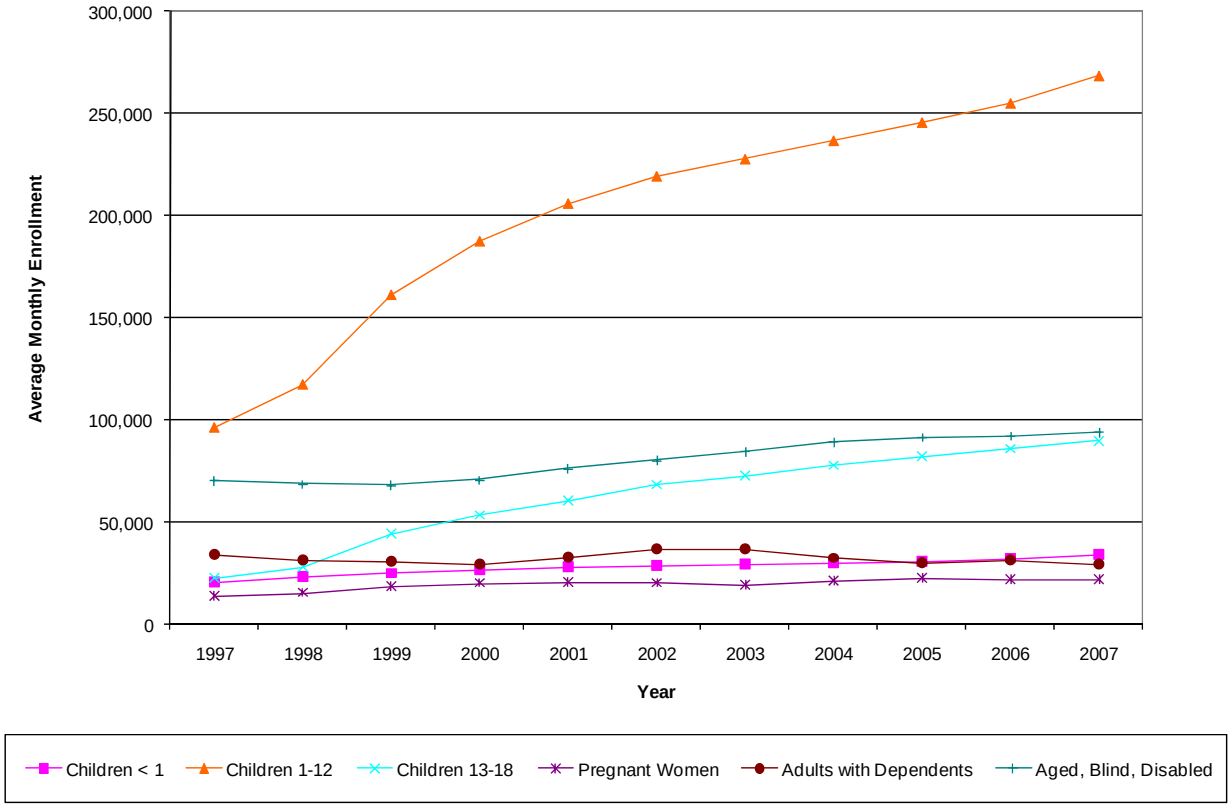
Figure III.3. SoonerCare Enrollment Trends, 1997-2007



Source: MPR analysis of OHCA enrollment records.

because eligible individuals must know about the program, complete application forms, and produce documentation to prove eligibility. [129]

Oklahoma's Medicaid participation rates are compared to the U.S. average in 2000, the only available benchmark. In 2000, the nationwide Medicaid participation rate was estimated to be between 66 and 70 percent. [130] Medicaid participation rates are generally highest for children (74-79 percent), in the middle of the range for adults (56-64 percent), and lowest for the elderly (40-43 percent).

SoonerCare Participation Rates by MEG. In 2000, Oklahoma's estimated SoonerCare participation rates were highest for pregnant women and infants (85 percent and 92 percent

[129] Government Accountability Office. "Means Tested Programs: Information on Program Access Can Be an Important Management Tool." Washington, DC: GAO, 2005.; Congressional Budget Office. "A Detailed Description of CBO's Cost Estimate for the Medicare Prescription Drug Benefit." Washington, DC: CBO, 2004.

[130] GAO. "Means Tested Programs." 2005. Estimated Medicaid participation rates do not include individuals who are institutionalized, but do account for variation in state eligibility rules and for people who may be eligible for only part of the year.

respectively), among the nine MEGs for which reliable estimates could be produced (Table III.19). These groups, as well as children ages 1 to 5, continued to have participation rates exceeding 90 percent in 2006.[131] These estimated participation rates are higher than the national average for 2000, and likely reflect OHCA's concerted outreach and application simplification reforms. The estimated participation rate for children ages 1 to 5 (66 percent) and disabled children (54 percent) were about the same as the U.S. average in 2000, and were slightly higher for adults with dependent children (68 percent) relative to the U.S. overall.

Oklahoma's estimated SoonerCare participation rates in 2000 were less than 50 percent for three groups: (1) adolescents ages 13 to 18 (39 percent), (2) adults with disabilities (43 percent), and (3) elderly (32 percent). While the first two are somewhat lower than national averages, low Medicaid participation among the elderly is consistent with the national average.

Change in SoonerCare Participation Rates, 2000-2006. Estimated participation rates in Oklahoma's SoonerCare program increased for all but one MEG between 2000 and 2006 (Table III.19). Increases were particularly notable for non-disabled children (26 percent to 58 percent greater), and for ABD children and adults (24 percent and 28 percent greater, respectively). There was a smaller increase in the estimated participation rate for pregnant women (5 percent), perhaps because the participation rate was high to start with and hospitals have an incentive to help women apply for assistance in order to receive reimbursement for delivery-related care.

There was, however, a 29 percent decline in the Medicaid participation rate among adults with dependent children from 2000 to 2006, suggesting that OHCA and the Oklahoma Department of Human Services could do more to inform very poor parents (those making less than half of FPL) that they, as well as their children, can qualify for Medicaid even if they do not receive public assistance. And, while the participation rate for the elderly increased by 10 percent from 2000 to 2006, it is still extremely low—only 35 percent.

Participation Rates by County. While estimated SoonerCare participation rates in all of the eligibility categories except adults with dependent children improved from 2000 to 2006 for Oklahoma as a whole, not all 10 regions within the state improved equally (data not shown). For example, the SoonerCare participation rate increased for low-income infants below age 1 in seven regions (North Central, South Central, East, Tulsa, Southeast, East Central, and Northeast), but dropped in three regions (Northwest, Southwest, and South Central West). Estimated participation rates for all groups of children ages 1 to 18 increased in all but one of the 10 regions. (The exception was the Southwest, for children ages 1 to 5.) Despite statewide improvement in estimated participation rates among low-income pregnant women over time, the rates declined in five regions: Northwest, Southwest, South Central West, Northeast, and

[131] Participation rates exceeding 100 percent do not reflect actual participation above 100 percent (that is, fraud). Participation rates can exceed 100 percent for populations that have a high enrollment rate because U.S. Census data are survey data that have both sampling and non-sampling errors. The rate of error in the estimate increases with smaller populations. In addition the income level used for the qualifying population for infants was the annual income of the parents, but actual enrollment would use income for a shorter time frame—thus leading to more variability in the eligibility estimate for infants than for other groups.

Table III.19. Estimated Medicaid Participation Rates in Oklahoma, 2000 and 2006

	2000			2006			Change 2000-2006
	OHCA Enrollment	Eligible Oklahoma population	Participation Rate (%)	OHCA Enrollment	Eligible Oklahoma population	Participation Rate (%)	
Children below age 1	26,698	28,964 ± 539	92 ± 2	32,186	27,807 ± 1,170	116 ± 5	26%
Children, age 1-5	90,141	135,836 ± 1,149	66 ± 1	124,862	135,499 ± 2,695	92 ± 2	39%
Children, age 6-12	97,171	178,887 ± 1,310	54 ± 1	129,986	183,830 ± 3,795	71 ± 3	30%
Children, age 13-18	53,419	135,999 ± 1,149	39 ± 1	85,959	138,462 ± 2,798	62 ± 1	58%
Pregnant Women	20,102	23,647 ± 487	85 ± 2	21,929	24,546 ± 1,240	89 ± 5	5%
Parents with dependent children (<age 18)	29,264	42,831 ± 654	68 ± 1	31,244	64,456 ± 2,351	48 ± 2	-29%
ABD, <age 19	8,186	15,071 ± 390	54 ± 2	12,272	18,185 ± 1,101	67 ± 5	24%
ABD, ages 19-64	40,353	94,147 ± 962	43 ± 1	55,677	101,485 ± 2,553	55 ± 1	28%
ABD, age 65+	22,213	70,430 ± 835	32 ± 1	24,306	69,789 ± 1,799	35 ± 1	10%
TOTAL	**387,545**	**725,812 ± 2,407**	**53 ± 1**	**518,419**	**764,059 ± 8,086**	**68 ± 1**	**27%**

Source: MPR analysis of OHCA enrollment data and U.S. Census data.

Notes: 1. ABD = Aged, Blind, or Disabled.
2. Enrollment is average of June and December enrolled each year.
3. Margin of error represents a 90 percent confidence level around the estimate. The margin of error is higher for estimates in 2006 relative to 2000, because the sample size in 2006 was smaller (81,350 households in 2000 vs. 16,074 households in 2006).

Oklahoma City. Uneven progress throughout the state suggests areas that might be a focus for targeted outreach efforts to the eligibility groups that have not shown improvements in participation rates.

c. Coverage of Low-Income Individuals—Oklahoma Relative to U.S.

Increased enrollment in the Oklahoma SoonerCare program led to a corresponding increase in the percentage of the non-elderly population covered by Medicaid. The percent of Oklahoma's population below age 65 who reported having Medicaid coverage increased from 7.7 percent in 1999 to 15.4 percent in 2007.[132] Nonetheless, the overall proportion of the Oklahoma population under age 65 who reported being uninsured changed very little, or even increased, over this period, measuring 18.2 percent in 1999 and 20.3 percent in 2007. This pattern in the uninsurance rate occurred despite increasing Medicaid coverage, because the proportion of people with any private coverage declined significantly, from 71.3 percent in 1999 to 62.1 percent in 2007.

Because insurance coverage trends for the entire population under age 65 mask what is happening to the low-income population, we conducted an analysis of coverage rates among sub-groups of the Oklahoma population earning up to 200 percent of FPL. For all non-elderly individuals below this income threshold, the proportion covered by Medicaid increased from 26 percent in 1995-96 to 32 percent in 2006-07, bringing Oklahoma close to the national average of 34 percent in 2006-07 (Tables III.20 and III.21).[133]

Expanded Medicaid coverage in Oklahoma contributed to an overall decline in the percentage of the low-income non-elderly population *lacking* insurance. This rate decreased from 33 percent in 1995-96 (slightly higher than the U.S. average) to 27 percent in 2006-07, five percentage points less than the U.S. average of 32 percent. But the trends in coverage over this period are substantially different for children and adults.

[132] U.S. Census Bureau. "Current Population Survey, Annual Social and Economic Supplements, Historical Health Insurance Tables, Table HIA-6. Health Insurance Coverage Status and Type of Coverage by State—Persons Under 65: 1999 to 2007." www.census.gov/hhes/www/hlthins/historic/hihistt6.xls. Accessed October 3, 2008. Data before 1999 is not comparable to data from subsequent years because the 2005 and 2006 Current Population Survey (CPS) Annual Social and Economic Supplement (ASEC) data were revised in March 2007 to improve the consistency of estimates for the insured and uninsured. Data for 1999 to 2003 were revised to make them consistent with the revision to the 2005 and 2006 estimates, but data before 1999 have not been revised and so are not directly comparable. Hence, trends from 2000-01 to 2006-07 are more reliable.

[133] Tables III.20 and III.21 report two-year averages of the uninsurance rate because these measures are considered more stable than one-year statistics, due to sample sizes in the annual CPS. CPS is known to undercount Medicaid enrollment by as much as 30 percent; for more information, see M. Davern, J. A. Klerman, and J. Ziegenfuss. "Medicaid Under-reporting in the Current Population Survey and One Approach for a Partial Correction." www.sph.umn.edu/img/assets/18528/CPSMedicaid_Adj_Oct2007.pdf. Accessed October 1, 2008.

Table III.20. Source of Insurance for Non-Elderly Individuals in Families Earning Up to 200 Percent of FPL: Oklahoma and U.S., 1995-2007

	1995-1996		2000-2001		2006-2007	
	OK	US	OK	US	OK	US
Children ages 0-18 (under age 19)						
Private	36%	38%	33%	39%	31%	33%
Medicaid	25%	43%	39%	45%	56%	53%
All other Public	9%	4%	10%	4%	6%	3%
IHS Only	5%	0%	5%	0%	3%	0%
Not covered	29%	23%	21%	20%	13%	18%
Adults, ages 19-64						
Private	40%	40%	38%	41%	35%	35%
Medicaid	11%	21%	12%	19%	15%	21%
All other public	14%	8%	14%	9%	13%	10%
IHS Only	6%	0%	5%	0%	8%	0%
Not covered	35%	37%	38%	37%	37%	40%
Total Under age 65						
Private	39%	39%	36%	41%	34%	34%
Medicaid	17%	30%	23%	29%	32%	34%
All other public	12%	6%	12%	7%	10%	7%
IHS Only	6%	0%	5%	0%	6%	0%
Not covered	33%	31%	31%	30%	27%	32%

Source: MPR analysis of U.S. Census Bureau, CPS data 1995-1996, 2000-2001, and 2006-2007.

Notes: 1. IHS = Indian Health Service.
2. All other public = Veterans Affairs, Tricare, Civilian Health and Medical Program of the Uniformed Services (CHAMPUS), Medicare.
3. Data shown represent the average of the two years in the header column.
4. Percents shown do not add to 100% as persons may be enrolled in more than one insurance type during the year.

Table III. 21. Change in Source of Insurance Coverage for Non-Elderly Individuals in Families Earning Up to 200 Percent of FPL, Oklahoma and U.S., 1995-2007

	Percent Change in Proportion of Total					
	1995-1996 to 2001-2002		2001-2002 to 2006-2007		1995-1996 to 2006-2007	
	OK	US	OK	US	OK	US
Children (under age 19)						
Private	-10%	4%	-5%	-19%	-14%	-13%
Medicaid	57%	4%	41%	16%	122%	24%
All other Public	10%	8%	-40%	-30%	-34%	-17%
IHS Only	-4%	-8%	-36%	-23%	-39%	-25%
Not Covered	-28%	-14%	-37%	-11%	-55%	-22%
Adults 19 to 64						
Private	-7%	4%	-6%	-17%	-12%	-11%
Medicaid	14%	-10%	27%	11%	44%	1%
All other Public	3%	11%	-9%	5%	-6%	17%
IHS Only	-14%	-6%	40%	20%	21%	17%
Not Covered	8%	-1%	-3%	8%	5%	7%
Total under 65						
Private	-8%	4%	-6%	-18%	-13%	-12%
Medicaid	39%	-3%	35%	13%	89%	11%
All other Public	6%	12%	-19%	-0%	-15%	11%
IHS Only	-10%	-7%	10%	8%	-1%	1%
Not Covered	-5%	-4%	-12%	4%	-16%	0%

Source: MPR analysis of U.S. Census Bureau, CPS data 1995-1996, 2000-2001, and 2006-2007.

Notes: 1. IHS = Indian Health Service.
2. All other public = Veterans' Affairs, Tricare, Civilian Health and Medical Program of the Uniformed Services (CHAMPUS), Medicare.
3. Data shown represent the average of the two years in the header column.
4. Percents shown do not add to 100% as persons may be enrolled in more than one insurance type during the year.

- ***Low-Income Children.*** The results show steady and significant increases in the proportion of low-income children covered by Medicaid from 1995-96 to 2006-2007, rising from 25 percent in the mid-1990s to 56 percent in 2006-07. There is a corresponding drop in the percentage of low-income children who were uninsured, from 29 percent in 1995-96 to just 13 percent in 2006-07. Because private insurance coverage for low-income children declined over the 12-year period, from 36 percent to 31 percent, the uninsured rate for this group would have grown without the considerable increase in Medicaid coverage.

- ***Low-Income Adults.*** Among Oklahoma adults ages 19 to 64 in families up to 200 percent of FPL, the percentage receiving Medicaid stayed about the same between 1995-96 and 2000-01 (11 to 12 percent). In the United States as a whole, this proportion decreased from 21 to 19 percent, largely due to the passage of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996, which de-linked Medicaid and food-stamp eligibility from receipt of welfare. However, after 2000 the proportion of low-income adults in Oklahoma and in the overall U.S., receiving Medicaid increased, as steps were taken to ensure that those eligible for Medicaid continued to receive benefits when they left welfare, and as many states expanded Medicaid coverage to low-income parents, and even to childless adults.

  While some low-income adults in Oklahoma gained Medicaid coverage between 2000-2001 and 2006-07, increasing the percentage with Medicaid from 12 percent to 15 percent, this remained below the national average of 21 percent in 2006-07. Hence the uninsured rate among low-income adults remained essentially the same over this period (37 to 38 percent). The launch of the Insure Oklahoma program in 2005 and 2006 was designed to address the high rate of uninsurance among low-income adults, but due to slow program start-up, only about 5,600 adults had enrolled in the program at the end of 2007, not yet enough to significantly affect the uninsurance rate among low-income adults.[134]

C. SOONERCARE CHOICE: QUALITY MEASURES AND MEMBER SATISFACTION

Any health care delivery system that shifts from a fee-for-service model to a model of full or partial capitation requires close surveillance of quality of care. Monitoring of care outcomes and satisfaction for SoonerCare Choice members is important because capitation payment approaches introduce incentives to limit the volume or intensity of services provided that are covered by the capitation contract. Therefore, to ensure that outcomes of care and member satisfaction have been maintained, this section reviews recent data for SoonerCare Choice members' care outcomes and their satisfaction with care received. OHCA has reported outcome

[134] Enrollment in Insure Oklahoma grew significantly in 2008; as of September 2008, total enrollment was over 14,000 (*Insure Oklahoma Fast Facts, http://www.oepic.ok.gov/WorkArea/showcontent.aspx?id=3304, September 2008)* Even with this growth, however, the numbers of adults who became newly insured are unlikely to lower the uninsurance rate significantly.

measures and member satisfaction in prior reports; we incorporate and summarize this data here.[135]

1. Data Sources and Methods

For purposes of this evaluation, we use OHCA-reported data for 2001-2007 from the National Center for Quality Assurance's (NCQA) Healthcare Effectiveness Data and Information Set (HEDIS). The HEDIS measures are benchmarked with national Medicaid managed care means and can be used to estimate changes in specific measures of healthcare utilization for SoonerCare Choice members between 2001 and 2007.[136] Analogous data on SoonerCare Plus members were not available for our analysis, although OHCA itself has reported comparisons between the Choice and Plus programs using several of these quality measures in its 2003 "Minding our P's and Q's" report.[137] We also summarize findings from reports on the Consumer Assessment of Healthcare Providers and Systems (CAHPS) and the Experience of Care and Health Outcomes (ECHO) surveys conducted between 2003 and 2007. All CAHPS and ECHO data provided by OHCA were also limited to SoonerCare Choice members.

To analyze HEDIS measures for the SoonerCare Choice population, we assess time trends and compare SoonerCare Choice members' measures to Medicaid managed care means, published by NCQA. We note, however, that the national benchmarks reported by NCQA are derived from information reported by a subset of Medicaid managed care organizations that voluntarily submit their HEDIS scores and are not reflective of all Medicaid managed care enrollees. For example, the 2006 HEDIS National Medicaid means reflect data submissions from 139 Medicaid managed care plans. PCCM plans like SoonerCare Choice are not as tightly organized as MCOs and therefore have fewer "levers" to impact primary-care-based outcomes such as those reflected in HEDIS measures. Since NCQA data are presented in an aggregated form, we do not test for statistical significance between SoonerCare Choice and NCQA-reported Medicaid averages.

We note similar limitations to comparing SoonerCare Choice member scores and Medicaid CAHPS benchmark scores. First, Medicaid benchmark scores are reported in the aggregate; significance testing between the individual-level data and the aggregated benchmark scores is not appropriate. Second, several of the CAHPS benchmark measures are aimed at assessing enrollees' satisfaction with the performance of the health plan as a whole, which is more relevant

[135] OFMQ. "SoonerCare Choice Final Technical Report of CAHPS Survey Findings: Medicaid Adult Survey." Oklahoma City, OK: OFMQ, March 2006; OFMQ. "SoonerCare Choice Final Technical Report of ECHO Survey Findings: Medicaid Child Survey." Oklahoma City, OK: OFMQ, March 2006.; The Myers Group. "CAHPS 2007 Medicaid Child Survey, Final Report." Snellville, GA: The Myers Group, 2007.; The Myers Group. "ECHO 2007 Behavioral Health Member Satisfaction Survey, Final Report," Snellville, GA: The Myers Group, 2007.

[136] Data were provided by OHCA for the years 2001–2007. HEDIS measures were computed prior to 2001 but are not included in this analysis. We note that the HEDIS data in this report were calculated using HEDIS measure specifications but do not imply data were audited by the NCQA.

[137] OHCA. "Minding our Ps and Qs: Performance and Quality for Oklahoma SoonerCare Programs." www.ohca.state.ok.us/reports/pdflib/pq_2003.pdf. Accessed October 14, 2008.

to MCOs than to PCCM programs like SoonerCare Choice. Last, reporting of data is voluntary and may not be representative of all or most managed Medicaid programs. Therefore, we believe it is generally more useful to measure SoonerCare Choice trends over time rather than to make comparisons to external benchmarks. Nonetheless, we include some CAHPS national benchmark comparisons, focusing on measures that are most relevant to a PCCM program, like satisfaction with individual providers. No national ECHO database is available for benchmarking purposes.

2. Results

a. HEDIS Measures

Table III.22 displays the SoonerCare Choice program's relative performance across a broad array of HEDIS measures over time, when compared with the yearly HEDIS national Medicaid mean for each measure. HEDIS national Medicaid means were available for 2001 to 2006. Measures in the upper left quadrant of the table indicate a SoonerCare Choice measure lags behind the national Medicaid mean for most or all years measured and demonstrate an overall trend of improvement. Measures in the upper right quadrant of the table either meet or exceed the national benchmark during the measurement period and also demonstrate an overall trend of improvement over the measurement period.

As indicated by Table III.22, all HEDIS measures reported by OHCA demonstrate a trend of improving performance over the measurement period. Further, five of the 19 measures (26 percent) consistently met or exceeded the national benchmark. Fourteen measures showed improvement over time but were consistently below the national Medicaid benchmark. Figures B.1 – B.19 (Appendix B) trend SoonerCare Choice performance for each of the 19 HEDIS measures.

The average percentage improvement for the 8 measures tracked between 2001 and 2007 was 18.6 percent while the average improvement for the 10 measures tracked between 2003 and 2007 was 36.7 percent.[138]The largest improvements occurred for a diabetes measure followed between 2003 and 2007—Annual Eye Exam (86.5 percent)—and for the Annual Child Health Checkup (ages 3 to 6 years) measure, which improved 62.2 percent between 2001 and 2007. The smallest improvements were for primary care provider visits among those 12 to 19 years old (3.5 percent improvement) and those ages 7 to 11 (5.3 percent improvement), with both measures being reported between 2003 and 2007. Similarly, the percentage of adults ages 45 to 64 who accessed preventive or ambulatory care showed marginal improvement (6 percent) between 2001 and 2007.

[138] Nephropathy screening is excluded from our calculation of improvement over time calculation as this measure changed definition in the 2006 measurement year.

Table III.22. OHCA HEDIS Measure Performance Over Time (2001 – 2007) and in Comparison to National Medicaid Means

Performance Over Time (2001-2007)	OHCA Performance (2001–2007) Compared to Yearly National Medicaid Mean (2001–2006)	
	Worse	Equivalent or Better
Improving	• Mammography • Cervical CA Screen • Adult (Age 20-44) Access to Prev/Amb. Care • EPSDT (3-6 years) • PCP Visit (25 months–6 years) • PCP Visit (7–11 years) • PCP Visit (12–19 years) • Annual A1c Test • Annual LDL-C Test • Annual Eye Exam • Annual Child Health Checkup (Adolescent) • Appropriate Asthma Medications (Age 5-9) • Appropriate Asthma Medications (Age 10-17) • Appropriate Asthma Medications (Age 18–56)	• Dental Visits < 21 years • EPSDT (0-15 months) • PCP Visit (12-24 Months) • Adult (Age 45-64) Access to Prev/Amb Care • Nephropathy Screening
Declining	—	—

Source: OHCA.

Notes: 1. Differences presented in this table do not imply statistically significant differences.
2. The following HEDIS indicators have been reported since 2003: Cervical CA screen, Mammography, Annual Child Health Adolescent Checkup (Adolescent), PCP Visit (Ages 12-19), HbA1c testing, LDL-C testing, Annual Eye Exam, Nephropathy screening, Asthma Medication (3 measures).

b. SoonerCare Choice Member Satisfaction

OHCA SoonerCare Choice members' satisfaction with care has been assessed since 1997, although we review data from only the 2003-2007 period.[139] For this analysis, we reviewed CAHPS reports for SoonerCare Choice members' satisfaction with care for adults (2003 and 2005) and for children (2006 and 2007).[140] In addition to the CAHPS surveys, the ECHO survey was administered to assess behavioral healthcare for both adults (2006) and children (2005) in SoonerCare Choice.[141] For this report, we summarize the main findings from these studies to provide additional context regarding the health and well-being of SoonerCare Choice members.

Satisfaction with Health Care and Health Care Providers

Adults. CAHPS surveys were administered to SoonerCare Choice adults in 2003 and 2005. As shown in Table III.23, there were small changes in adult satisfaction ratings between 2003 and 2005, but these changes were not statistically significant.

Looking just at the measures where there is likely to be greater comparability between PCCM and MCO programs, approximately three-fourths of SoonerCare Choice members ranked their overall health care and their personal health care providers (doctors, nurses, specialists) at 7 or higher on a scale of 10. Approximately 80 percent said that getting needed care was not a problem, or only a small problem, and that their doctors always or usually communicated well. Two-thirds said they always or usually got needed care quickly.

For each of the measures, the 2005 SoonerCare Choice results were below the 2005 national Medicaid CAHPS managed care benchmark (Table III.23). SoonerCare Choice adult responses were closest to the national benchmark in the area of access to care, with 80 percent reporting "no problem or a small problem" getting needed care, compared with 86 percent for the national Medicaid population. SoonerCare Choice responses were similarly close to the national benchmark in enrollees' ratings of their experience in getting care quickly and how well their doctors communicate. They were a bit further below the national benchmark in their overall rating of their doctors, nurses, and specialists, and in their overall rating of their health care.

[139] Some of the CAHPS results from earlier periods are summarized on pp. 23-30 in OHCA, "Minding our Ps and Qs: Performance and Quality for Oklahoma SoonerCare Programs." www.ohca.state.ok.us/reports/pdflib/pq_2003.pdf. Accessed October 14, 2008.

[140] OFMQ. "SoonerCare Choice Final Technical Report of CAHPS Survey Findings Medicaid Adult Survey." Oklahoma City, OK: OFMQ, March 2006; The Myers Group. "SoonerCare Choice CAHPS 2007 Medicaid Child Survey, Final Report." Snellville, GA: The Myers Group, 2007.

[141] OFMQ. "SoonerCare Choice Final Technical Report of ECHO Survey Findings Medicaid Child Survey," March 2006; The Myers Group. "SoonerCare Choice ECHO 2007 Behavioral Health Member Satisfaction Survey, Final Report," 2007.

Table III.23. SoonerCare Choice CAHPS Adult Surveys and Comparison with National Medicaid Benchmarks

Measure	2003 OHCA Rate	2005 OHCA Rate	2004-2005 National Benchmark (76 plans)
Overall Rating of Personal Doctor (7-10)	79%	77%	86%
Overall Rating of Specialist (7-10)	79%	73%	83%
Overall Rating of Health Care (7-10)	73%	69%	83%
Overall Rating of Health Plan (7-10)	64%	65%	80%
Getting Needed Care (Not a Problem/Small Problem)	79%	80%	86%
Getting Care Quickly (Usually/Always)	66%	65%	72%
How Well Doctors Communicate (Usually/Always)	82%	80%	86%
Courteous and Helpful Office Staff (Usually/Always)	85%	82%	88%
Customer Service (Not a Problem/Small Problem)		83%	91%

Source: OHCA.

Note: The CAHPS® Database report contained data from 2004 and 2005 survey administrations, while the 2005 SoonerCare Choice survey was based on collected survey data between September 2005 and February 2006, which was after the data for the national benchmarks had been compiled.

Children. CAHPS surveys for SoonerCare Choice children were administered in 2006 and 2007. Since the small changes between the results in the two years were not statistically significant, only the 2007 results are shown in Table III.24. Looking just at the measures that are most relevant for PCCM programs, well over half of respondents gave rankings of 9 or 10 to their overall health care and their personal health care providers. Getting needed care and getting it quickly was generally not a problem, as with adults.

Satisfaction ratings for SoonerCare Choice children were in most cases similar to those reported nationally for Medicaid populations in the CAHPS benchmarks, although SoonerCare Choice members consistently reported lower satisfaction. The largest difference was in the percentage of SoonerCare Choice members stating they always received care quickly (46 percent for SoonerCare Choice vs. 57 percent for the national Medicaid average). There was a similar gap in the overall rating of health care for SoonerCare Choice children and in the ratings of their personal doctor. The smallest difference was for respondents reporting that getting needed care was not a problem, with 72 percent of SoonerCare Choice members reporting this level of access, compared with 74 percent nationally.

Overall, from 2003 to 2007, a large proportion of SoonerCare Choice members appeared to be satisfied with the care they received, and most gave their providers high ratings. Although SoonerCare Choice members were below the national average on most of these measures, PCCM programs are at somewhat of a disadvantage in these comparisons with the MCO-dominated national CAHPS benchmarks.

Table III.24. SoonerCare Choice CAHPS Child Surveys and Comparison with National Medicaid Benchmarks

Measure	2007 OHCA Rate	2006 National Benchmark Rate
Overall Rating of Personal Doctor (9-10)	57%	66%
Overall Rating of Specialist (9-10)	58%	60%
Overall Rating of Health Care (9-10)	54%	66%
Overall Rating of Health Plan (9-10)	53%	62%
Getting Needed Care (Not a problem)	72%	74%
Getting Care Quickly (Always)	46%	57%
How Well Doctors Communicate (Always)	66%	71%
Courteous and Helpful Office Staff (Always)	68%	74%
Customer Service (Not a problem)	74%	75%

Source: OHCA.

Satisfaction with Behavioral Health and Behavioral Health Care Providers

We examined OHCA-supplied reports of ECHO data from 2003 to 2007 for changes in satisfaction with behavioral health care providers. Table III.25 provides a summary of the results for children, and Table III.26 summarizes the results for adults. Satisfaction with behavioral care for children was assessed in 2003 and 2005; care for adults was assessed in 2004 and 2007. While there were differences between the two years in the surveys, the differences were not statistically significant. Again, overall satisfaction appeared to be high. As noted earlier, there is no national benchmark for the ECHO survey.

D. SOONERCARE FINANCIAL OUTCOMES

Facing skyrocketing health care costs in the early 1990s, Oklahoma turned to managed care to help control costs and introduce greater predictability into the budgeting processes. Thus, the degree to which OHCA has successfully moderated the growth in per-member expenditures is an important dimension of program performance. To assess this program outcome, we tracked per-member costs over time within key eligibility groups (adults, children, aged, and disabled) as reported in the annual *Medicare and Medicaid Statistical Supplement* released by the Centers for Medicare and Medicaid Services (CMS). Because health care program expansion competes with other state expenditure priorities for limited revenues, OHCA's financial performance also has an impact on the long-term affordability of the current benefit package and the sustainability of planned expansions. Therefore, we used data from the National Association of State Budget Officers (NASBO) to examine total SoonerCare expenditures relative to Oklahoma's budget constraints over time and assess potential bounds on expenditure growth. For both analyses we include comparisons between Oklahoma and selected other states to provide perspective on Oklahoma's relative level of expenditures.

