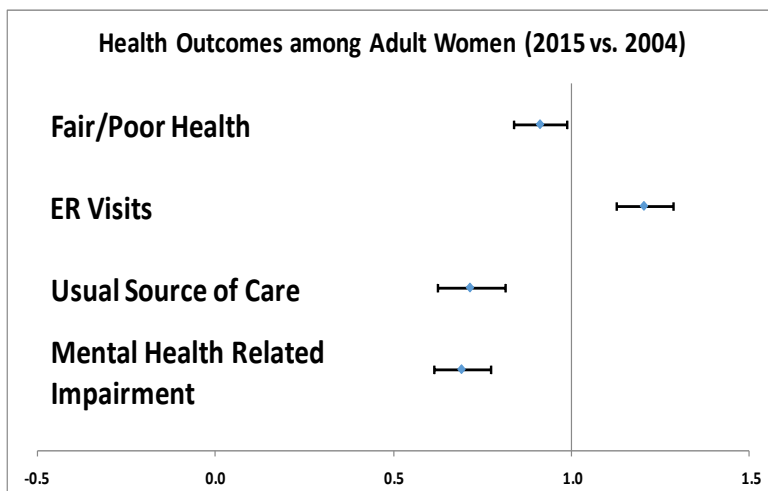
<u>Risk and Protective Factors for Health</u>**:** Among protective factors, parents reported that only 40% of their children slept well nightly but 94% attended a safe school.   Adverse childhood events (ACEs), shown to predict poorer health in adulthood, were found to "accumulate" in children age 12 to 17 years of age, In 2012, over 35% of Ohio children had experienced 2 or more adverse events, placing them at high risk for possible adverse health outcomes, such a chronic disease.

Adult Women's Health Outcomes from 2004 to 2015

<u>Health:</u> Women were less likely to be in fair/poor health or experience mental health-related impairment (MHRI) in 2015 than 2004. Those who were uninsured, other insured, or insured through Medicare or Medicaid reported worse health when compared to those insured through job-based coverage. African-American and Hispanic women were more likely to report fair/poor health than white women, and women living in Appalachia were more likely to report fair/poor health than those living in Metro regions. There was a clear income gradient in health, with increasing poverty correlated with decreasing health status. MRHI did not vary by region, but did increase with age, being white, and having an insurance status other than job-related.

<u>Health Care Utilization</u>: Women were more likely not to have a usual source of care in 2010, 2012, and 2015 than in 2004. This was a consistent pattern in the overall sample and among Medicaid-insured women. Older women more likely to have a usual source of care than younger women; African-Americans were less likely, and Asians more likely than whites to have a usual source of care. For the overall sample and Medicaid-insured groups, the odds of having an ER visit increased in 2015 as compared to 2004.
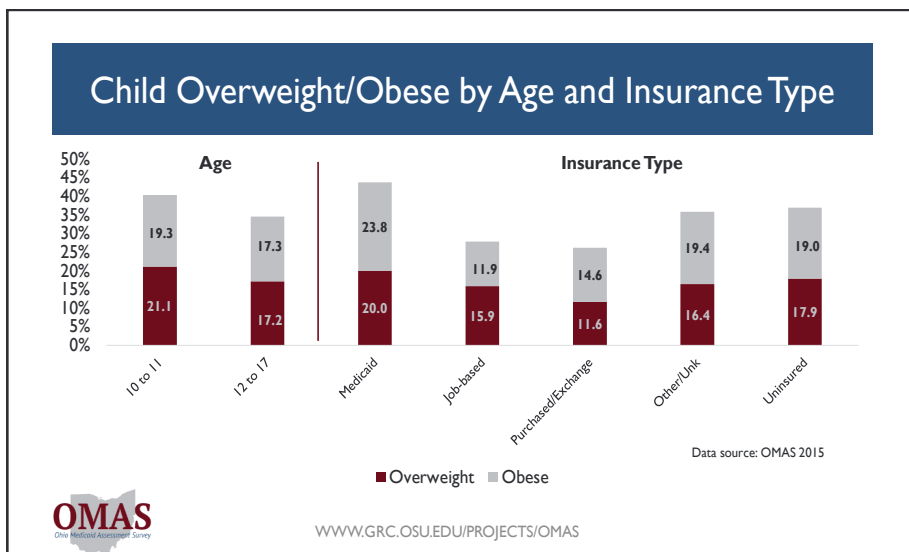
<u>Access</u>: In 2015, over one-third of all women report having an unmet health need in the past 12 months. Women were less likely to have a usual source of care in 2015 than in 2004. These findings indicate issues with access to providers.
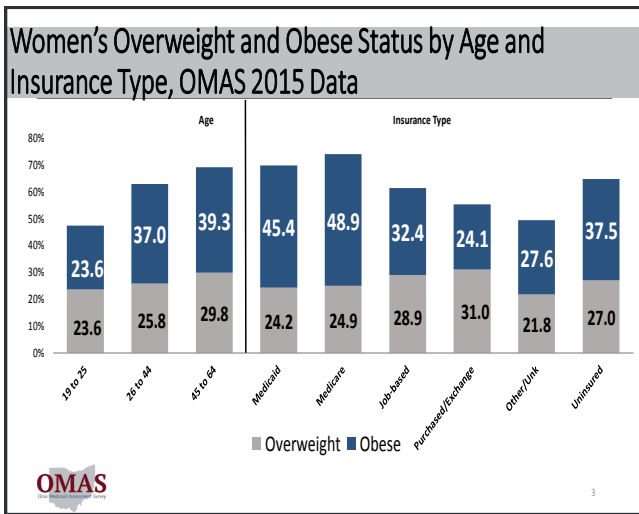
Health Behaviors Affecting the Life Course: Overweight/obesity and smoking.

