



Child Health in Ohio

Lisa Raiz,¹ Yoshi Kim,² Tim Sahr,² Robert Orellana,²
Schuyler Schmidt,³ Elizabeth Conrey⁴

¹ The Ohio State University College of Social Work, ²Ohio Colleges of Medicine Government Resource Center, ³Ohio Department of Medicaid, ⁴Ohio Department of Health

February 2019

INTRODUCTION

This brief examines health indicators and health outcomes for Ohio children ages 0-18 years. It describes subgroups of children with special health care needs and examines factors associated with key health outcomes, including sociodemographic indicators such as income and health insurance. Data from the 2017 Ohio Medicaid Assessment Survey (OMAS) were analyzed for this brief.

METHODS

The OMAS is a population health survey that samples both landline and cell phones in Ohio. The 2017 OMAS completed 39,711 interviews with adults, and 9,202 proxy interviews for children. The OMAS topics emphasize access to health care, health statuses for various populations, health risk behaviors, and health demographics for Ohio's Medicaid, Medicaid eligible, and non-Medicaid populations. The 2017 OMAS is the seventh iteration of the survey, since 1997. For more information about OMAS' background, findings, methodology, and the OMAS Dashboard (web analytics) please visit <http://grc.osu.edu/omas/>.

This brief examines sociodemographic data for six subgroups of Ohio children: 1) children with developmental disabilities; 2) children who had any kind of emotional, developmental or behavioral problem for which they needed or received treatment or counseling; 3) children who needed or used medicine prescribed by a doctor or other health care professional; 4) children who needed or received special therapy, such as physical, occupational or speech therapy; and 5) children who had limitations in different life areas compared to other same-age children (e.g., eating, paying attention, communicating). These five subgroups identified children who, due to health status, required more care than children without any of these conditions. The sixth subgroup described is children without any identified health care needs, labeled "no special health care needs." A child was placed in this category only if the adult proxy answered "no" to the five questions addressing health and health care needs. However, it is possible that an adult proxy may have answered yes to more than one of the other areas of health care need. Children in the no special health care needs

KEY FINDINGS

- Nearly one-third of Ohio children experienced at least one health care need pertaining to developmental disabilities, treatment, counseling, physician prescribed medicine, or special therapy.
- A greater proportion of children with special health care needs resided in homes with lower incomes.

category were used as a comparative baseline to the other conditions.

Health indicators were examined by select sociodemographic variables (income and insurance). Special attention was given to children living in households at or below 206% Federal Poverty Level (FPL) – the Medicaid income eligibility threshold for Ohio children (200% FPL with a 6% variability allowance). The health indicators were represented through the following four areas:

Health status: Whether the child was overweight (weight for height percentile at or above the 85th percentile and below the 95th percentile for children of the same age and sex) or obese (weight for height above the 95th percentile for children of the same age and sex) based on reported height and weight for children aged 6 through 18.

Access to health care: Whether the child had a usual source of health care, including whether the adult proxy needed assistance coordinating care for the child.

Health care utilization: The length of time since the child last saw a doctor or other health care professional regarding his/her health; three or more visits to the emergency room.

Dental care: Whether there was a time, during the last 12 months, when the child needed to access dental care but was unable to receive it at the time it was needed; amount of sugar sweetened beverages (not 100% juice) children ages 2 to 5 consumed on the day prior to the survey.

RESULTS

Sociodemographics and Special Health Care Needs

Table 1 (page 3) presents sociodemographic information for three of the subgroups of Ohio children: Children with a developmental disability, children who needed or received treatment or counseling, and children without a special health

care need (see Appendix I for information on all six subgroups). Slightly more than two-thirds of Ohio children (68%) had none of the health care needs described in this brief. However, 32% had at least one of them. Because adult proxies could identify more than one health care need for each child, the five categories can be comorbid conditions. Thus, one child could have received treatment or counseling and prescriptions and be counted in multiple categories.

The majority of children with special health care needs lived in households with incomes at or below 206% FPL. The percentage of children in these households with any of the five examined health care needs ranged from 55% to 67%, while 44% of children without special health care needs lived in households at or below 206% FPL. More than two-thirds (67%) of children with developmental disabilities lived in households at or below 206% FPL.