Table III.25. 2003 – 2005 SoonerCare Choice ECHO Ratings (Children)

Measure	2003 SC	2005 SC	2003–2005 % Change
Getting treatment quickly (Usually/Always)	70%	62%	-11%
Clinicians communicate well (Usually/Always)	89%	84%	-6%
Perceived improvement (Same/Better)	94%	93%	-1%
Information about treatment options (Yes)	59%	60%	2%
Informed of medication side effects (Yes)	77%	78%	1%
Given information to manage condition (Yes)	72%	66%	-8%
Given information on patients rights (Yes)	94%	87%	-7%
Amount helped by treatment (A lot)	42%	41%	-2%
Average rating of counseling or treatment (0-6=1; 7-8=2; 9-10=3)	2.2	2.1	-5%

Source: OHCA.

Table III.26. 2004 – 2007 SoonerCare Choice ECHO Ratings (Adults)

Measure	2004 SC	2007 SC	2004-2007 Change
Getting treatment quickly (Usually/Always)	66%	65%	-2%
Clinicians communicate well (Usually/Always)	83%	80%	-4%
Clinicians explained things in a way you could understand (Usually/Always)	84%	79%	-6%
Clinicians showed respect for what you had to say (Usually/Always)	85%	81%	-5%
Clinicians spent enough time with you (Usually/Always)	81%	77%	-5%
Informed about treatment options (Yes)	47%	49%	4%
Told about self-help or support groups (Yes)	44%	47%	7%
Given information about different kinds of counseling or treatment (Yes)	49%	51%	4%
Informed about medication side effects (Yes)	72%	76%	6%
Rating of counseling or treatment (8-10)	65%	59%	-9%

Source: OHCA.

1. Per-Member Costs

a. Data Sources and Methods

We present per-member Medicaid expenditures by basis of eligibility group (aged, disabled, adults, and children)[142], as calculated by CMS and reported in the annual *Medicare and Medicaid Statistical Supplement* from 1997 to 2008. Since the *Statistical Supplement* calculates per-member costs in a standardized way, we are able to compare Oklahoma's expenditures and trends with those of other states. Only payments that could be associated with an individual member (such as physician fees, long-term care facility billings, and prescription drug expenditures) were considered in computing these measures; payments such as disproportionate share payments to hospitals and lump-sum provider reimbursement adjustments were excluded. Though comparability across states is improved by excluding such payments and by calculating expenditures within eligibility groups, per-member expenditures continue to reflect differences across states in member utilization rates, provider reimbursement levels, and benefit package generosity.

In Figures III.4 and III.5 we compare Oklahoma's per-member expenditures and growth rates to the national average, as well as to the averages within three groups of states with geographic or program structure similarities. These groupings were determined by the states' Medicaid managed care system over the past decade: primary care case management (PCCM), managed care organizations (MCOs), or a combination of PCCM and MCOs. As a point of comparison, we also include a fourth group, of states that continue to rely primarily on fee-for-service (FFS).[143] Capitated premiums for enrollees in Medicaid MCOs were first included as expenditures in fiscal year 1998; however, data were unavailable for Oklahoma that year. Therefore, while Figures III.4 and III.5 show trends from fiscal years 1996 through 2005, we focus the discussion on per-member expenditure trends from fiscal years 1999 through 2005.

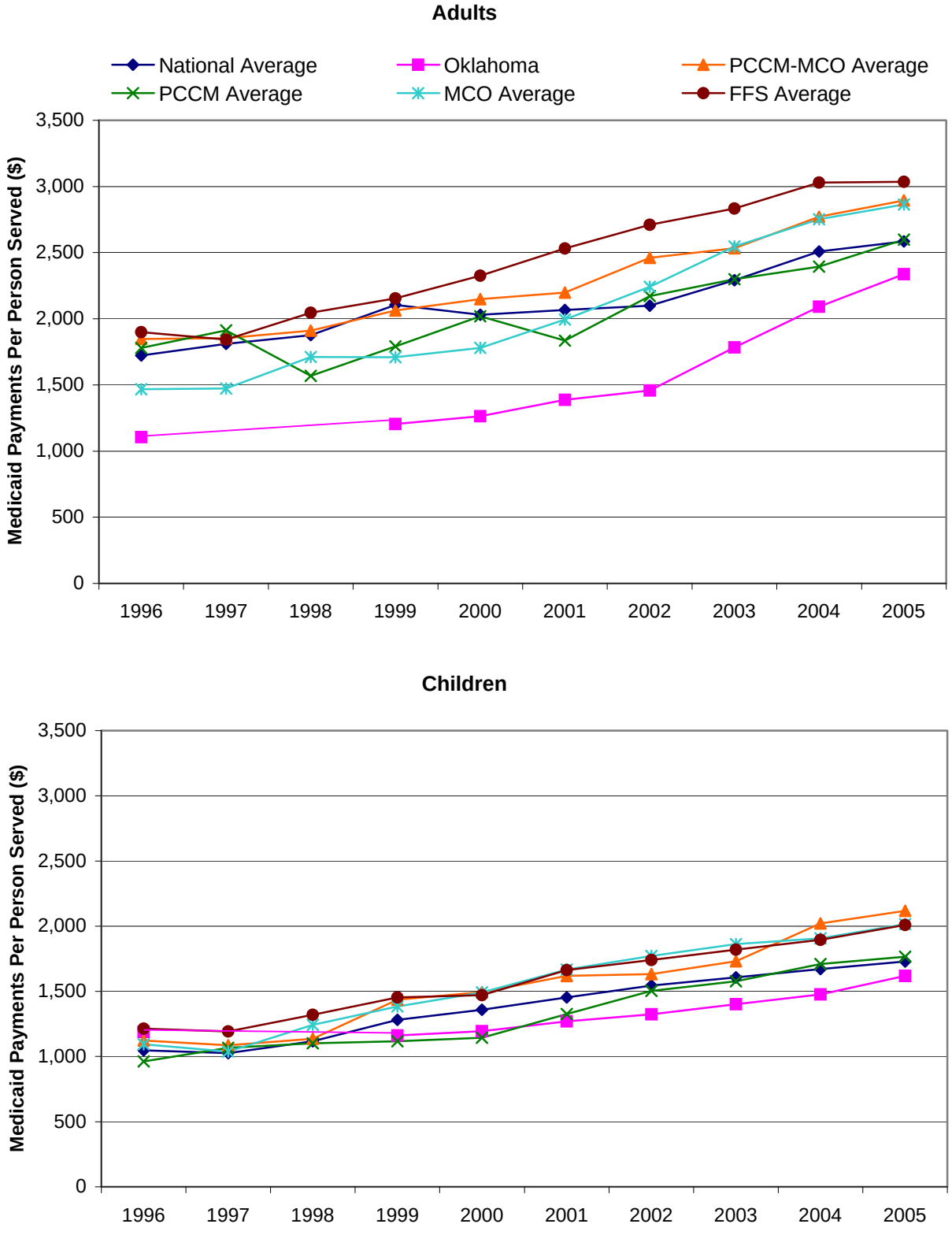
b. Results

Level of Per-Member Costs Relative to Other States. In fiscal years 1999-2005, Oklahoma reported consistently lower per-member costs for all eligibility groups when compared to the national average, as well as to FFS, MCO, and PCCM-MCO comparison states (Figures III.4 and III.5). For example, in 2005 per-member costs for children and adults in Oklahoma were 6 to 10 percent below the national average, and for the aged and disabled costs were about 20 percent below the national average. When compared to other states with PCCM

[142]Aged individuals include those over age 65; disabled individuals include children and adults under age 64 who have disabilities; adults include nondisabled adults younger than age 64; and children include nondisabled children and foster care children.

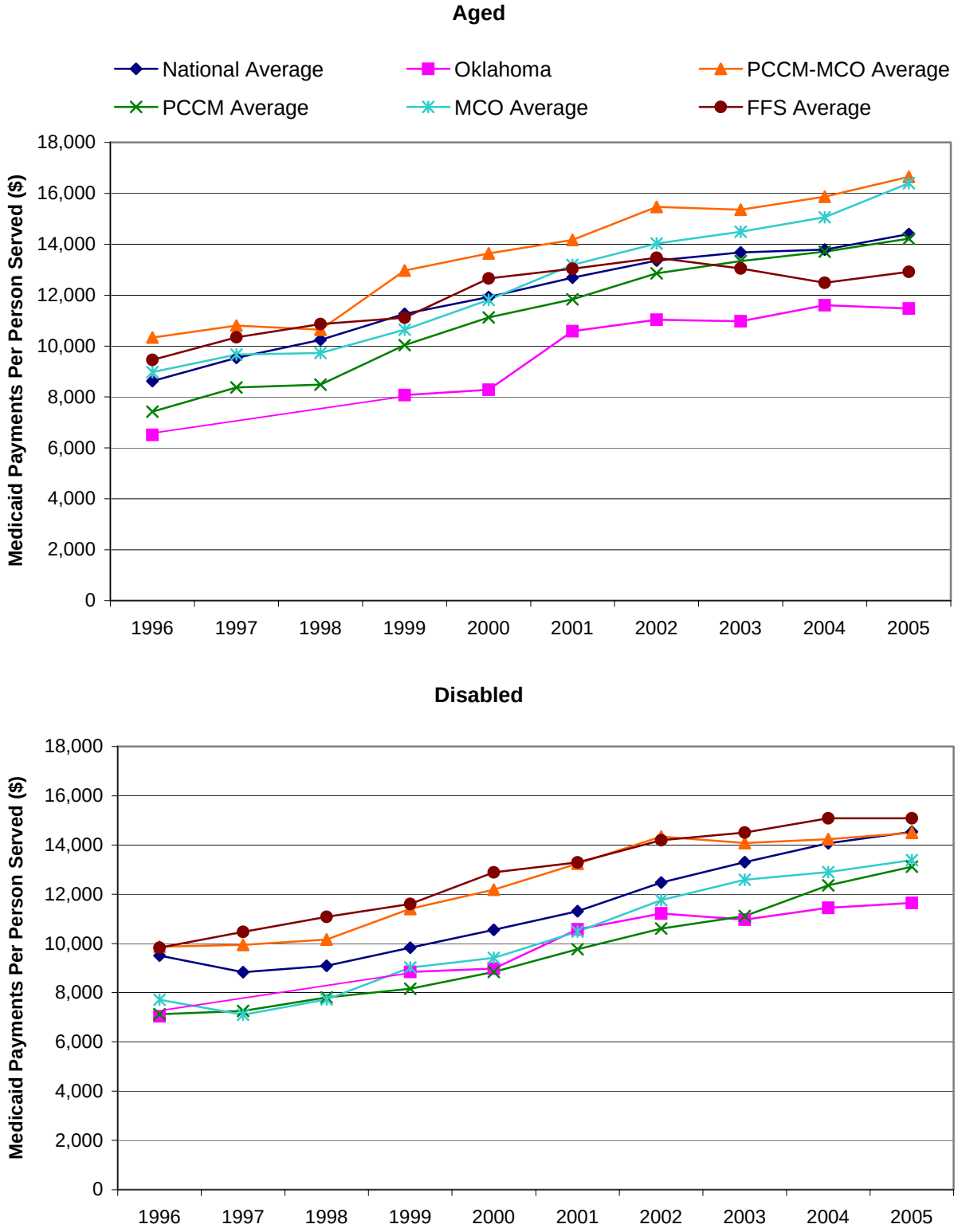
[143] PCCM states include Alabama, Arkansas, Georgia, Iowa, Kansas, and North Carolina. MCO states include Missouri, New Mexico, and Pennsylvania. PCCM-MCO states include Colorado, Indiana, Massachusetts, Nebraska, and Texas. FFS states include Illinois, Mississippi, New Hampshire, South Carolina, and Wyoming.

Figure III.4. Medicaid Payments Per Enrollee, Fiscal Years 1996-2005



Source: *Medicare and Medicaid Statistical Supplement*, Centers for Medicare and Medicaid Services, 1997-2008.

Figure III.5. Medicaid Payments Per Enrollee, Fiscal Years 1996-2005



Source: *Medicare and Medicaid Statistical Supplement*, Centers for Medicare and Medicaid Services, 1997-2008.

programs, costs in Oklahoma were substantially lower for the adult and aged populations, however, Oklahoma's costs for children and the disabled were more similar to the PCCM group average.

Per-Member Cost Growth. During fiscal years 1999-2005, the average annual growth rate of per-member costs in Oklahoma exceeded the national average for all eligibility groups except the disabled (Table III.27). When compared to other states with PCCM programs, Oklahoma had a comparable growth rate for expenditures on the aged, a lower rate for the disabled and children, and a much higher rate for adults.

Oklahoma's higher expenditure growth rates were somewhat expected, particularly for adults, given OHCA's initiatives to expand the benefit package for this population and to increase physician reimbursement up to Medicare levels. Since physician fees represent a relatively large proportion of the costs of caring for adults, we observe a sharp increase in the trend line for per-member costs for adults beginning around 2003 (Figure III.4), concurrent with the implementation of physician reimbursement initiatives.

Despite its higher annual expenditure growth rates, Oklahoma continued to have lower absolute per-member costs throughout 1999-2005 because the cost gap at the beginning of this period had been so substantial. For example, at the gap's widest point in 1999, per-member costs for adults in Oklahoma were 43 percent lower than the national average.

2. State Expenditures and Revenue

a. Data Sources and Methods

We present annual general fund revenues and state expenditures on Medicaid as reported by NASBO in their annual state expenditure report and semi-annual fiscal survey of the states. In Figure III.6 we compare Oklahoma's annual growth in state revenues and expenditures on Medicaid to the national average. In Figure III.7 we trend Medicaid expenditures as a percentage of total state expenditures, and compare Oklahoma to the national average, as well as to the average within four groups of states with different Medicaid management systems (FFS, MCO, PCCM, PCCM-MCO).[144]

b. Results

General Revenue Growth and SoonerCare Expenditures. Both general revenues and total SoonerCare expenditures in Oklahoma increased for nine of the 11 years from 1996 to 2006 (Figure III.6). Though state revenues contracted in consecutive years in 2002 and 2003,

[144] As with the per-member expenditure analysis, PCCM states included Alabama, Arkansas, Georgia, Iowa, Kansas, and North Carolina. MCO states include Missouri, New Mexico, and Pennsylvania. PCCM-MCO states include Colorado, Indiana, Massachusetts, Nebraska, and Texas. FFS states include Illinois, Mississippi, New Hampshire, and South Carolina. The data reported by NASBO for Wyoming was not reliable over this period, so it was excluded from the FFS group for these analyses.

Table III.27. Per-Enrollee Medicaid Expenditures and Average Annual Growth Rate by Eligibility Group, Fiscal Year 1999-2005.

	Oklahoma	PCCM Average	National Average
Children			
Per-member expenditures 1999	$1,161	$1,116	$1,282
Per-member expenditures 2005	$1,618	$1,765	$1,729
Average annual growth rate	5.69%	7.94%	5.11%
Adults			
Per-member expenditures 1999	$1,205	$1,791	$2,104
Per-member expenditures 2005	$2,337	$2,598	$2,585
Average annual growth rate	11.67%	6.39%	3.49%
Aged			
Per-member expenditures 1999	$8,073	$10,031	$11,268
Per-member expenditures 2005	$11,472	$14,222	$14,402
Average annual growth rate	6.03%	5.99%	4.17%
Disabled			
Per-member expenditures 1999	$8,848	$8,163	$9,832
Per-member expenditures 2005	$11,648	$13,121	$14,536
Average annual growth rate	4.69%	8.23%	6.73%

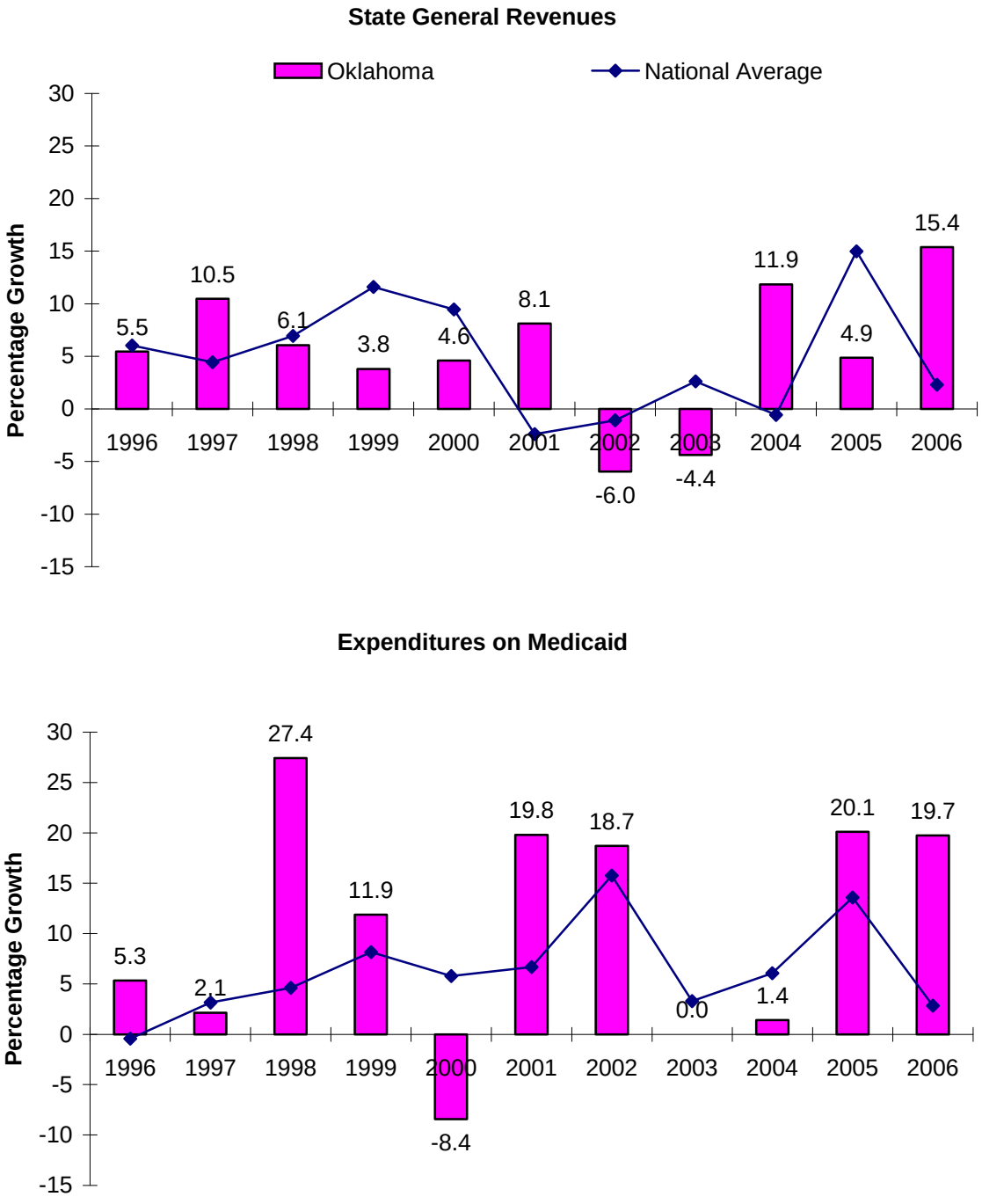
Source: *Medicare and Medicaid Statistical Supplement*, Centers for Medicare and Medicaid Services, 1997-2008.

SoonerCare expenditures experienced modest growth over this period as enrollment increased during the economic recession. In fact, for eight of 10 years from 1997 to 2006, the percentage growth in SoonerCare expenditures was substantially higher than the general revenue growth from the prior year. Oklahoma's percentage growth in SoonerCare expenditures was also generally higher than the national average growth in Medicaid expenditures. Some of this additional spending resulted from specific initiatives designed to support SoonerCare, such as a tobacco tax in 2005 whose revenues were partially earmarked for SoonerCare, and a provision that allowed taxpayers to donate part of their state tax refund to the SoonerCare program beginning in 2004.[145] However, the consistent pattern of expenditure increases suggests a relatively strong political commitment to the program, and willingness to allocate increasing portions of the general revenue to SoonerCare expansions.

SoonerCare Expenditures vs. Total Expenditures. Oklahoma's SoonerCare expenditures as a proportion of total state expenditures increased more than 50 percent over the past several years, rising from about 6.5 percent in 1995 to a high of 10.3 percent of total expenditures by 2005 (Figure III.7). While the Oklahoma trend line is roughly consistent with that seen for other states, and tracks quite closely with the average among PCCM states, the absolute level of Medicaid expenditures as a percentage of total expenditures in 2006 remained 28 percent below the national average (9.6 percent vs. 13.4 percent) and 5 percent below the average among other states with PCCM programs (10.1 percent). Overall, states with MCO and FFS Medicaid systems allotted a relatively higher proportion of expenditures to Medicaid than did Oklahoma and other PCCM states. States with blended MCO-PCCM programs closely tracked the national average.

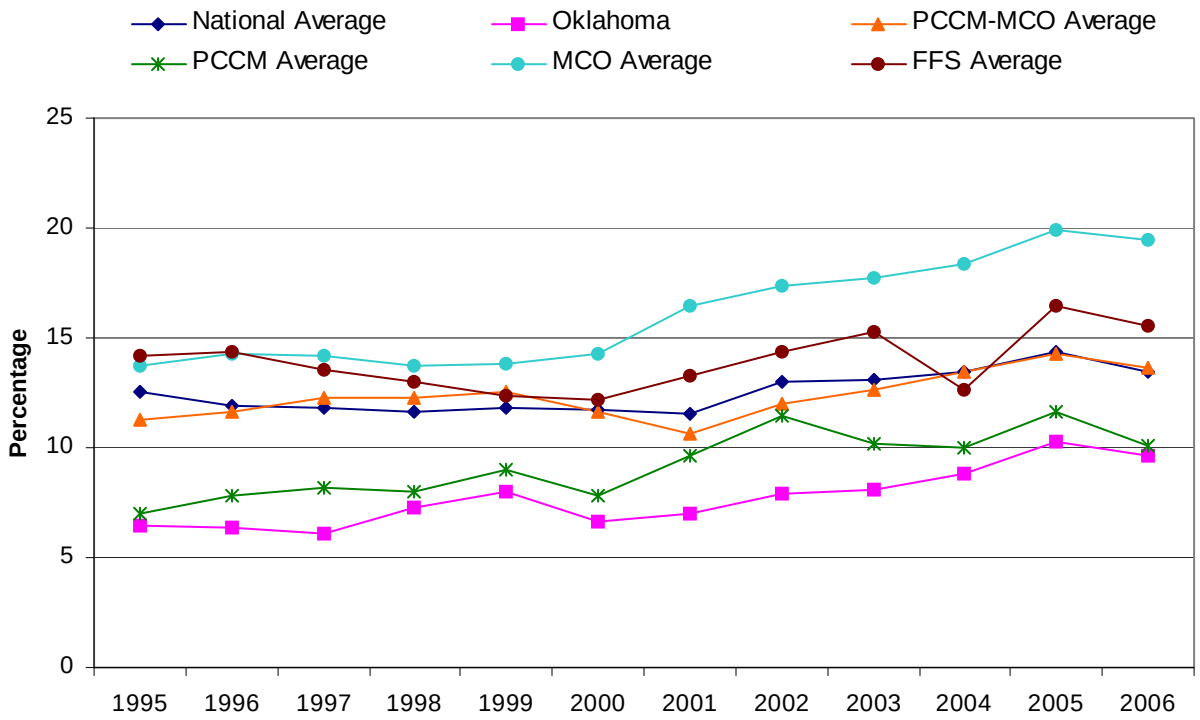
[145] OHCA. "A History in Brief." Oklahoma City, OK: OHCA, September 2005, p. 19.

Figure III.6. Percentage Growth in State Revenues and Expenditures on Medicaid, Oklahoma vs. National Average, 1996-2006



Source: NASBO Annual State Expenditure Report, 1996-2006 and Spring Fiscal Survey of the States, 1996-2007.

Figure III.7. Percentage of Total State Expenditures on Medicaid, 1995-2006



Source: NASBO Annual State Expenditure Report, 1996-2006.

E. TRENDS IN PRIMARY CARE UTILIZATION AND HEALTH CARE STATUS AMONG LOW-INCOME OKLAHOMANS

Like most Medicaid programs, SoonerCare's enrollment turnover rate is relatively high. Many more people participate in SoonerCare during a year than are reflected in point-in-time enrollment measures. For example, in June 2007, 612,699 individuals were enrolled in one of OHCA's programs; however, over the course of the fiscal year that ended that month, the agency had served 763,535 unduplicated individuals—about 25 percent more than were captured in the June snapshot.[146] Because the roster of SoonerCare members changes so frequently, trends in health care utilization and health status within the low-income population as a whole can offer important insights about the population that OHCA may serve in the future, or may have served in the past. Though low-income Oklahomans may or may not be currently enrolled in SoonerCare, analyses of their characteristics offer important lessons for program design as OHCA continues its efforts to expand coverage to low-income groups through the Insure Oklahoma program. We use the Behavioral Risk Factor Surveillance System (BRFSS) to examine trends in primary care utilization and health care status within this pool of potential enrollees, noting that while observed trends within the low-income population may be useful to OHCA policymakers, they should not be considered a reflection of SoonerCare performance.

[146] OHCA. "SoonerCare Fast Facts Total Enrollment: June 2007." www.ohca.state.ok.us/reports/pdflib/ff_overview/2007_06.pdf. Accessed October 10, 2008.

Data Sources and Methods. The BRFSS is administered by the Centers for Disease Control and Prevention in cooperation with state Departments of Health. It is the world's largest ongoing telephone health survey system, tracking health conditions and risk behaviors within the U.S. adult population annually since 1984.[147] Four BRFSS measures that have been collected consistently in Oklahoma from 1995 to 2007 provide insight into changes in access to primary care providers and utilization of preventive services: (1) having a personal doctor or health care provider; (2) needing to see a doctor, but not visiting one because of cost; (3) receipt of routine checkups with a physician; and (4) receipt of influenza vaccinations. In addition, Oklahoma's BRFSS has consistently asked respondents about their overall health status and the number of poor mental and physical health days that they experienced in the past month. We computed each of these measures for the low-income adult population in Oklahoma from 1995 to 2007. While fluctuations in these measures should not be attributed directly to SoonerCare's performance, observed trends over time do provide a valuable general perspective on OHCA's potential pool of enrollees.

Since BRFSS is a telephone survey, results may be biased by differential telephone ownership across demographic subgroups, and by changing survey response rates over time. From 1995 through 2007, response rates for Oklahoma's BRFSS have measured between 56 and 76 percent, well above the national median in each survey year, giving us confidence that reported findings are reasonably representative of the target populations. Measures where the underlying sample size is smaller than 50 respondents are considered unreliable due to the complex survey design. Annual sample survey sizes were not sufficient to present analyses by region, educational status, race/ethnicity, or employment status prior to 2001.

We define low-income adults as those ages 18 to 64 who reside in households with incomes less than $25,000. The BRFSS survey records income in nominal dollar categories (that is, less than $10,000, $10,000-$14,999, $15,000-$19,999, and so on). Poverty thresholds used to establish a person's eligibility for SoonerCare are updated each year to account for inflation. Hence, BRFSS income data cannot be compared directly with federal poverty thresholds. A nominal income of $25,000 in 1995 represents a higher level of income relative to the poverty threshold than the same amount did in 2007. For example, a family of four with an income of $25,000 in 1995 would have been at 165 percent of FPL; in 2007 this same nominal income level represented just 121 percent of FPL.

Results are presented separately for adults who reside in households with children and those who reside in households without children, as these two groups have significantly different income levels and demographic profiles (See Table III.28). Since income can strongly influence health care utilization and health status, overall trends from 1995 to 2007 in BRFSS measures may be driven by changes in the relative wealth of households included in the sample population. The difference in relative income levels is less pronounced when considering trends from 1995 to 2001, or from 2001 to 2007, therefore readers can place more weight in these intermediate trends than in measures of performance over the full period from 1995-2007.

[147] Centers for Disease Control and Prevention. "Behavioral Risk Factor Surveillance System." www.cdc.gov/brfss/. Accessed September 20, 2008.

Table III.28. Characteristics of Low-Income Adults in Oklahoma, 1995-2007

	1995	2001	2007
Households without Children			
100% FPL (2-member household)	$10,030	$11,610	$13,690
$25,000 as %FPL (2-member household)	249% FPL	215% FPL	183% FPL
Average age	37.0	41.0	43.8
Percent employed	59	56	41
Percent with at least a high school degree	76	80	79
Percent with some college education	48	49	34
Households with Children			
100% FPL (4-member household)	$15,150	$17,650	$20,650
$25,000 as % FPL (4-member household)	165% FPL	142% FPL	121% FPL
Average age	34.7	35.3	34.1
Percent employed	65	59	50
Percent with at least a high school degree	77	68	73
Percent with some college education	32	28	30

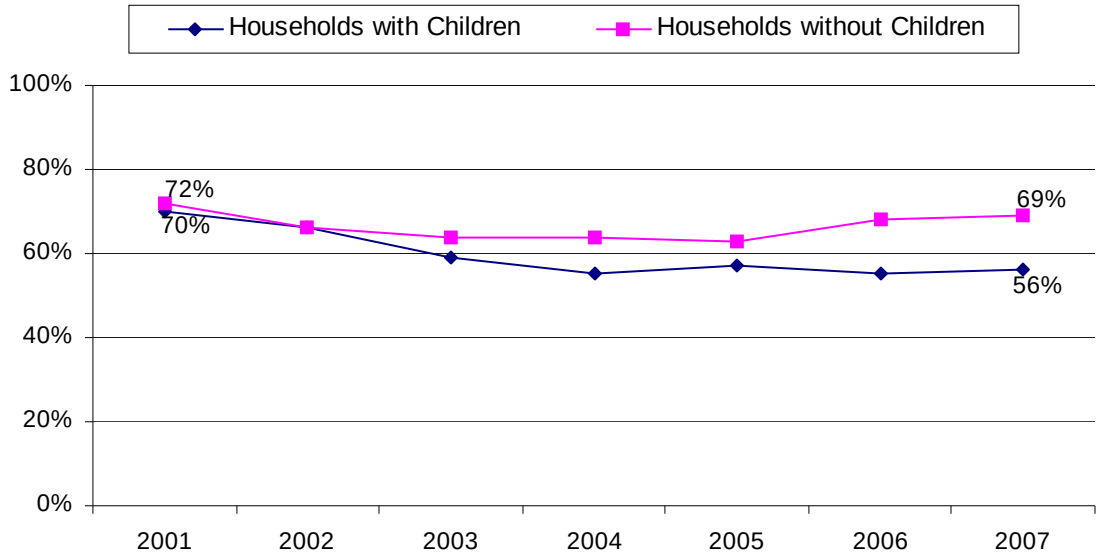
Source: MPR analysis of BRFSS, 1995-2007.

Results

Access to Primary Care Providers. Overall, self-reported access to primary care providers declined from 1995 to 2007 among low-income adults residing in households with children. From 2001 to 2007 the percentage of adults reporting that they had a personal doctor or health care provider decreased from 70 to 56 percent (Figure III.8). At the same time, an increasing percentage of low-income adults in households with children reported that at least once during the past year they had needed to see a doctor but did not because of costs (Figure III.9). By 2007 nearly half of respondents reported this concern.

Low-income adults residing in households without children had better self-reported access to primary care providers in Oklahoma during this period when compared to adults residing in households with children. Among this group no significant declines were observed from 2001 to 2007 in the percentage of adults reporting that they had a personal doctor or health care provider (Figure III.8). While the percentage of respondents who did not see a doctor because of costs increased during 2000 to 2007, costs were less of a concern among adults residing in households without children. By 2007, just over one-third of adult respondents without children reported that they needed to see a doctor, but did not because of costs (Figure III.9). Better self-reported access to primary care providers among this group, when compared to adults in households with children, may reflect their higher relative income and older average age.

