

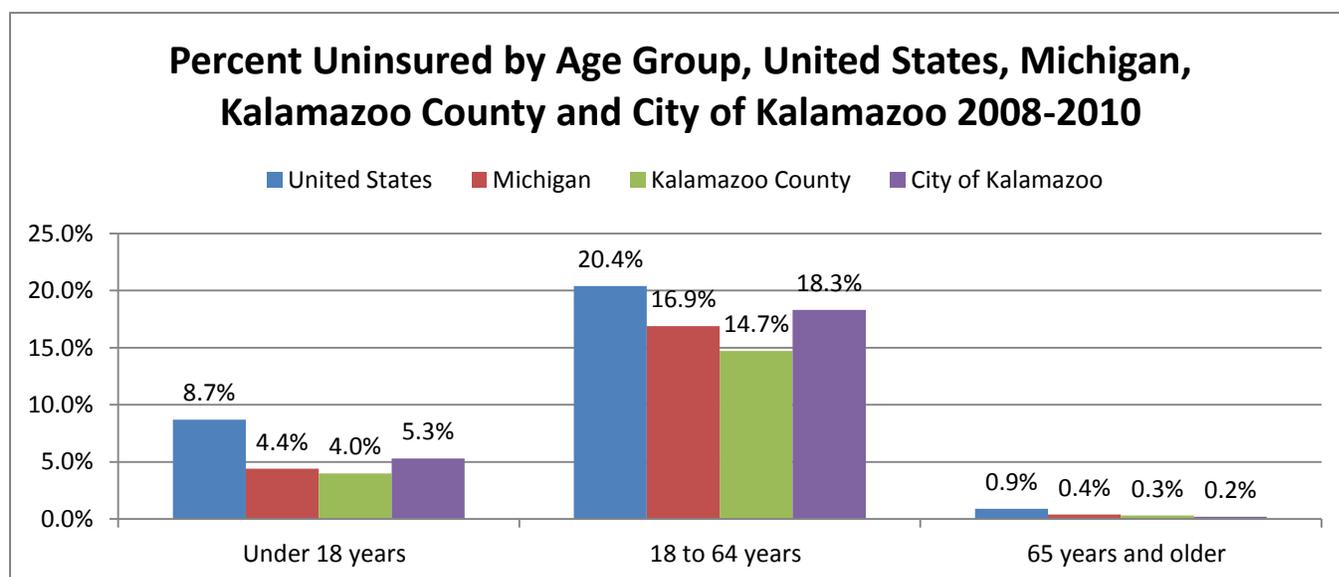
## 2.2 Access to Care

### 2.2.1 Healthcare Coverage

From 2008 through 2010, the proportion of the total population that was uninsured (average per year) was similar in Kalamazoo County (10.6%) and in Michigan (11.7%), and lower in the county than in the United States (15.0%).<sup>1</sup>

Insurance coverage estimates among Kalamazoo County residents indicate that 14.7% of adults between the ages of 18 years and 64 years old in the county were uninsured on average during 2008 through 2010. In Michigan during this same time period 16.9% of the adult population were uninsured. In Kalamazoo County, 14.7% of the adult population equates to approximately 23,740 people between the ages of 18 and 64 with no health insurance.

Among children less than 18 years of age, an estimated 4.0% or 2,271 were uninsured in Kalamazoo County on average between 2008 and 2010. A similar rate was observed throughout Michigan at 4.4%.<sup>2</sup>

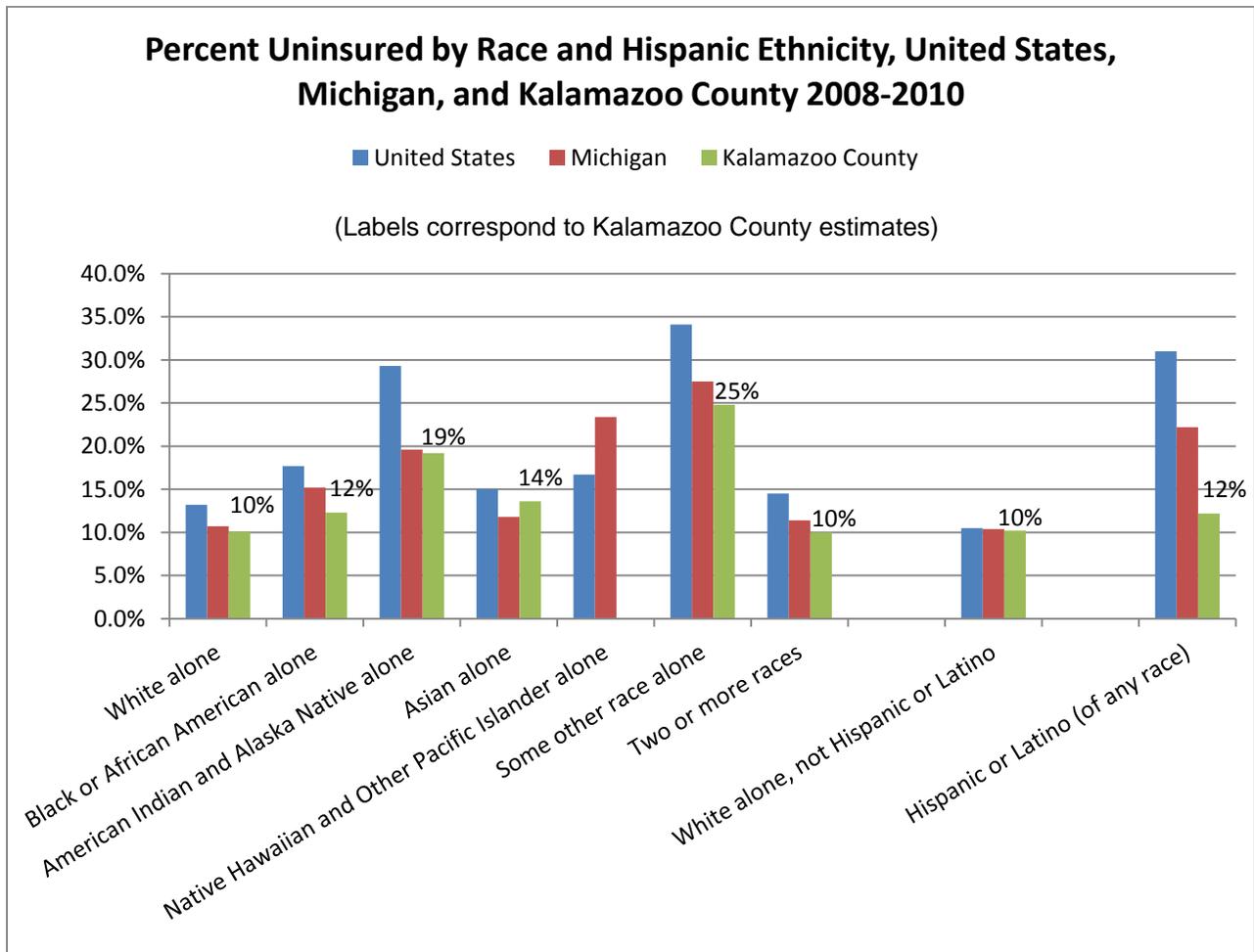


Sources: American Community Survey (ACS 3-year estimates) 2008-2010 table S2701

Over this same time period, the percentage of the total population that was uninsured differed by race: in Kalamazoo County the highest uninsured rates were among the American Indian/Alaska Native population.

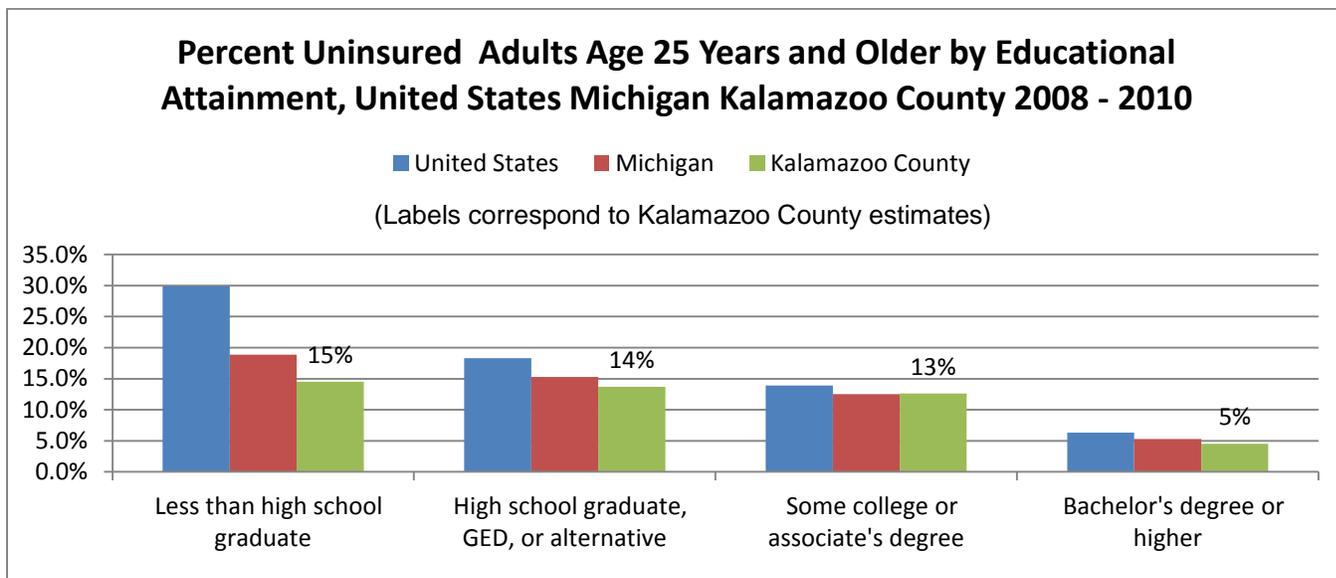
<sup>1</sup> American Community Survey (ACS 3-year estimates) 2008-2010 table S2701

<sup>2</sup> American Community Survey (ACS 3-year estimates) 2008-2010 table S2701

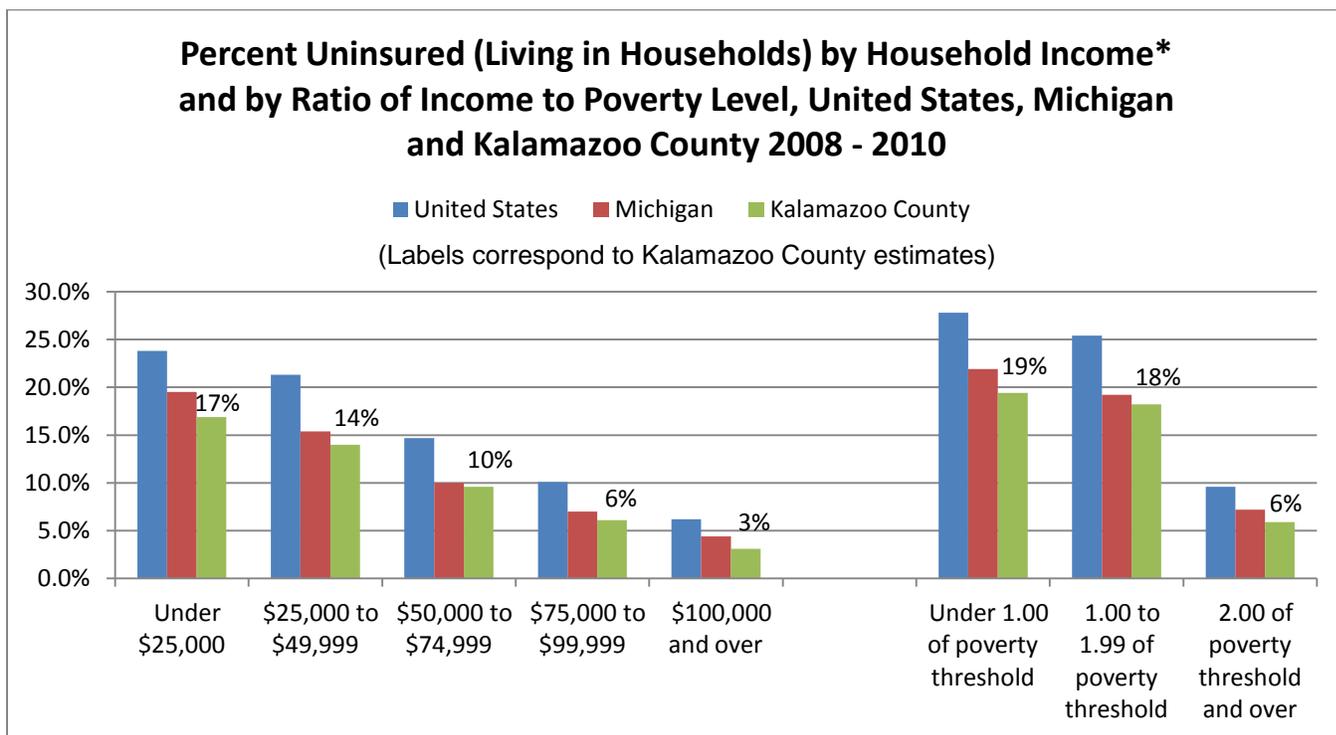


Source: American Community Survey (ACS 3-year estimates) 2008-2010 table S2701

Insurance coverage rates decreased with decreasing educational attainment and income in the county, the state, and nationally. In Kalamazoo County, over one third (35%) of those who were unemployed were uninsured; 13% of those who were currently employed were uninsured. Among adults aged 18 years and older who were employed full time/year round in the past year, 9.4% did not have health insurance. Among adults 18 years and over who worked some but less than full time/year round in the previous year, 20.0% were without health insurance.