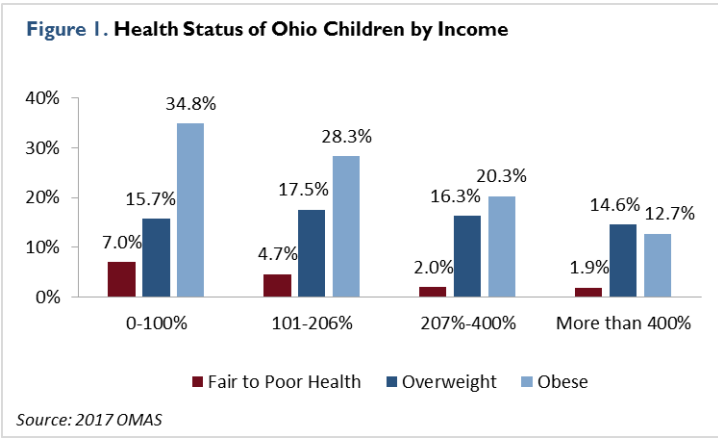
Medicaid remained the insurer for the largest percentage of children in all five of the special health care needs subgroups, ranging from 55% to 67%. The coverage for children without special health care needs was different: 37% insured by Medicaid and 50% with employer-sponsored insurance (ESI). More than two-thirds (67%) of children with developmental disabilities were covered by Medicaid and an additional 17% were covered through other directly purchased or exchange insurance. Nearly half of children needing or receiving treatment or counseling were in the 6-12 age group (48%), which was higher than the 35% without special health care needs in this age group. Finally, males comprised the majority of children with developmental disabilities (64%) who were in need of or receiving treatment or counseling (57%), despite comprising 48% of Ohio children.

Health Indicators and Income

Figure 1 presents health status of Ohio children related to their household income. The social