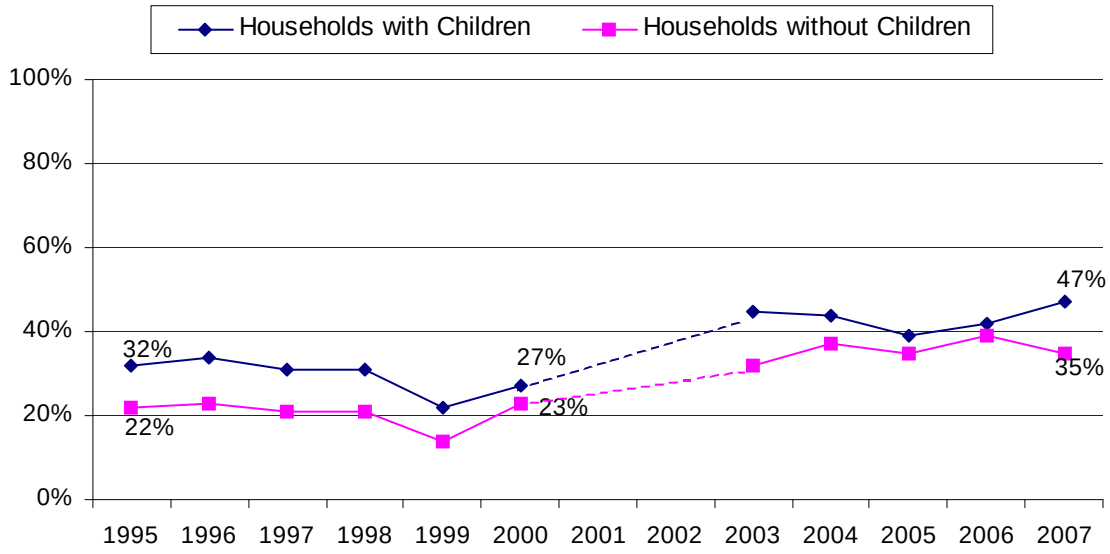
Figure III.8. Percentage of Low-Income Adults in Oklahoma Reporting that They Have a Personal Health Care Provider, BRFSS 2001-2007



	Households with Children	Households without Children
Change 2001-2007	-20%*	-4%

*Statistically significant change at the 5% level.

Figure III.9. Percentage of Low-Income Adults in Oklahoma Who Did Not See a Doctor Because of Cost, BRFSS 1995-2007



	Households with Children	Households without Children
Change 1995-2000	-16%	5%
Change 2000-2007	74%	52%*
Change 1995-2007	47%	59%*

*Statistically significant change at the 5% level.

We also examined trends in these measures by region, race/ethnicity, educational attainment, and employment status (see Appendix B for additional detail on subgroup analyses). Subgroup trends were generally similar to those observed for the overall population; however, non-Hispanic American Indian adults appeared more consistently connected to primary care providers during the period 2001-2007 than other race/ethnic groups. For example, in 2007 about three-quarters of low-income American Indian adults reported having a personal health care provider; in contrast, fewer than 60 percent of non-Hispanic whites and non-Hispanic blacks reported having a personal health care provider (Appendix B, Table B-3). We also observe that the employed often have better access to primary care providers relative to the unemployed.

Utilization of Preventive Care. Overall, the percentage of low-income adults reporting that they had received a recent checkup with a doctor declined significantly from 2000 to 2007 (Figure III.10).[148] For example, among adults residing in households with children, the percentage who had received a checkup within the past year declined by 28 percent from 2000 to 2007, and the percentage who had received a checkup within the past two years declined by 24 percent. For most years from 1995-2007, adults residing in households without children were more likely to have received a checkup within the past year or two years, when compared to adults residing in households with children. We again observe that American Indian low-income adults were more likely to utilize routine checkups than non-Hispanic white adults, particularly among those residing in households with children. For example, in 2007, 60 percent of non-Hispanic American Indian adults residing with children had received a checkup within the past year, compared to just 37 percent of non-Hispanic white adults (Appendix B, Table B-5).

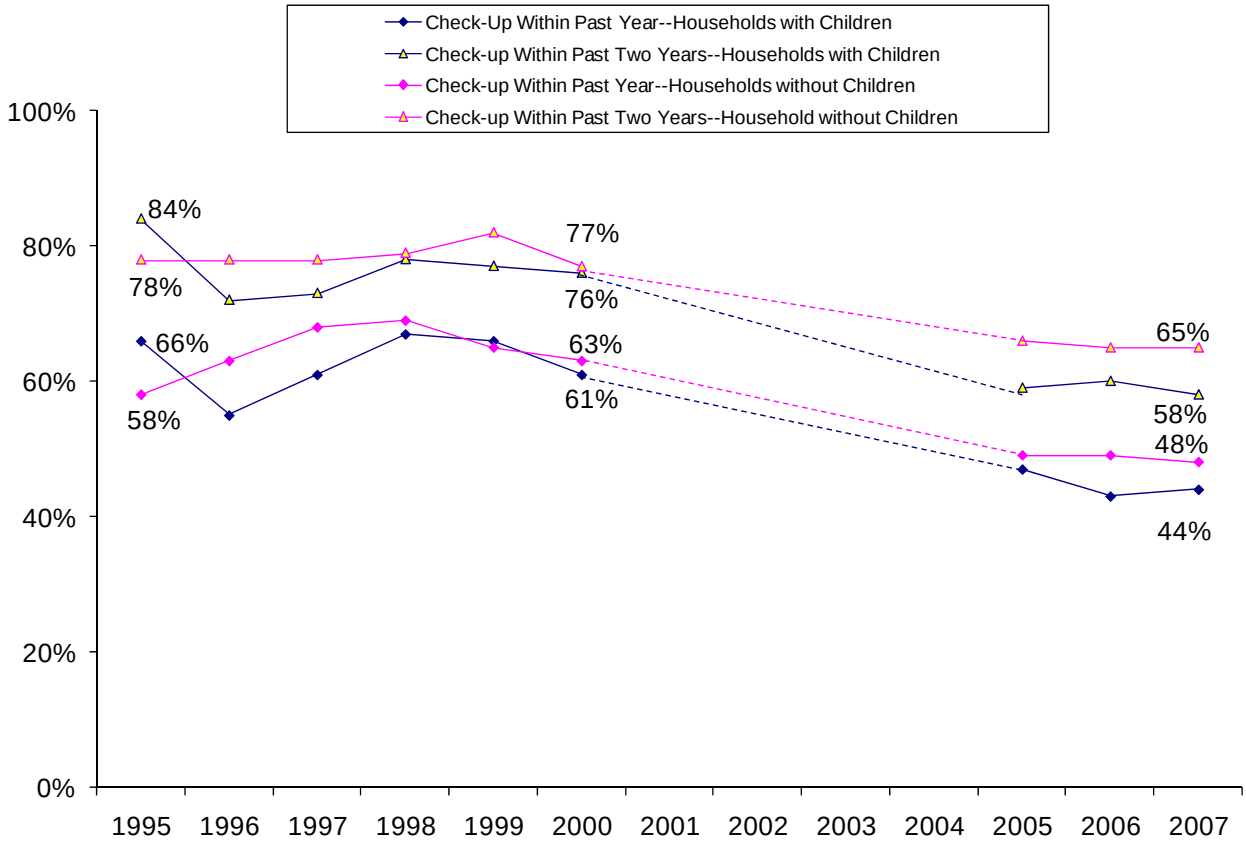
Having health care coverage and having a primary care provider were strong predictors of routine checkup utilization. In 2007 low-income adults who had some form of health care coverage, but no primary care provider were about as likely as adults who had a primary care provider, but no health care coverage, to have received a checkup within the past two years (Table III.29).

Table III.29. Percentage of Low-income Oklahoman Adults in Households with Children Receiving Routine Checkups, by Health Care Coverage Status and Primary Care Provider Access, BRFSS 2007

	Has Health Care Coverage		Does Not Have Health Care Coverage	
	Has Primary Provider	Does Not Have Primary Provider	Has Primary Provider	Does Not Have Primary Provider
Checkup Within the Past Year	60%	55%	40%	27%
Checkup Within the Past Two Years	74%	65%	59%	40%

[148] Respondents were not asked about receipt of a routine checkup during survey years 2001-2004.

Figure III.10. Percentage of Low-Income Adults in Oklahoma Receiving a Recent Checkup, BRFSS 1995-2007



Checkup Within the Past Year

	Households with Children	Households without Children
Change 1995-2000	-8%	9%
Change 2000-2007	-28%*	-24%*
Change 1995-2007	-33%*	-17%*

*Statistically significant change at the 5% level.

Checkup Within the Past Two Years

	Households with Children	Households without Children
Change 1995-2000	-10%	-1%
Change 2000-2007	-24%*	-16%*
Change 1995-2007	-31%*	-17%*

*Statistically significant change at the 5% level.

Although measures of access to primary care providers and utilization of routine checkups appeared on the decline from 1995 to 2007, a higher percentage of low-income adult Oklahomans received a flu shot in 2007 than in 1995 (Figure III.11). Among adults without children, this measure increased steadily from 1995 to 2007; however, among adults with children, the measure dropped to 17 percent in 2001, before recovering to 1995-levels by 2007. Despite the recent upward trend, the rate of vaccination continues to be quite low; fewer than 40 percent of low-income adults were vaccinated in 2007.

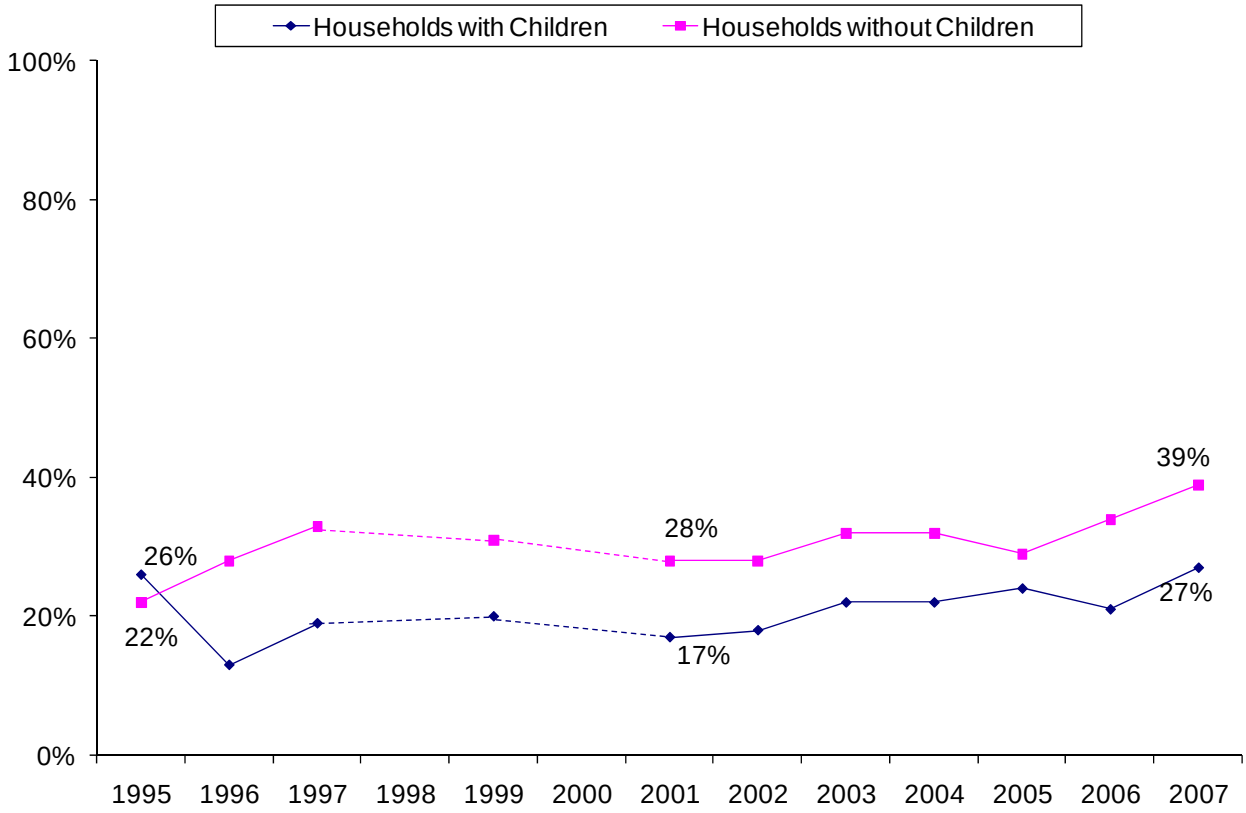
Health Status. Self-reported health status worsened for low-income adults in Oklahoma from 1995 to 2007. The percentage of adults reporting their health status as excellent, very good, or good declined (Figure III.12), as did the percentage of adults who reported having zero poor mental

Changes in health status were most substantial for the adult population in households without children. A significant decline in the percentage of this group reporting excellent, very good, or good health status was reported both from 1995 to 2001 and again from 2001 to 2007. In addition, from 1995 to 2001 the percentage reporting zero poor physical health days fell from 74 to 54 percent, and the percentage reporting zero poor mental health days fell from 74 to 61 percent. Continued declines in physical and mental health measures were observed from 2001 to 2007, although the changes were not statistically significant.

While adults in households with children also experienced apparent declines in these measures, the changes were often not statistically significant because the population estimates were less precise for this group. Two exceptions were: (1) a significant decline in the percentage reporting zero poor mental health days, from 64 percent in 2001 to 48 percent 2007; and (2) a significant increase in mean poor physical health days, from 7.8 days in 1995 to 12.7 days in 2001.

Trends in health status within key subgroups were as expected. The employed and those with higher levels of education were significantly more likely to report their health status as excellent, very good, or good, as well as to report having zero poor mental or physical health days in the past month. American Indians were somewhat less likely to report excellent, very good, or good health (Appendix B, Table B-4).

Figure III.11. Percentage of Low-Income Adults in Oklahoma Receiving a Flu Shot Within the Past Year, BRFSS 1995-2007

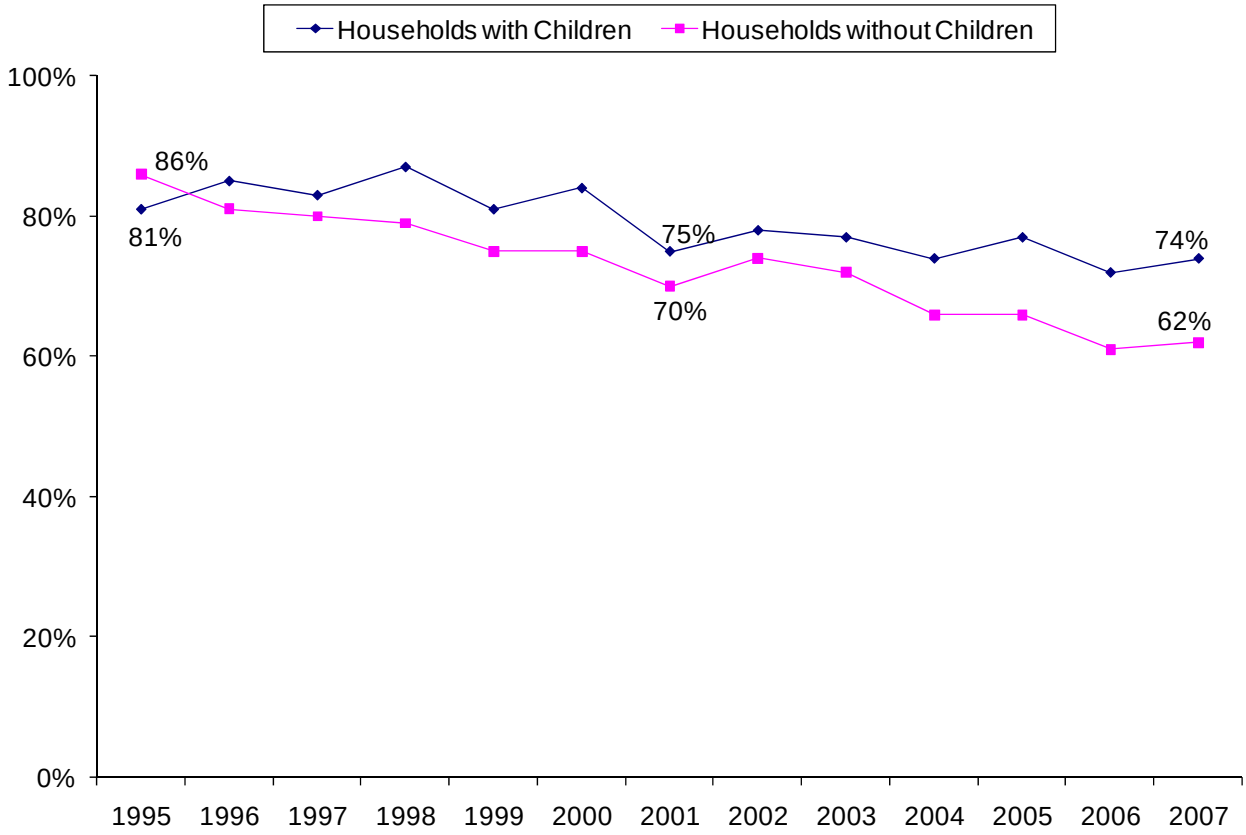


Receipt of Flu Shot Within the Past Year

	Households with Children	Households without Children
Change 1995-2001	-35%	27%
Change 2001-2007	59%*	39%*
Change 1995-2007	4%	77%*

*Statistically significant change at the 5% level.

Figure III.12. Percentage of Low-Income Adults in Oklahoma Reporting Excellent, Very Good, or Good Overall Health Status, BRFSS 1995-2007

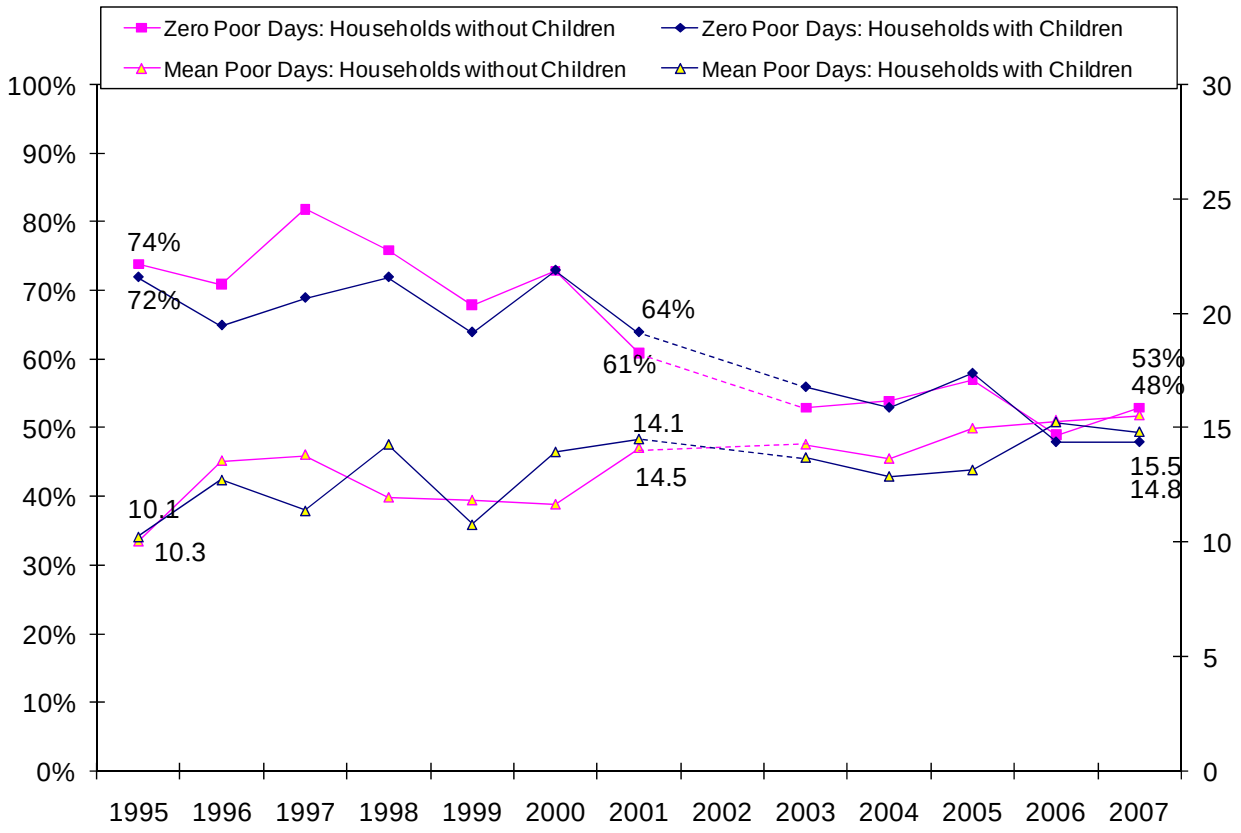


Excellent, Very Good, or Good Health Status

	Households with Children	Households without Children
Change 1995-2001	-7%	-19%*
Change 2001-2007	-1%	-11%*
Change 1995-2007	-9%	-28%*

*Statistically significant change at the 5% level.

Figure III.13. Percentage of Low-Income Adults in Oklahoma Reporting Zero Poor Mental Health Days and the Mean Number of Poor Days Reported Among Those with Some Poor Days, BRFSS 1995-2007



Percentage Reporting Zero Poor Mental Health Days

	Households with Children	Households without Children
Change 1995-2001	-11%	-18%*
Change 2001-2007	-25%*	-13%
Change 1995-2007	-33%	-28%*

*Statistically significant change at the 5% level.

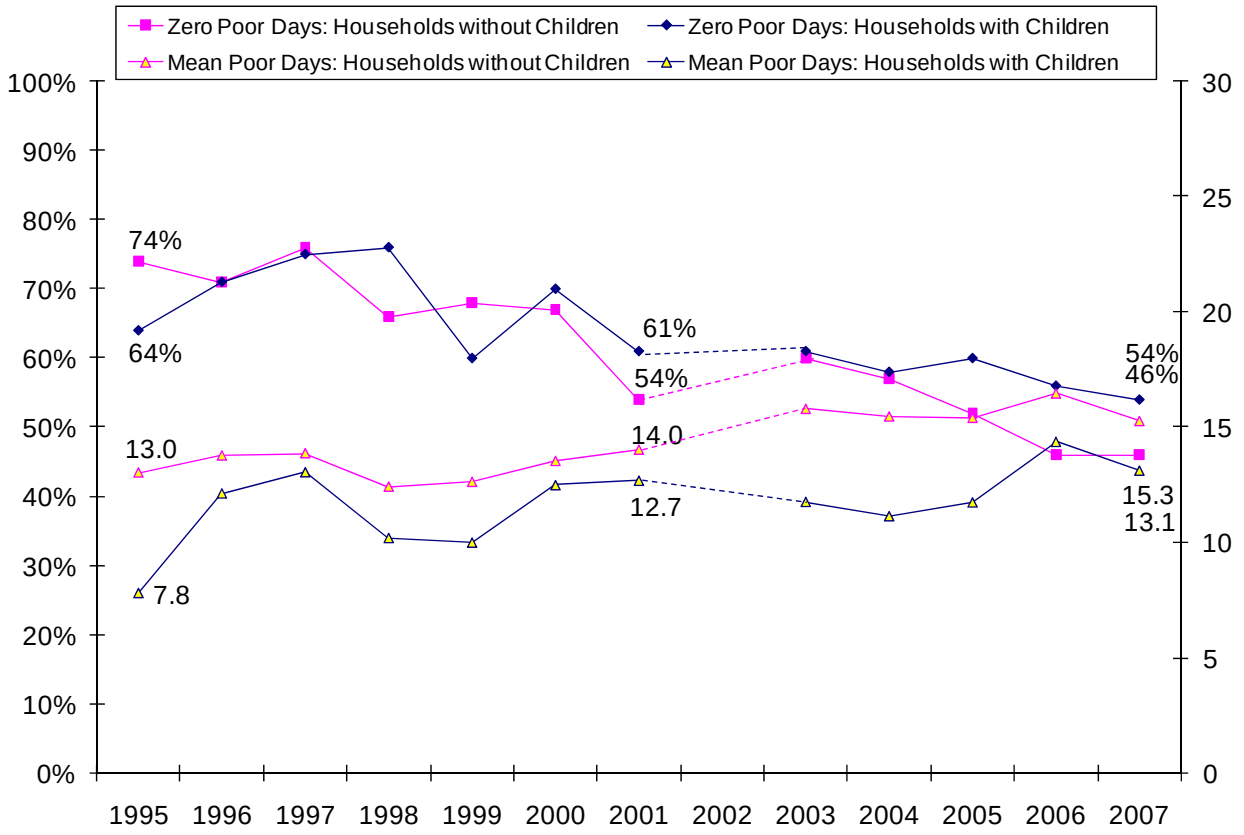
Mean Poor Mental Health Days Among Those Reporting Some Poor Days

	Households with Children	Households without Children
Change 1995-2001	#	40%*
Change 2001-2007	0%	10%
Change 1995-2007	#	55%*

*Statistically significant change at the 5% level.

Change not calculated. Sample include fewer than 50 respondents in 1995.

Figure III.14. Percentage of Low-Income Adults in Oklahoma Reporting Zero Poor Physical Health Days and the Mean Number of Poor Days Reported Among Those with Some Poor Days, BRFSS 1995-2007



Percentage Reporting Zero Poor Physical Health Days

	Households with Children	Households without Children
Change 1995-2001	-5%	-27%*
Change 2001-2007	-11%*	-15%
Change 1995-2007	-16%*	-38%*

*Statistically significant change at the 5% level.

Mean Poor Physical Health Days Among Those Reporting Some Poor Days

	Households with Children	Households without Children
Change 1995-2001	#	8%
Change 2001-2007	3%	9%
Change 1995-2007	#	17%

*Statistically significant change at the 5% level.

Change not calculated. Sample include fewer than 50 respondents in 1995.

IV. MAJOR FINDINGS

This chapter summarizes our major findings regarding the SoonerCare 1115 waiver program and its impact on Oklahomans. We look first at its impact on access to health care for low-income Oklahomans, and then at various measures of the quality of that care. We look next at the cost of the SoonerCare program to Oklahoma's taxpayers. Finally, we look at how OHCA as an agency has shaped and managed the SoonerCare waiver program over the last 13 years.

A. ACCESS

Although the SoonerCare 1115 waiver program contributed to improvements in access to care for low-income Oklahomans from 1995 through 2008, coverage for some populations either lags behind national averages or could be significantly improved. In general, health insurance coverage for lower-income populations in the state has increased during the last decade, especially for children, with increases in Medicaid coverage offsetting declines in private insurance coverage. Some low-income populations in Oklahoma have experienced declining access to primary and preventive care in recent years, creating both challenges and opportunities for OHCA as the program considers expansions.

1. Health Insurance Coverage

SoonerCare has improved coverage substantially for children during the last 10 years, but there has been less progress in coverage for adults. From 1997 to 2007, Oklahoma experienced a doubling in SoonerCare enrollment, with 90 percent of the increase attributable to children. Oklahoma also increased the estimated Medicaid participation rate among children; SoonerCare-eligible children living in eligible families earning up to 185 percent of the federal poverty level (FPL) who were enrolled in Medicaid rose from 55 percent on average in 2000 to 77 percent in 2006, a 38 percent increase. Expanded Medicaid enrollment among children has reduced the uninsured rate among those in low-income families—earning up to twice the federal poverty level—from 29 percent in 1995-1996 to 13 percent in 2006-2007, below the national average of 18 percent. The uninsured rate for low-income adults in Oklahoma was also below the national average in 2006-2007 (37 percent versus 40 percent), but was up somewhat from the 35 percent rate in 1995-1996. Overall, the percentage of the state's under-65 low-income population covered by Medicaid was just slightly below the national average in 2006-2007 (32 percent versus 34 percent), due mainly to high rates of coverage for children.

With the launch of the Insure Oklahoma program at the end of 2005, some low-income uninsured adults can now receive subsidies to help them afford insurance premiums. After a slow start, enrollment in the program grew from 1,394 at the end of 2006 to 15,907 as of December 2008.[149] The maximum income level for individuals eligible to receive premium subsidies rose from 185 percent to 200 percent of FPL in November 2007, as authorized in a

[149] OHCA. "Insure Oklahoma. Fast Facts." Oklahoma City, OK: OHCA, December 2006 and September 2008.

waiver amendment approved by the federal government. Businesses with up to 50 workers are now eligible to enroll in Insure Oklahoma's employer-sponsored insurance program, up from 25 workers at the program's inception.

Some gaps remain that SoonerCare must address. Enrollment of 68 percent of qualified Oklahomans in Medicaid in 2006 was comparable to the national average; however, the state's participation rates were significantly lower than the national average for certain groups: adolescents, very poor parents with dependent children, disabled adults, and elderly. In addition, the uninsured rate among non-elderly adults earning up to 200 percent of FPL (37 percent) has stayed about the same over the last 10 years, and the percentage of this population covered by Medicaid has increased only modestly, from 11 percent in 1995-1996 to 15 percent in 2006-2007. Oklahoma did little until the launch of Insure Oklahoma to offset the declining rate of private insurance among this group. Progress in reducing the rate of uninsurance in Oklahoma and improving access to care for low-income adults and children depends on obtaining federal approval to implement the coverage expansions enacted by the Oklahoma legislature in 2006 and 2007.

Low Medicaid income eligibility levels for parents can create large differences in coverage rates relative to their children. Oklahoma's income eligibility standards for parents with dependent children are relatively low compared to those for children, and have not been adjusted for over a dozen years. In addition, fewer parents who are eligible are enrolling. This suggests that OHCA, in concert with the Department of Human Services, could improve efforts to inform very poor parents that they, as well as their children, can qualify for Medicaid even if they do not receive public assistance. Oklahoma's effort to expand the Insure Oklahoma program to allow more individuals and businesses to receive subsidies that would enable them to afford insurance premiums would also increase coverage for adult parents.

2. Physician Participation

The total number of primary care provider (PCP) contracts has grown substantially since 1997, but the mix of contracts has changed, partly as a result of recent administrative changes that facilitate the enrollment of practice groups as PCPs. From 1997 to 2007, the number of contracts for providers serving as SoonerCare PCPs increased from 414 to 595, a nearly 44 percent increase. The mix of PCP contracts has changed somewhat in recent years, following OHCA's decision in 2004 to allow groups to enroll as PCPs rather than requiring individual contracts with each provider within the group. In 2004, 61 percent of urban members were assigned to an individual MD, doctor of osteopathic medicine (DO), nurse practitioner (NP), or physician assistant (PA). By 2007, about 34 percent of members were assigned to individual PCPs, and the remainder were assigned to multi-provider groups or clinics, which may result in improved access if members are able to seek treatment from any available group member. Similar trends were observed among rural members; about half of all rural members were assigned to individual PCPs in 2007, down from 81 percent in 2004.

From 2004 to 2006, the total number of contracted specialists and MDs working as PCPs for SoonerCare Choice has increased by 14 percent. The number of contracted MDs increased from 4,287 in 2004 to 4,870 by 2006. Of these gains, new enrollment among PCPs accounted for one-quarter of the increase and new enrollment among specialists accounted for

the remainder. By 2006 about 90 percent of all MDs in Oklahoma had contracts with the SoonerCare Choice program to deliver services to members.

Approximately 37 percent of physicians specializing in general/family medicine, pediatrics, and obstetrics/gynecology participate as SoonerCare Choice PCPs, with particularly high participation rates in rural areas. In 2006, 24 percent of general/family medicine practitioners and 48 percent of pediatricians statewide participated in SoonerCare Choice as PCPs. In urban areas, the participation rate for both groups was slightly more than 30 percent, while in rural areas about 60 percent of these physicians participated, including nearly all pediatricians.

The typical SoonerCare Choice PCP in 2007 provided between 84 and 90 percent more visits to assigned members than the typical SoonerCare PCP in 1997. In rural areas, the median number of annual visits (encounters) per member for adults assigned to SoonerCare Choice PCPs rose from 0.82 in 1997 to 1.56 in 2007, an increase of 90 percent. The increase in visits for children rose from 0.67 per member in 1997 to 1.23 in 2007, a jump of 84 percent. Visit trends in urban areas show similar increases, although the data in those areas may be less reliable because so many members were enrolled in fully capitated MCOs during the Plus period. Notable improvements also occurred at the lower end of the distribution. The number of encounters provided by PCPs at the 25th percentile rose from 0.33 in 1997 to 0.94 by 2007, suggesting that most PCPs had at least one contact with their assigned members during the year.

Turnover among SoonerCare Choice contracts has averaged about 16 percent a year from 1997 to 2007, so recruitment of providers remains an ongoing challenge. About 16 percent of PCP contracts that were active at some point during the year had lapsed by the end of the year.

3. Emergency Room (ER) Visits

SoonerCare members' ER utilization decreased between 2004 and 2007— a time when ER use among Medicaid enrollees in the rest of the country was increasing. Between 2004 and 2006, ER visits by Medicaid enrollees nationwide rose from 80 per 100 enrollees to 87 per 100 enrollees. In contrast, OHCA (using a more precise measure) reported a 5 percent decrease between 2004 and 2007, from 80 visits per 1,000 member months to 76 visits per 1,000 member months.

Overall, care for SoonerCare Choice members is shifting from ERs to physicians' office visits. In 2003, SoonerCare Choice beneficiaries had 1.2 ER visits for every physician office visit. By 2007, the ratio was 0.74 Er visits for every physician office visit, a decline of 38 percent.