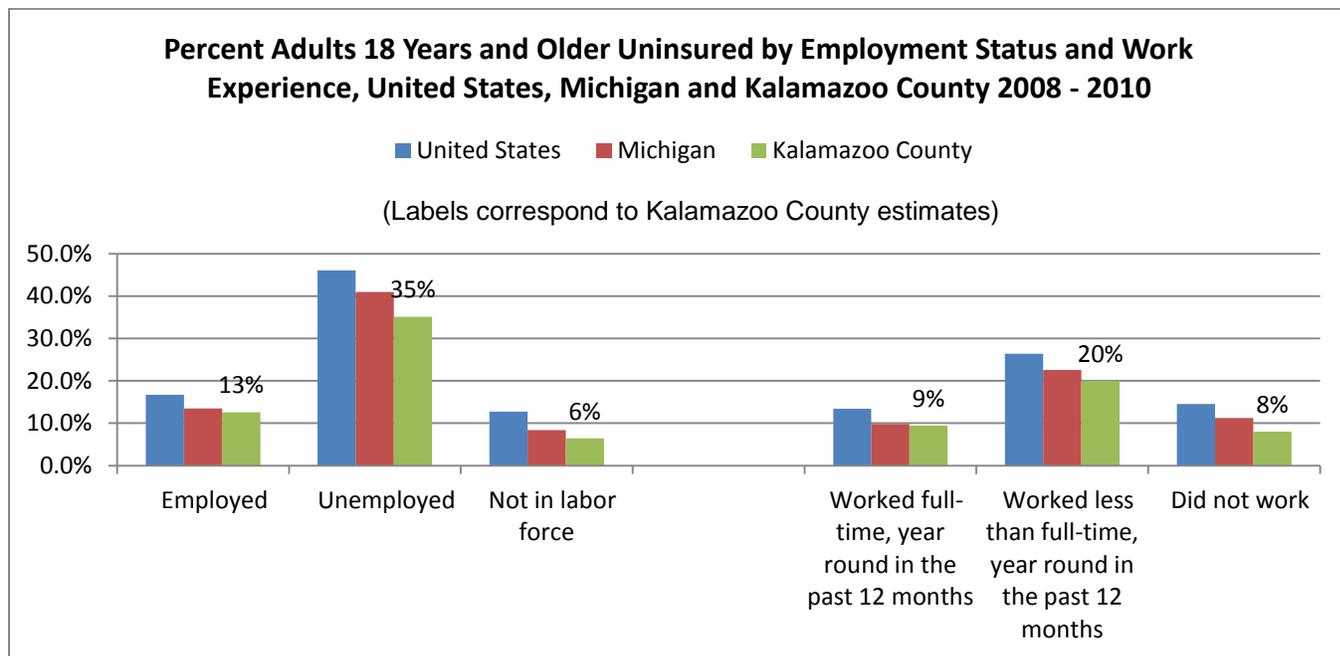


Source: American Community Survey (ACS 3-year estimates) 2008-2010 table S2701



\*Household income in 2010 inflation-adjusted dollars.

Source: American Community Survey (ACS 3-year estimates) 2008-2010 table S2701



Source: American Community Survey (ACS 3-year estimates) 2008-2010 for Kalamazoo County

**Uninsured Population Estimates by Demographic Characteristic, 2008-2010 Average  
Michigan, Kalamazoo County and the City of Kalamazoo**

Demographics	Michigan			Kalamazoo County			Kalamazoo City		
	Total	Number Uninsured	Percent Uninsured	Total	Number Uninsured	Percent Uninsured	Total	Number Uninsured	Percent Uninsured
	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate
Total civilian noninstitutionalized population	9,790,070	1,141,556	11.7%	247,061	26,088	10.6%	73,391	10,338	14.1%
<b>AGE</b>									
Under 18 years	2,370,986	105,446	4.4%	56,698	2,271	4.0%	15,353	821	5.3%
18 to 64 years	6,116,348	1,031,405	16.9%	160,999	23,740	14.7%	51,893	9,504	18.3%
65 years and older	1,302,736	4,705	0.4%	29,364	77	0.3%	6,145	13	0.2%
<b>SEX</b>									
Male	4,780,682	639,078	13.4%	120,944	15,327	12.7%	35,373	5,920	16.7%
Female	5,009,388	502,478	10.0%	126,117	10,761	8.5%	38,018	4,418	11.6%
<b>RACE AND HISPANIC OR LATINO ORIGIN</b>									
One Race	9,570,954	1,116,631	11.7%	N	N	N	N	N	N
White alone	7,792,640	836,794	10.7%	204,768	20,615	10.1%	52,773	7,333	13.9%
Black or African American alone	1,352,753	205,337	15.2%	27,289	3,362	12.3%	15,317	2,151	14.0%
American Indian and Alaska Native alone	55,058	10,809	19.6%	1,528	294	19.2%	N	N	N
Asian alone	243,317	28,809	11.8%	5,301	722	13.6%	1,544	289	18.7%
Native Hawaiian and Other Pacific Islander alone	2,847	667	23.4%	N	N	N	N	N	N
Some other race alone	124,339	34,215	27.5%	1,915	475	24.8%	N	N	N
Two or more races	219,116	24,925	11.4%	6,195	620	10.0%	1,878	220	11.7%
White alone, not Hispanic or Latino	7,530,864	781,999	10.4%	198,500	20,216	10.2%	49,479	7,090	14.3%
Hispanic or Latino (of any race)	426,331	94,809	22.2%	9,616	1,169	12.2%	5,084	631	12.4%
<b>PLACE OF BIRTH AND U.S. CITIZENSHIP STATUS</b>									
Native born	9,201,297	1,011,882	11.0%	236,061	24,465	10.4%	69,078	9,435	13.7%
Foreign born	588,773	129,674	22.0%	11,000	1,623	14.8%	4,313	903	20.9%
Naturalized	287,482	40,067	13.9%	4,782	318	6.6%	1,382	211	15.3%
Not a citizen	301,291	89,607	29.7%	6,218	1,305	21.0%	2,931	692	23.6%

Demographics	Michigan			Kalamazoo County			Kalamazoo City		
	Total	Number Uninsured	Percent Uninsured	Total	Number Uninsured	Percent Uninsured	Total	Number Uninsured	Percent Uninsured
	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate
<b>EDUCATIONAL ATTAINMENT</b>									
Civilian noninstitutionalized population 25 years and older	6,459,468	792,919	12.3%	152,465	15,707	10.3%	37,600	5,723	15.2%
Less than high school graduate	734,249	138,978	18.9%	12,252	1,775	14.5%	4,198	596	14.2%
High school graduate, GED, or alternative	1,986,867	303,778	15.3%	38,866	5,315	13.7%	8,723	1,561	17.9%
Some college or associate's degree	2,103,958	263,940	12.5%	50,452	6,337	12.6%	12,735	2,421	19.0%
Bachelor's degree or higher	1,634,394	86,223	5.3%	50,895	2,280	4.5%	11,944	1,145	9.6%
<b>EMPLOYMENT STATUS</b>									
Civilian noninstitutionalized population 18 years and older	7,419,084	1,036,110	14.0%	190,363	23,817	12.5%	58,038	9,517	16.4%
In labor force	4,828,917	817,937	16.9%	130,996	20,043	15.3%	39,234	7,717	19.7%
Employed	4,221,736	569,247	13.5%	115,390	14,558	12.6%	32,695	5,524	16.9%
Unemployed	607,181	248,690	41.0%	15,606	5,485	35.1%	6,539	2,193	33.5%
Not in labor force	2,590,167	218,173	8.4%	59,367	3,774	6.4%	18,804	1,800	9.6%
<b>WORK EXPERIENCE</b>									
Civilian noninstitutionalized population 18 years and older	7,419,084	1,036,110	14.0%	190,363	23,817	12.5%	58,038	9,517	16.4%
Worked full-time, year round in the past 12 months	2,749,449	270,169	9.8%	73,663	6,930	9.4%	17,865	2,760	15.4%
Worked less than full-time, year round in the past 12 months	2,122,644	480,134	22.6%	62,859	12,570	20.0%	24,900	5,245	21.1%
Did not work	2,546,991	285,807	11.2%	53,841	4,317	8.0%	15,273	1,512	9.9%
<b>HOUSEHOLD INCOME (IN 2010 INFLATION ADJUSTED DOLLARS)</b>									
Civilian household population	9,670,272	1,128,204	11.7%	239,925	25,367	10.6%	66,671	9,617	14.4%
Under \$25,000	1,977,031	385,594	19.5%	55,180	9,331	16.9%	25,939	4,083	15.7%
\$25,000 to \$49,999	2,371,737	364,212	15.4%	57,638	8,081	14.0%	18,101	3,300	18.2%
\$50,000 to \$74,999	1,951,628	195,771	10.0%	47,140	4,520	9.6%	11,492	1,399	12.2%
\$75,000 to \$99,999	1,340,668	93,855	7.0%	32,135	1,954	6.1%	4,956	394	7.9%
\$100,000 and over	2,029,208	88,772	4.4%	47,832	1,481	3.1%	6,183	441	7.1%

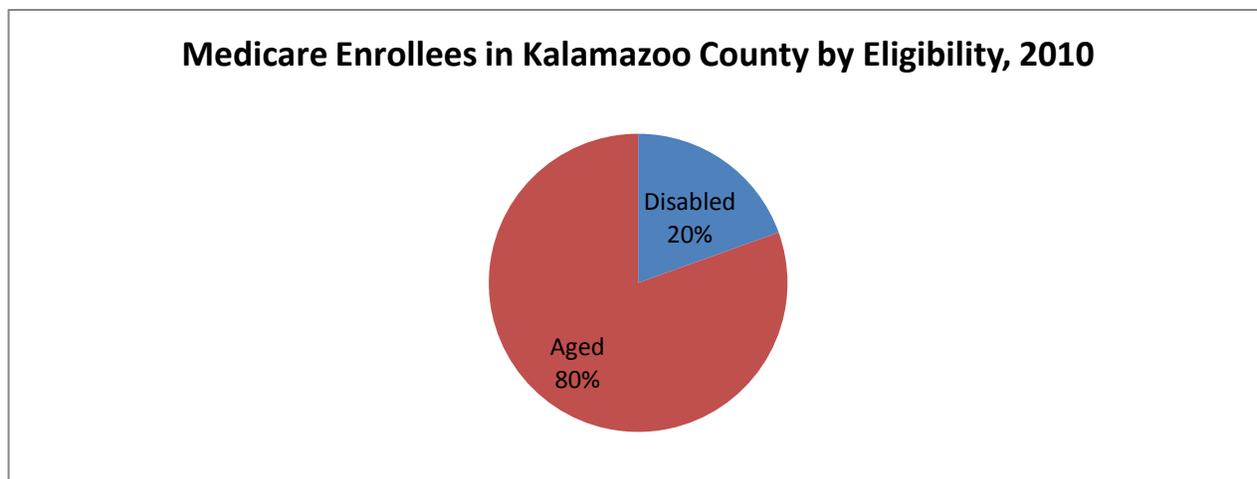
Demographics	Michigan			Kalamazoo County			Kalamazoo City		
	Total	Number Uninsured	Percent Uninsured	Total	Number Uninsured	Percent Uninsured	Total	Number Uninsured	Percent Uninsured
	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate
<b>RATIO OF INCOME TO POVERTY LEVEL IN THE PAST 12 MONTHS</b>									
Civilian noninstitutionalized population for whom poverty status is determined	9,680,548	1,135,105	11.7%	240,255	25,474	10.6%	66,904	9,724	14.5%
Under 1.00 of poverty threshold	1,521,924	333,034	21.9%	46,091	8,934	19.4%	24,126	4,757	19.7%
1.00 to 1.99 of poverty threshold	1,767,118	340,035	19.2%	41,655	7,592	18.2%	13,742	2,532	18.4%
2.00 of poverty threshold and over	6,391,506	462,036	7.2%	152,509	8,948	5.9%	29,036	2,435	8.4%

Source: American Community Survey (ACS 3-year estimates) 2008-2010, table S2701

### ***Medicare***

The Medicare program provides health insurance for people 65 years of age and older, certain disabled people and people with kidney failure. In Kalamazoo County in 2010, 29,997 seniors were enrolled in Medicare. This equates to 97.5% of the population aged 65 years and older. Similarly, 93.2% of the senior population in Michigan was enrolled in Medicare.

In 2010, 7,276 disabled individuals younger than 65 in Kalamazoo County were enrolled in Medicare.<sup>3</sup>



Source: U.S. Department of Health and Human Services, Centers for Medicare & Medicaid Services (CMS), Medicare County Enrollment as of July 1, 2010

### ***Medicaid***

Medicaid pays for health services for certain individuals and families with low incomes and resources. It is the largest source of funding for medical and health-related services for people with limited income.<sup>4</sup> Persons receiving cash assistance (Supplemental Security Income or Family Independence Program benefits) are automatically eligible for Medicaid.