Table I. Sociodemographic Characteristics of Ohio Children 0-18 in 2017

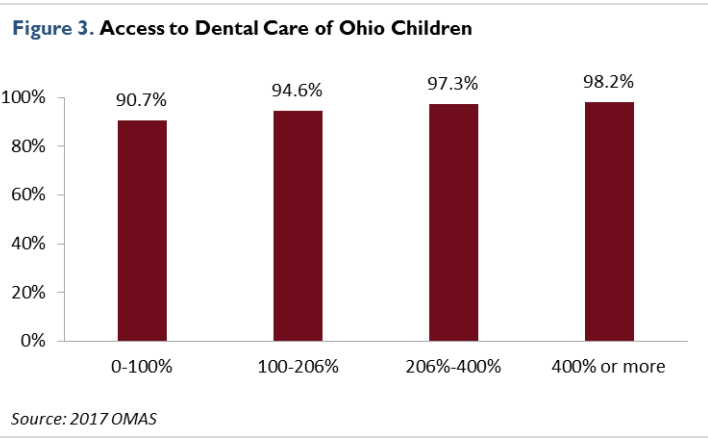
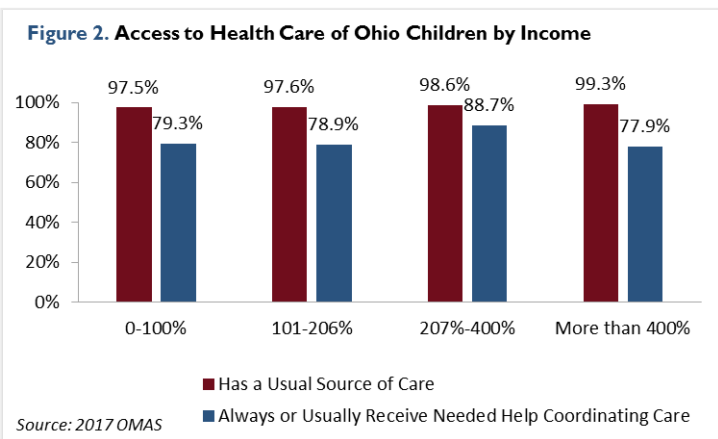
Variable	Ohio Children without Special Healthcare Needs		Developmental Disability		Treatment or Counseling		All Children	
	# of Children	%	# of Children	%	# of Children	%	# of Children	%
	1,854,658	68%	294,830	11%	347,354	13%	2,745,174	100%
Age Group								
<1	106,776	6%	4,414	2%	2,406	1%	131,221	5%
1-5	526,515	28%	48,809	17%	39,405	11%	690,961	25%
6-12	642,069	35%	137,831	47%	166,940	48%	1,023,941	37%
13-18	579,297	31%	103,775	35%	138,603	40%	899,051	33%
Gender								
Female	956,828	52%	105,333	36%	149,802	43%	1,342,102	49%
Male	897,829	48%	189,497	64%	197,552	57%	1,403,072	51%
Race/Ethnicity								
White/other	1,460,119	79%	233,251	79%	278,509	80%	2,145,643	78%
African-American	255,636	14%	41,392	14%	49,979	14%	391,577	14%
Hispanic	100,739	5%	16,378	6%	16,497	5%	155,560	6%
Asian	38,164	2%	3,808	1%	2,369	1%	52,394	2%
Region								
Rural/Appalachia	290,628	16%	52,121	18%	54,800	16%	433,918	16%
Metro	996,197	54%	165,483	56%	201,257	60%	1,487,330	54%
Rural/ Non-Appalachia	274,623	15%	37,370	13%	39,161	11%	385,888	14%
Appalachia Suburban	293,209	16%	39,856	14%	52,136	15%	438,038	16%
Income								
0-100%	381,775	21%	112,256	38%	126,420	36%	658,143	24%
101-206%	432,907	23%	86,417	29%	96,398	28%	665,864	24%
207%-400%	537,531	29%	56,294	19%	65,548	19%	740,959	27%
>400%	502,444	27%	39,862	14%	58,988	17%	680,208	25%
Insurance								
Medicaid	656,049	36%	178,166	61%	203,787	59%	1,120,805	42%
Medicaid & Medicare	18,878	1%	17,165	6%	14,625	4%	47,079	2%
Medicare	13,424	1%	2,944	10%	3,693	1%	19,928	1%
Employer Sponsored Insurance (ESI)	899,915	50%	74,126	25%	97,497	28%	1,214,991	45%
Other Directly Purchased and Exchange	77,903	4%	5,097	17%	4,378	1%	95,223	4%
Other Insurance Type/ Unknown	83,449	5%	7,652	3%	10,769	3%	110,040	4%
Uninsured	63,935	4%	8,163	3%	11,349	3%	91,369	3%



gradient of health, defined as the correlation of inequalities in social status to inequalities of health status, was apparent in the obesity prevalence among 6-18 year olds. As income category increased, the prevalence of obesity decreased. Low income was also associated with fair or poor health status. Seven percent (7%) of children living at or below 100% FPL were in fair or poor health while 5% of those living between 101-206% FPL were in fair or poor health.

Figure 2 indicates that a usual source of health care was present for 97% or more of children within all income categories. Of households between 207-400% FPL, 89% reported that they always or usually received needed assistance coordinating health care for the child, compared to 79% of households with incomes less than 206% FPL, and 78% for households with incomes at or above 400% FPL.

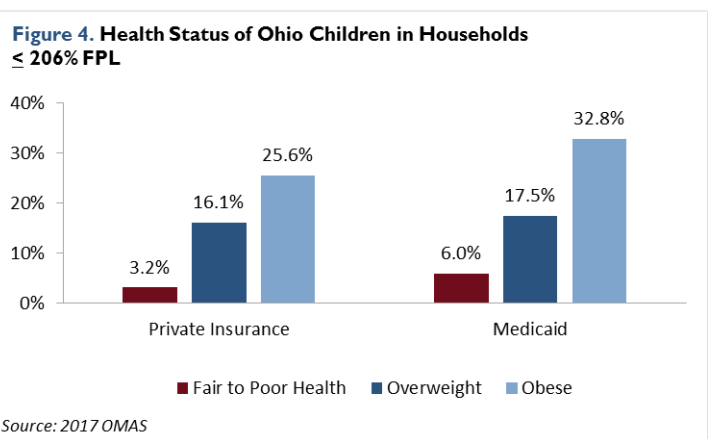
Figure 3 shows that more than 90% of Ohio children, within all income categories, had access to



dental care when it was needed, although the social gradient of health is evident.