Health Outcomes among Adult Women (2015 vs. 2004)

Fair/Poor Health	
ER Visits	
Usual Source of Care	
Mental Health Related Impairment	

(x-axis: -0.5, 0.0, 0.5, 1.0, 1.5)

<u>Overweight/obesity:</u> These data suggest that overweight and obesity are and will remain a considerable public health concern. The risks for overweight and obesity have been demonstrated to begin in utero. The data presented here, then, suggest increasing long term risk for Ohio children. As noted, children born in 2014 are more likely to be exposed to gestational diabetes than in 2006, and this is a known risk factor for obesity and type 2 diabetes, Similarly, women are coming to pregnancy heavier in 2014 than in 2006—another risk for childhood obesity. At least 50% of 1 to 5 year-olds consume one or more SSB daily. The child data indicate that children ages 10 to 12 are overweight or obese in greater numbers than children in adolescence, which is consistent with developmental changes and entry into puberty. Over 35% of Medicaid insured children, uninsured children, and other insured children were overweight/obese in 2015. However, there may be some leveling off of rates, as the odds of these children being overweight or obese in 2015 were no greater than in 2004.

Child Overweight/Obese by Age and Insurance Type

Category	Overweight	Obese
10 to 11	21.1	19.3
12 to 17	17.2	17.3
Medicaid	20.0	23.8
Job-based	15.9	11.9
Purchased/Exchange	11.6	14.6
Other/Unk	16.4	19.4
Uninsured	17.9	19.0

Data source: OMAS 2015

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Adult women overall were more likely to be overweight/obese in 2015 than in 2008. Women's overweight/obesity rate rise with age: For Medicaid insured women that was not the case; there was no difference in the odds of overweight/obesity in 2015 when compared with 2008.   A 45 to 64 year-old woman was approximately 2.5 times more likely to be overweight/obese than a woman aged 19 to 26 years.

Women's Overweight and Obese Status by Age and Insurance Type, OMAS 2015 Data

	Age			Insurance Type					
	19 to 25	26 to 44	45 to 64	Medicaid	Medicare	Job-based	Purchased/Exchange	Other/Unk	Uninsured
Obese	23.6	37.0	39.3	45.4	48.9	32.4	24.1	27.6	37.5
Overweight	23.6	25.8	29.8	24.2	24.9	28.9	31.0	21.8	27.0

■ Overweight ■ Obese

OMAS

Smoking: Smoking in women decreased from 2004 to 2015. At that time women, ages 26 to 44 years were the most likely to smoke, followed by women 45 to 64 years. Medicaid-insured and the uninsured were more likely to smoke than those with job-based insurance. Birth certificate data also showed a drop in smoking from 2006 to 2014. This is a notable finding as smoking during pregnancy has an intergenerational effect, leading to long-term adverse child health outcomes,

POLICY CONSIDERATIONS:

Medicaid insurance has become an increasingly important coverage option for women and children in Ohio. Medicaid covered approximately 45% of Ohio children and 25% of adult women in 2015. This increased coverage presents new opportunities to impact health through health promotion programs. This is of particular importance in childbearing aged women as improvements to health prior to pregnancy have intergenerational benefits, resulting in healthier mothers and offspring.

Overall health seems to be improving, with better ratings in infants, women and children in later years, compared with earlier years. This is also true for Medicaid insured women and children. Mental health was also better overall and for Medicaid insured women when comparing 2015 to 2008. Age differences were noted in both children and adults, with older groups in worse health.   Using a life course approach opportunities exist to target programs that account for varying risks within a developmental stage.

2015 Snapshot of Women's Health: Current Smoking Status by Age and Insurance Type

	Age			Insurance Type					
	19 to 25	26 to 44	45 to 64	Medicaid	Medicare	Job-based	Purchased/Excha...	Other/Unk	Uninsured
	20.5	26.9	23.9	41.4	34.2	16.3	13.7	18.9	36.1

Data Source: 2015 OMAS Data

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Health Systems (ER use, usual source of care, well child visits): Hints from these data suggest that capacity for care may be limited, as ER visits were up and less access to a usual source of care for women and children. This is especially true of adolescents and young adult women.

Health behaviors: *Overweight and obesity* will remain a considerable public health concern for some time to come. Taken through a life course lens, the risks for overweight and obesity begin in utero. These data suggest increasing long term risk for Ohio children, as children born in 2014 are more likely to be exposed to gestational diabetes than in 2006 and women are coming to pregnancy heavier in 2014 than in 2006.

Smoking cessation efforts should recognize the most likely ages of smoking women (26 to 44 years) and provide targeted messages to this group. Smoking rates in pregnant women should remain a target of cessation efforts.

Context: The NSCH suggests that Ohio children by adolescence have had exposure to ACEs; additional data collection in the OMAS on these factors could provide a better assessment of the extent of this problem.

FOR MORE INFORMATION To view more information about OMAS and the findings in this policy brief, please visit the OMAS website at the Ohio Colleges of Medicine Government Resource Center www.grc.osu.edu/OMAS.

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