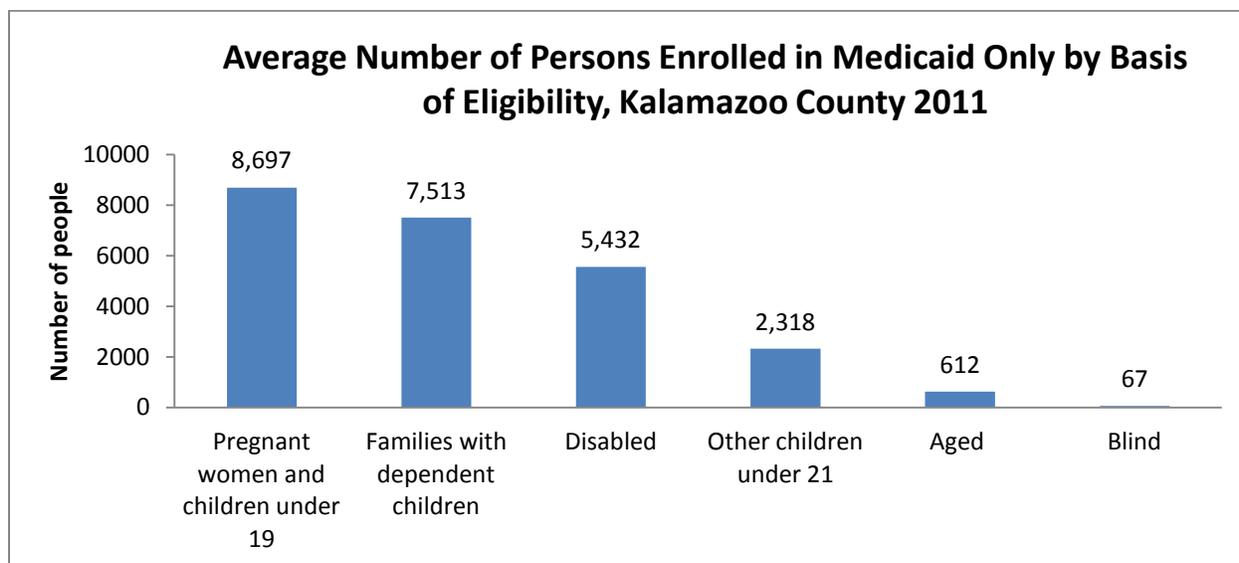
During 2011, the monthly average number of persons enrolled in Medicaid in Kalamazoo County was 44,808.<sup>5</sup> Of Medicaid enrollees who received cash assistance, 6,244 received Supplemental Security Income (SSI) and another 6,519 received Family Independence Program (FIP) benefits on average per month.

<sup>3</sup> U.S. Department of Health and Human Services, Centers for Medicare & Medicaid Services (CMS), Medicare County Enrollment as of July 1, 2010

<sup>4</sup> U.S. Department of Health and Human Services, Centers for Medicare & Medicaid Services (CMS)

<sup>5</sup> Department of Human Services, Program Statistics, April 2012

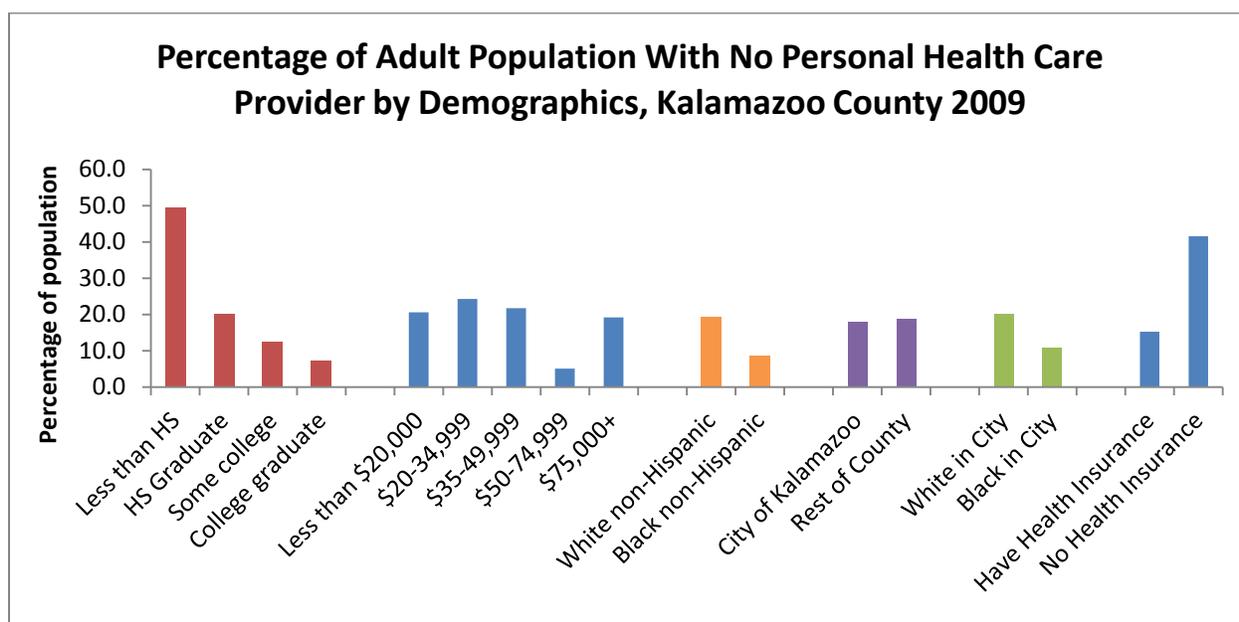
There are six main medical need categories of Medicaid eligibility: aged (65 years or older), blind, disabled, families with dependent children, other children under age 21, and pregnant women and children. Among the medically needy group, the largest group in 2011 was comprised of pregnant women and children, followed by individuals in families with dependent children.



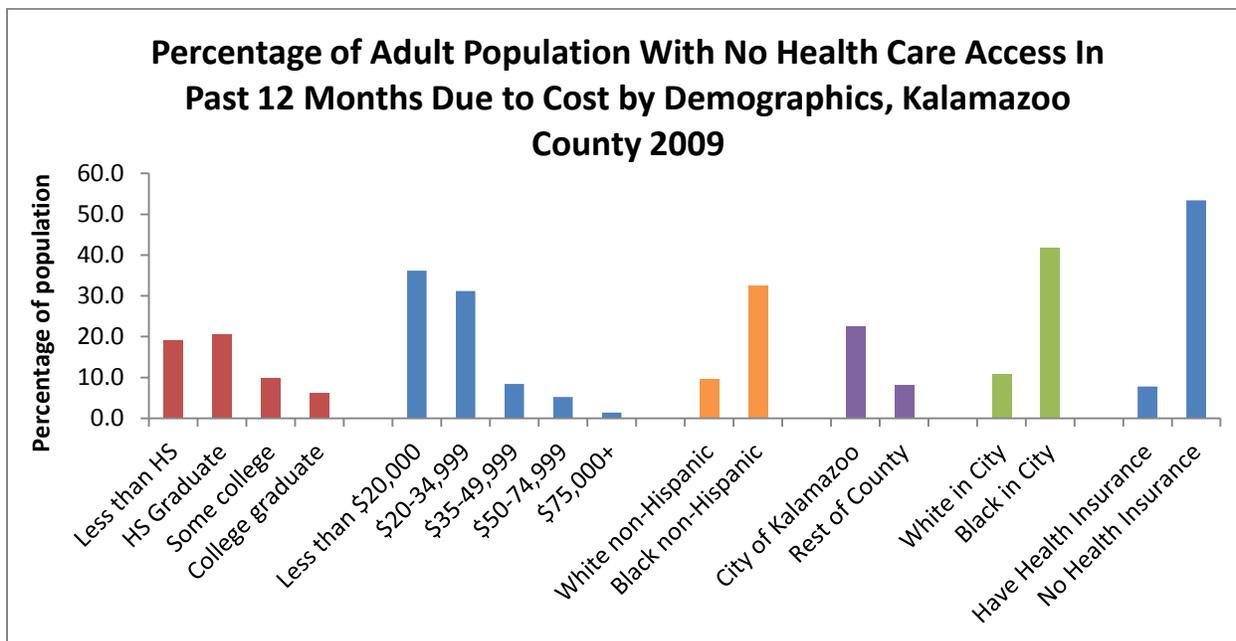
Source: Department of Human Services, Program Statistics 2011

## 2.2.2 Healthcare Utilization

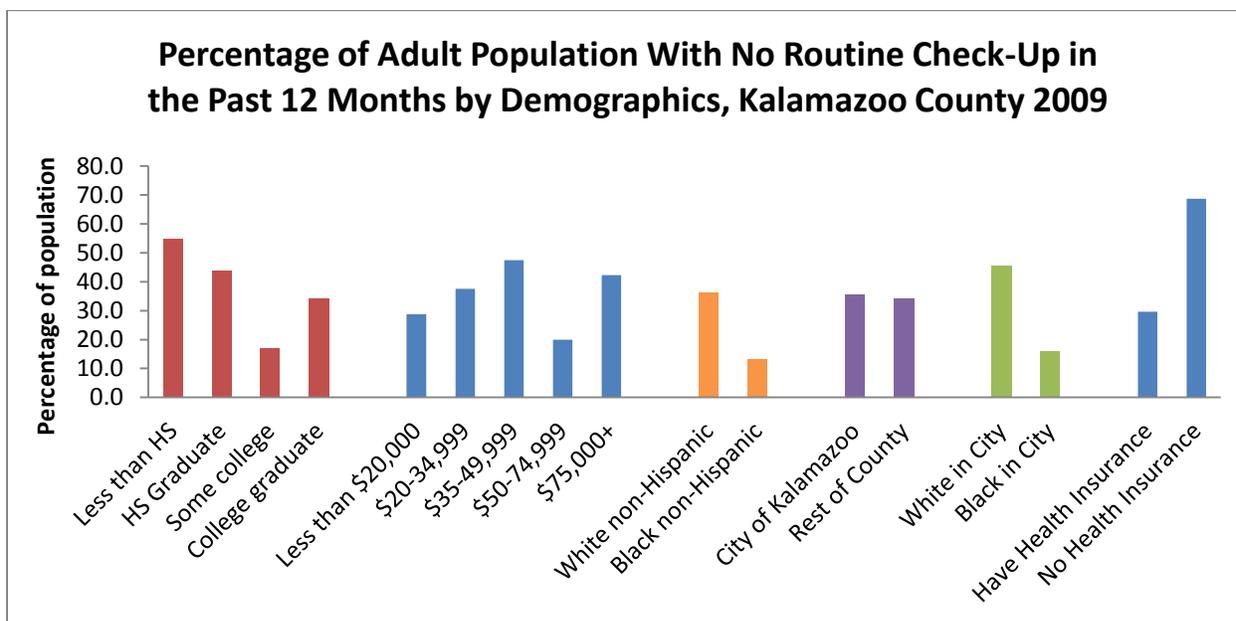
In addition to whether or not a person has health insurance, other indicators of access to healthcare (among adults) are available through the Kalamazoo County Behavioral Risk Factor Survey. Survey respondents were asked whether they had one or more providers they considered to be their personal doctor or healthcare provider (whether a person has a medical home), if in the past year they were unable to see a doctor when they needed to due to cost, and whether they had a routine check-up in the past year. These healthcare utilization indicators reveal a trend of consistently inferior access to care among lower income adults, adults with less education, and adults with no health insurance.