Health Indicators and Types of Insurance among Children in Households ≤ 206% FPL

Figures 4-8 present the health status, access, utilization, and dental care of Ohio children in households at or below 206% FPL, relative to their insurance status. Figure 4 suggests that health status, as indicated by fair or poor health and overweight or obesity was worse for children enrolled in Medicaid compared to those who were potentially Medicaid eligible but had private insurance. However, less than 10% of Ohio children who were either on Medicaid or potentially eligible with private insurance had fair or poor health (6% and 3%, respectively). Among children with Medicaid, one-third (33%) were obese and 18% were overweight compared to one-fourth (26%) obese and 16% overweight among children who were potentially Medicaid eligible but privately insured.



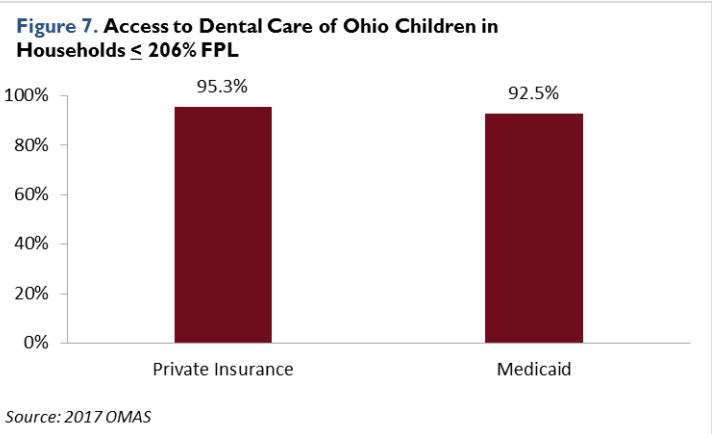
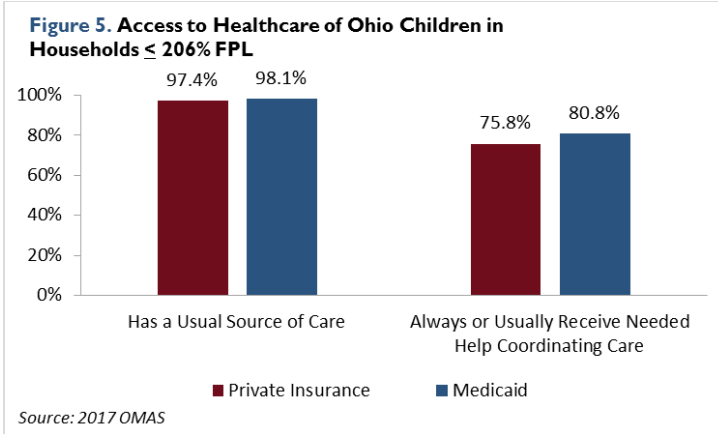