The SoonerCare Choice focus on high ER users appears to be effective. In 2003, among patients enrolled with the 5 percent of physicians whose patients used the ER the most, there were 2.85 ER visits for every office visit. By 2007, there were 1.26 ER visits for every office visit by patients enrolled with the 5 percent of physicians whose patients used the ER the most, a reduction of more than 55 percent. In addition to actions that physicians may have taken on their own or with OHCA assistance, OHCA's efforts to provide education on appropriate ER use and

self-management strategies to people who were unusually high and persistent ER users, which began in 2006, probably also had an impact on this measure.

4. Preventable Hospitalizations

The overall rate of preventable hospitalizations declined among SoonerCare adults from 2003 to 2006. The overall rate of preventable hospitalizations among SoonerCare enrollees declined by 24 percent among urban adults and 15 percent among rural adults from 2003 to 2006. Preventable hospitalizations for chronic obstructive pulmonary diseases, asthma, and bacterial pneumonia declined statewide. While most trends in preventable hospitalizations among children enrolled in the SoonerCare waiver program were not statistically significant, an increase in gastroenteritis-related admissions in urban areas and a decrease in asthma-related admissions in rural areas were observed.

The transition from the Plus to the Choice program in urban areas was not generally associated with changes in the rate of preventable hospitalizations; however, trends for some chronic conditions spotlight areas where improved disease management is needed. After controlling for trends in the number of physicians per capita, demographic changes, and the prevalence of chronic disease among low-income Oklahomans, we found evidence that SoonerCare Choice has performed as effectively as SoonerCare Plus MCOs in managing most types of preventable hospitalizations. However, we also found evidence that the Choice program may have performed less effectively than the Plus program in managing diabetes-related hospitalizations among urban adults and asthma-related admissions among urban children. This pattern could also indicate that the Choice program has more aggressively implemented disease management initiatives for diabetes and asthma in rural areas than has been the case in urban areas.

Rates of preventable hospitalizations varied by age and geographic location. In 2006 roughly 3,600 preventable hospitalizations occurred among SoonerCare Choice enrollees; children accounted for 42 percent of these hospitalizations and rural enrollees accounted for 46 percent. Rates of preventable hospitalizations were generally lower among urban adults relative to rural adults, but were higher among urban children relative to rural children. Hospitalizations related to diabetes, congestive heart failure (CHF), bacterial pneumonia, chronic obstructive pulmonary disease (COPD), and asthma were the most common preventable admissions among adults; asthma admissions were also common among children.

Reducing preventable hospitalizations would lower SoonerCare expenditures. We estimate that SoonerCare Choice could save at least $8 million a year by cutting its rate of preventable hospitalizations in half. Actual savings could be much higher, given the strong link between preventable hospitalizations and emergency room utilization. About 68 percent of OHCA's preventable hospitalizations were preceded by a visit to the emergency room.

5. Primary Care Utilization Among Low-Income Oklahomans

Reported access to providers declined between 1995 and 2007 for low-income adults with children. Self-reported access to primary care providers declined from 1995 to 2007 among adults residing in households with children, many of whom may have been eligible for

SoonerCare, but were not necessarily enrolled. From 2001 to 2007 the percentage of adults reporting that they had a personal doctor or health care provider decreased from 70 to 56 percent. At the same time, an increasing percentage reported that at least once during the past year they had needed to see a doctor but did not because of cost.

Low-income adults with children reported fewer checkups between 2000 and 2007. Among low-income adults residing in households with children, the percentage who had received a checkup with a doctor within the last year declined by 28 percent from 2000 to 2007; the percentage who had received a checkup within the last two years declined by 24 percent. Having health care coverage and having a primary care provider were strong predictors of routine checkup utilization. In 2007 low-income adults who had some form of health care coverage but no primary care provider were about as likely as adults who had a primary care provider but no health care coverage to have received a checkup in the last two years. Encouraging new SoonerCare enrollees clients to access preventive care services, such as routine checkups, within the first few months of enrollment may ultimately improve member outcomes, given the low level of contact most will have had with the health care system prior to enrollment.

Linking enrollees to primary care providers is likely to be an ongoing challenge for SoonerCare. About half of respondents in all subgroups reported in 2007 that they had a personal health care provider. While only some of these low-income adults are currently enrolled in SoonerCare, this finding underscores the importance of enrolling as many providers as possible in the program to encourage the maintenance of existing "medical home" relationships and improve continuity of care upon enrollment in the SoonerCare program.

B. QUALITY

OHCA has made a concerted effort over the years to measure quality in the SoonerCare program, using a combination of HEDIS, CAHPS, and ECHO measures to determine utilization of key services and enrollee satisfaction. It is especially noteworthy that OHCA has used these measures in its SoonerCare Choice program, since only a limited number of states with PCCM programs do so.[150] We summarize below key quality-related trends in SoonerCare Choice from OHCA data, with emphasis on trends over time and comparisons to national benchmarks when they are available.

1. HEDIS

Quality of care trends show improvement between 2001 and 2007 for SoonerCare Choice members. Among the 19 HEDIS measures tracked by OHCA, all showed some level of improvement over time. The average percentage improvement for the 8 measures tracked between 2001 and 2007 was 18.6 percent while the average improvement for the 10 measures tracked between 2003 and 2007 was 36.7 percent.

[150] Eric C. Schneider, Bruce E. Landon, Carol Tobias, and Arnold Epstein. "Quality Oversight in Medicaid Primary Care Case Management Programs." *Health Affairs*, Volume. 23, Number 6, November-December 2004, pp. 235-242.

Quality of care is comparable to or better than national Medicaid averages for several of the measures. Five of the 19 measures reported consistently met or exceeded national Medicaid benchmarks between 2001 and 2006; the others fell below. Since the HEDIS Medicaid benchmarks include few if any PCCM programs, and since the MCOs that are included are likely to be relatively high-performing (since reporting is voluntary), the SoonerCare Choice performance on these measures is respectable.

2. CAHPS

In CAHPS surveys administered to SoonerCare Choice adults and children between 2003 and 2007, satisfaction levels were consistently high for measures most relevant to PCCM programs. Three-fourths or more of respondents gave high rankings to their overall health care and their personal health care providers, and said they were generally able to get the care they needed, and get it promptly.

SoonerCare Choice satisfaction ratings were below 2005 and 2006 CAHPS national Medicaid benchmarks, but by small margins. Since the AHRQ National CAHPS Benchmarking Database for Medicaid is made up almost entirely of MCOs that submit their results voluntarily, it is encouraging that the SoonerCare Choice ratings were reasonably close to the national benchmark on measures that a PCCM program can be expected to impact.

3. ECHO

Satisfaction with SoonerCare behavioral health care has been consistently high in recent years. Adults were surveyed in 2004 and 2006 and approximately 7 out of 10 respondents reported no problem seeing providers quickly and more than 8 out of 10 reported providers usually or always communicated well. There are no national benchmarks for the ECHO survey.

4. Health Care Status Among Low-Income Oklahomans

The percentage of low-income adults with children who reported their own health status as excellent, very good, or good declined from 81 percent in 1995 to 74 percent in 2007. The decline was even sharper for lower-income adults without children (from 86 percent in 1995 to 62 percent in 2007), but adults without children are less likely to be on Medicaid than those with children. These trends may reflect to some extent the limits on health insurance coverage for lower-income adults in Oklahoma, since private insurance coverage for lower-income adults declined over this period, and Medicaid coverage increased only modestly.

C. COST

Medicaid costs per member in Oklahoma were substantially below the national average between 1996 and 2005. Compared to national averages and to a selection of 19 other states with various kinds of managed care and FFS delivery systems, Oklahoma's Medicaid program has had relatively low costs on a per-member basis since the inception of the SoonerCare managed care program. Looking just at children and non-disabled adults, who account for approximately three-quarters of the enrollment in SoonerCare and in managed care

programs in most other states, annual per-member costs in Oklahoma have been significantly below the national average every year between 1996 and 2005. Oklahoma's per-member expenditures for those in the disabled eligibility category were also below the national average throughout the period, although by a smaller percentage than in the children and adult categories.

Medicaid costs per member were generally lower between 1996 and 2005 in managed care states. In our analysis of per-member expenditure trends, states without any form of managed care had significantly higher per-member expenditures for adults throughout the period, compared to states with PCCM and MCO managed care programs. The pattern was essentially the same for per-member expenditures for children and disabled eligibility categories. The distinctions among states with different forms of managed care (PCCM-only, PCCM-MCO combined, and MCO-only) were less clear and consistent.

Medicaid accounted for a smaller share of total state expenditures in Oklahoma between 1996 and 2005 than the national average and 19 comparison states. Medicaid has accounted for a substantially smaller share of total state expenditures in Oklahoma than the national average throughout the period from 1995 to 2006, and a smaller share than in any of the 19 comparison states we examined. Medicaid represented 6.5 percent of state expenditures in Oklahoma in 1995, rising to just under 10 percent in 2006. During that same period, the national average remained relatively stable, with Medicaid expenditures rising from around 12.5 percent of total state expenditures in 1995 to just under 14 percent in 2006.

State revenue growth constrains Medicaid growth, especially during economic downturns. The growth in expenditures on Medicaid over time in Oklahoma is constrained by growth in state revenues, as it is in other states, since states are generally required to balance their budgets every year. As in other states, there were times in Oklahoma between 1996 and 2006 in which economic conditions and Medicaid program trends combined to produce revenue declines and expenditure increases at the same time, requiring hard decisions to control costs in Medicaid. This occurred most strikingly from 2001 to 2004 in Oklahoma, as it did in most other states.

D. OHCA PERFORMANCE

OHCA is unusual among state Medicaid agencies in several respects: its status as a separate, stand-alone agency; the stability and continuity of its top leadership and key staff; its ability to maintain its own personnel and salary system; its governance by a separate appointed board; and its ability over time to obtain needed resources and flexibility from the legislature and the governor.

In combination, these factors have helped OHCA to construct a Medicaid managed care program that fits Oklahoma well and adapts as needs and circumstances change and as opportunities arise. OHCA has made modest efforts to expand health insurance coverage to children and lower-income workers, within the constraints of the state's political and fiscal circumstances. Recent coverage expansions, for example, have begun to increase the availability of employer-sponsored coverage, albeit to a limited extent.

Some of OHCA's most notable accomplishments include:

- ***SoonerCare Choice Design and Implementation.*** OHCA designed and implemented a PCCM program that increased physician participation and member access in rural areas, and that provided a solid managed care alternative in urban areas when the MCO program became too difficult to maintain in 2003.
- ***Smooth Transitions to New Programs.*** OHCA has invested substantial resources in making transitions to new programs and new forms of care as smooth as possible for members and providers, including the initial transition to managed care in 1995-1996, the inclusion of the ABD population in managed care in 1999, the transition from the MCO to the PCCM program in urban areas in 2003-2004, and implementation of the Insure Oklahoma program in 2005-2006.
- ***Managed Care Enhancements in SoonerCare Choice.*** OHCA has continued to add care coordination and disease management capabilities to the SoonerCare Choice PCCM program through an in-house team of nurse care managers, the new Health Management Program, and plans for improved performance incentives for providers in the new "medical home" model in SoonerCare Choice.
- ***Innovation and Strategic Planning.*** OHCA's leadership has built an agency culture that values careful innovation, bolstered by a systematic and broadly inclusive strategic planning process.
- ***Information Technology Enhancements.*** OHCA has built and continually improved information technology capabilities that facilitate provider payment and data analysis and reporting, using a well-coordinated combination of skilled and experienced in-house staff and on-site outside contractors.
- ***Quality and Performance Monitoring and Reporting.*** OHCA has developed a strong emphasis on quality, performance monitoring, and reporting in SoonerCare and other programs, using both in-house staff and on-site outside contractors.
- ***Public Reporting and Accountability.*** OHCA has undergirded all of its efforts with a systematic commitment to public reporting and accountability, with publications ranging from detailed annual reports to short "Fast Facts" summaries of key program issues.

We also found some areas where OHCA could improve:

- ***Better Coordination of Care Coordination.*** OHCA does not appear to have fully worked through all the ways in which the SoonerCare Choice nurse care managers will relate to the new Health Management Program (HMP). Since there is the potential for overlap in the clients served through these two efforts, and since the HMP is being operated by an outside contractor, coordination is likely to present some challenges. OHCA has already begun to address some of these coordination issues. In addition, the still-developing "medical home" model for SoonerCare Choice

will likely have some additional care coordination features that will have to be integrated into what currently exists.

- ***Better Coordination with Other State Agencies, Especially at the Staff Level.*** While OHCA collaborates effectively with a wide range of other state agencies, and while the relationships among agency heads appear very strong, we picked up some indications in our interviews that relationships with some agencies may not be as strong below the leadership level. Responsibility for home-and-community-based services (HCBS) waiver programs is shared between OHCA and the Department of Human Services, for example, so differences in perspectives and priorities can sometimes lead to tensions between the two agencies. Since some participants in HCBS waiver programs may also be served by OHCA's nurse care managers, greater attention to the linkages between HCBS waivers and the SoonerCare Choice program may be warranted. We also saw evidence that the Oklahoma Insurance Department perspective on the Insure Oklahoma program sometimes differs from that of OHCA, so continued efforts to improve communication and collaboration between the two agencies would likely benefit that program.

- ***Improved Data Collection on PCP Participation within Provider Groups.*** Our analyses considered individual providers within each provider group as a potential PCP; however, one concern that we were not able to address with currently available data was whether each individual group member actually rendered services to Medicaid patients. OHCA indicated that, while some groups reliably report the rendering provider for each service, others have claims patterns that suggest data submission is incomplete (i.e. all claims have the same rendering provider number). Improving the quality of rendering provider data would enable analyses of the number of providers actually delivering care. Tracking the count of rendering PCPs, as opposed to the count of potential PCPs who are members of contracted groups, would provide a more accurate way of monitoring PCP participation. If OHCA implements the new "medical home" reimbursement system it is considering for the SoonerCare Choice program, the more complete FFS claims data on primary care visits provided by that system would facilitate this kind of enhanced tracking of PCP participation.

- ***Even More Communication, Especially with the Legislature.*** Despite OHCA's extensive public reporting on its activities, our interviews suggested that awareness of OHCA activities and programs is not widespread among legislators and other key constituents. Given the frequent turnover in Oklahoma's term-limited legislature, ongoing education programs should remain a priority.

- ***Leadership Transition Planning.*** Our interviews with a wide range of OHCA staff and external stakeholders made it very clear that a large part of OHCA's success over the years can be attributed to the skill, experience, and stability of the agency's leadership and top managers. OHCA's leaders have done a great deal to build and enhance the agency's institutional capability, so there will be strong organizational support for any new set of leaders that the future may bring. Nonetheless, leadership transitions always present both internal and external challenges to organizations, so preparing for those challenges should be part of the strategic planning agenda for any public agency.

V. LESSONS AND IMPLICATIONS FOR OTHER STATES

We conclude this report by presenting lessons and implications for other states that have emerged from our evaluation of the Oklahoma SoonerCare 1115 waiver program. Specifically, we examine the key lessons that Oklahoma illustrates in program design and management, agency management, and stakeholder relationships.

A. PROGRAM DESIGN AND MANAGEMENT

1. Managed Care Organizations (MCOs) vs. In-House Care Management

With sufficient resources and leadership commitment, state Medicaid agencies can manage care at lower costs than MCOs and with similar outcomes. Annual per-member costs in Oklahoma have been significantly below the national average for every year between 1996 and 2005, and in most cases below the average of states operating MCOs. Given the cost trajectory of Oklahoma's MCO contracts, and the limited competition that existed between companies at the time that the Plus program was terminated, it seems likely that SoonerCare would have been more costly to operate during the past four years had those contracts been maintained. Evidence from this evaluation suggests that provider participation and member outcomes have not been adversely affected as a result of the statewide expansion of SoonerCare Choice and termination of the MCO contracts, though we did find some evidence that preventable hospitalizations for diabetes and asthma may have increased. In states such as Oklahoma, where managed care penetration is low and turnover among MCOs is relatively high, MCOs' key advantage—utilizing resources more flexibly—may have limited effectiveness in achieving better outcomes. The growing concentration of Medicaid managed care interest and capabilities in a relatively small number of multi-state private MCOs have prompted many states to look at state-managed PCCM, care management, and disease management programs as potential alternatives.[151] Oklahoma has demonstrated that such programs have the potential to produce results that are as good as those produced by private MCOs, and perhaps better, if state Medicaid agencies have the necessary resources and a commitment to truly manage care.

2. General Program Design

Models from other states can be important guides, but they must be adapted to the context of individual states. Oklahoma made extensive use of outside consultants and site visits to other states when developing the initial SoonerCare program from 1992 to 1994. It then incorporated an innovative partial capitation feature into its PCCM program to encourage the

[151] Robert Hurley, Michael McCue, Mary Beth Dyer, and Michael Bailit. "Understanding the Influence of Publicly Traded Health Plans on Medicaid Managed Care." Princeton, NJ: Center for Health Care Strategies, November, 2006; Robert E. Hurley and Stephen A. Somers. "Medicaid Managed Care," in Peter J. Kongstvedt, *Essentials of Managed Health Care*, Fifth Edition, 2007, pp. 619-632; Melanie Bella, Chad Shearer, Karen LLanos, and Stephen A. Somers. "Purchasing Strategies to Improve Care Management for Complex Populations: A National Scan of State Purchasers," Princeton, NJ: Center for Health Care Strategies, March 2008.

participation of rural physicians who had previously been reluctant to see Medicaid patients. It also set up a separate, stand-alone Medicaid agency that had few counterparts in other states, to help give a higher priority and greater focus to health care policy and Medicaid managed care. Other states would benefit from using an equally careful approach when borrowing and adapting successful features of other programs to their own specific context.

Wide consultation with external stakeholders on program design can pay major dividends. Oklahoma initially planned to include the ABD population in SoonerCare on a mandatory basis in 1997, a step few other states were taking at the time; but extensive consultation with disability advocacy groups, MCOs, and providers persuaded OHCA to delay implementation until 1999, when OHCA was able to phase in mandatory enrollment with little controversy or difficulty. As discussed in Chapter II, the Ku and Wall evaluation of the early years of SoonerCare implementation concluded that it went much more smoothly than similar managed care implementations in other states during that period, due in part to OHCA's extensive efforts to reach out to MCOs, providers, and member advocates.

3. Ongoing Performance Measurement

Robust performance measurement capabilities, like those developed by OHCA, provide reliable data to support key management decisions. OHCA has made a strong commitment to measuring program performance. Though most states now use Healthcare Effectiveness Data and Information Set (HEDIS) and Consumer Assessment of Healthcare Providers and Systems (CAHPS) measures to monitor the performance of contracted MCOs, and many states have begun using the measures within their PCCM programs, OHCA demonstrated an early commitment to tracking these measures for the SoonerCare Choice program.[152] OHCA began administering CAHPS surveys in 1997, and reported HEDIS measures as early as 2001.[153] The availability of comparable quality and consumer satisfaction data, which showed strong performance in the Choice program, played a key role in supporting the difficult decision to terminate the Plus program in 2003, as MCOs began to drop out of Medicaid managed care in Oklahoma and hospital-based MCOs encountered challenges in managing utilization and costs. Since then, OHCA has continued an innovative approach to performance measurement, seeking new approaches to examining its data in a way that illuminates program management, such as its analysis of ER utilization, development of individual primary care provider (PCP) performance profiles, and analysis of the impact of care management on utilization of behavioral health services.[154] Other states would benefit from viewing their own performance as critically as they measure the performance of contracted MCOs.

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[152] Vernon Smith, Kathleen Gifford, and Eileen Ellis. "Headed for a Crunch: An Update on Medicaid Spending, Coverage, and Policy Heading into an Economic Downturn." Washington, DC: Kaiser Family Foundation, September 2008.

[153] OHCA. "Minding our Ps and Qs: Performance and Quality for Oklahoma SoonerCare Programs." Oklahoma City, OK: OHCA, 2003.

[154] OHCA. "Minding our Ps and Qs: Performance and Quality for Oklahoma SoonerCare Programs." Oklahoma City, OK: OHCA, 2006.

Where data availability limits agency performance measurement capabilities, states should explore partnerships with other agencies that collect data on Medicaid populations. OHCA has engaged in collaborative data-sharing initiatives with the Oklahoma State Department of Health (OSDH) to complement and expand access to data on its members. For example, in order to obtain a clearer picture of enrollee immunization histories, OHCA has worked with OSDH to compile a common immunization registry. For this report, we built upon that existing partnership, combining data on inpatient hospitalizations and Medicaid enrollment in order to gain insights on the performance of Medicaid MCOs. Data that Oklahoma received from SoonerCare Plus MCOs on patient encounters and hospitalizations were not consistently reliable across MCOs, making it difficult to assess the overall performance of the SoonerCare Plus program. Many states have similar concerns about encounter data completeness from their MCOs. By applying publicly available software tools to records of inpatient discharges, Medicaid programs can calculate the rate of preventable hospitalizations and gain a valuable perspective on the performance of their MCOs. Thirty-nine states now systematically collect inpatient discharge data through a project led by the Agency for Healthcare Research and Quality (AHRQ) and could make use of this approach by collaborating with the entities within their state that maintain discharge records.[155] Analysis in Oklahoma provided evidence that the statewide SoonerCare Choice PCCM program is generally performing as effectively as the MCOs in its Plus program had performed in urban areas.

States should develop measures that provide perspective on both performance improvement and performance constraints. Measures that provide perspective on internal performance constraints may be as valuable as those that measure program performance relative to an external benchmark. This report includes several measures intended to both illuminate Oklahoma's performance and identify notable constraints on performance improvement. For example, we examined OHCA's success in recruiting PCPs from the pool of potential providers and found that the SoonerCare Choice program has recruited 60 percent or more of family/general practitioners and pediatricians in rural areas. Given these already high participation rates in rural areas, it may be difficult for SoonerCare Choice to further boost its PCP participation numbers. In a separate analysis we found that about 50 percent of Medicaid hospital admissions occur in such close proximity to Medicaid eligibility that the agency cannot reasonably expect to influence the likelihood of those events occurring or to avoid their associated costs. This type of data helps to set reasonable expectations about the potential for cost savings associated with new initiatives.

4. Approach to Client Service

Focusing on providers as clients can significantly improve participation rates. OHCA increased Medicaid physician reimbursement to 100 percent of Medicare rates in 2005, making Oklahoma one of only a few states that reimburse physicians at that relatively high level. Providers offered consistently positive feedback about the initiatives that OHCA has undertaken in recent years to simplify their interactions with the agency. Most of these initiatives have been information technology based, such as online real-time claims processing and upgrades in the

[155] Agency for Healthcare Research and Quality. "Healthcare Cost and Utilization Project: State Inpatient Databases." www.hcup-us.ahrq.gov/sidoverview.jsp#States. Accessed October 10, 2008.

call center to support more fluid call transfers. While the role of provider reimbursement cannot be ignored, these kinds of initiatives have almost certainly contributed to OHCA's continued provider participation growth.[156] The rollout of online enrollment for providers later this year is likely to provide an additional recruitment boost.

Medicaid eligibility expansions for children, coupled with outreach and simplified applications such as those instituted in Oklahoma, can improve participation rates and reduce uninsurance. Like many other states, Oklahoma's Medicaid eligibility expansions, have dramatically increased enrollment among low-income pregnant women and children in the program. However, to ensure that all those eligible can enroll and to achieve high Medicaid participation rates, concerted outreach and simplified application processes like those Oklahoma carried out are essential. On the other hand, uneven progress throughout Oklahoma—as is likely to be the situation in most states—indicates the importance of targeted outreach efforts in certain regions to ensure that the benefits of expanded coverage are shared equally. Oklahoma's success in lowering the rate of uninsured low-income children, (in families earning up to twice the federal poverty level), reinforces the importance of Medicaid and SCHIP to these families in light of continuing declines in rates of private insurance coverage for low-income children.

B. AGENCY MANAGEMENT

Though change is always disruptive, adequate resources and leadership can ensure that even difficult transitions are accomplished smoothly. OHCA's transition of the SoonerCare Plus population to SoonerCare Choice in the first three months of 2004 is a textbook example of how to accomplish a challenging and abrupt program transition with minimal disruptions. In early November 2003, the OHCA Board decided not to renew MCO contracts for the following year and to end the SoonerCare Plus program on December 31, 2003. Over the next several months, OHCA staff established a clear timeline to accomplish the transition of all Plus members to SoonerCare Choice by April 2004, and worked tirelessly to ensure that deadlines were met. Top leadership participated in some of the necessary legwork tasks, sending a clear signal about the importance of success. Afterward, the agency evaluated its own performance during the transition process and published a report on the transition effort.

Managing managed care programs requires major investments in infrastructure, staffing, monitoring, and reporting. While OHCA had an advantage from the outset as a stand-alone agency with unusual flexibility in staffing and salary levels, over time it has built very sophisticated information technology, data analysis, and reporting capabilities, using a combination of experienced in-house staff and outside contractors, most of whom work on-site in close conjunction with OHCA staff.

Good management to ensure the retention of skilled in-house staff is critical to working successfully with outside contractors and to overall agency success. The experience and

[156] Recent research supports the view that higher reimbursement alone may not be enough to increase physician participation in Medicaid if it is not accompanied by steps to reduce payment delays and other administrative obstacles. See Peter J. Cunningham and Ann S. O'Malley. "Do Reimbursement Delays Discourage Medicaid Participation By Physicians?" *Health Affairs*, Web Exclusive, November 18, 2008, pp. w17-28.

stability of OHCA's top leaders and managers is relatively unusual among state Medicaid agencies, but it is not just tenure that makes a difference. OHCA's leaders and managers actively work to keep morale, commitment, and productivity high. As a result, many key OHCA staff members have been with the agency since the 1990s, providing guidance and continuity for key functions that are performed by outside contractors, such as claims payment, and data collection and analysis. Two-thirds of the top executive staff have been with OHCA since 1995, as have well over one-third of all supervisory staff.[157]

A well-developed strategic planning process enables an agency to be prepared to take advantage of windows of opportunity that can open and close quickly. OHCA instituted an annual strategic planning process in part to fulfill a state budget requirement; however the process has become integral to the agency as a way to focus priorities and engage stakeholders. Top leadership makes explicit choices and ranks projects by relative priority; staff throughout the agency are aware of projects that have been identified as key agency priorities. This type of explicit planning process, conducted with the level of specificity and commitment demonstrated by OHCA, leaves the agency far better prepared to take advantage of windows of opportunity that may open fairly briefly. For example, with the economic recovery in 2005 after several years of budget challenges, OHCA was able to establish the Insure Oklahoma program.

Changing circumstances provide new opportunities; states should continue to monitor whether program design best meets current needs. The original SoonerCare Choice partial capitation model was a good solution to the physician participation problem that existed in rural Oklahoma in the early 1990s, but it provided few financial incentives for providers to actually provide the services that were capitated. OHCA added payment incentives for EPSDT screening and immunizations, and in 2005 increased Medicaid physician reimbursement to 100 percent of Medicare. Recognizing the limits of partial capitation, the opportunities presented by higher FFS reimbursement, and the growing interest in pay-for-performance reimbursement systems, OHCA has taken advantage of the current interest in "medical home" models to propose further refinement of the SoonerCare Choice reimbursement system in order to build in more financial incentives for physicians to provide primary care services and to improve their performance on other dimensions. As in the past, OHCA is working closely with physicians and other stakeholders to assure that this change in reimbursement is fully discussed and understood before being implemented.

C. RELATIONSHIPS WITH EXTERNAL STAKEHOLDERS

Effective and continuous communication is a crucial task for state Medicaid agencies. OHCA has done a thorough and skillful job of reporting on OHCA programs and accomplishments. The agency reports shortcomings and areas for improvement, thereby enhancing its credibility. While the number of people who read these reports cover-to-cover may be limited, the reports demonstrate a commitment to public accountability and openness that is critical in a program that serves hundreds of thousands of people, depends on thousands of providers, and uses billions of taxpayer dollars. OHCA's investment in this type of communication tool also leaves the agency in a better position to tackle one of the most difficult

[157] OHCA Workforce Analysis, provided to MPR on November 10, 2008.

problems facing Medicaid agencies: Medicaid is a very complicated program that can be difficult for people to understand**.** Most people see only small parts of the program, if they are aware of it at all. Medicaid agencies should, as OHCA has done, seize every opportunity to provide information on the program to legislators, other key stakeholders, reporters, and the public as a whole, knowing that those opportunities may be fleeting. Having good information already on the shelf is the best way to be prepared to take advantage of those opportunities when they arise.[158]

Consultation with external stakeholders should be pursued in a targeted way that builds engagement and support. OHCA has created targeted opportunities for stakeholder engagement that have built its reputation as a willing and thoughtful partner. Most notably, OHCA holds its annual strategic planning meeting as an open and interactive forum in which the agency can articulate priorities that have been identified internally, and hold a real-time dialogue with key constituents to refine those priorities, building stakeholder buy-in through the process. OHCA has also instituted a separate physicians-only advisory board with representatives from key Medicaid provider groups (family practitioners, pediatricians, geriatricians, and so on) that has been instrumental in developing new initiatives and providing OHCA with feedback on how to improve the engagement of the physician community. OHCA's annual summits with the American Indian community, recognizing their unique expertise in providing culturally appropriate care, have also resulted in productive collaborations that have enabled the agency to reach this difficult-to-serve population and to address those needs of most concern to Oklahoma tribes.

[158] For more discussion of these communication issues, see James M. Verdier and Robert E. Hurley. "State Medicaid Managed Care Evaluations and Reports: Themes, Variations, and Lessons." Princeton, NJ: Center for Health Care Strategies, May 2004; James M. Verdier and Rebecca Dodge. "Using Data Strategically in Medicaid Managed Care." Princeton, NJ: Center for Health Care Strategies, January 2002; and James M. Verdier. "Implementing Medicaid Managed Care: Suggestions for Dealing with the Media, Legislators, Providers, Recipients, and Advocates." Princeton, NJ: Center for Health Care Strategies, November 1997.

APPENDIX A
COMPLETED INTERVIEWS

OHCA Staff

- Mike Fogarty, Chief Executive Officer
- Garth Splinter, former Chief Executive Officer
- Dr. Lynn Mitchell, State Medicaid Director
- Policy, Planning and Integrity
  - Cindy Roberts, Deputy Chief Executive Officer
  - Buffy Heater, Planning and Development Manager
- SoonerCare Operations
  - Dr. J. Paul Keenan, Chief Medical Officer
  - Becky Pasternik-Ikard, Chief Operating Officer
  - Debra Johnson, MMIS Reprocurement Manager
  - Patricia Johnson, Quality Assurance/Quality Improvement Director
  - Beverly Rupert, Systems Integrity Review Nurse
  - Kacey Hawkins, Quality Assurance Project Manager
  - Kevin Rupe, Member Services Director
  - Melody Anthony, Provider Services Director
  - Terrie Fritz, Child Health Unit Director
  - Dr. Michael Herndon, Health Care Management Medical Director
  - Margaret Pitt-Helm, Health Management Manager
  - Trevlyn Cross, Indian Health Manager
  - Teri Dalton, Health Wellness Manager
  - Melinda Jones, Waiver Development and Reporting Director
  - Matt Lucas, Insure Oklahoma Director
  - Nicole Altobello, Insure Oklahoma Operations Manager
  - Care Management Staff
    - Marlene Asmussen, SoonerCare Care Management and Medical Authorization Services Director
    - Carolyn Reconnu, Care Management Supervisor
    - Diana Capps, Care Management Supervisor
    - Cheryl Moore, Care Management Supervisor
    - Connie Wildman, SoonerRide Manager
    - Jennifer Laizure, Senior Exceptional Needs Coordinator

- Michelle Meixel, Senior Exceptional Needs Coordinator
- Reneé Davis, Senior Exceptional Needs Coordinator
- Rebekah Gossett, Senior Exceptional Needs Coordinator
- Jeanne Leopard, Senior Exceptional Needs Coordinator

- Legal Services
  - Howard Pallotta, General Counsel
  - Beth VanHorn, Legal Operations Director
  - Peggy Hanson, Provider Contracting Manager
  - Theresa Isenhour, Senior Contract Coordinator
- Information Services
  - John Calabro, Chief Information Officer
  - Lynn Puckett, Contract Services Director
  - Lise DeShea, Statistician
  - Connie Steffee, Reporting and Statistics Manager
  - Brett May, Data Processing Analyst/Planning Specialist IV
  - Holly Stoner, Data Processing Analyst/Planning Specialist IV
  - Judi Worsham, Data Processing Administrator
- Financial Services
  - Anne Garcia, Chief Financial Officer
  - Debbie Ogles, Financial Management Director
  - Carrie Evans, Chief Financial Officer (effective February 2009)
  - Juarez McCann, Chief Budget Officer
  - Marianne Lingle, Federal Reporting Financial Manager

Other Stakeholders

- OHCA Board and Committee Members
  - Lyle Roggow, OHCA Board Member
  - Dr. Daniel McNeill, Vice Chair, OHCA Medical Advisory Committee
  - Dr. Dale Askins, President, Morning Star Emergency Physicians, and OHCA Medical Advisory Task Force Member

- Oklahoma State Legislators
  - Senator Brian Crain (R), Co-Chair, Appropriations Subcommittee on Health and Social Services
  - Representative Doug Cox (R), Medicaid Reform Commission and Chair, Committee on Public Health
  - Angela Munson, former Oklahoma State Senator, involved in OHCA formative stages
- Oklahoma State Agencies
  - Kim Holland, Oklahoma Insurance Commissioner, and former OHCA Board Member
  - Craig Knutson, Chief of Staff, Oklahoma Insurance Department
  - Yvonne Meyers, Chief of Federal Funds Development, Oklahoma State Department of Health
- SoonerCare Plus Health Plans
  - Brian Maddy, Chief Executive Officer, University of Oklahoma Physicians, and former lobbyist for Heartland Health Plan
  - Tanya Case, Executive Director, Lawton Community Health Center, and former Chief Executive Officer, Prime Advantage
  - Joe Anderson, former Chief Executive Officer, Schaller Anderson
- Advocates and Other Stakeholders
  - Carmelita Skeeter, Chief Executive Officer, Indian Health Care Resource Center of Tulsa
  - Anne Roberts, Executive Director, Oklahoma Institute for Child Advocacy, and former OHCA Board Member
  - Kenneth King, Executive Director, Oklahoma State Medical Association
  - Melissa Johnson, Director of Health Care Policy, Oklahoma State Medical Association
- Data Contractors
  - Scott Mack, General Manager—Midwest Region, State Health and Human Services, EDS
  - James Lanier, Business Analyst, EDS
  - Daniel Sorrells, Executive Director, APS Healthcare of Oklahoma
  - Ryan Morlock, Health Intelligence Consultant, APS Healthcare of Oklahoma

APPENDIX B

ADDITIONAL QUANTITATIVE ANALYSES

PREVENTABLE HOSPITALIZATION LOGISTIC REGRESSION RESULTS

Table B.1. Logistic Regression Coefficients Estimating the Impact of the Transition from SoonerCare Plus to SoonerCare Choice on Preventable Hospitalizations Among Urban Adults, Ages 20 to 64.