Source: Kalamazoo County 2009 Behavioral Risk Factor Survey



Source: Kalamazoo County 2009 Behavioral Risk Factor Survey



Source: Kalamazoo County 2009 Behavioral Risk Factor Survey

### Access to Health Care, Kalamazoo County 2009 Behavioral Risk Factor Survey

Demographic Characteristics	No Personal Health Provider <sup>a</sup>		No Health Care Access During Past 12 Months Due to Cost <sup>b</sup>		No Routine Check-Up in Past 12 Months <sup>c</sup>	
	%	95% C.I.	%	95% C.I.	%	95% C.I.
<b>Total</b>	18.3	(10.5 - 29.8)	12.7	(9.2 - 17.3)	32.8	(24.8 - 41.9)
<b>Age</b>						
18-24 years	39.1	(16.9 - 67.1)	6.2	(1.4 - 23.6)	25.6	(7.3 - 60.0)
25-34 years	15.9	(7.8 - 29.9)	12.6	(6.3 - 23.7)	41.5	(27.3 - 57.3)
35-44 years	13.9	(7.7 - 23.8)	23.0	(14.8 - 34.0)	36.9	(27.2 - 47.9)
45-54 years	11.1	(6.2 - 19.1)	17.6	(11.2 - 26.6)	40.8	(31.3 - 51.1)
55-64 years	3.1	(1.5 - 6.0)	7.3	(3.8 - 13.3)	23.8	(16.2 - 33.6)
65-74 years	3.1	(1.3 - 7.1)	4.0	(1.7 - 9.3)	20.4	(13.3 - 30.0)
75 years +	3.1	(1.1 - 8.5)	7.8	(1.6 - 30.3)	12.7	(7.5 - 20.7)
<b>Gender</b>						
Male	17.3	(11.4 - 25.5)	12.3	(7.0 - 20.5)	36.2	(26.7 - 47.1)
Female	17.3	(6.3 - 39.7)	13.3	(9.0 - 19.3)	30.7	(18.6 - 46.1)
<b>Race</b>						
White non-Hispanic	19.2	(10.5 - 32.6)	9.5	(6.6 - 13.3)	36.4	(27.4 - 46.6)
Black non-Hispanic	8.6	(4.1 - 17.1)	32.5	(14.7 - 57.2)	13.0	(6.0 - 25.9)
<b>Education</b>						
Less than HS	49.4	(16.5 - 82.8)	18.9	(5.4 - 49.0)	54.9	(21.2 - 84.6)
HS Graduate	20.2	(12.0 - 32.0)	20.4	(13.5 - 29.6)	43.7	(32.5 - 55.6)
Some college	12.5	(5.8 - 25.0)	9.8	(5.7 - 16.3)	17.0	(10.7 - 26.1)
College graduate	7.2	(3.7 - 13.6)	6.1	(3.7 - 9.9)	34.2	(26.8 - 42.5)
<b>Income</b>						
Less than \$20,000	20.6	(9.5 - 39.1)	36.2	(22.5 - 52.5)	28.8	(18.7 - 41.6)
\$20-34,999	24.3	(13.7 - 39.4)	31.2	(19.5 - 46.0)	37.6	(24.9 - 52.3)
\$35-49,999	21.8	(8.2 - 46.5)	8.4	(3.2 - 20.3)	47.5	(29.1 - 66.7)
\$50-74,999	5.1	(1.6 - 14.6)	5.2	(2.3 - 11.2)	20.0	(11.4 - 32.6)
\$75,000+	19.2	(4.6 - 54.1)	1.4	(0.4 - 4.3)	42.3	(24.6 - 62.2)
<b>City/Out-County</b>						
City of Kalamazoo	17.9	(10.1 - 29.7)	22.5	(13.9 - 34.5)	35.4	(25.2 - 47.1)
Rest of County	18.6	(7.2 - 40.2)	8.1	(4.8 - 13.2)	34.2	(21.8 - 49.2)
<b>Within City of Kalamazoo</b>						
White in City	20.0	(9.8 - 36.6)	10.8	(6.2 - 18.3)	45.6	(32.3 - 59.7)
Black in City	10.8	(5.0 - 21.7)	41.8	(20.8 - 66.2)	15.9	(7.1 - 31.7)
<b>Health Insurance</b>						
Have Health Insurance	15.3	(7.3 - 29.4)	7.8	(5.4 - 11.1)	29.6	(21.0 - 39.9)
No Health Insurance	41.6	(24.7 - 60.7)	53.4	(35.6 - 70.4)	68.7	(47.4 - 84.2)

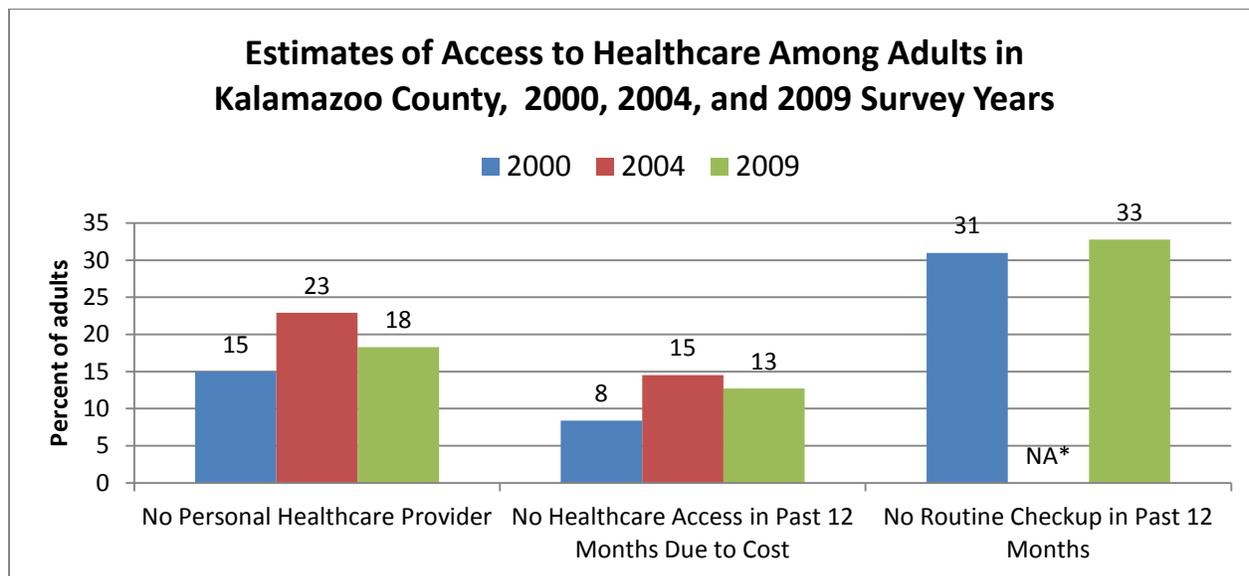
<sup>a</sup> The proportion who reported that they did not have anyone that they thought of as their personal doctor or health care provider.

<sup>b</sup> The proportion who reported that in the past 12 months, they could not see a doctor when they needed to due to the cost.

<sup>c</sup> The proportion who reported that in the past 12 months, they did not see a doctor for a routine checkup (a general physical exam, not an exam for a specific injury, illness, or condition).

Source: Kalamazoo County 2009 Behavioral Risk Factor Survey

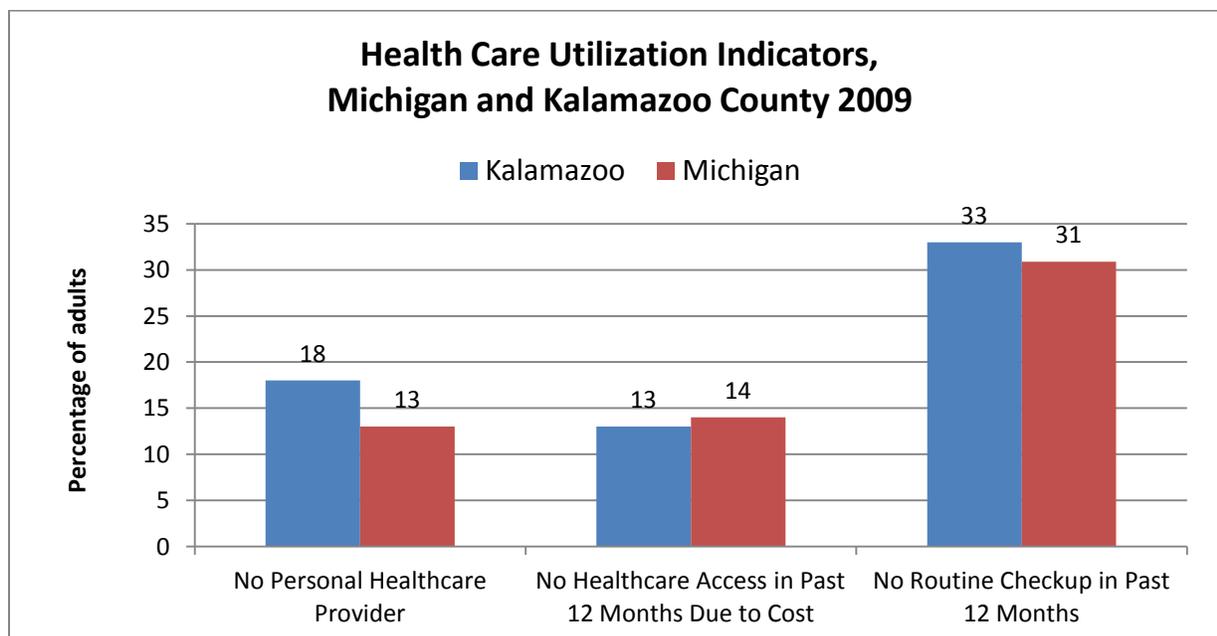
Over time in Kalamazoo, rates for these indicators have been similar. In 2004 the percentage of adults with no medical home (no personal healthcare provider) was higher than estimated in the 2000 or in the 2009 survey (but differences were not statistically significant). Having no healthcare access in the previous year due to cost was estimated to be more prevalent in 2004 and 2009 than in 2000, and in the two surveys that asked about having a routine check-up in the past year, estimated rates were similar over time (asked in 2000 and 2009).



\*Not asked in 2004 survey

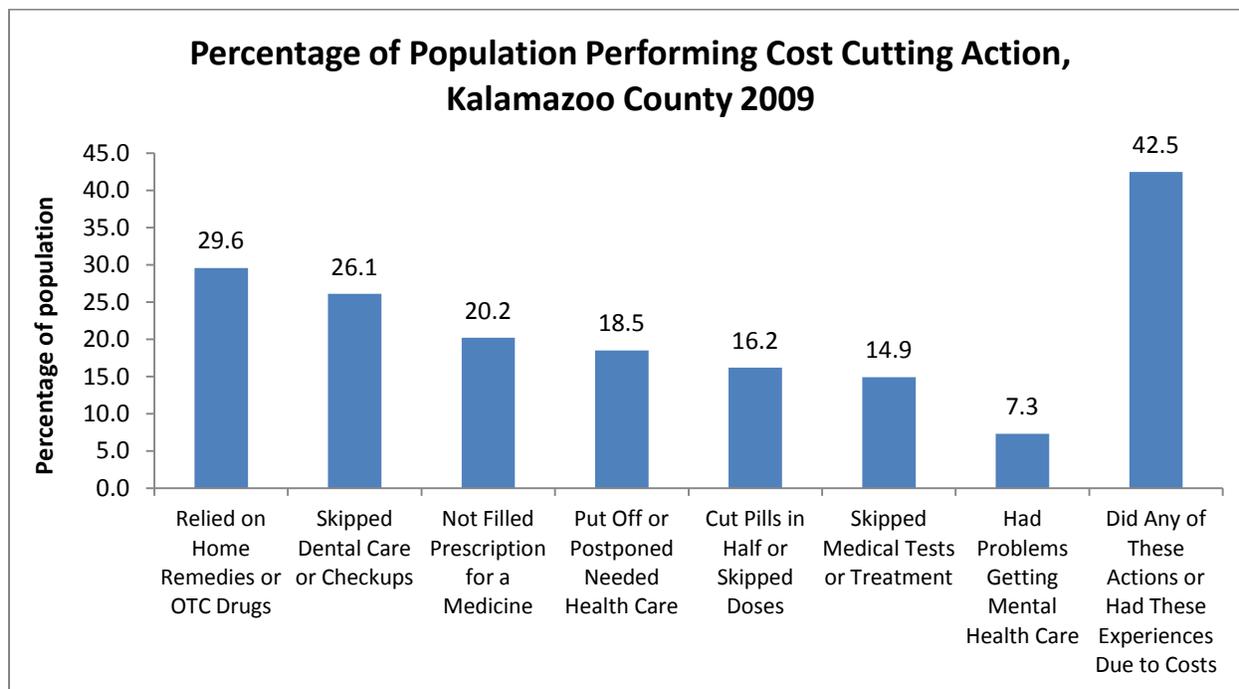
Source: Kalamazoo County Behavioral Risk Factor Survey, 2000, 2004, 2009

Estimated rates for these healthcare utilization indicators were similar in Kalamazoo County and in Michigan overall in 2009.



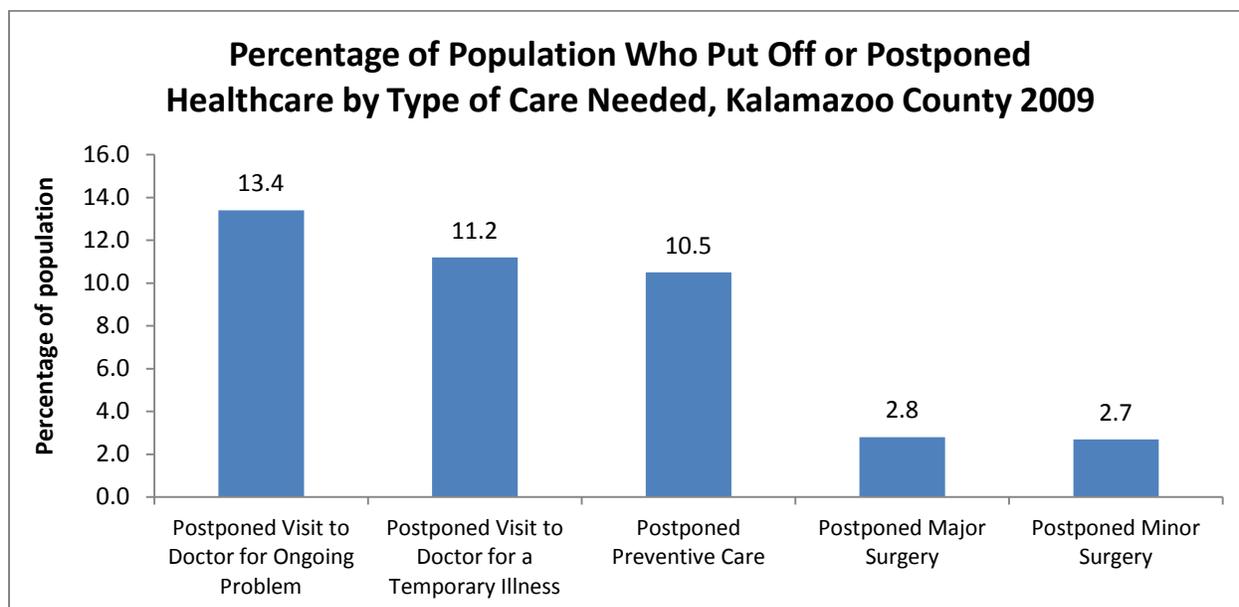
Source: Kalamazoo County Behavioral Risk Factor Survey 2009 and Michigan Behavioral Risk Factor Survey 2009

Due to high health care costs many individuals within Kalamazoo County have taken part in cost cutting practices over the past year. In 2009, approximately 30% of adults relied on home remedies or over the counter drugs instead of going to see a doctor. More than a quarter of individuals reported skipping dental care or checkups to save money. Other cost cutting practices are shown below.