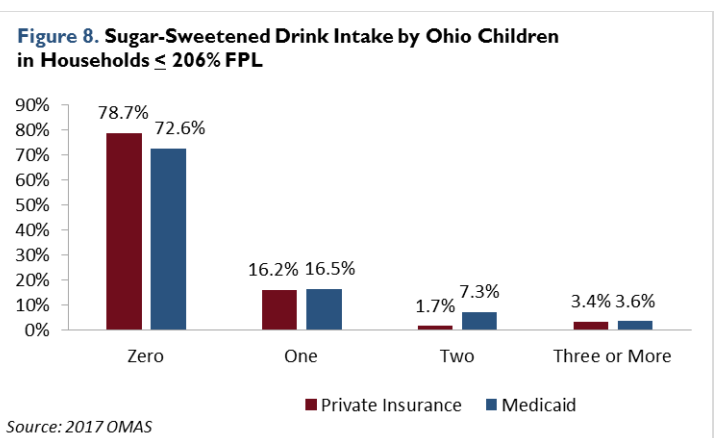
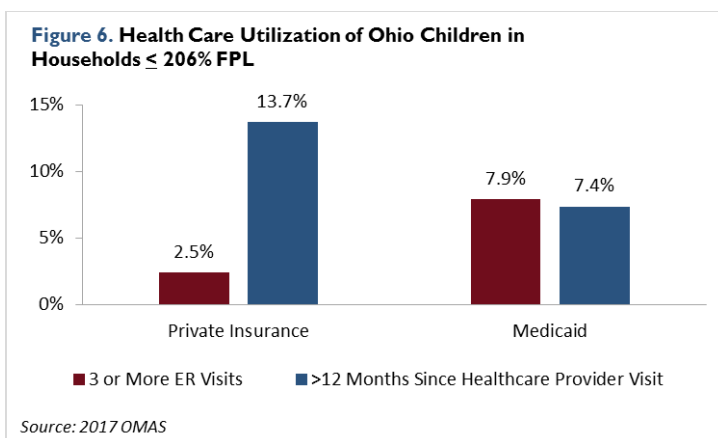
Figure 5 presents access to health care. Having a usual source of health care differed little between Medicaid insured and privately insured children, although a higher percentage of children with Medicaid always or usually received needed help coordinating care, compared to children with private insurance (81% and 76%, respectively). This is consistent with previous research that found comparable adequacy of insurance for children with public and private health insurance (Soylu, et al, 2018). It should be noted that 19% of Medicaid and 24% of privately insured children did not always or usually receive help coordinating care when it was needed, which represents 16,883 Ohio children for whom assistance coordinating care was never, rarely or sometimes received when it was needed.

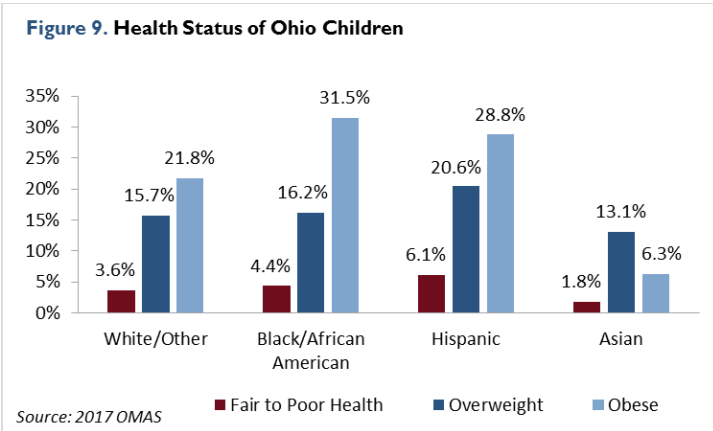
Figure 6 presents utilization of health care by health insurance type. Compared to privately insured

children, a smaller percentage of children with Medicaid had not seen a health care provider in more than 12 months, although a larger percentage of Medicaid insured children used the emergency room three or more times.

Figure 7 presents the access to dental care relative to health insurance coverage. More than 90% of Ohio children with Medicaid or private insurance had access to dental care when it was needed, although the percentage was lower for children with Medicaid.

Figure 8 presents consumption of sugar-sweetened, non-juice drinks by insurance type. The majority of Ohio children (more than 90%), ages 2 to 5, consumed no sugar-sweetened drinks during the previous day.





Health Indicators and Race

Figure 9 presents health status by race and ethnicity. Among African-American children, nearly one-third (32%) were obese, while 29% of Hispanic children were obese and 22% of White children were obese. Among Hispanic children, 21% were overweight, while 16% of African-American children and 16% of White children were classified as overweight.