	Initial Regression Model*		Regression Model with Additional Controls**	
	Coefficient Estimate on Year2006*Urban [Effect of Transition to Choice Program]	P-Value	Coefficient Estimate on Year2006*Urban [Effect of Transition to Choice Program]	P-Value
Any Preventable Hospitalization	-0.113	0.113	0.071	0.439
Any diabetes hospitalization	0.062	0.727	0.448	0.056
Diabetes short term complication	-0.136	0.653	0.028	0.949
Diabetes long term complication	0.209	0.393	0.676	0.045
Uncontrolled diabetes without complications	-0.121	0.781	0.172	0.757
Diabetes-related lower extremity amputation	0.556	0.316	1.420	0.086
Chronic Respiratory Diseases				
Chronic obstructive pulmonary disease	-0.311	0.055	-0.238	0.330
Asthma	-0.069	0.728	0.198	0.451
Circulatory Diseases				
Hypertension	-0.003	0.994	-0.184	0.658
Congestive heart failure	-0.168	0.365	0.188	0.467
Angina without procedure	-0.575	0.147	-0.188	0.716
Acute Conditions				
Dehydration	-0.303	0.290	-0.166	0.640
Bacterial pneumonia	-0.164	0.253	0.063	0.733
Urinary infection	-0.002	0.993	-0.328	0.296

Source: MPR analysis of OHCA Medicaid enrollment records and OSDH inpatient discharge records.

Note: A negative, statistically significant (p-value < 0.10) coefficient indicates that the transition to SoonerCare Choice in urban areas was associated with a decrease in preventable hospitalizations.

* The regression model was specified as follows, where p is the probability of a preventable hospitalization occurring: $\ln(p/(1-p))=\beta 0+ \beta 1 year2006+ \beta 2 urban+ \beta 3 year2006*urban+ \beta 4 female+ \beta 5 aged\_45\text{-}64+ \mu$.

** The regression model with additional controls was specified as follows, where p is the probability of a preventable hospitalization occurring: $\ln(p/(1-p))=\beta_0+ \beta_1 year2006+ \beta_2 urban+ \beta_3 year2006*urban+ \beta_4 female+ \beta_5 age45\_64+ \beta_6 percent\_asthma+ \beta_7 percent\_diabetes+ \beta_8 MDs\_per\_capita+ \beta_9 percent\_hispanic+\mu$.

Table B.2. Logistic Regression Coefficients Estimating the Impact of the Transition from SoonerCare Plus to SoonerCare Choice on Preventable Hospitalizations Among Urban Children, Ages 0 to 19*

Preventable Hospitalization	Coefficient Estimate on Year2006*Urban [Effect of Transition to Choice Program]	P-Value
Asthma	0.329	0.016
Diabetes Short Term Complication	-0.231	0.528
Gastroenteritis	0.128	0.261
Urinary Tract Infection	0.098	0.684

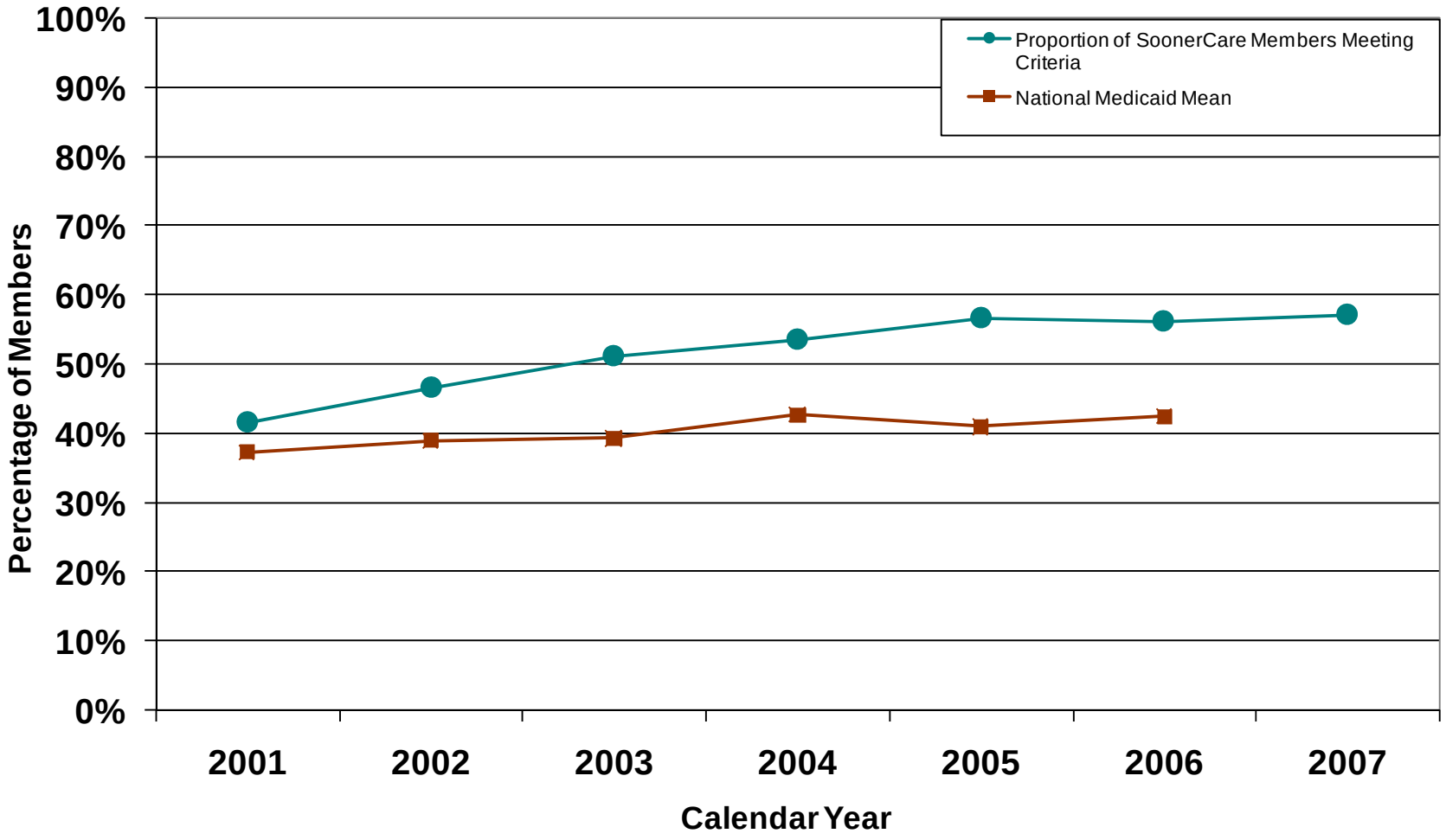
Source: MPR analysis of OHCA Medicaid enrollment records and OSDH inpatient discharge records.

Note: A negative, statistically significant (p-value < 0.10) coefficient indicates that the transition to SoonerCare Choice in urban areas was associated with a decrease in preventable hospitalizations.

* The regression model was specified as follows, where p is the probability of a preventable hospitalization occurring: $\ln(p/(1-p))=\beta 0+ \beta 1 year2006+ \beta 2 urban+ \beta 3 year2006*urban+ \beta 4 female+ \mu$.

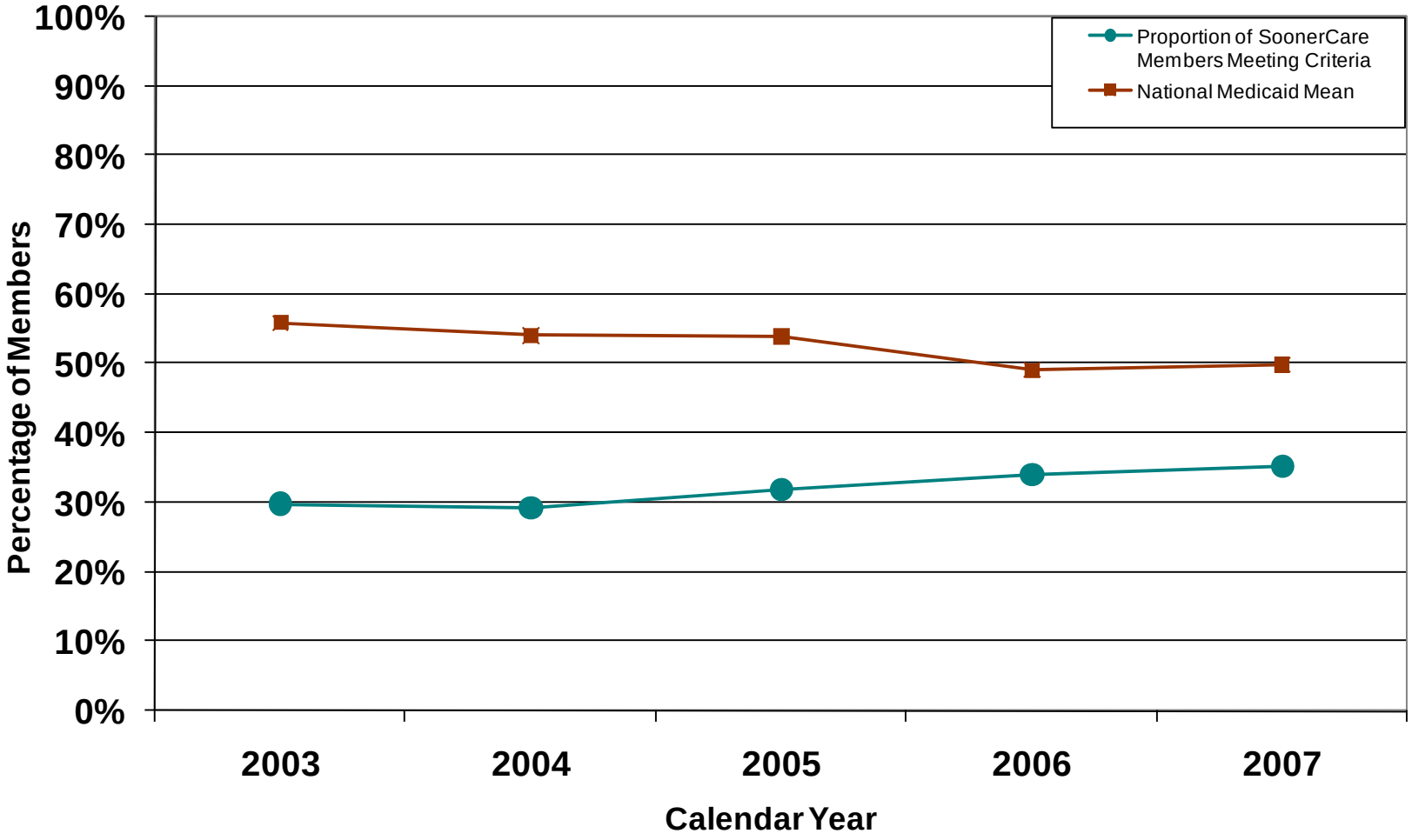
HEDIS MEASURES

Figure B.1
Annual Dental Visit, Members < 21 Years



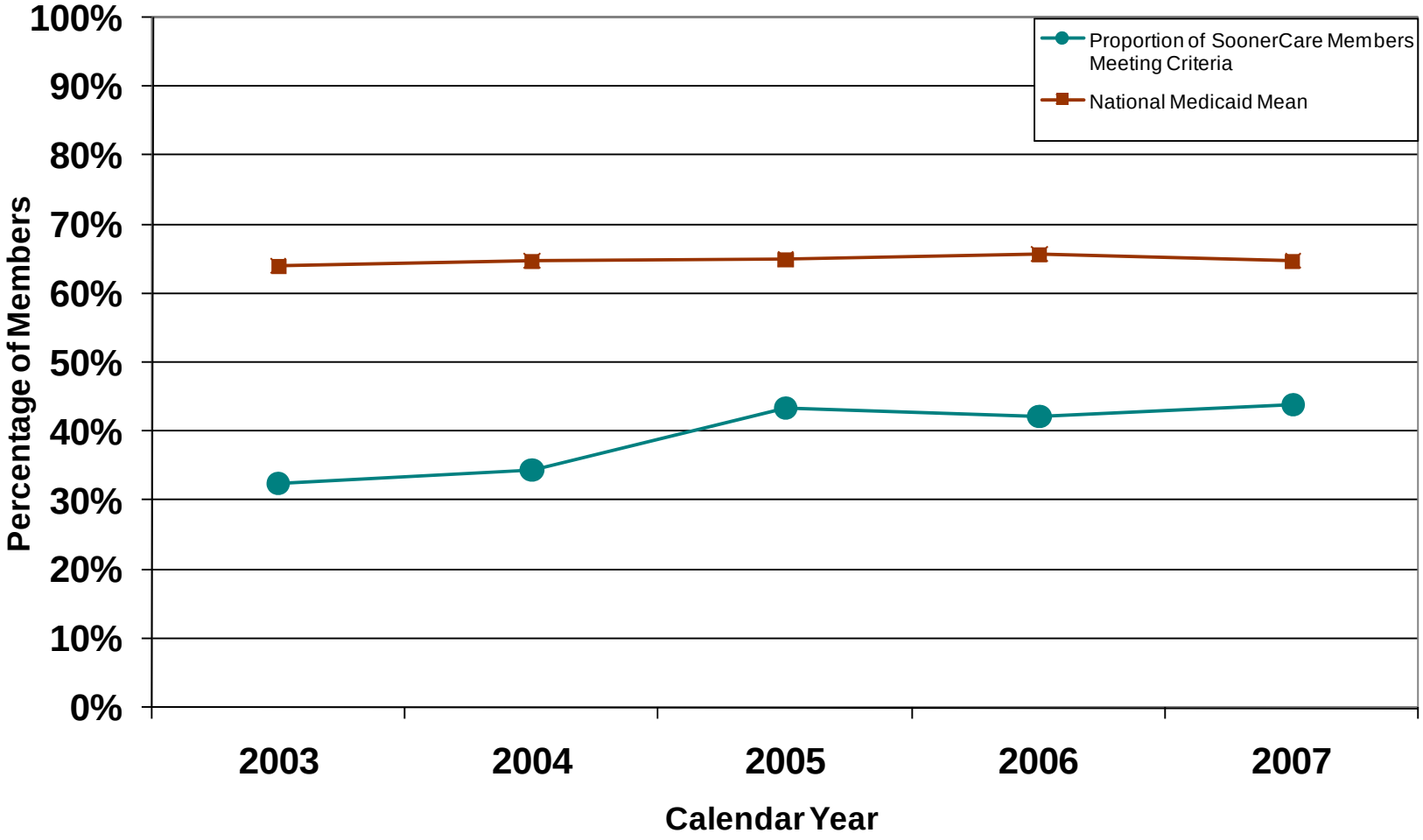
Source: OHCA.

Figure B.2
Breast Cancer Screening



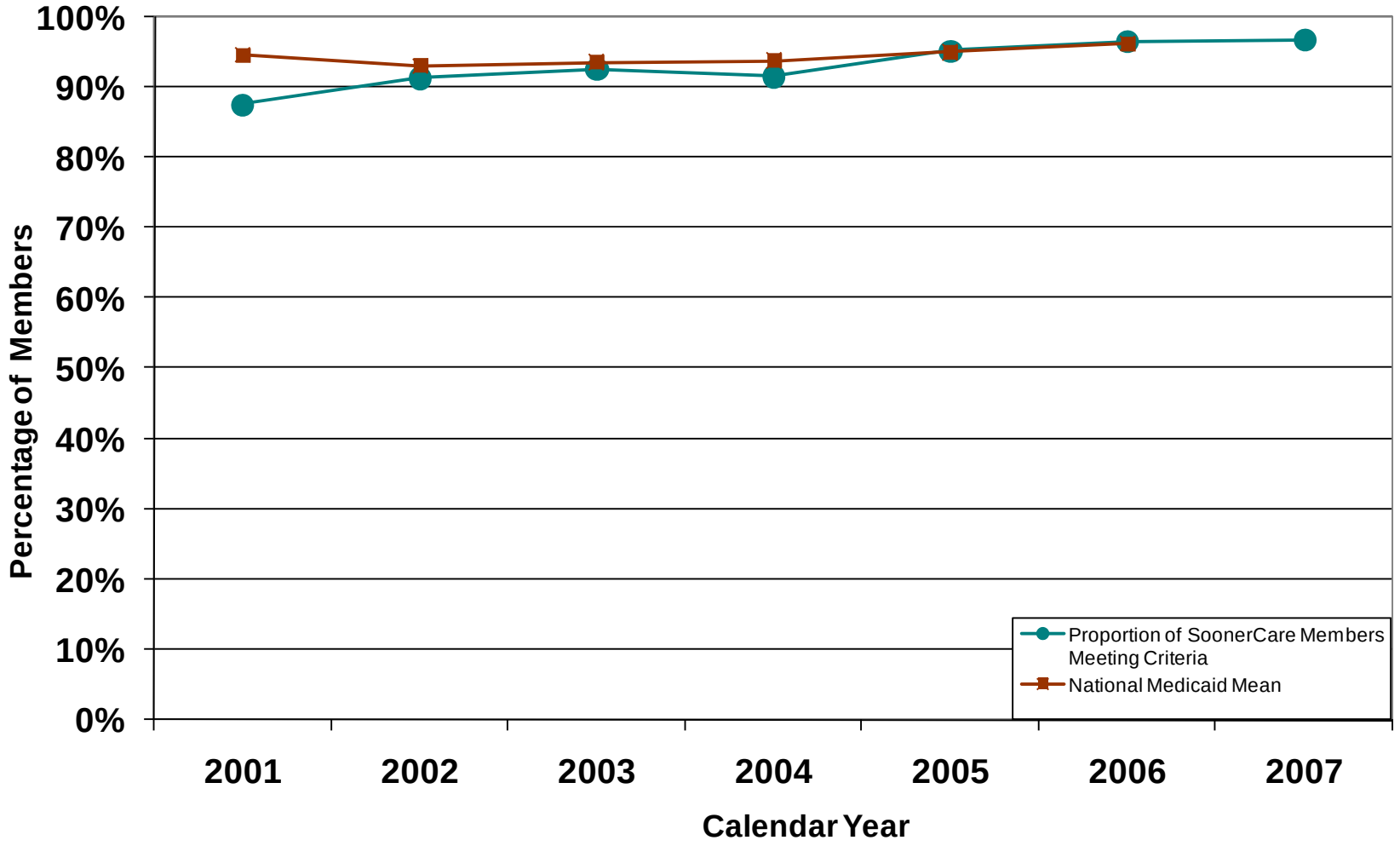
Source: OHCA.

Figure B.3
Cervical Cancer Screening



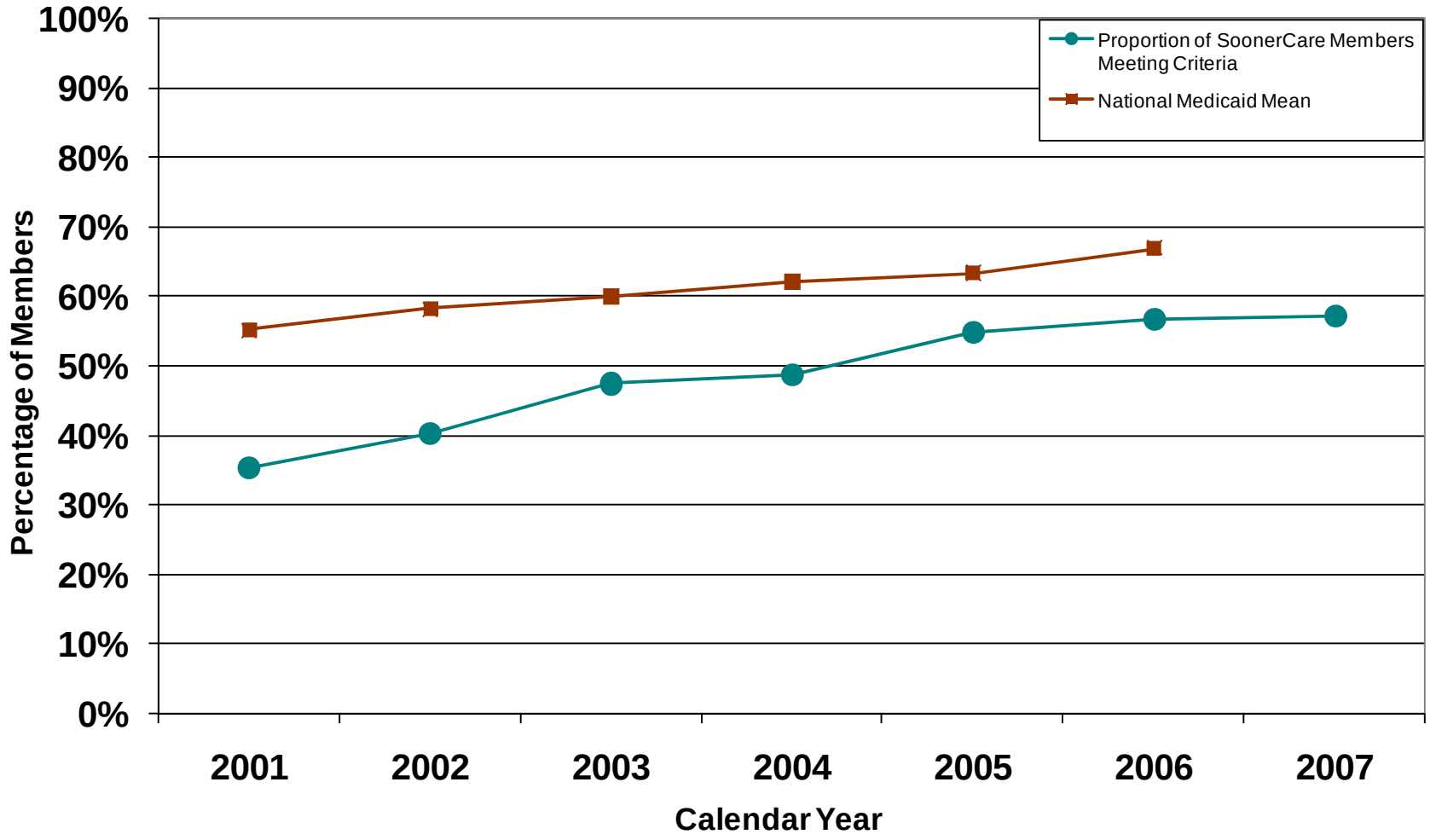
Source: OHCA.

Figure B.4
Annual Child Health Checkup, Ages 0-15 Months



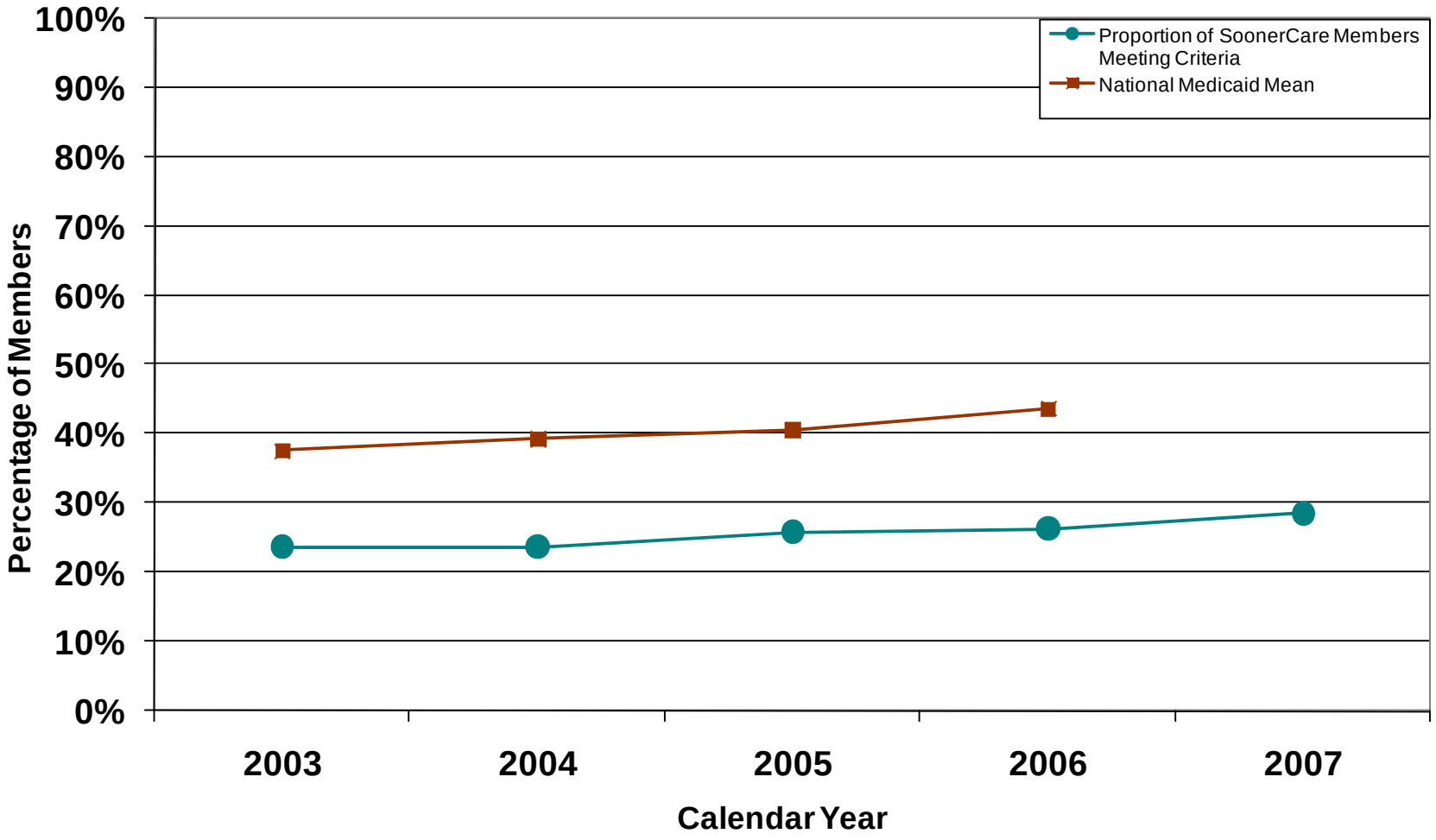
Source: OHCA.

Figure B.5
Annual Child Health Checkup, Ages 3-6 Years



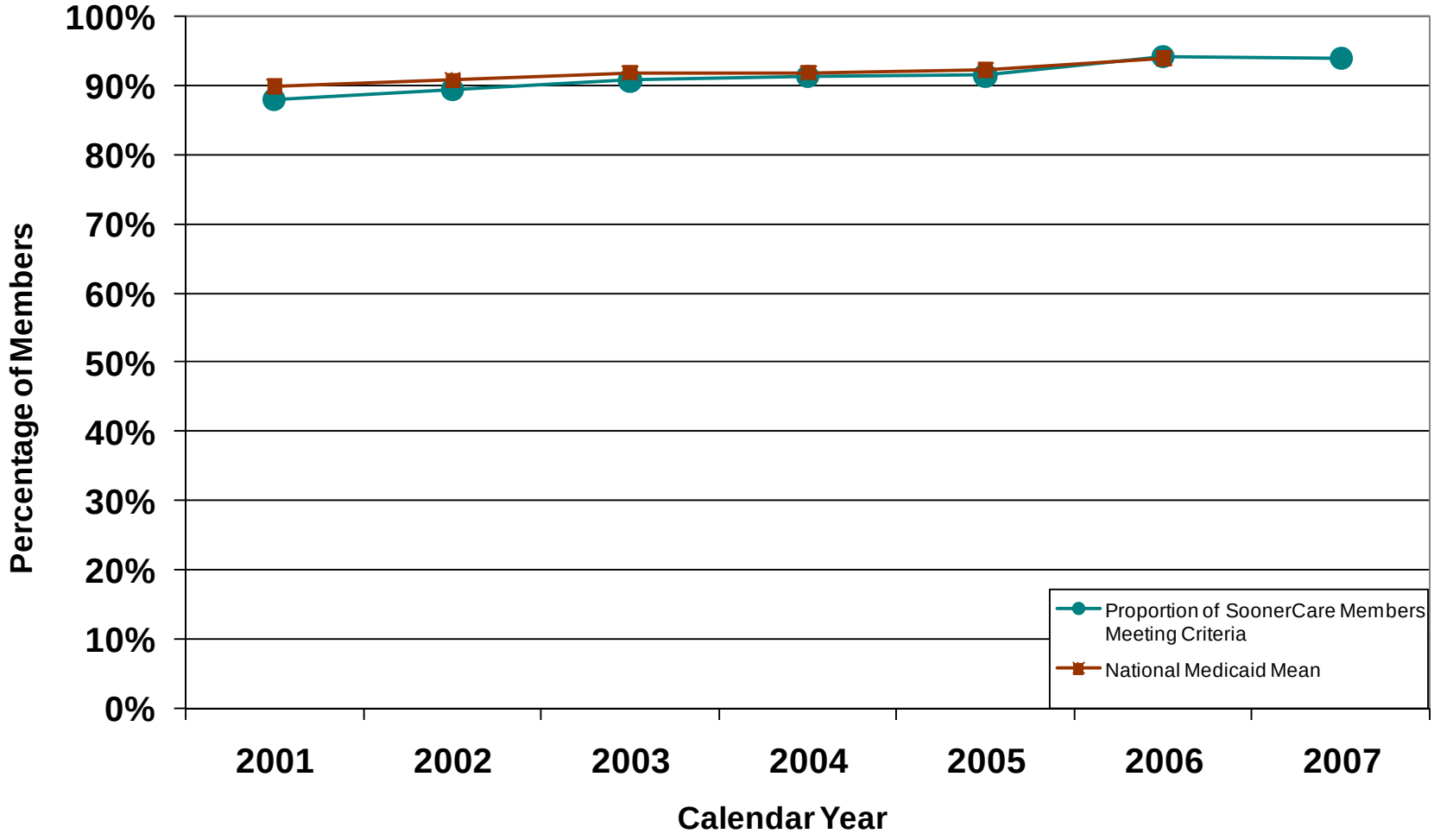
Source: OHCA.