Source: Kalamazoo County 2009 Behavioral Risk Factor Survey

Among adults in Kalamazoo County, 18.5% reported the cost cutting action of putting off or postponing needed healthcare. The chart on the following page shows more detailed information on what was put off or postponed in healthcare. The most commonly reported practice was postponing a visit to a doctor for an ongoing problem (reported by 13.4% of all adults). Because management of many chronic conditions in an outpatient setting (through regular visits with a care provider) can reduce morbidity experienced by patients (and thus prevent the need for more expensive care or hospitalization), this statistic is concerning. Postponing preventive care was reported by 10.5% of adults.



Source: Kalamazoo County 2009 Behavioral Risk Factor Survey

All of these cost-cutting measures were more common among adults without health insurance; most were more common among the black population, adults with lower incomes, and adults with lower educational attainment.

Consequences of Health Care Costs: Cost Cutting in the Past Year (Part 1)<sup>a</sup>

Demographic Characteristics	Relied on Home Remedies or OTC Drugs Instead of Going to See a Doctor		Skipped Dental Care or Checkups		Put Off or Postponed Getting Health Care Needed	
	%	95% C.I.	%	95% C.I.	%	95% C.I.
<b>Total</b>	29.6	(22.5 - 37.7)	26.1	(19.6 - 33.9)	18.5	(13.3 - 25.1)
<b>Age</b>						
18-24 years	20.8	(7.6 - 45.5)	16.0	(4.9 - 41.0)	11.0	(2.7 - 35.6)
25-34 years	46.2	(29.0 - 64.4)	32.5	(17.6 - 51.9)	18.0	(8.7 - 33.5)
35-44 years	30.9	(21.1 - 42.8)	33.1	(22.5 - 45.9)	31.4	(21.3 - 43.8)
45-54 years	36.8	(26.8 - 48.2)	35.5	(25.4 - 47.1)	23.0	(14.8 - 33.7)
55-64 years	25.4	(16.3 - 37.2)	21.2	(13.3 - 32.1)	13.8	(7.9 - 23.0)
65-74 years	5.9	(3.2 - 10.7)	11.1	(6.4 - 18.7)	8.1	(4.0 - 15.7)
75 years +	16.6	(5.9 - 38.8)	12.5	(3.3 - 37.3)	10.7	(2.3 - 37.9)
<b>Gender</b>						
Male	28.1	(18.7 - 39.9)	23.4	(15.4 - 33.9)	11.8	(7.2 - 18.8)
Female	28.8	(19.7 - 40.0)	26.7	(17.8 - 38.0)	24.6	(16.0 - 35.7)
<b>Race</b>						
White non-Hispanic	28.5	(20.8 - 37.7)	24.2	(17.2 - 33.0)	17.1	(11.5 - 24.6)
Black non-Hispanic	33.6	(19.2 - 51.8)	37.5	(21.4 - 56.9)	24.2	(13.0 - 40.6)
<b>Education</b>						
Less than HS	28.2	(9.1 - 60.6)	28.7	(9.3 - 61.3)	14.5	(4.4 - 38.1)
HS Graduate	37.3	(25.5 - 50.8)	32.0	(22.2 - 43.7)	19.6	(12.5 - 29.4)
Some college	30.8	(18.9 - 46.0)	32.0	(19.6 - 47.6)	23.2	(12.9 - 38.1)
College graduate	20.7	(14.2 - 29.3)	9.5	(5.4 - 16.3)	12.9	(8.0 - 20.3)
<b>Income</b>						
<\$20,000	53.1	(35.1 - 70.3)	49.3	(31.7 - 67.0)	27.6	(16.4 - 42.4)
\$20-34,999	39.2	(25.0 - 55.4)	55.0	(39.3 - 69.7)	41.5	(26.4 - 58.4)
\$35-49,999	43.2	(23.7 - 65.1)	22.6	(8.4 - 48.3)	7.3	(2.4 - 19.7)
\$50-74,999	17.6	(9.3 - 30.9)	11.9	(6.1 - 21.9)	10.0	(5.0 - 19.1)
\$75,000+	13.9	(6.8 - 26.1)	8.4	(3.7 - 17.9)	7.0	(3.2 - 14.7)
<b>City/Out-County</b>						
City of Kalamazoo	35.2	(25.4 - 46.5)	29.6	(21.3 - 39.5)	19.5	(13.4 - 27.4)
Rest of County	25.5	(17.4 - 35.8)	23.0	(15.2 - 33.2)	18.2	(11.5 - 27.6)
<b>Within City of Kalamazoo</b>						
White in City	32.7	(20.4 - 47.9)	20.2	(12.2 - 31.7)	13.7	(8.1 - 22.1)
Black in City	32.3	(17.7 - 51.5)	40.6	(22.6 - 61.6)	25.2	(13.0 - 43.2)
<b>Health Insurance<sup>b</sup></b>						
Have Health Insurance	27.4	(20.3 - 35.8)	12.8	(8.1 - 19.7)	14.8	(9.8 - 21.7)
No Health Insurance	57.7	(36.1 - 76.7)	49.7	(36.9 - 62.6)	52.3	(31.7 - 72.1)

<sup>a</sup> Among all adults, the proportion who reported they or someone else in their household did these activities because of health care costs.

<sup>b</sup> For "Skipped dental care or checkups", refers to Have Dental Insurance vs. No Dental Insurance instead of Have Health Insurance vs. No Health Insurance.

Source: Kalamazoo County 2009 Behavioral Risk Factor Survey

Consequences of Health Care Costs: Cost Cutting in the Past Year (Continued, Part 2)<sup>a</sup>

Demographic Characteristics	Skipped Recommended Medical Test or Treatment		Not Filled Prescription for a Medicine		Cut Pills in Half or Skipped Doses of Medicine	
	%	95% C.I.	%	95% C.I.	%	95% C.I.
<b>Total</b>	14.9	(10.4 - 20.9)	20.2	(14.8 - 27.1)	16.2	(11.0 - 23.0)
<b>Age</b>						
18-24 years	6.8	(1.1 - 32.1)	10.6	(2.8 - 33.3)	12.5	(3.2 - 37.7)
25-34 years	13.5	(5.6 - 29.1)	31.4	(16.7 - 51.1)	21.2	(8.8 - 42.8)
35-44 years	22.7	(13.6 - 35.3)	28.4	(18.3 - 41.2)	21.0	(12.5 - 33.2)
45-54 years	23.1	(15.1 - 33.8)	24.6	(16.1 - 35.7)	19.6	(12.0 - 30.2)
55-64 years	11.2	(5.8 - 20.7)	16.1	(9.3 - 26.6)	9.9	(4.9 - 19.0)
65-74 years	3.1	(1.4 - 6.5)	6.7	(3.3 - 13.0)	5.5	(2.4 - 12.1)
75 years +	14.0	(4.2 - 37.4)	14.3	(4.5 - 37.0)	10.2	(2.1 - 38.1)
<b>Gender</b>						
Male	11.8	(7.0 - 19.4)	22.0	(13.6 - 33.5)	16.7	(9.4 - 27.8)
Female	17.7	(10.8 - 27.5)	18.9	(12.3 - 28.0)	16.2	(9.6 - 26.1)
<b>Race</b>						
White non-Hispanic	12.9	(8.2 - 19.6)	16.9	(11.7 - 23.9)	13.9	(8.9 - 21.0)
Black non-Hispanic	24.9	(12.7 - 43.2)	45.3	(25.6 - 66.6)	40.0	(20.3 - 63.5)
<b>Education</b>						
Less than HS	10.5	(2.8 - 32.6)	29.1	(9.5 - 61.8)	24.7	(7.4 - 57.4)
HS Graduate	18.6	(11.7 - 28.4)	18.2	(11.5 - 27.6)	17.2	(10.8 - 26.5)
Some college	15.7	(7.7 - 29.4)	22.3	(13.1 - 35.2)	16.7	(8.4 - 30.5)
College graduate	13.0	(7.6 - 21.2)	13.3	(7.9 - 21.4)	8.6	(4.1 - 17.2)
<b>Income</b>						
<\$20,000	23.0	(13.3 - 36.9)	36.5	(20.9 - 55.5)	34.5	(19.4 - 53.6)
\$20-34,999	28.9	(16.7 - 45.2)	42.9	(27.7 - 59.6)	19.9	(9.7 - 36.3)
\$35-49,999	13.5	(5.4 - 29.9)	20.5	(7.0 - 47.1)	18.4	(5.5 - 46.4)
\$50-74,999	10.4	(4.3 - 23.2)	8.1	(2.9 - 20.8)	6.0	(1.6 - 20.3)
\$75,000+	4.2	(1.6 - 10.7)	9.9	(4.8 - 19.5)	6.1	(2.6 - 13.7)
<b>City/Out-County</b>						
City of Kalamazoo	18.3	(12.2 - 26.5)	25.1	(16.0 - 36.9)	23.1	(14.4 - 35.0)
Rest of County	13.3	(7.8 - 21.7)	18.3	(12.0 - 27.0)	13.5	(7.8 - 22.5)
<b>Within City of Kalamazoo</b>						
White in City	11.0	(6.2 - 18.9)	11.8	(6.5 - 20.3)	14.3	(8.1 - 24.0)
Black in City	26.3	(12.9 - 46.2)	49.4	(28.3 - 70.6)	42.5	(21.4 - 66.8)
<b>Health Insurance</b>						
Have Health Insurance	13.1	(8.6 - 19.5)	17.6	(12.5 - 24.2)	13.6	(8.8 - 20.5)
No Health Insurance	33.8	(18.6 - 53.4)	47.5	(27.9 - 68.0)	41.2	(22.3 - 63.2)

<sup>a</sup> Among all adults, the proportion who reported they or someone else in their household did these activities because of health care costs.

Source: Kalamazoo County 2009 Behavioral Risk Factor Survey

Consequences of Health Care Costs: Cost Cutting in the Past Year (Continued, Part 3)<sup>a</sup>

Demographic Characteristics	Had Problems Getting Mental Health Care		Did Any of These Actions or Had These Experiences Due to Costs	
	%	95% C.I.	%	95% C.I.
<b>Total</b>	7.3	(4.8 - 10.9)	42.5	(33.8 - 51.7)
<b>Age</b>				
18-24 years	0.6	(0.1 - 3.2)	31.7	(13.4 - 58.3)
25-34 years	5.8	(1.5 - 20.2)	56.6	(39.3 - 72.4)
35-44 years	14.3	(8.0 - 24.5)	47.6	(35.7 - 59.7)
45-54 years	11.5	(5.7 - 21.8)	51.4	(40.2 - 62.4)
55-64 years	9.4	(4.0 - 20.2)	37.7	(26.6 - 50.3)
65-74 years	2.6	(0.8 - 8.0)	22.2	(14.9 - 31.6)
75 years +	0.0	(0.0 - 0.0)	25.5	(13.1 - 43.8)
<b>Gender</b>				
Male	4.8	(2.4 - 9.3)	43.6	(31.1 - 57.0)
Female	9.7	(5.7 - 16.0)	39.9	(28.6 - 52.4)
<b>Race</b>				
White non-Hispanic	5.8	(3.5 - 9.6)	38.8	(29.6 - 48.9)
Black non-Hispanic	18.3	(8.3 - 35.7)	70.6	(52.9 - 83.7)
<b>Education</b>				
Less than HS	6.7	(1.2 - 29.3)	45.8	(15.7 - 79.3)
HS Graduate	12.7	(7.3 - 21.3)	51.9	(38.6 - 64.9)
Some college	4.9	(2.3 - 10.4)	44.4	(29.0 - 61.0)
College graduate	5.8	(2.7 - 12.3)	27.9	(20.4 - 36.8)
<b>Income</b>				
<\$20,000	15.3	(8.0 - 27.3)	74.5	(58.2 - 85.9)
\$20-34,999	15.7	(7.0 - 31.6)	69.0	(54.3 - 80.7)
\$35-49,999	4.2	(0.9 - 17.3)	48.3	(28.4 - 68.8)
\$50-74,999	7.5	(2.7 - 19.4)	26.8	(15.4 - 42.4)
\$75,000+	2.0	(0.7 - 5.7)	22.2	(12.5 - 36.4)
<b>City/Out-County</b>				
City of Kalamazoo	12.2	(7.5 - 19.4)	53.8	(42.8 - 64.5)
Rest of County	5.3	(2.7 - 9.9)	36.1	(25.9 - 47.7)
<b>Within City of Kalamazoo</b>				
White in City	7.3	(3.5 - 14.5)	41.8	(28.9 - 56.0)
Black in City	20.0	(8.9 - 39.0)	72.5	(53.6 - 85.7)
<b>Health Insurance</b>				
Have Health Insurance	5.0	(3.1 - 7.8)	40.0	(31.4 - 49.1)
No Health Insurance	27.0	(13.4 - 46.9)	78.6	(59.9 - 90.0)

<sup>a</sup> Among all adults, the proportion who reported they or someone else in their household did these activities because of health care costs.