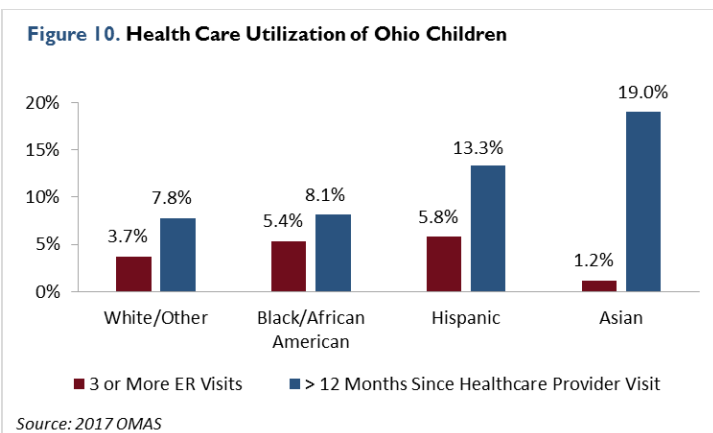


Figure 10 presents health care utilization. Nearly 20% of Asian children had not seen a health care provider in more than 12 months, although they had the smallest percentage of three or more emergency room visits. Hispanic children had the highest percentage with three or more emergency room visits (6%) and were second to Asian children for not having seen a health care provider in more than 12 months (13%).

CONCLUSION

Nearly one-third of Ohio children experienced at least one of the special health care needs described in this brief. More than 20% experienced limitations in life activities and 13% needed or received treatment or counseling for an emotional, developmental or behavioral problem. Additionally, 19% of Ohio children needed or used medicine prescribed by a health professional.

The social gradient of health is evident among Ohio children. Lower-income was associated with having a special health care need. There was a higher percentage of children in households at or below 206% FPL in each of the five health care need subgroups compared to the subgroup with none of the special health care needs. Because barriers to care have been identified for children living in low-income households, innovative strategies may be pursued to enhance receipt of services, for example, integrated care within a patient-centered medical home (Hodgkinson, 2017).

The health status of children with Medicaid was poorer than children with private insurance, which may have contributed to the higher percentage of three or more emergency room visits for children with Medicaid. Access to health care for Medicaid insured children was similar to that of privately insured children. The percentage of children with Medicaid whose households received assistance coordinating needed health care was slightly higher than that of children with private insurance, despite a larger percentage of children with special health care needs and with fair or poor health for children with Medicaid.

Obesity was evident among Ohio children, particularly Hispanic and African-American children. Higher percentages of Asian and Hispanic children had not seen a health care provider in more than 12 months.

POLICY CONSIDERATIONS

Medicaid and private insurance offer comparable access to health care for Ohio children in households at or below 206% FPL, although a higher percentage of children with special health care needs had Medicaid insurance. The maintenance of current, successful efforts to provide support coordinating needed care remains important as does the provision of integrated care in an accessible manner. Further investigation of care coordination may reveal specific subgroups of children with special health care needs who could benefit from innovative care coordination strategies, since there were 19% and 24%, respectively, of children with Medicaid and private insurance who did not usually or always receive help coordinating care when it was needed.

Screening and service provision for mental health remained important for all Ohio children, particularly those living at or below 206% FPL and with Medicaid insurance. The finding that mental health needs were higher among children with Medicaid was consistent with previous research which also noted the diverse factors that may impact access to behavioral health services (MACPAC, 2016).

The collaboration among diverse public agencies and private organizations to address obesity among Ohio children remains imperative, especially in light of the high prevalence of overweight and obesity among young children in Ohio and the immediate and long-term consequences of childhood obesity (ODH, 2016).

For more information about OMAS' background, findings, methodology, and the OMAS Dashboard (web analytics), please visit <http://grc.osu.edu/omas/>.