Figure B.6
Annual Child Health Checkup, Adolescents



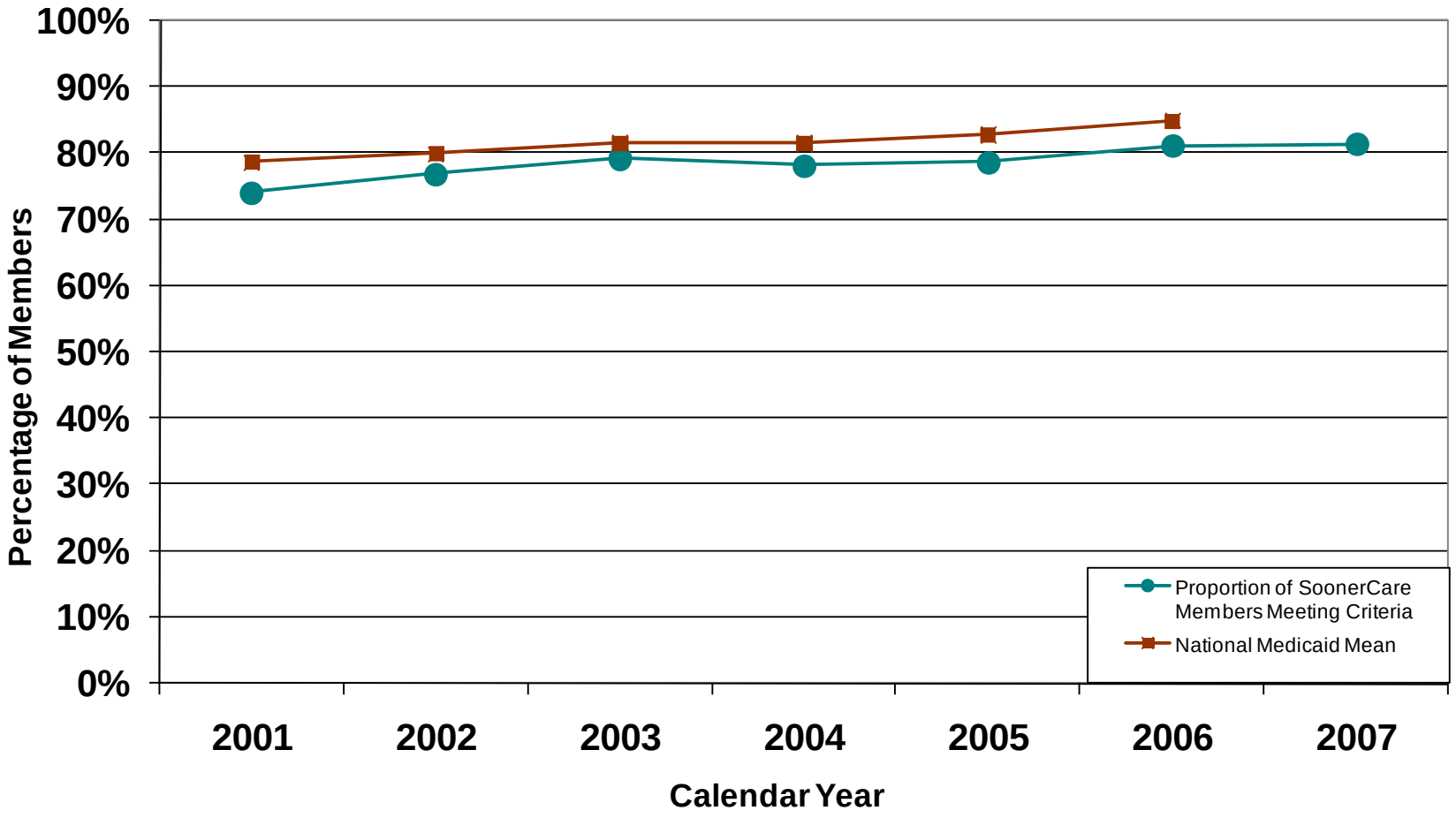
Source: OHCA.

Figure B.7
At Least One PCP Visit, Ages 12-24 Months



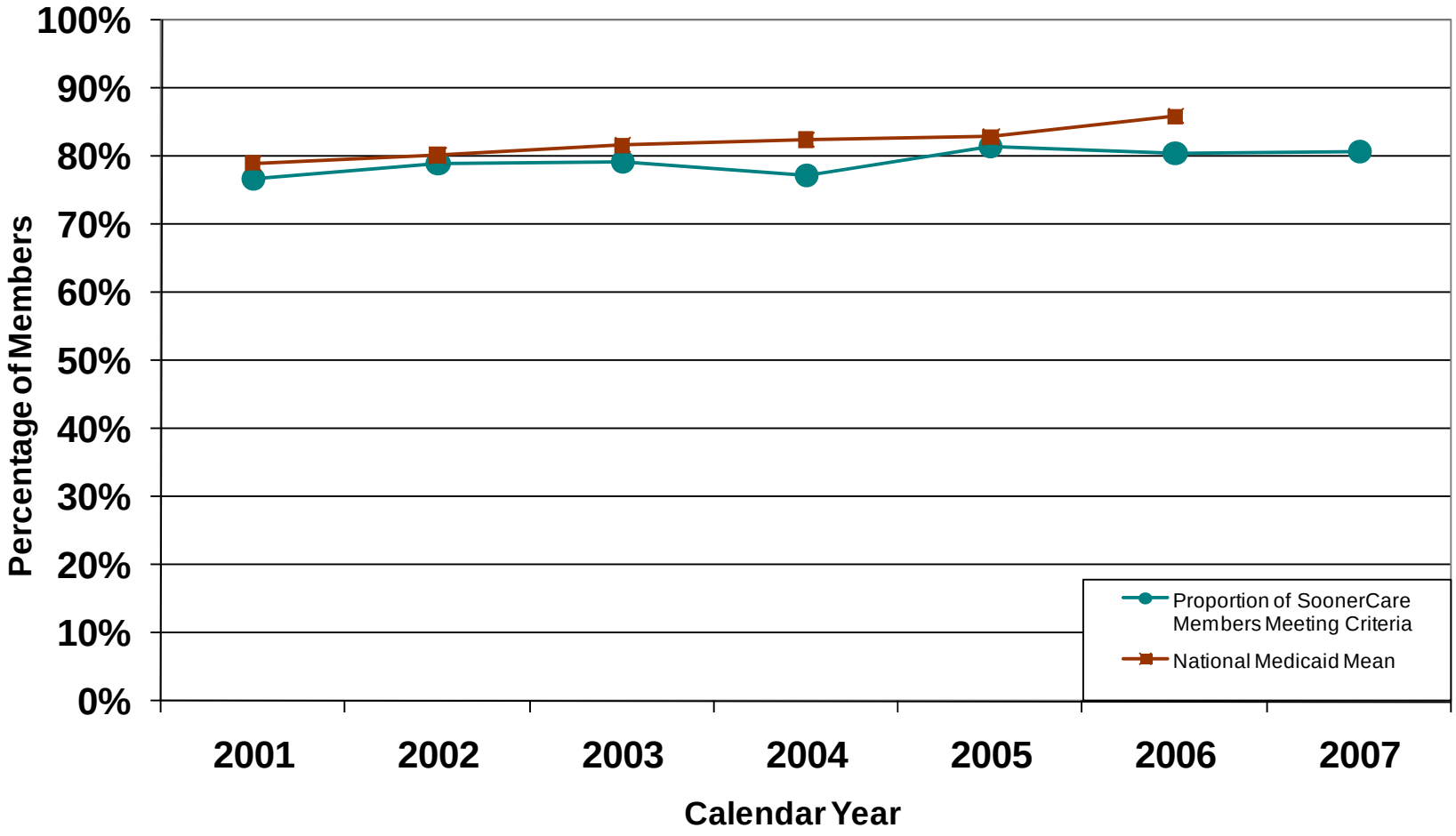
Source: OHCA.

Figure B.8
At Least One PCP Visit, Ages 25 Months-6 Years



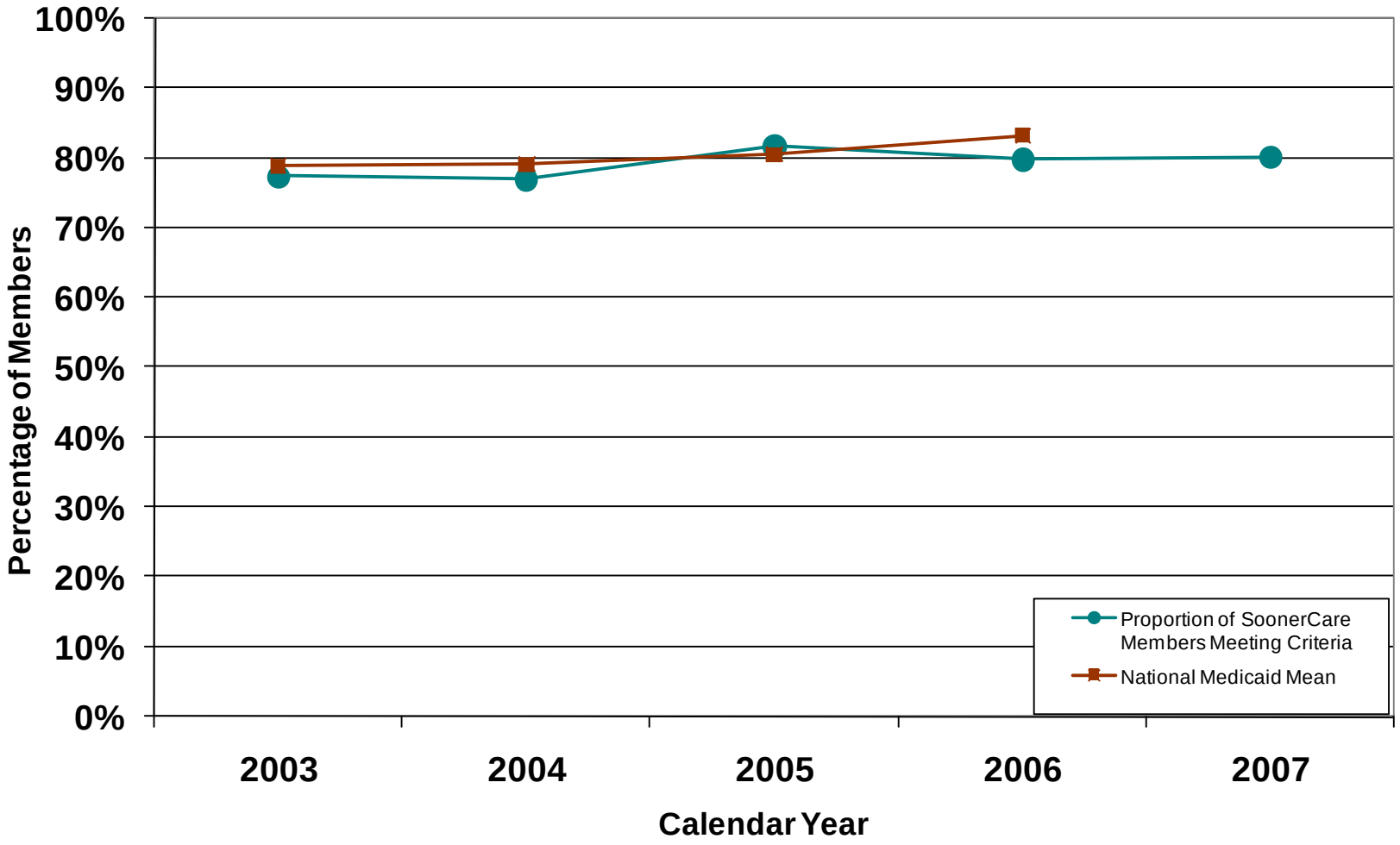
Source: OHCA.

Figure B.9
At Least One PCP Visit, Ages 7-11 Years



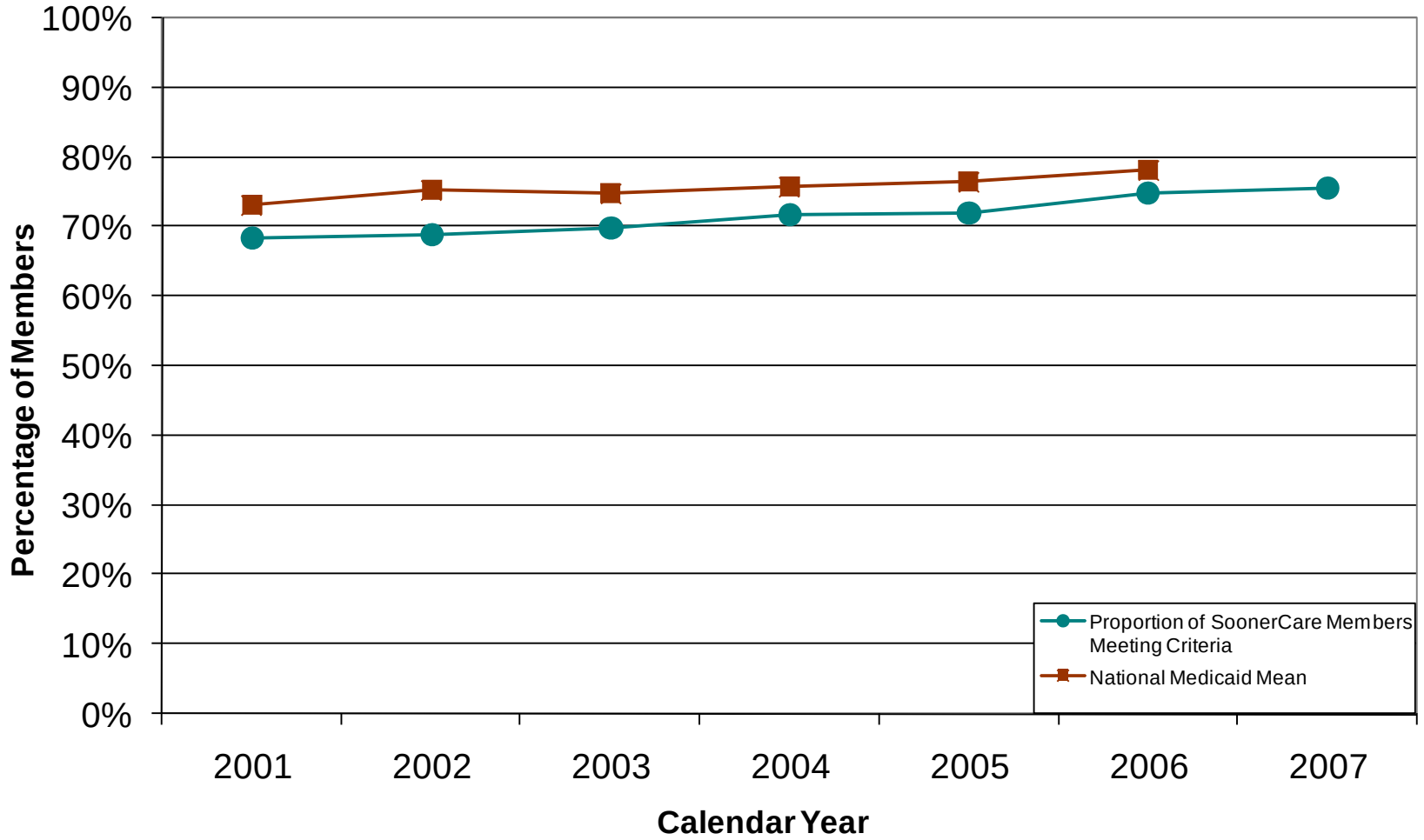
Source: OHCA.

Figure B.10
At Least One PCP Visit, Ages 12-19 Years



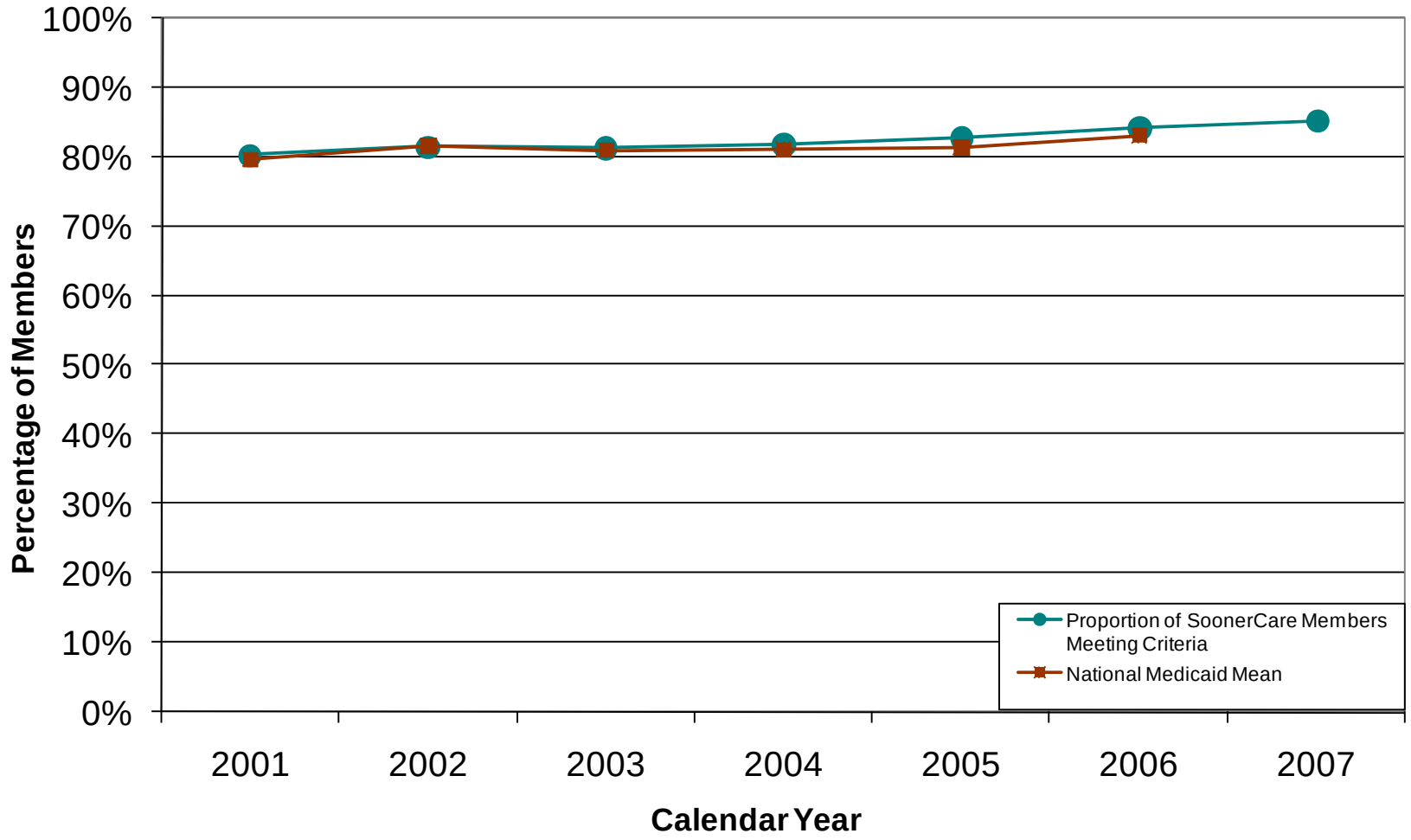
Source: OHCA.

Figure B.11
Adults Ages 20-44 Years Accessing Preventive/Ambulatory Services



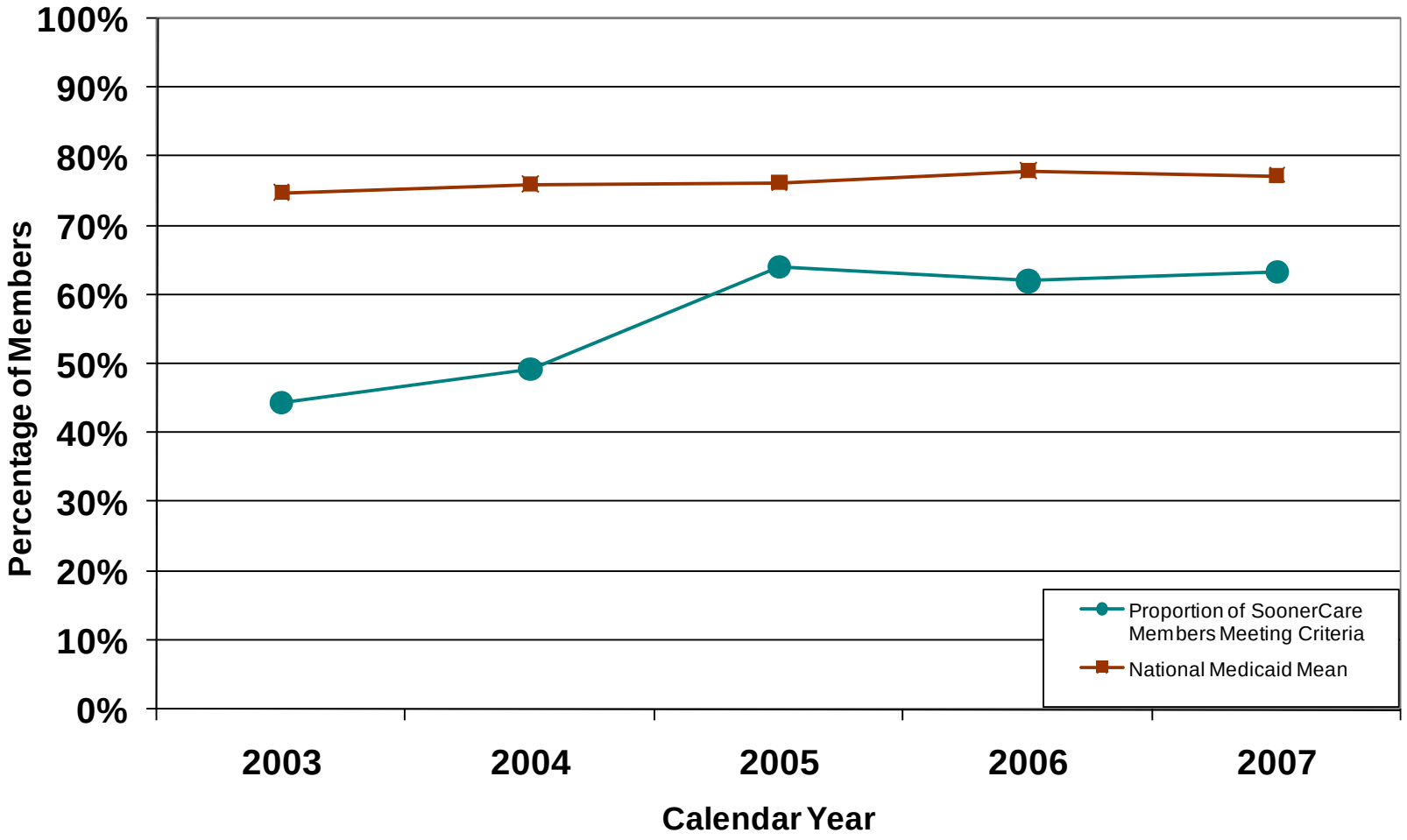
Source: OHCA.

Figure B.12
Adults Ages 45-64 Years Accessing Preventive/Ambulatory Services



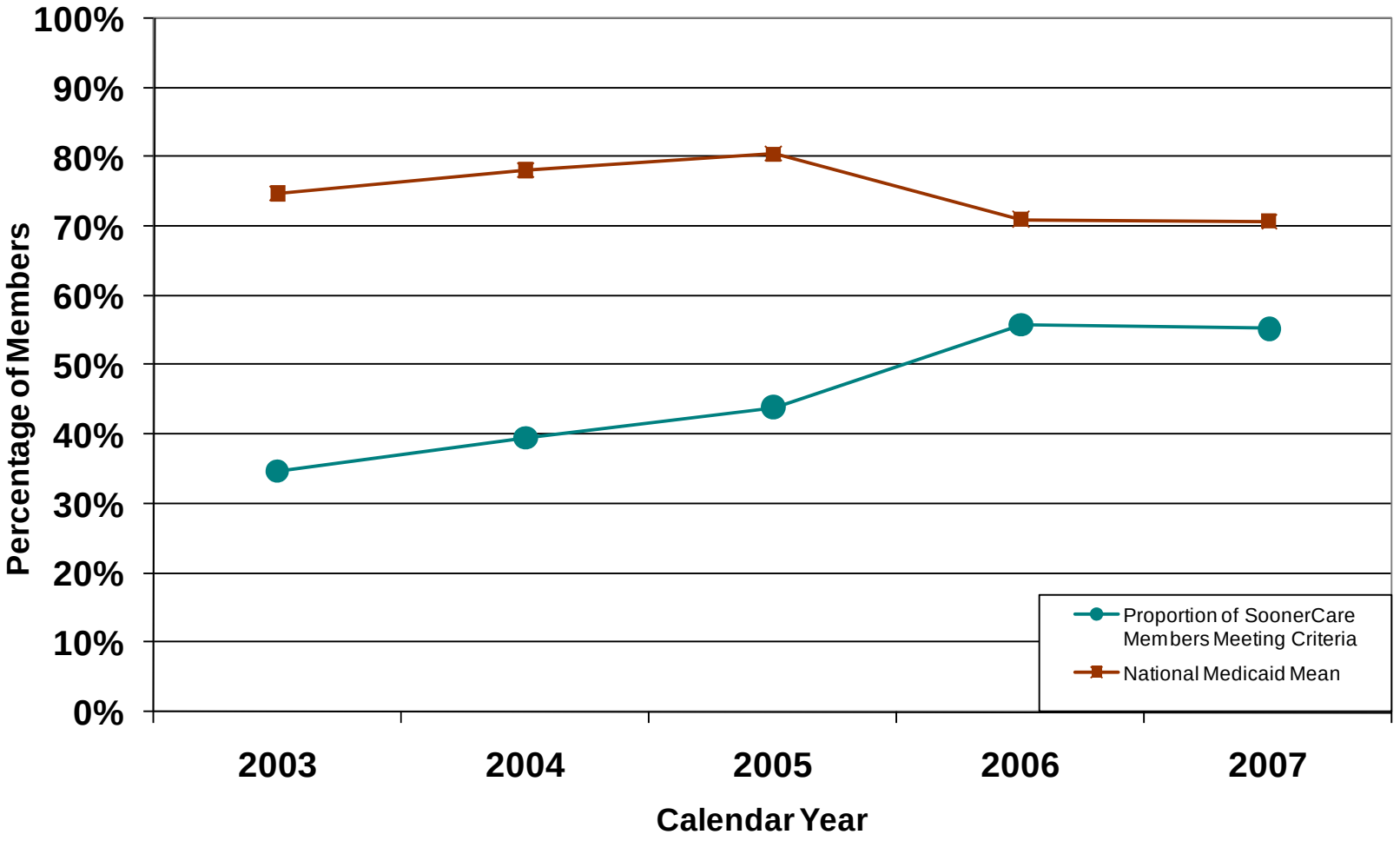
Source: OHCA.

Figure B.13
Comprehensive Diabetes Care: HbA1C



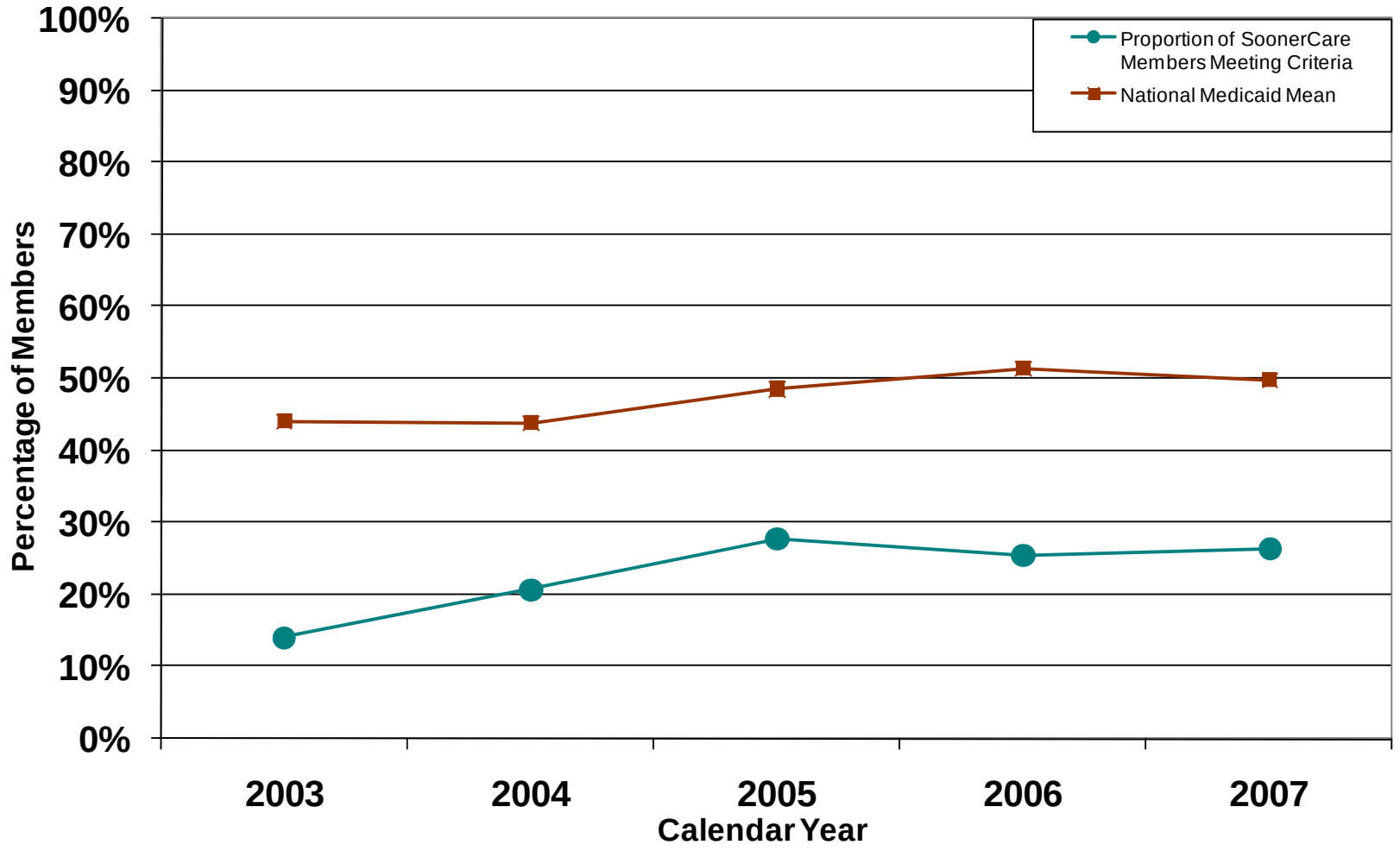
Source: OHCA.

Figure B.14
Comprehensive Diabetes Care: LDL-C



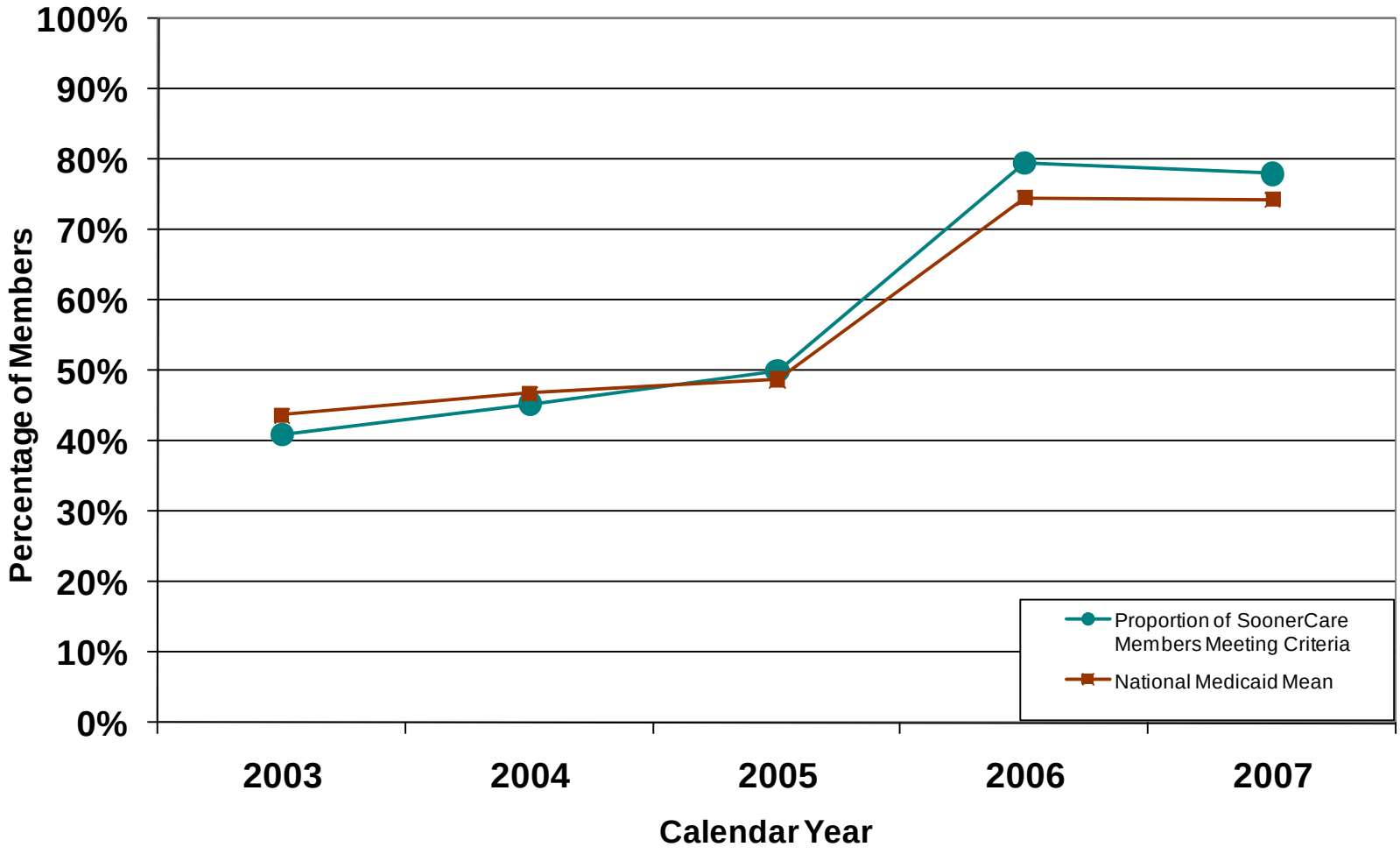
Source: OHCA.