Source: Kalamazoo County 2009 Behavioral Risk Factor Survey

Type of Health Care Put Off or Postponed<sup>a</sup>

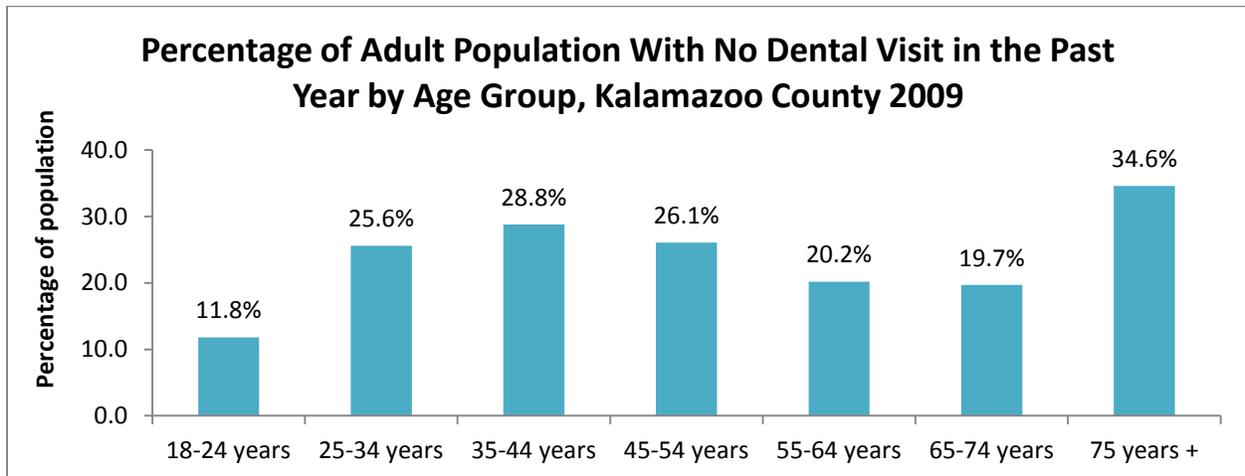
Demographic Characteristics	Postponed Preventive Care		Postponed Visit to Doctor for a Temporary Illness		Postponed Visit to Doctor for Ongoing Problem		Postponed Minor Surgery		Postponed Major Surgery	
	%	95% C.I.	%	95% C.I.	%	95% C.I.	%	95% C.I.	%	95% C.I.
<b>Total</b>	10.5	(7.5 - 14.5)	11.2	(7.6 - 16.3)	13.4	(9.0 - 19.6)	2.7	(1.6 - 4.5)	2.8	(0.8 - 9.3)
<b>Age</b>										
18-24 years	0.5	(0.1 - 3.5)	4.9	(0.8 - 25.3)	10.6	(2.5 - 35.6)	0.1	(0.0 - 0.7)	6.0	(0.8 - 33.7)
25-34 years	12.1	(4.9 - 26.9)	13.8	(5.7 - 29.8)	11.1	(4.3 - 25.9)	0.9	(0.2 - 3.3)	0.0	(0.0 - 0.3)
35-44 years	18.8	(11.1 - 30.0)	14.7	(8.1 - 25.1)	22.1	(13.6 - 33.9)	3.3	(1.0 - 10.3)	2.0	(0.3 - 10.7)
45-54 years	16.5	(10.1 - 25.8)	18.9	(11.5 - 29.5)	16.4	(9.7 - 26.3)	6.4	(3.3 - 12.2)	1.6	(0.5 - 5.6)
55-64 years	11.6	(6.2 - 20.8)	5.8	(2.5 - 12.7)	7.4	(3.7 - 14.4)	3.3	(0.9 - 11.2)	0.7	(0.1 - 3.5)
65-74 years	3.1	(1.2 - 8.1)	1.6	(0.5 - 5.3)	4.8	(1.8 - 12.1)	0.7	(0.1 - 3.3)	1.4	(0.3 - 5.4)
75 years +	10.7	(2.3 - 37.9)	10.6	(2.3 - 37.9)	10.6	(2.3 - 37.9)	0.7	(0.1 - 4.8)	9.3	(1.6 - 39.3)
<b>Gender</b>										
Male	8.7	(5.0 - 14.8)	5.7	(2.8 - 11.1)	7.8	(4.5 - 13.3)	2.3	(1.0 - 5.2)	1.5	(0.5 - 4.6)
Female	12.5	(8.1 - 18.8)	16.1	(10.0 - 25.0)	18.4	(10.9 - 29.4)	3.2	(1.6 - 6.1)	4.1	(0.8 - 17.9)
<b>Race</b>										
White non-Hispanic	9.3	(6.3 - 13.6)	10.1	(6.3 - 15.9)	12.4	(7.6 - 19.5)	2.8	(1.5 - 4.9)	2.8	(0.7 - 11.1)
Black non-Hispanic	16.5	(7.6 - 32.0)	17.1	(8.2 - 32.2)	18.1	(8.7 - 33.9)	1.9	(0.6 - 5.6)	1.8	(0.6 - 5.2)
<b>Education</b>										
Less than HS	5.9	(1.6 - 19.3)	10.3	(2.6 - 32.9)	9.3	(2.2 - 31.9)	0.5	(0.1 - 3.0)	1.1	(0.3 - 4.1)
HS Graduate	16.6	(10.1 - 26.1)	11.0	(6.2 - 18.5)	17.4	(10.7 - 27.2)	3.5	(1.3 - 9.1)	3.3	(1.1 - 9.6)
Some college	9.4	(5.1 - 16.7)	12.9	(6.4 - 24.3)	15.9	(7.3 - 31.2)	1.8	(0.8 - 4.2)	5.0	(0.8 - 26.1)
College graduate	9.3	(5.0 - 16.7)	9.6	(5.2 - 17.1)	8.5	(5.2 - 13.6)	4.7	(2.1 - 10.1)	0.1	(0.0 - 0.7)
<b>Income</b>										
<\$20,000	20.7	(11.2 - 35.0)	22.4	(12.7 - 36.6)	22.3	(12.6 - 36.5)	4.0	(1.5 - 10.4)	2.8	(0.8 - 9.2)
\$20-34,999	21.0	(11.8 - 34.5)	28.5	(14.8 - 47.8)	31.9	(17.6 - 50.6)	4.3	(1.7 - 10.3)	0.1	(0.0 - 0.3)
\$35-49,999	6.6	(2.0 - 19.5)	6.8	(2.1 - 19.6)	7.1	(2.3 - 19.7)	3.6	(0.6 - 18.0)	3.6	(0.6 - 18.1)
\$50-74,999	7.6	(3.4 - 15.9)	4.3	(1.7 - 10.7)	6.8	(3.1 - 14.3)	1.8	(0.5 - 6.1)	0.5	(0.1 - 3.3)
\$75,000+	3.8	(1.3 - 10.5)	2.3	(0.5 - 9.7)	2.9	(1.2 - 7.0)	1.0	(0.2 - 3.8)	0.0	(0.0 - 0.0)
<b>City/Out-County</b>										
City of Kalamazoo	14.7	(9.4 - 22.2)	11.9	(7.4 - 18.4)	13.7	(8.7 - 20.8)	3.2	(1.6 - 6.4)	2.3	(0.9 - 5.9)
Rest of County	9.0	(5.6 - 14.0)	10.9	(6.4 - 18.2)	13.4	(7.6 - 22.4)	2.5	(1.2 - 5.1)	3.1	(0.6 - 14.3)
<b>Within City of Kalamazoo</b>										
White in City	10.7	(5.9 - 18.8)	7.8	(3.9 - 15.1)	8.1	(4.4 - 14.6)	3.2	(1.2 - 8.3)	1.6	(0.3 - 7.3)
Black in City	17.0	(7.5 - 34.1)	17.7	(8.1 - 34.4)	18.4	(8.4 - 35.9)	2.1	(0.7 - 6.3)	1.9	(0.6 - 5.8)
<b>Health Insurance</b>										
Have Health Insurance	8.1	(5.4 - 11.8)	8.6	(5.2 - 13.7)	10.8	(6.4 - 17.6)	1.7	(0.9 - 3.4)	2.6	(0.5 - 11.7)
No Health Insurance	32.7	(18.2 - 51.5)	35.0	(19.3 - 54.8)	38.1	(21.6 - 58.0)	10.8	(4.7 - 22.7)	5.8	(1.8 - 17.3)

<sup>a</sup> Among all adults, the proportion who reported they or someone else in their household did these activities because of health care costs.

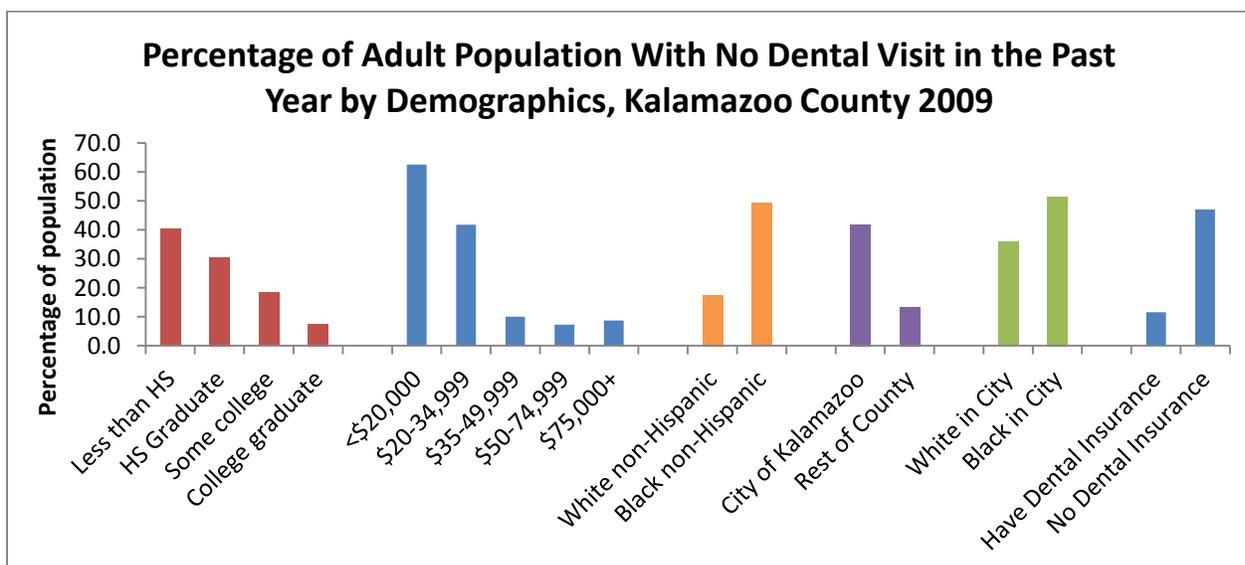
### 2.2.3 Access to Dental Care

In 2009, 22.2% of the adult population in Kalamazoo County hadn't had a dental visit in the previous year and 21.3% of adults hadn't had a dental cleaning in the previous year. In contrast to access to health care measures for which access to care improved with increasing age, the likelihood of having been to a dentist or having had a dental cleaning in the previous year did not increase with age; rather, access to dental care was most common among young adults aged 18 to 24 years compared with other age groups, and was worst among middle aged adults (aged 35 to 44 years) and adults aged 75 years and over.

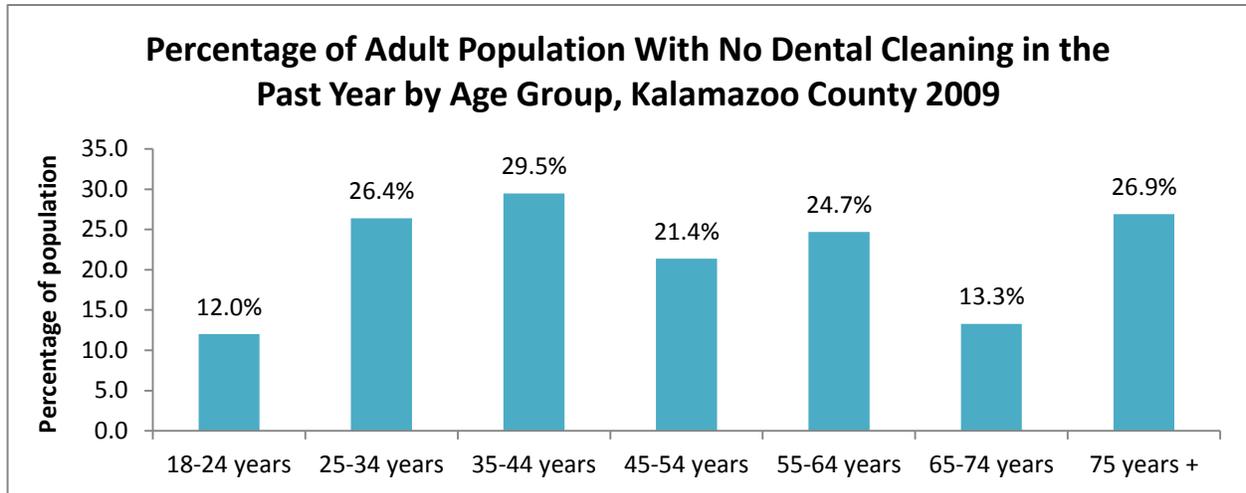
Similar to access to health care indicators, those with without dental insurance, with lower incomes, less education, those who were black, and those who were black and living in the City of Kalamazoo were all less likely to have had their teeth cleaned or to have visited the dentist in the past year.