References

1. Bleich, S.N., Vercammen, K.A., Koma, J.W. & Li, Z. (2018). Trends in beverage consumption among children and adults, 2003-2014. *Obesity*, 26(2), 432-441.
2. Hodgkinson, S., Godoy, L., Beers, L.S., & Lewin, A. (2017). Improving mental health access for low-income children and families in the primary setting. *Pediatrics*, 139(1), 1-9.
3. MACPAC (June, 2016). Medicaid access in brief: Children's use of behavioral health services. Issue Brief.
4. Ohio Department of Health (2016). Early childhood overweight and obesity, Ohio 2016.
5. Rosinger, A., Herrick, K., Gahche, J. & Park (2017). Sugar-sweetened beverage consumption among U.S. youth: 2011-2014. *NCHS Data Brief*. No 271.
6. Soyulu, T.G., Elaskar, E., Aloudah, F. Ahmed, M. & Kitsantas. (2018). Racial/ethnic differences in health insurance adequacy and consistency among children: Evidence from the 2011/12 National Survey of Children's health. *Journal of Public Health Research*, 7:1280, 56-62.

Appendix I: Socodemographic Characteristics of Ohio Children in 2017

Variable	# of Children	%	# of Children	%	# of Children	%	# of Children	%	# of Children	%	# of Children	%
Age Group	1,854,658	68%	294,830	11%	347,354	13%	511,791	19%	255,929	9%	582,903	21%
<1	106,776	6%	4,414	2%	2,406	1%	11,122	2%	4,629	2%	16,408	3%
1-5	526,515	28%	48,809	17%	39,405	11%	66,409	13%	70,852	28%	111,669	19%
6-12	642,069	35%	137,831	47%	166,940	48%	227,697	44%	119,324	47%	265,593	46%
13-18	579,297	31%	103,775	35%	138,603	40%	206,563	38%	61,134	24%	189,232	32%
Gender												
Female	956,828	52%	105,333	36%	149,802	43%	231,153	45%	96,501	38%	206,555	38%
Male	897,829	48%	189,497	64%	197,552	57%	262,467	55%	159,428	62%	338,542	62%
Race/Ethnicity												
White/Other	1,460,119	79%	233,251	79%	278,509	80%	394,837	77%	199,775	78%	451,602	77%
Black/African American	255,636	14%	41,392	14%	49,979	14%	80,164	16%	39,056	15%	86,193	15%
Hispanic	100,739	5%	16,378	6%	16,497	5%	29,251	6%	13,249	5%	38,183	7%
Asian	38,164	2%	3,808	1%	2,369	1%	7,539	1%	3,849	2%	6,925	1%
Region												
Rural/Appalachia	290,628	16%	52,121	18%	54,800	16%	81,714	16%	37,936	15%	96,452	17%
Metro	996,197	54%	165,483	56%	201,257	60%	282,368	55%	146,859	57%	321,764	55%
Rural/Non-Appalachia	274,623	15%	37,370	13%	39,161	11%	63,485	12%	29,197	11%	68,313	12%
Suburban	293,209	16%	39,856	14%	52,136	15%	84,223	16%	41,937	16%	96,374	17%
Income (% of FPL)												
0-100%	381,775	21%	112,256	38%	126,420	36%	151,776	30%	85,220	33%	196,199	34%
100-206%	432,907	23%	86,417	29%	96,398	28%	128,927	25%	70,833	28%	166,882	29%
206%-400%	537,531	29%	56,294	19%	65,548	19%	115,071	22%	57,725	23%	125,070	21%
>400%	502,444	27%	39,862	14%	58,988	17%	116,016	23%	42,152	16%	94,753	16%
Insurance												
Medicaid	656,049	36%	178,166	61%	203,787	59%	267,426	52%	149,325	58%	330,057	57%
Medicaid & Medicare	18,878	1%	17,165	6%	14,625	4%	14,990	3%	13,170	5%	21,313	4%
Medicare	13,424	1%	2,944	10%	3,693	1%	4,173	1%	2,018	1%	4,902	1%
ESI	899,915	50%	74,126	25%	97,497	28%	188,613	40%	76,908	30%	178,481	31%
Other Directly Purchased and Exchange	77,903	4%	5,097	17%	4,378	1%	11,260	2%	1,808	1%	10,508	2%
Other Insurance Type and Unknown	83,449	5%	7,652	3%	10,769	3%	14,039	3%	5,642	2%	15,317	3%
Uninsured	63,935	4%	8,163	3%	11,349	3%	10,627	2%	6,469	3%	18,224	3%