Figure B.15
Comprehensive Diabetes Care: Eye Exam



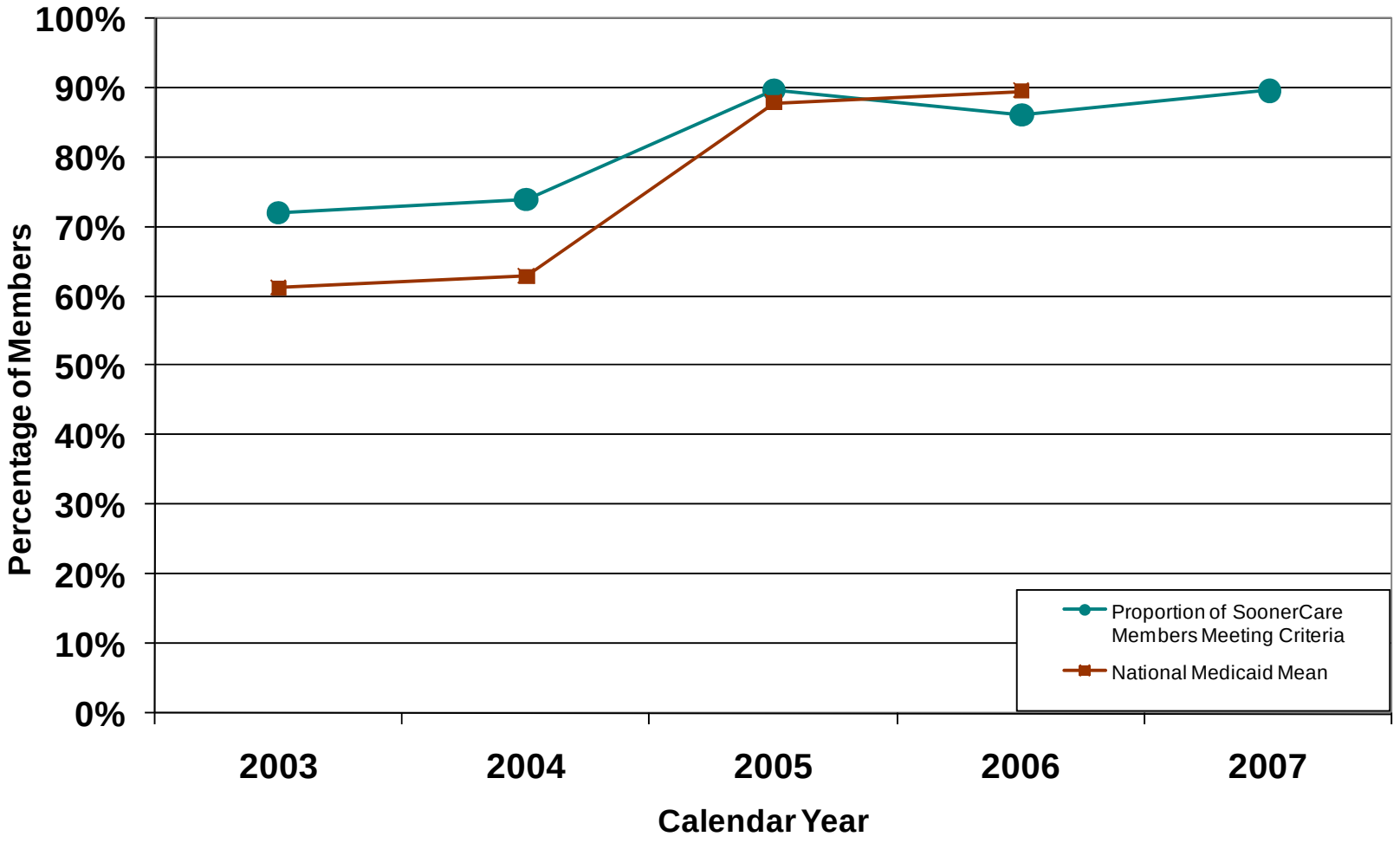
Source: OHCA.

Figure B.16
Comprehensive Diabetes Care: Nephropathy Screening



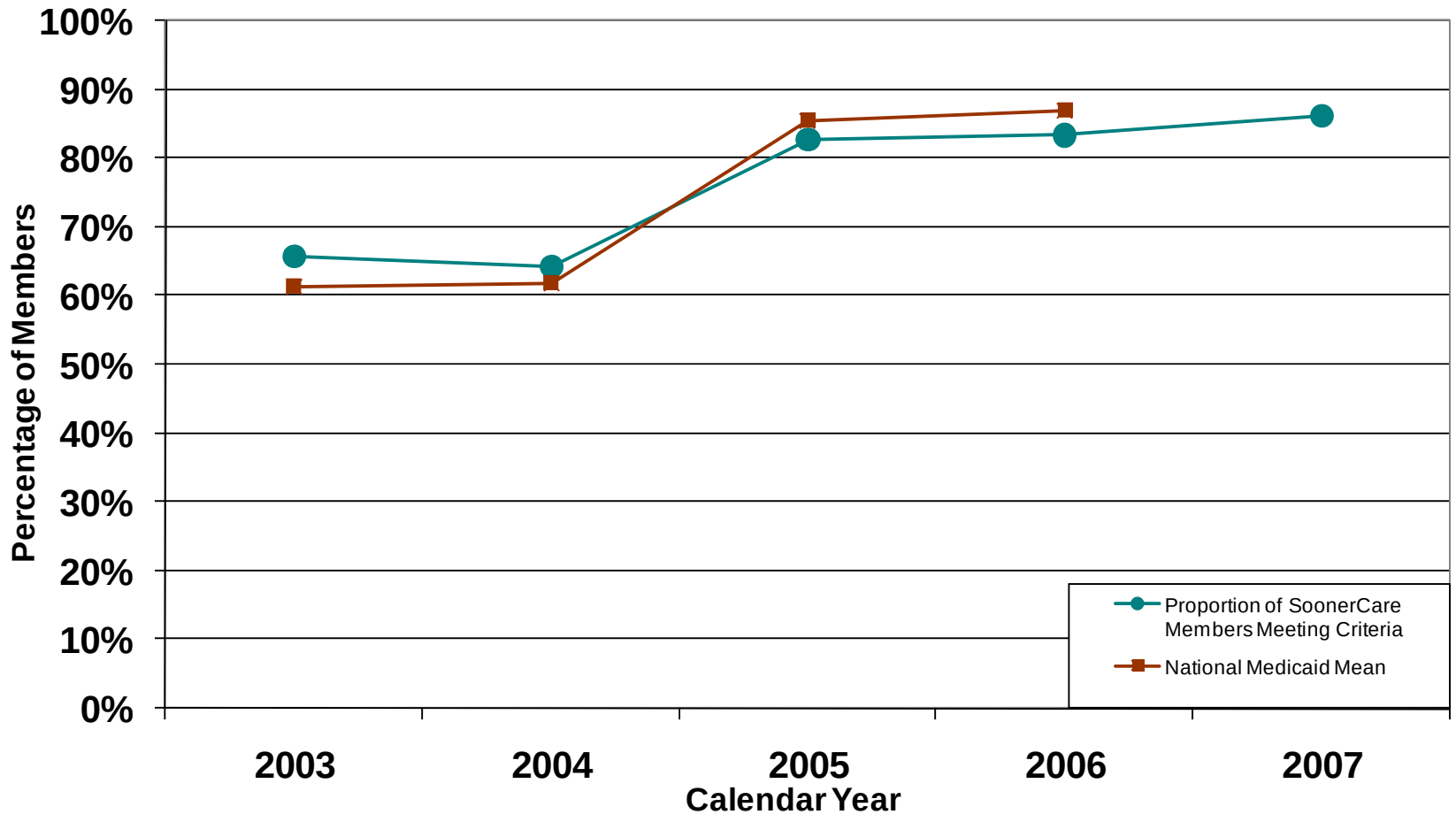
Source: OHCA.

Figure B.17
Appropriate Asthma Medication: Ages 5-9 Years



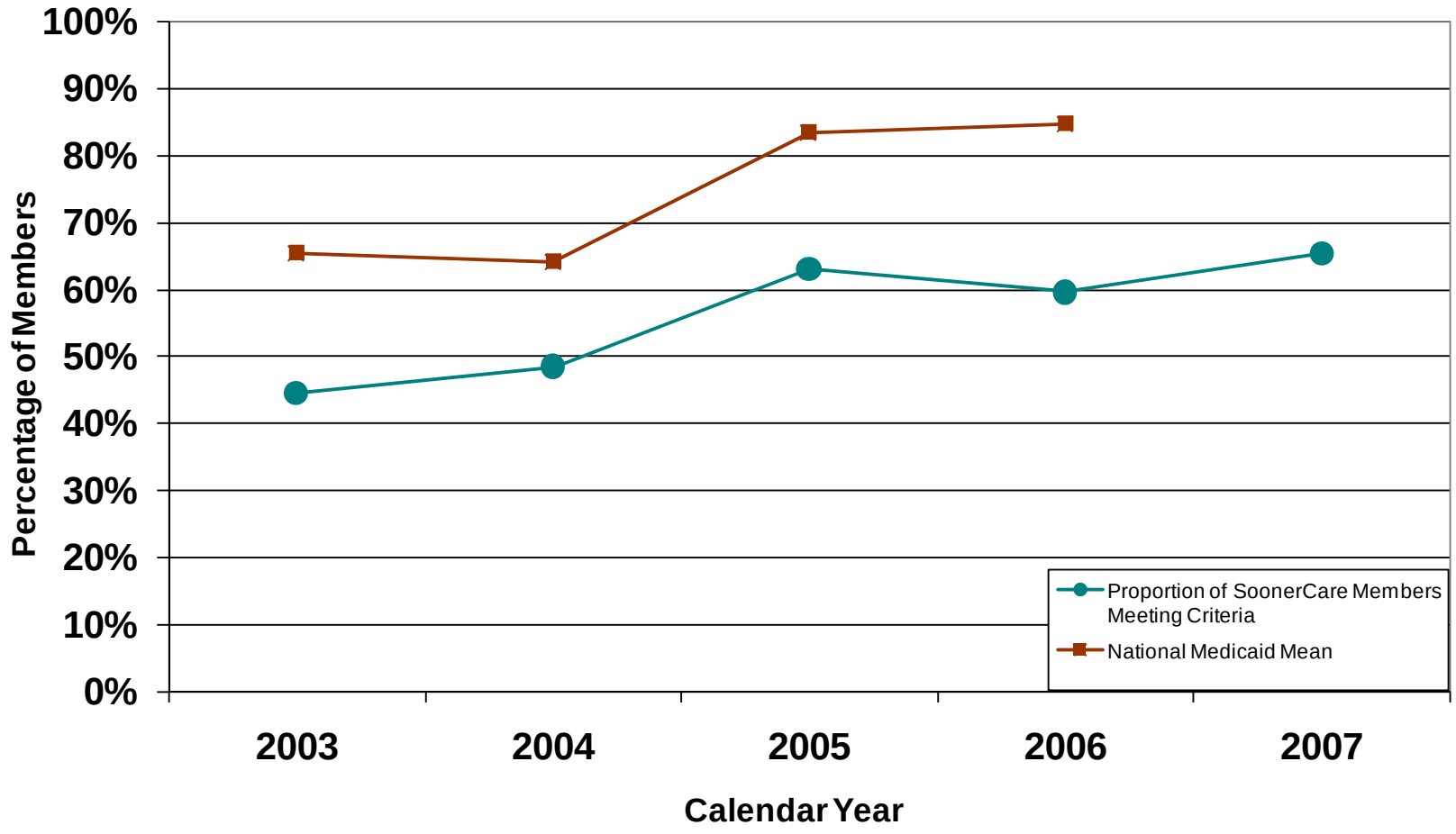
Source: OHCA.

Figure B.18
Appropriate Asthma Medication: Ages 10-17 Years



Source: OHCA.

Figure B.19
Appropriate Asthma Medication: Ages 18-56 Years



Source: OHCA.

BRFSS TABLES

Table B.3 Change in Access to Primary Providers and Receipt of Preventative Care Among Low-Income Oklahomans, BRFSS 2001-2007

		Region			Race/Ethnicity			Employment		Education		
	All	Tulsa	Central	Remainder	Non-Hispanic White	Non-Hispanic Black	Non-Hispanic American Indian	Employed	Not Employed	No High School Degree	High School Degree Only	Some College Education
Percentage with a Personal Healthcare Provider												
Households without Children												
2001	72%	--	68%	72%	73% [f]	--	85% [d]	69%	76%	73%	67%	75%
2007	69%	69%	61%	70%	72% [e]	56% [d,f]	77% [e]	57% [h]	76% [g]	61%	68%	74%
Change	-4%	--	-10%	-3%	-1%	--	-9%	-17% *	0%	-16%	1%	-1%
Households with Children												
2001	70%	--	63%	74%	76%	--	77%	66%	75%	61%	71%	77%
2007	56%	57%	49%	56%	59% [f]	51% [f]	75% [d,e]	50% [h]	61% [g]	47% [m]	56%	62% [j]
Change	-20% *	--	-22%	-24% *	-22% *	--	-3%	-24% *	-19% *	-23%	-21% *	-19% *
Percentage Who Received a Flu Shot Within the Past 12 Months												
Households without Children												
2001	28%	--	21%	31%	29% [f]	--	49% [d]	22% [h]	36% [g]	33%	25%	28%
2007	39%	25% [b,c]	41% [a]	42% [a]	36% [e]	23% [d,f]	52% [e]	31% [h]	45% [g]	34%	39%	43%
Change	39% *	--	95% *	35% *	24%	--	6%	41%	25%	3%	56% *	54% *
Households with Children												
2001	17%	--	13%	20%	18%	--	12%	17%	16%	10% [k]	22% [j]	16%
2007	27%	33%	27%	25%	23% [f]	28%	39% [d]	29%	25%	26%	26%	28%
Change	59% *	--	108%	25%	28%	--	225% *	71% *	56%	160% *	18%	75% *

Note: Central region includes Oklahoma City and surrounding counties.

*Statistically significant change over time, p<0.05.

[a] Significantly different than Tulsa, p<0.05.

[b] Significantly different than Central, p<0.05.

[c] Significantly different than Remainder, p<0.05.

[d] Significantly different than Non-Hispanic White, p<0.05.

[e] Significantly different than Non-Hispanic Black, p<0.05.

[f] Significantly different than Non-Hispanic American Indian, p<0.05.

[g] Significantly different than employed, p<0.05.

[h] Significantly different than unemployed, p<0.05.

[j] Significantly different than no high school degree, p<0.05.

[k] Significantly different than high school degree only, p<0.05.

[m] Significantly different than some college, p<0.05.

Table B.4. Change in Health Status Among Low-Income Oklahomans, BRFSS 2001-2007

		Region			Race/Ethnicity			Employment		Education		
	All	Tulsa	Central	Remainder	Non-Hispanic White	Non-Hispanic Black	Non-Hispanic American Indian	Employed	Not Employed	No High School Degree	High School Degree Only	Some College Education
Percentage Reporting Excellent, Very Good, or Good Health Status												
Households without Children												
2001	70%	--	68%	71%	71% [f]	--	52% [d]	85% [h]	52% [g]	48% [k,m]	70% [j]	79% [j]
2007	62%	57% [b]	73% [a,c]	57% [b]	59% [e]	73% [d]	57%	77% [h]	52% [g]	50% [k,m]	64% [j]	67% [j]
Change	-11% *	--	7%	-20% *	-17% *	--	10%	-9%	0%	4%	-9%	-15% *
Households with Children												
2001	75%	--	71%	73%	73%	--	69%	83% [h]	63% [g]	74%	78%	72%
2007	74%	84% [c]	75%	71% [a]	73%	79% [f]	60% [e]	85% [h]	63% [g]	65% [k]	82% [j,m]	71% [k]
Change	-1%	--	6%	-3%	0%	--	-13%	2%	0%	-12%	5%	-1%
Percentage who Reported Zero Poor Physical Days												
Households without Children												
2001	54%	--	59%	50%	52%	--	52%	64% [h]	41% [g]	44%	55%	57%
2007	46%	47%	46%	45%	40% [e]	67% [d]	46%	57% [h]	38% [g]	49%	45%	45%
Change	-15% *	--	-22%	-10%	-23% *	--	-12%	-11%	-7%	11%	-18%	-21% *
Households with Children												
2001	61%	--	65%	56%	57%	--	58%	68% [h]	51% [g]	70% [m]	63%	50% [j]
2007	54%	62% [c]	60% [c]	48% [a,b]	51%	56%	42%	66% [h]	43% [g]	59%	56%	48%
Change	-11%	--	-8%	-14%	-11%	--	-28%	-3%	-16%	-16%	-11%	-4%
Percentage who Reported Zero Poor Mental Days												
Households without Children												
2001	61%	--	62%	61%	58%	--	59%	67% [h]	54% [g]	57%	63%	61%
2007	53%	49%	49%	53%	50%	54%	63%	60% [h]	48% [g]	56%	49%	54%
Change	-13% *	--	-21%	-13%	-14%	--	7%	-10%	-11%	-2%	-22% *	-11%
Households with Children												
2001	64%	--	71%	58%	58%	--	59%	69%	57%	77% [k,m]	63% [j]	51% [j]
2007	48%	53%	54% [c]	41% [b]	45%	46%	37%	51%	45%	55% [m]	48%	42% [j]
Change	-25% *	--	-24%	-29% *	-22% *	--	-37% *	-26% *	-21% *	-29% *	-24% *	-18%

Note: Central region includes Oklahoma City and surrounding counties.

*Statistically significant change over time, p<0.05.

[a] Significantly different than Tulsa, p<0.05.

[b] Significantly different than Central, p<0.05.

[c] Significantly different than Remainder, p<0.05.

[d] Significantly different than Non-Hispanic White, p<0.05.

[e] Significantly different than Non-Hispanic Black, p<0.05.

[f] Significantly different than Non-Hispanic American Indian, p<0.05.

[g] Significantly different than employed, p<0.05.

[h] Significantly different than unemployed, p<0.05.

[j] Significantly different than no high school degree, p<0.05.

[k] Significantly different than high school degree only, p<0.05.

[m] Significantly different than some college, p<0.05.

Table B.5. Access and Health Care Utilization Among Low-Income Oklahomans, BRFSS 2007

		Region			Race/Ethnicity			Employment		Education		
	All	Tulsa	Central	Remainder	Non-Hispanic White	Non-Hispanic Black	Non-Hispanic American Indian	Employed	Not Employed	No High School Degree	High School Degree Only	Some College Education
Percentage who Did Not See a Doctor Because of Costs												
Households without Children	35%	29%	37%	37%	37%	30%	36%	33%	37%	42% [m]	37%	28% [j]
Households with Children	47%	43%	47%	49%	50% [f]	43%	33% [d]	48%	45%	48%	43%	51%
Percentage who Had a Checkup Within the Past Year												
Households without Children	48%	47%	45%	49%	46%	48%	47%	39% [h]	54% [g]	39%	51%	49%
Households with Children	44%	49%	44%	39%	37% [e,f]	55% [d]	60% [d]	37% [h]	50% [g]	37%	45%	46%
Percentage who Had a Checkup within the Past Two Years												
Households without Children	65%	65%	65%	65%	60% [e]	77% [d]	72%	55% [h]	71% [g]	54% [m]	66%	70% [j]
Households with Children	58%	69% [b,c]	55% [a]	55% [a]	50% [e,f]	75% [d]	77% [d]	52% [h]	64% [g]	50% [k]	63% [j]	59%

Note: Central region includes Oklahoma City and surrounding counties.

[a] Significantly different than Tulsa, p<0.05.

[b] Significantly different than Central, p<0.05.

[c] Significantly different than Remainder, p<0.05.

[d] Significantly different than Non-Hispanic White, p<0.05.

[e] Significantly different than Non-Hispanic Black, p<0.05.

[f] Significantly different than Non-Hispanic American Indian, p<0.05.

[g] Significantly different than employed, p<0.05.

[h] Significantly different than unemployed, p<0.05.

[j] Significantly different than no high school degree, p<0.05.

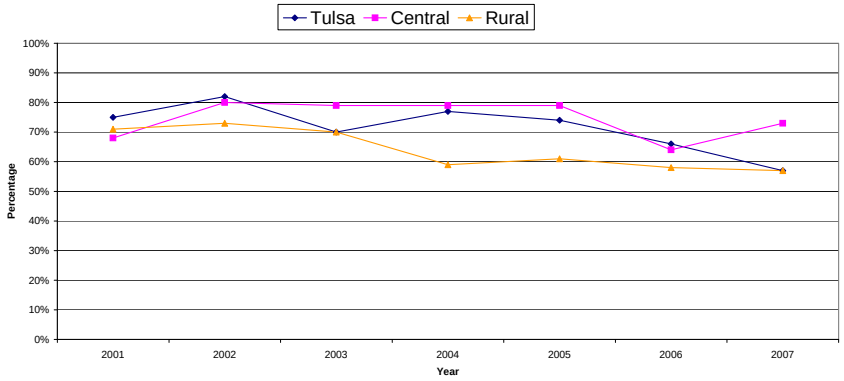
[k] Significantly different than high school degree only, p<0.05.

[m] Significantly different than some college, p<0.05.

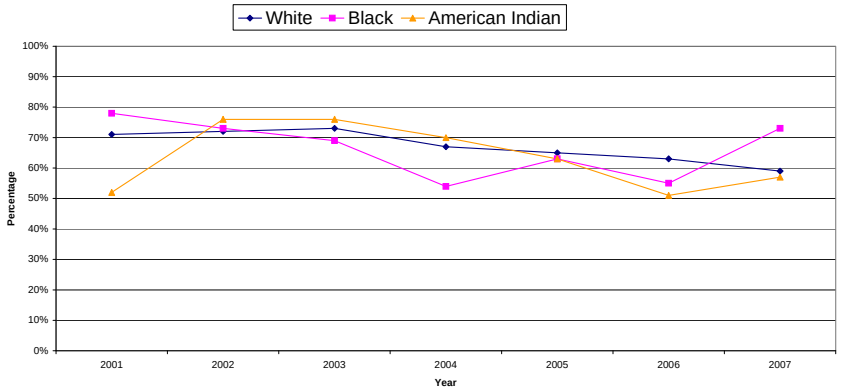
BRFSS FIGURES

Figure B.20
Percentage of Low-Income Adults Residing in Households without Children Who Report Their Health Status as Excellent, Very Good, or Good, BRFSS 2001-2007

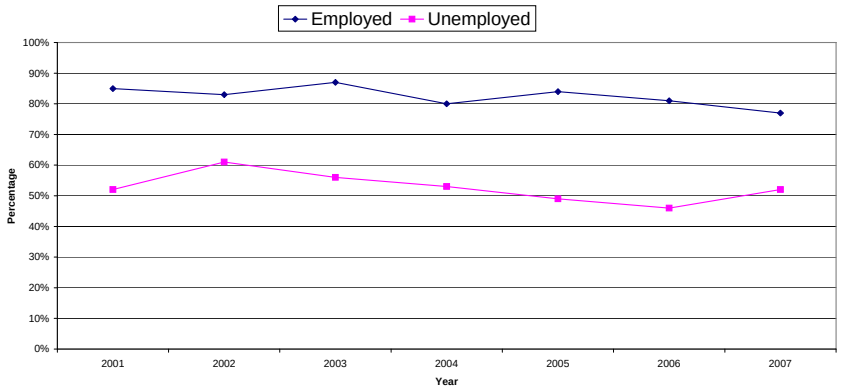
By Region



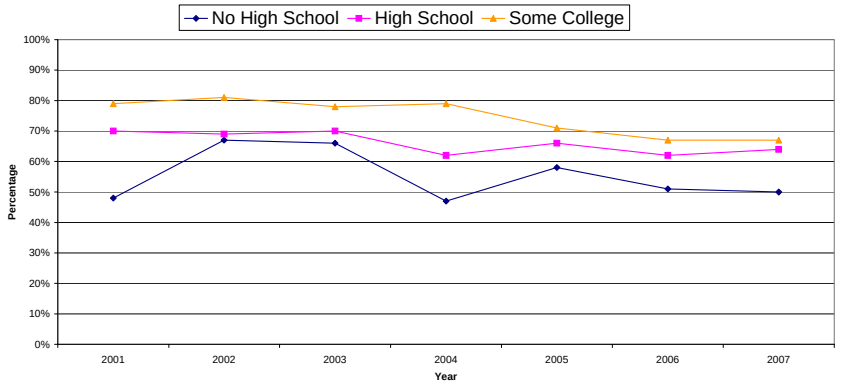
By Race



By Employment Status



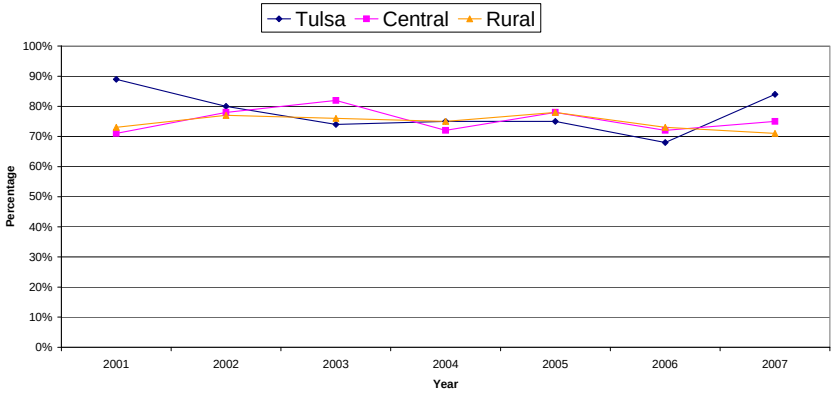
By Education Level



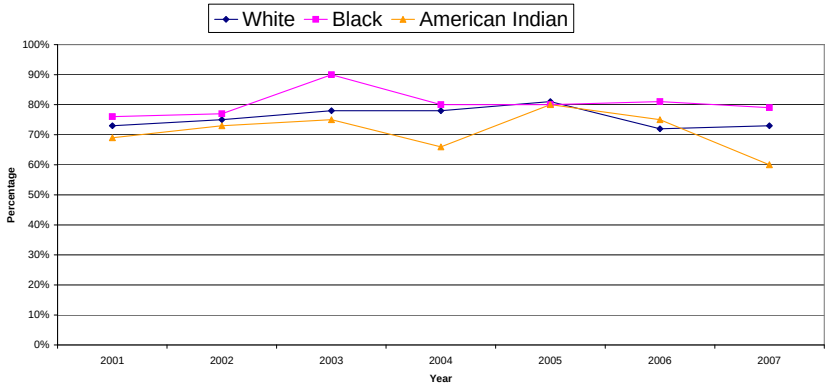
Note: Central region includes Oklahoma City and surrounding counties.

Figure B. 21
Percentage of Low-Income Adults Residing in Households with Children Who Report Their Health Status as Excellent, Very Good, or Good, BRFSS 2001-2007

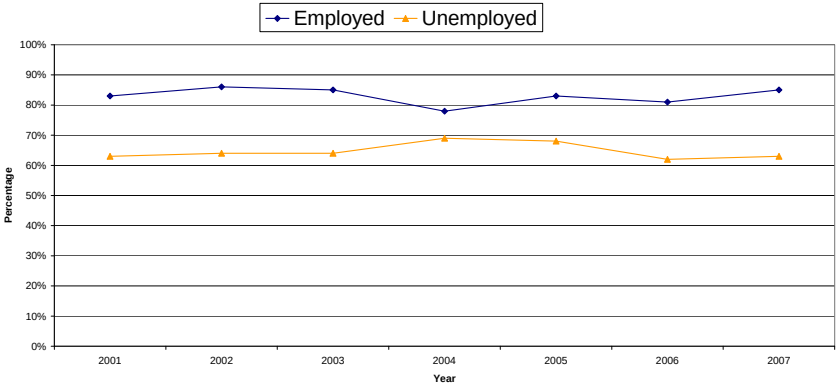
By Region



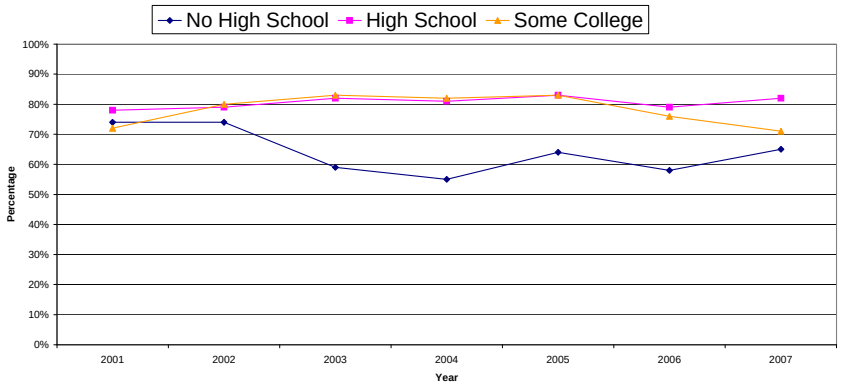
By Race/Ethnicity



By Employment Status



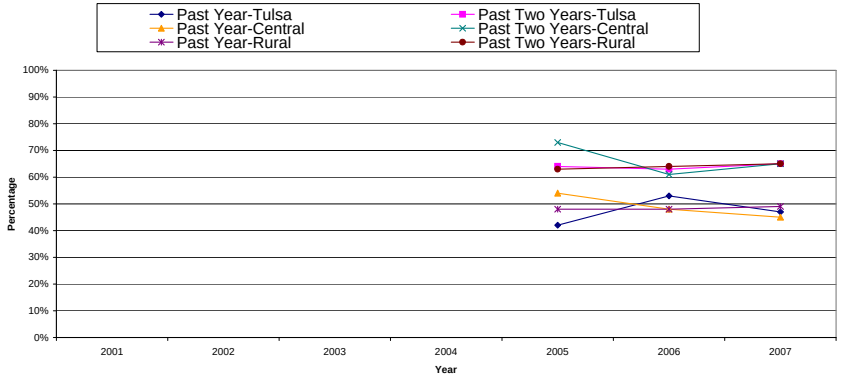
By Education Level



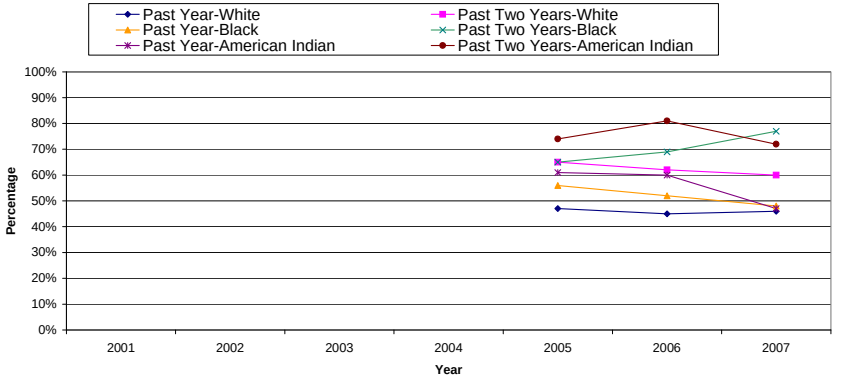
Note: Central region includes Oklahoma City and surrounding counties.