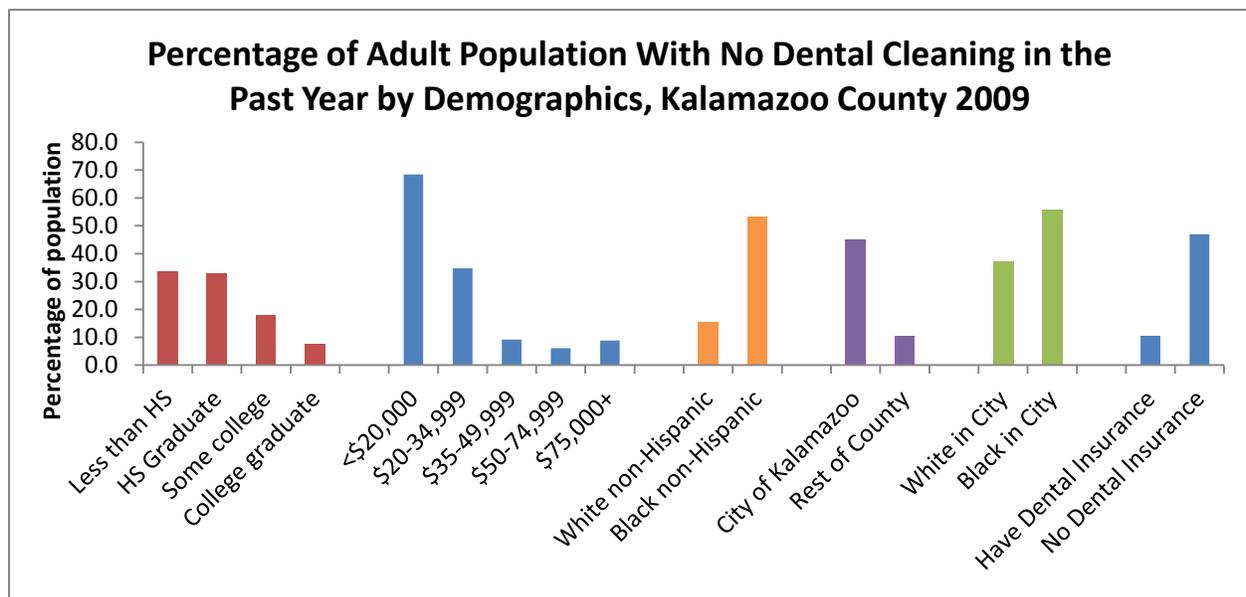
Source: Kalamazoo County 2009 Behavioral Risk Factor Survey



Source: Kalamazoo County 2009 Behavioral Risk Factor Survey

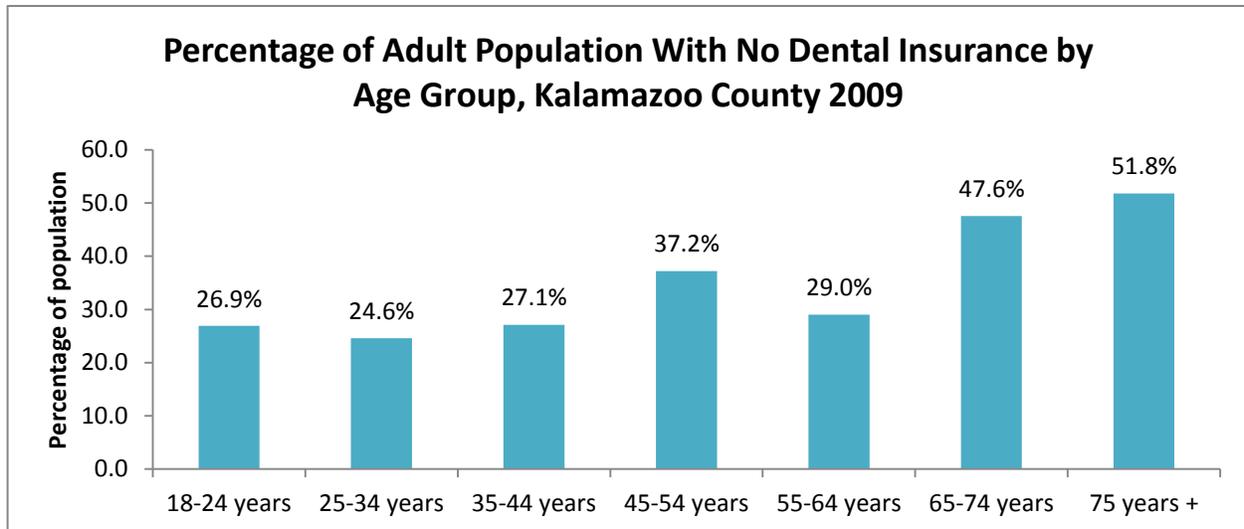


Source: Kalamazoo County 2009 Behavioral Risk Factor Survey

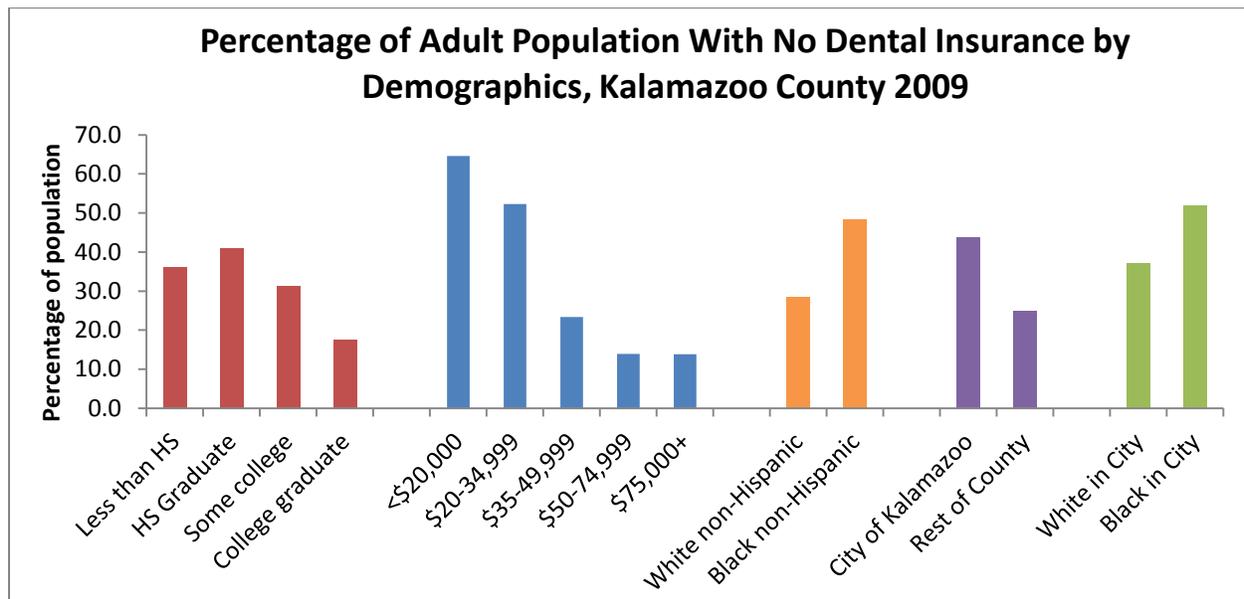


Source: Kalamazoo County 2009 Behavioral Risk Factor Survey

Among all adults in Kalamazoo County, 31.0% did not have dental insurance. The likelihood of having dental insurance decreased with age. As with other access to care indicators, dental insurance was less common among adults with less education, lower incomes, black adults, and individuals living in the City of Kalamazoo.



Source: Kalamazoo County 2009 Behavioral Risk Factor Survey



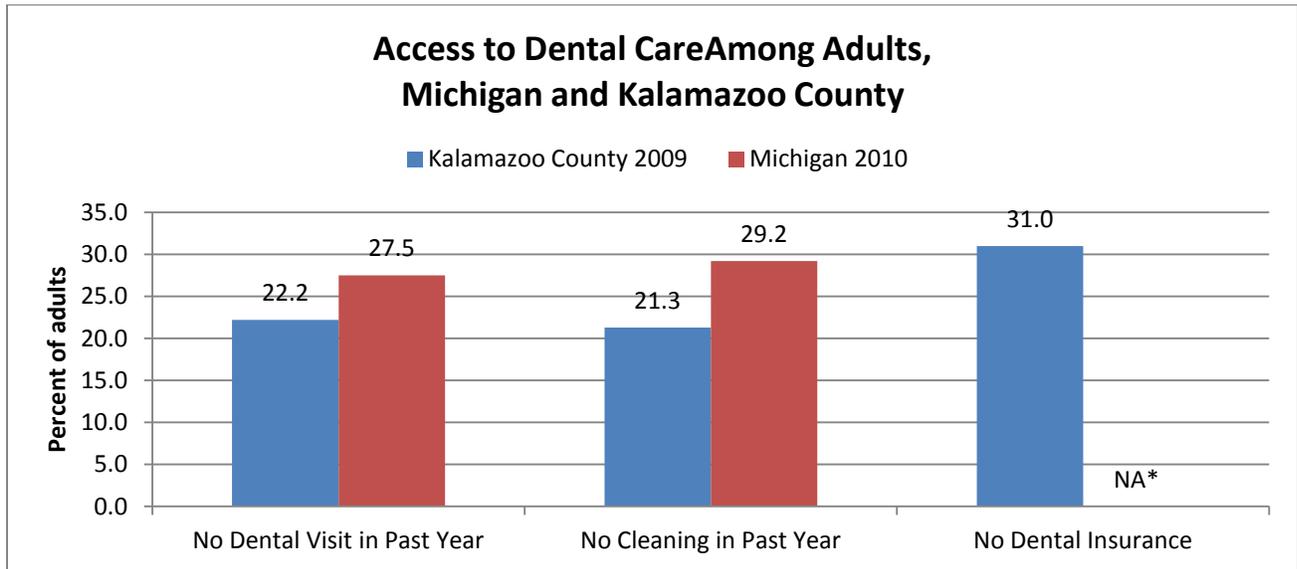
Source: Kalamazoo County 2009 Behavioral Risk Factor Survey

### Access to Dental Health Care, Kalamazoo County 2009

	No Dental Visit in Past Year <sup>a</sup>		No Cleaning in Past Year <sup>b</sup>		No Dental Insurance <sup>d</sup>	
	%	95% C.I.	%	95% C.I.	%	95% C.I.
<b>Total</b>	22.2	(16.5 - 29.2)	21.3	(15.6 - 28.3)	31.0	(23.9 - 39.0)
<b>Age</b>						
18-24 years	11.8	(3.0 - 36.2)	12.0	(3.2 - 36.3)	26.9	(9.5 - 56.3)
25-34 years	25.6	(12.0 - 46.6)	26.4	(12.7 - 46.9)	24.6	(12.9 - 41.9)
35-44 years	28.8	(18.6 - 41.8)	29.5	(19.1 - 42.5)	27.1	(16.9 - 40.5)
45-54 years	26.1	(16.7 - 38.2)	21.4	(13.2 - 32.7)	37.2	(26.5 - 49.3)
55-64 years	20.2	(9.5 - 37.8)	24.7	(12.6 - 42.8)	29.0	(17.3 - 44.3)
65-74 years	19.7	(13.0 - 28.9)	13.3	(8.0 - 21.1)	47.6	(36.3 - 59.2)
75 years +	34.6	(20.6 - 51.9)	26.9	(12.4 - 48.8)	51.8	(37.6 - 65.7)
<b>Gender</b>						
Male	25.6	(16.8 - 36.9)	26.4	(17.4 - 38.0)	33.3	(23.5 - 44.9)
Female	19.5	(12.9 - 28.4)	17.1	(11.1 - 25.4)	29.0	(19.8 - 40.3)
<b>Race</b>						
White non-Hispanic	17.5	(12.4 - 24.3)	15.6	(10.7 - 22.1)	28.6	(21.3 - 37.3)
Black non-Hispanic	49.4	(27.9 - 71.0)	53.1	(31.3 - 73.8)	48.3	(27.3 - 69.9)
<b>Education</b>						
Less than HS	40.3	(12.3 - 76.5)	33.7	(8.5 - 73.5)	36.2	(11.0 - 72.3)
HS Graduate	30.6	(19.5 - 44.5)	32.9	(21.3 - 47.1)	41.0	(28.1 - 55.2)
Some college	18.3	(11.5 - 28.0)	17.9	(11.0 - 27.7)	31.3	(20.8 - 44.1)
College graduate	7.5	(4.6 - 12.0)	7.5	(4.6 - 12.0)	17.5	(11.3 - 25.9)
<b>Income</b>						
<\$20,000	62.5	(44.2 - 77.8)	68.4	(49.7 - 82.5)	64.6	(46.0 - 79.7)
\$20-34,999	41.8	(26.7 - 58.6)	34.8	(20.5 - 52.4)	52.3	(36.0 - 68.1)
\$35-49,999	10.0	(3.7 - 24.4)	9.2	(3.2 - 23.6)	23.4	(9.0 - 48.7)
\$50-74,999	7.3	(3.1 - 16.2)	6.1	(2.4 - 14.6)	13.9	(6.1 - 28.7)
\$75,000+	8.7	(3.5 - 20.1)	8.8	(3.6 - 20.1)	13.8	(6.2 - 27.8)
<b>City/Out-County</b>						
City of Kalamazoo	41.9	(30.2 - 54.5)	45.1	(33.0 - 57.7)	43.9	(32.4 - 56.1)
Rest of County	13.3	(8.5 - 20.1)	10.5	(6.5 - 16.5)	24.8	(16.9 - 34.7)
<b>Within City of Kalamazoo</b>						
White in City	35.8	(22.8 - 51.3)	37.2	(23.7 - 53.0)	37.2	(24.8 - 51.6)
Black in City	51.5	(28.9 - 73.6)	55.7	(32.6 - 76.5)	52.0	(29.5 - 73.8)
<b>Dental Insurance</b>						
Have Dental Insurance	11.5	(7.1 - 18.0)	10.6	(6.3 - 17.3)	--	--
No Dental Insurance	47.1	(34.4 - 60.2)	47.0	(34.0 - 60.3)	--	--
<sup>a</sup> The proportion who reported that they had not visited a dentist or dental clinic for any reason in the previous year. <sup>b</sup> The proportion who reported that they had not had their teeth cleaned by a dentist or dental hygienist in the past year, excluding those who had lost all of their teeth. <sup>c</sup> The proportion who reported that they were missing 6 or more teeth due to tooth decay or gum disease. This excludes teeth lost for other reasons such as injury or orthodontics. <sup>d</sup> The proportion who reported that they do not have any dental insurance coverage.						

Source: Kalamazoo County 2009 Behavioral Risk Factor Survey

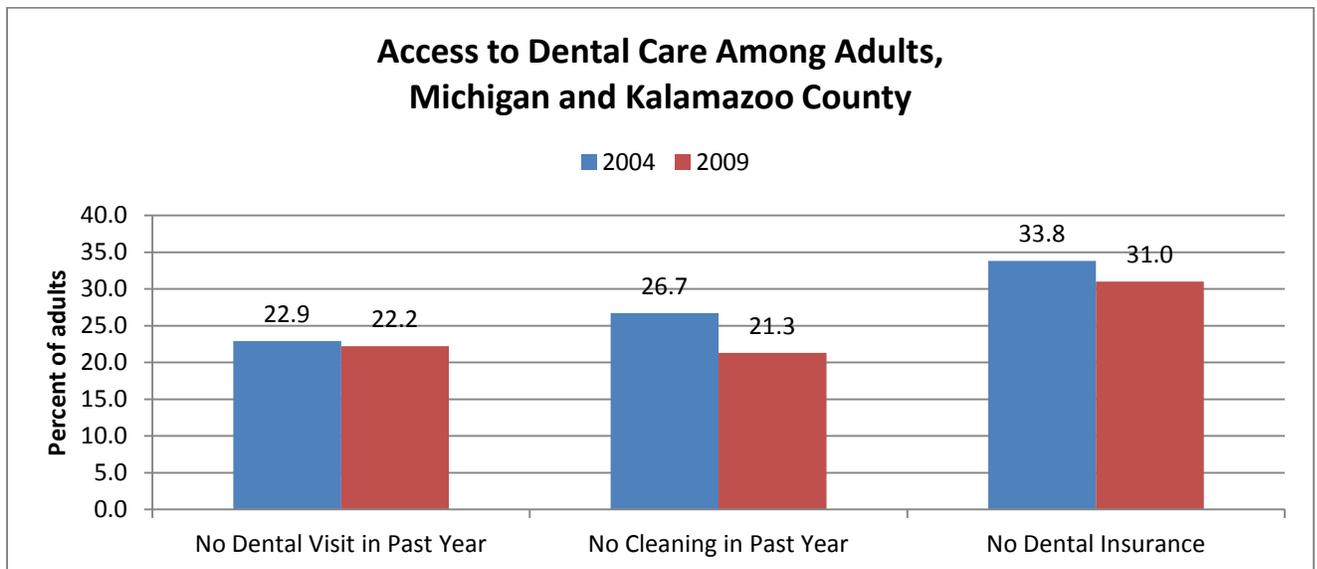
Rates of dental care utilization among adults in Kalamazoo County were slightly better than rates in Michigan, but differences were not statistically significant.



\*Dental coverage was not asked in the Michigan Behavioral Risk Factor Survey

Source: Kalamazoo County 2009 Behavioral Risk Factor Survey and Michigan Behavioral Risk Factor Survey 2010

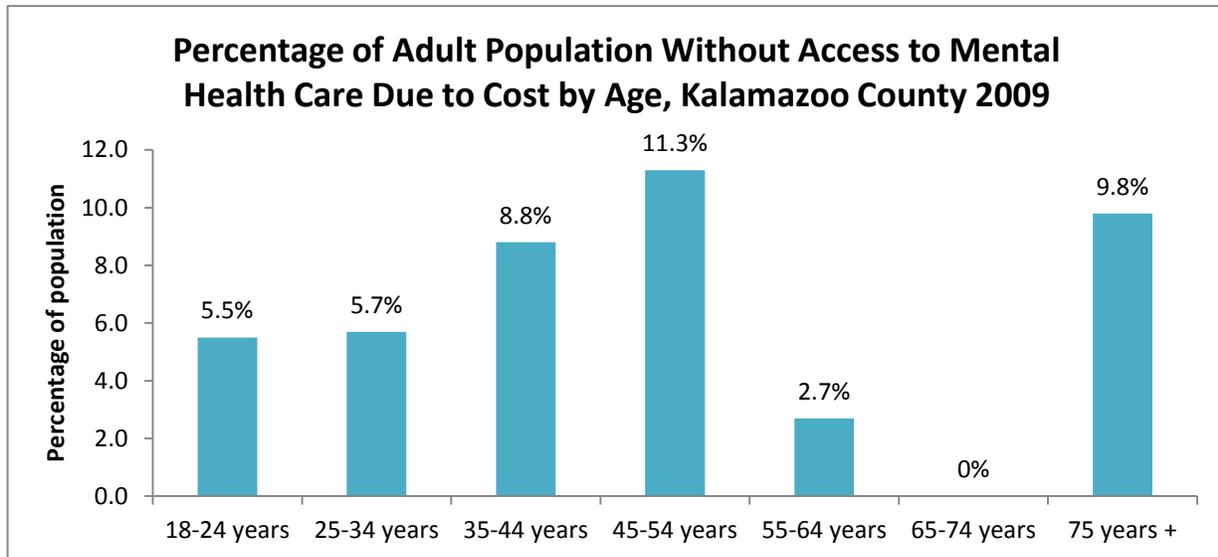
Between 2004 and 2009 (the two survey years in Kalamazoo County in which dental care utilization was asked), rates were of dental care access were similar.



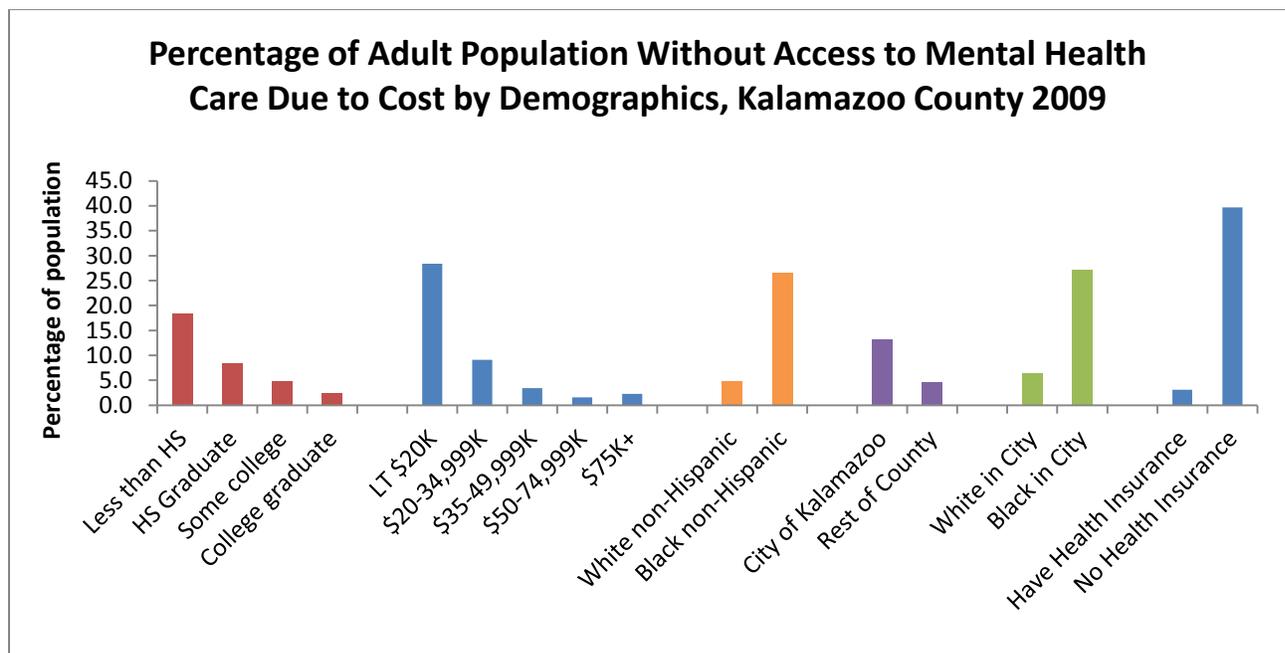
Source: Kalamazoo County Behavioral Risk Factor Survey 2004 and 2009

### 2.2.4 Access to Mental Health Care

In 2009, 7.1% of Kalamazoo County residents went without mental health care due to cost. Large differences in access to mental health care were observed for race, education, income levels, and where the individual lived. Among individuals with less than a high school education, 18.3% reported they did not have access to mental health care in the past year due to cost as compared to 2.4% of college graduates reporting not having access. No clear pattern could be observed when looking at access by age. The age group with the least access to mental health care was 45-54 year olds and the group with the greatest access was 65-74 year olds.



Source: Kalamazoo County 2009 Behavioral Risk Factor Survey



Source: Kalamazoo County 2009 Behavioral Risk Factor Survey

### Access to Mental Health Care, Kalamazoo County 2009

Demographic Characteristics	No Mental Health Care Access During Past 12 Months Due to Cost <sup>a</sup>	
	%	95% C.I.
<b>Total</b>	7.1	(4.0 - 12.4)
<b>Age</b>		
18-24 years	5.5	(0.7 - 31.7)
25-34 years	5.7	(1.6 - 18.3)
35-44 years	8.8	(3.9 - 18.6)
45-54 years	11.3	(5.5 - 22.0)
55-64 years	2.7	(0.5 - 13.7)
65-74 years	0.0	(0.0 - 0.0)
75 years +	9.8	(1.7 - 40.3)
<b>Gender</b>		
Male	6.3	(2.1 - 17.5)
Female	7.8	(4.2 - 14.1)
<b>Race</b>		
White non-Hispanic	4.9	(2.7 - 8.8)
Black non-Hispanic	26.6	(8.2 - 59.3)
<b>Education</b>		
Less than HS	18.3	(4.1 - 53.8)
HS Graduate	8.4	(4.1 - 16.2)
Some college	4.9	(2.1 - 11.0)
College graduate	2.4	(1.0 - 5.7)
<b>Income</b>		
<\$20,000	28.4	(12.6 - 52.2)
\$20-34,999	9.1	(2.5 - 28.0)
\$35-49,999	3.4	(0.5 - 18.9)
\$50-74,999	1.6	(0.4 - 6.1)
\$75,000+	2.3	(0.8 - 6.4)
<b>City/Out-County</b>		
City of Kalamazoo	13.1	(5.8 - 27.1)
Rest of County	4.5	(2.1 - 9.3)
<b>Within City of Kalamazoo</b>		
White in City	6.4	(3.0 - 13.1)
Black in City	27.1	(7.6 - 62.7)
<b>Health Insurance</b>		
Have Health Insurance	3.1	(1.7 - 5.5)
No Health Insurance	39.7	(20.0 - 63.4)
<sup>c</sup> The proportion who reported that in the past 12 months, they could not see a doctor for a mental or emotional problem when they needed to due to the cost.		

Source: Kalamazoo County 2009 Behavioral Risk Factor Survey

Among adults in Kalamazoo County receiving mental health care, 30.7% reported going to their own regular doctor for care. The next most commonly seen providers for mental health care were clergy or spiritual counselors through a place of worship (17.0%), followed by a psychologist, psychiatrist or psychotherapist (12.5%). More than one in three adults (34.6%) receiving care did not have any usual place that they received care.

<b>Place Usually Go For Mental Health Care, Among Adults Who Receive Care</b>		
	<b>%</b>	<b>95% C.I.</b>
Own Regular Doctor	30.7	(22.9 - 39.8)
Psychologist, Psychiatrist or Psychotherapist	12.5	(8.0 - 19.1)
Clergy or Spiritual Counselor Through a Place of Worship	17.0	(8.6 - 30.9)
Community Mental Health Center	1.4	(0.6 - 3.1)
A Hospital Emergency Room	0.2	(0.0 - 0.9)
Urgent Care Center	0.1	(0.0 - 0.4)
Some Other Kind of Place	3.5	(1.5 - 8.1)
No Usual Place	34.6	(23.6 - 47.5)

Source: Kalamazoo County 2009 Behavioral Risk Factor Survey