Figure B.22
Percentage of Low-Income Adults Residing in Households without Children Who Have Received a Checkup within the Past Year and within the Past Two Years, BRFSS 2005-2007

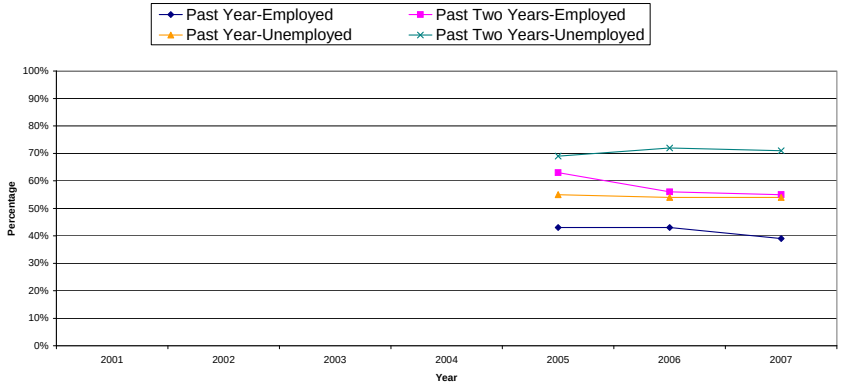
By Region



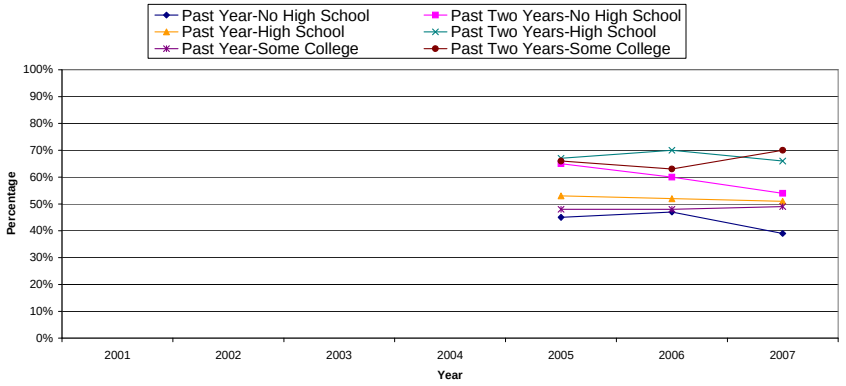
By Race/Ethnicity



By Employment Status



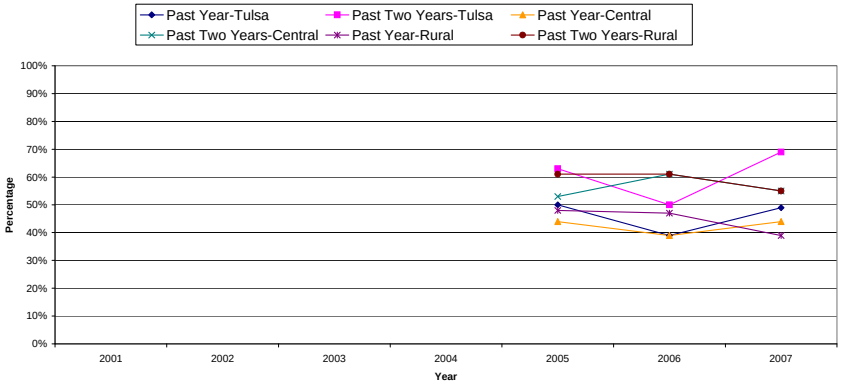
By Education Level



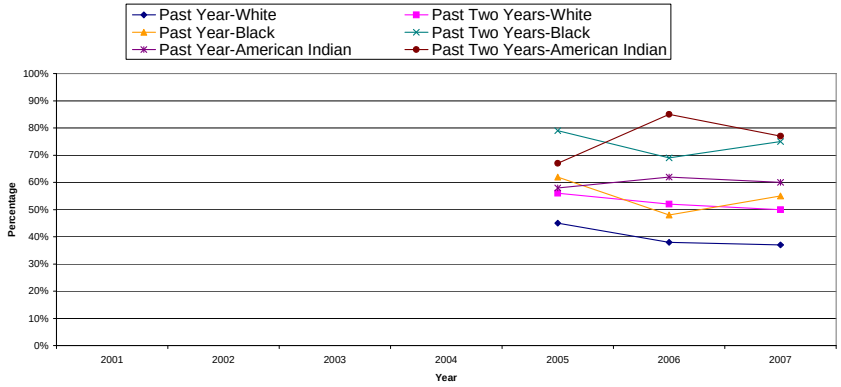
Note: Central region includes Oklahoma City and surrounding counties.

Figure B. 23
Percentage of Low-Income Adults Residing in Households with Children Who Have Received a Checkup within the Past Year and within the Past Two Years, BRFSS 2005-2007

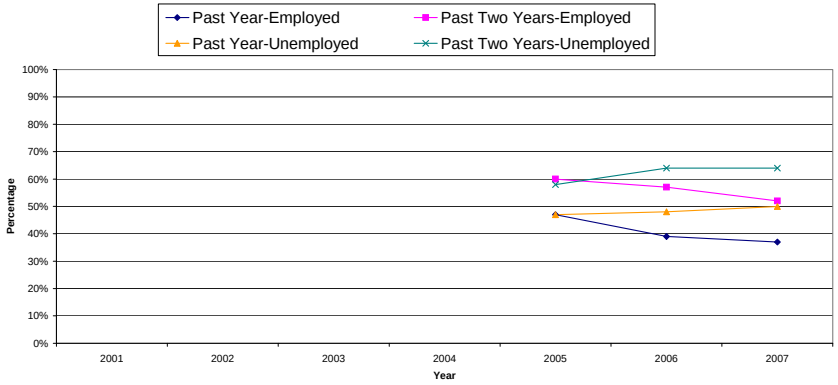
By Region



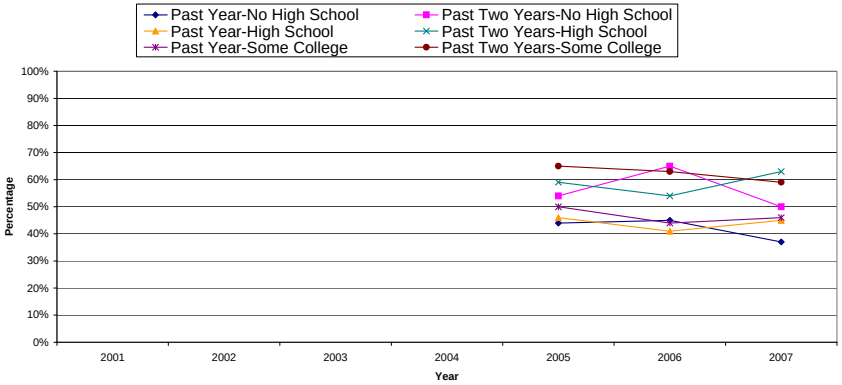
By Race/Ethnicity



By Employment Status

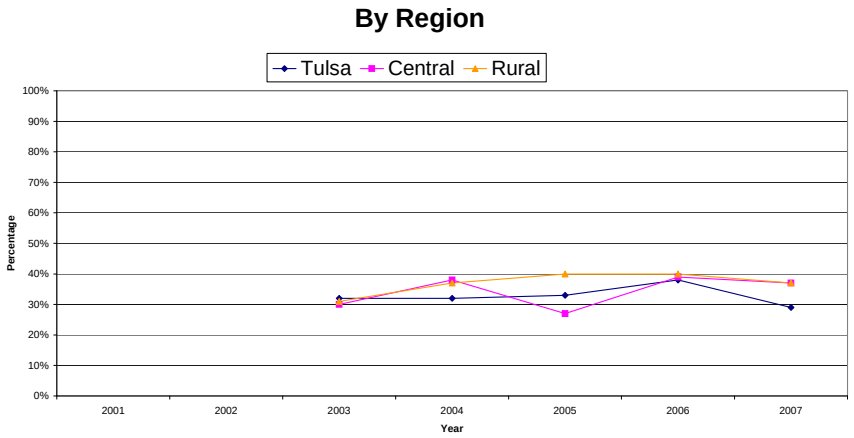


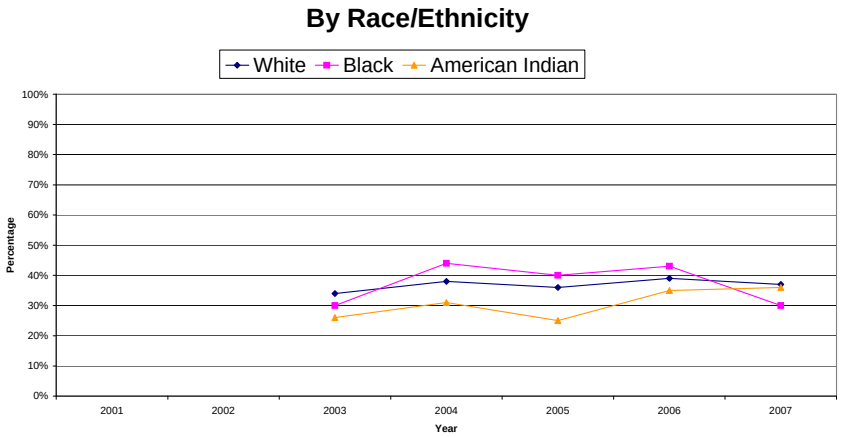
By Education Level

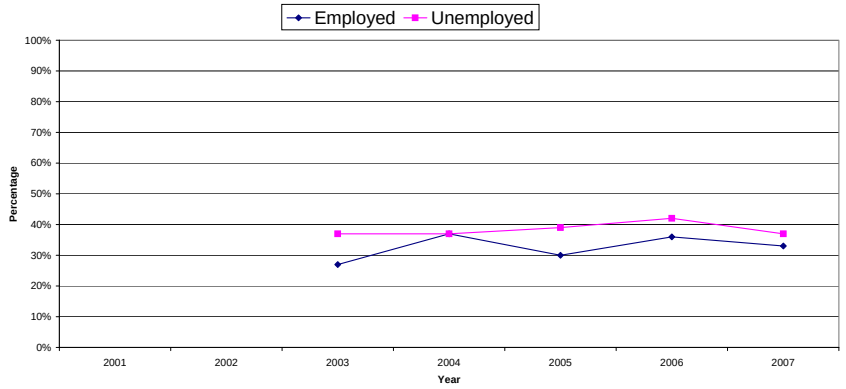


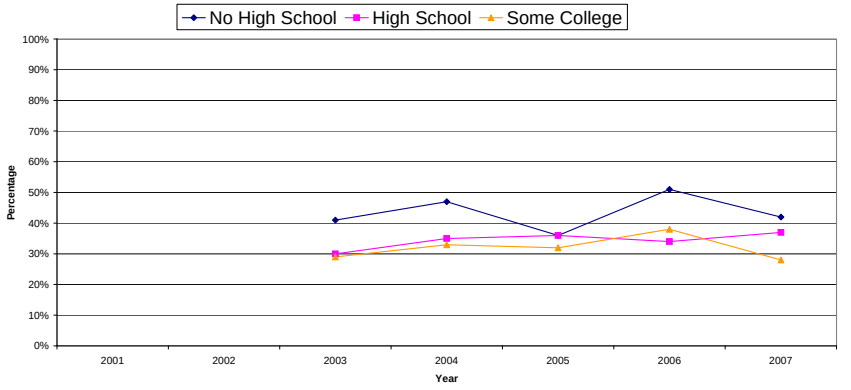
Note: Central region includes Oklahoma City and surrounding counties.

Figure B.24
Percentage of Low-Income Adults Residing in Households without Children Who Did Not See a Doctor Because of Cost, BRFSS 2003-2007





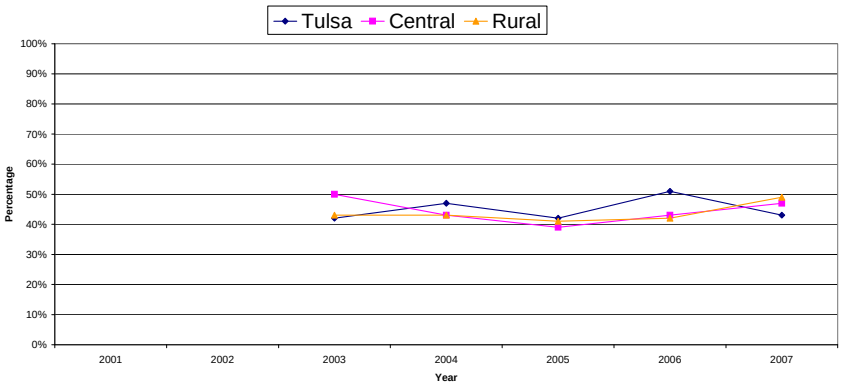




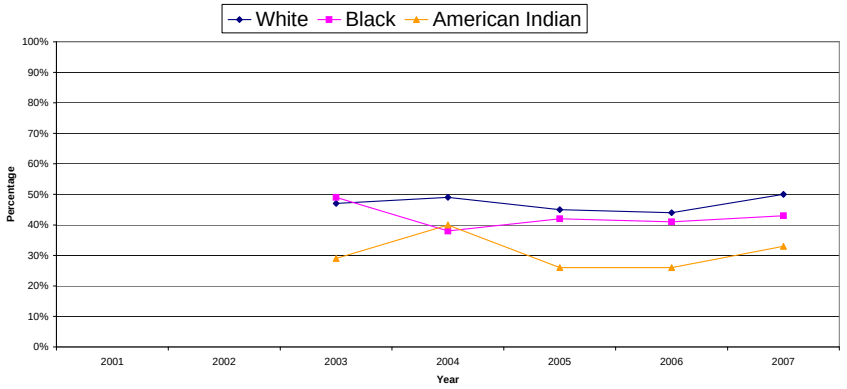
Note: Central region includes Oklahoma City and surrounding counties.

Figure B.25
Percentage of Low-Income Adults Residing in Households with Children Who Did Not See a Doctor Because of Cost, BRFSS 2003-2007

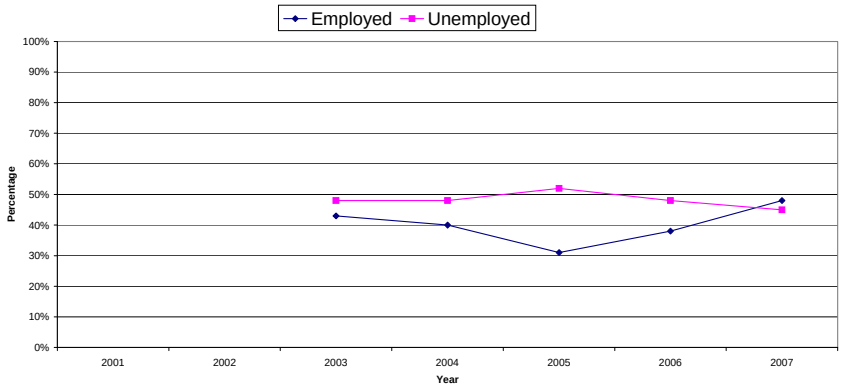
By Region



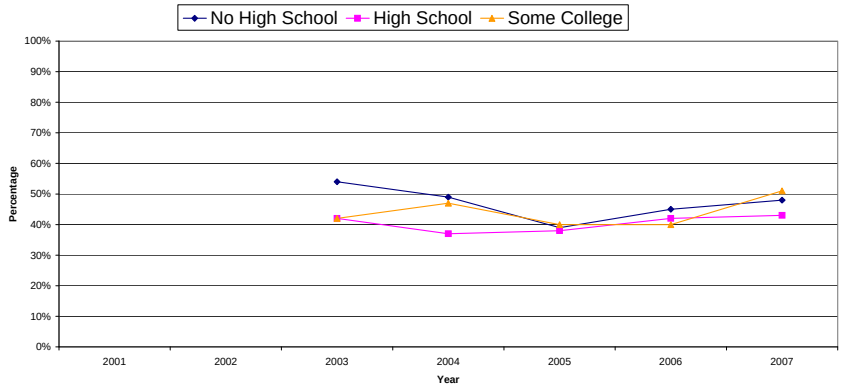
By Race/Ethnicity



By Employment Status



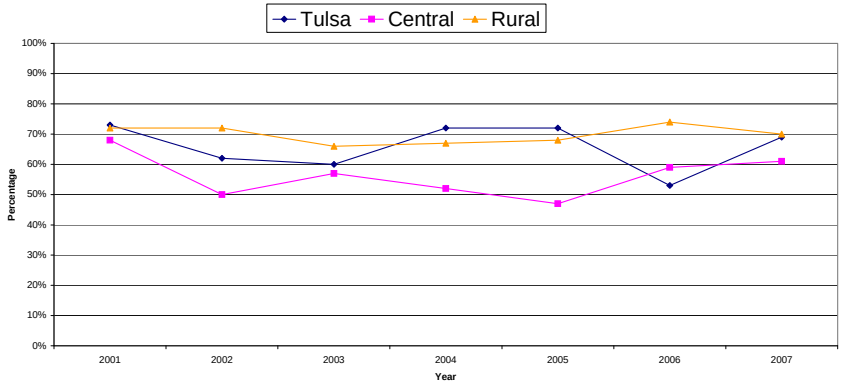
By Education Level



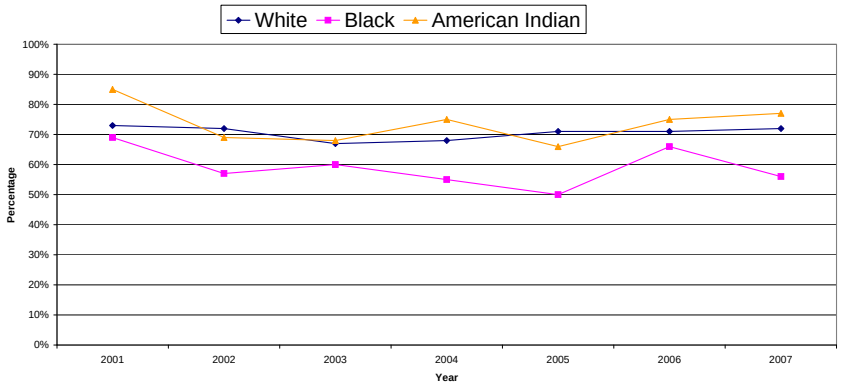
Note: Central region includes Oklahoma City and surrounding counties.

Figure B.26
Percentage of Low-Income Adults Residing in Households without Children Who Have a Personal Healthcare Provider, BRFSS 2001-2007

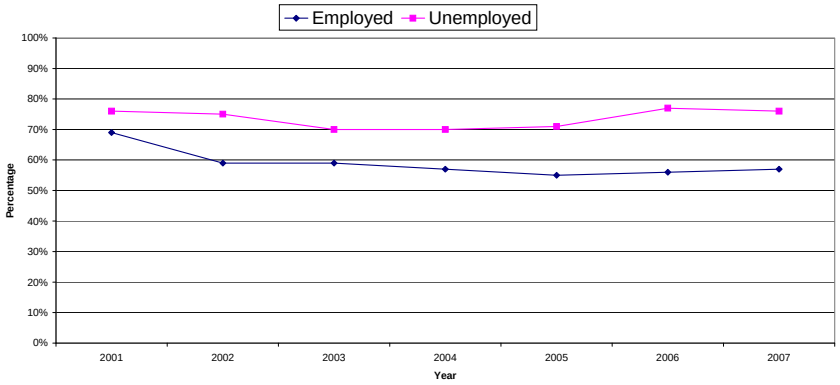
By Region



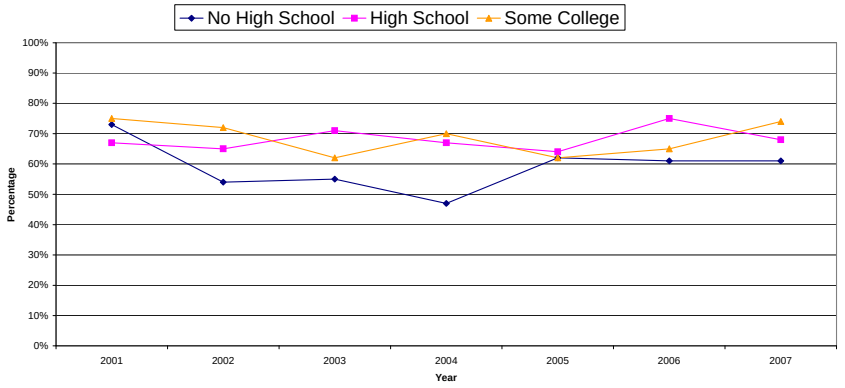
By Race/Ethnicity



By Employment Status



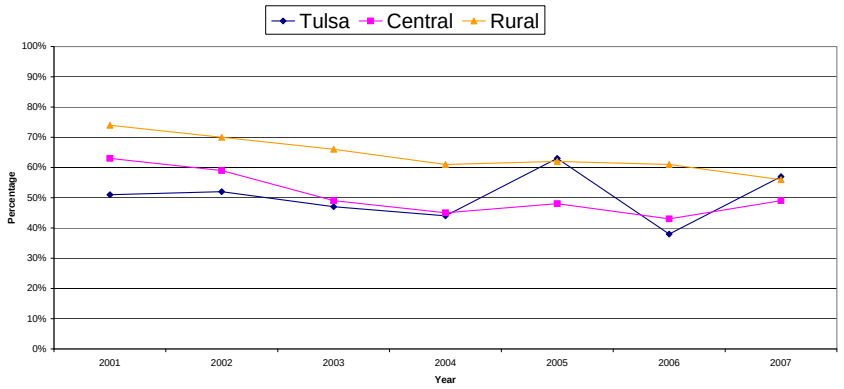
By Education Level



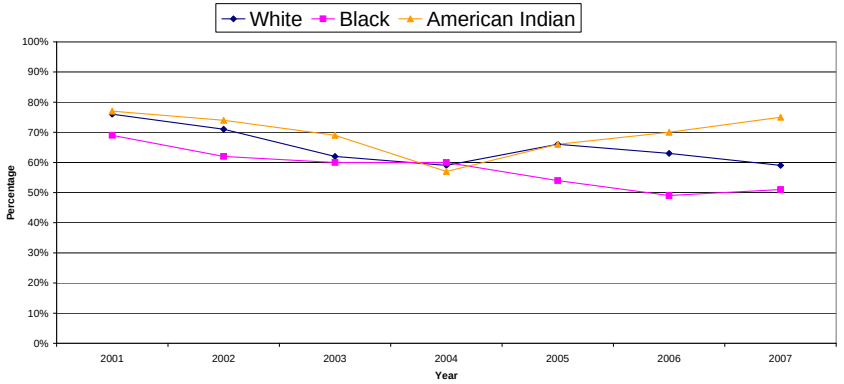
Note: Central region includes Oklahoma City and surrounding counties.

Figure B. 27
Percentage of Low-Income Adults Residing in Households with Children Who Have a Personal Healthcare Provider, BRFSS 2001-2007

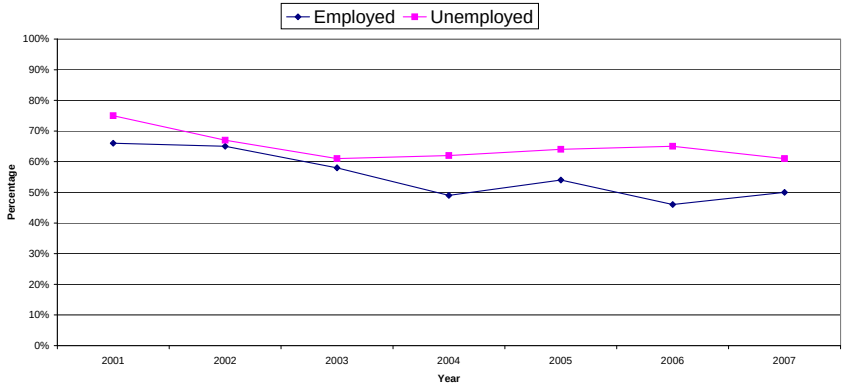
By Region



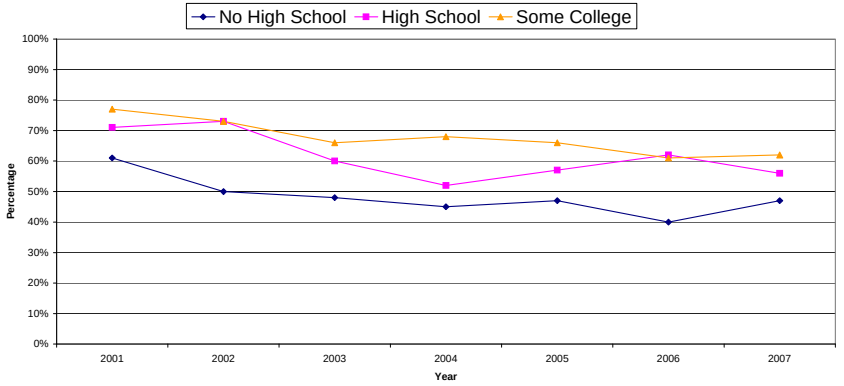
By Race/Ethnicity



By Employment Status

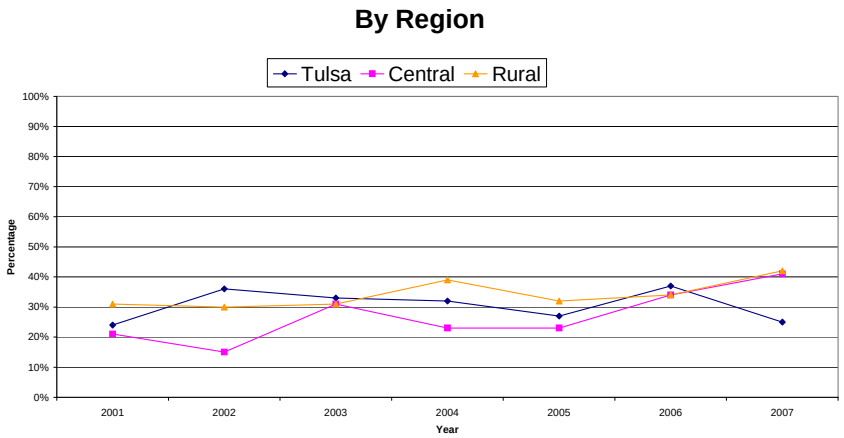


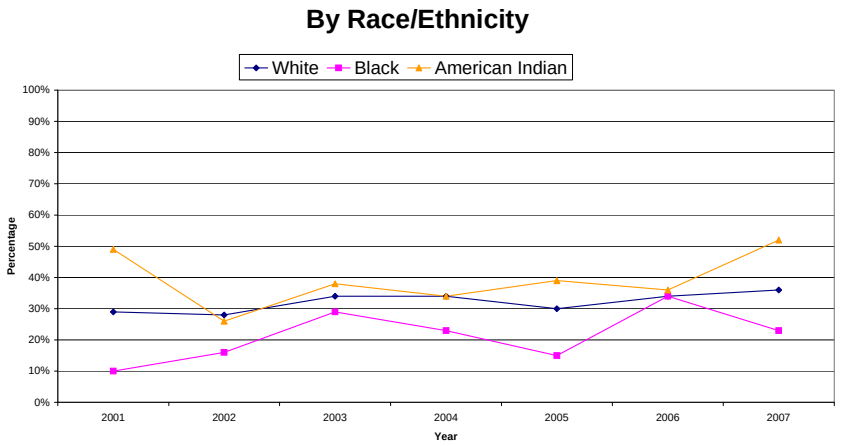
By Education Level

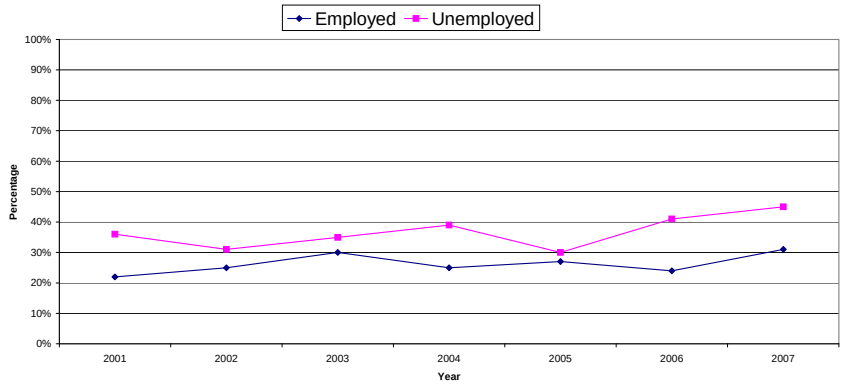


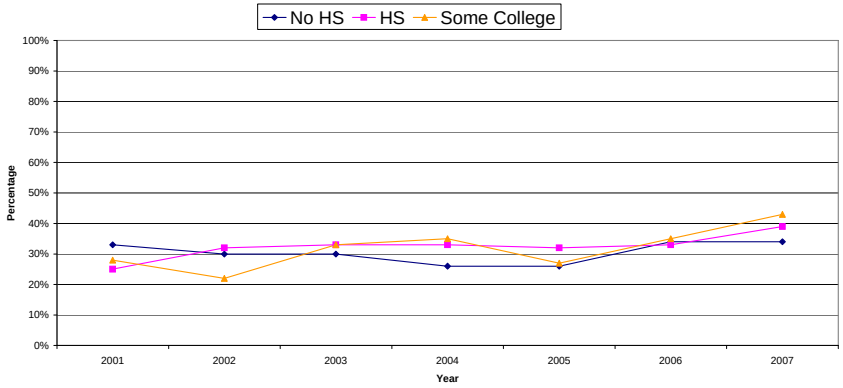
Note: Central region includes Oklahoma City and surrounding counties.

Figure B.28
Percentage of Low-Income Adults Residing in Households without Children Who Received a Flu Shot within the Past 12 Months, BRFSS 2001-2007





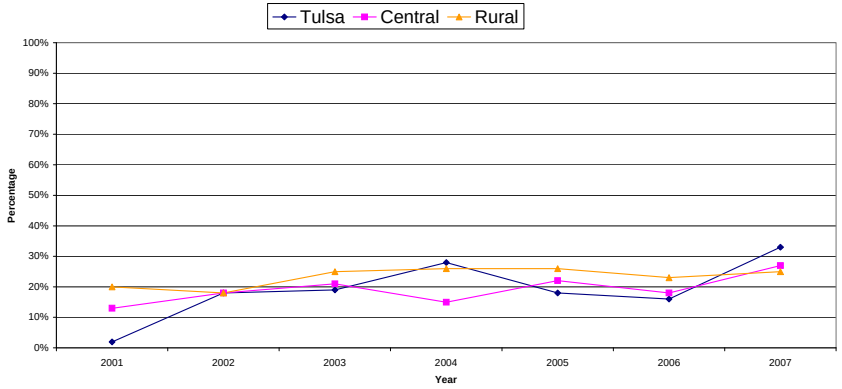




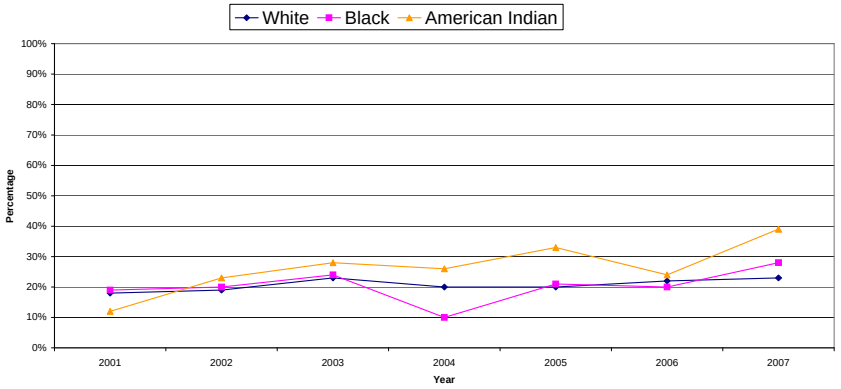
Note: Central region includes Oklahoma City and surrounding counties.

Figure B. 29
Percentage of Low-Income Adults Residing in Households with Children Who Received a Flu Shot within the Past 12 Months, BRFSS 2001-2007

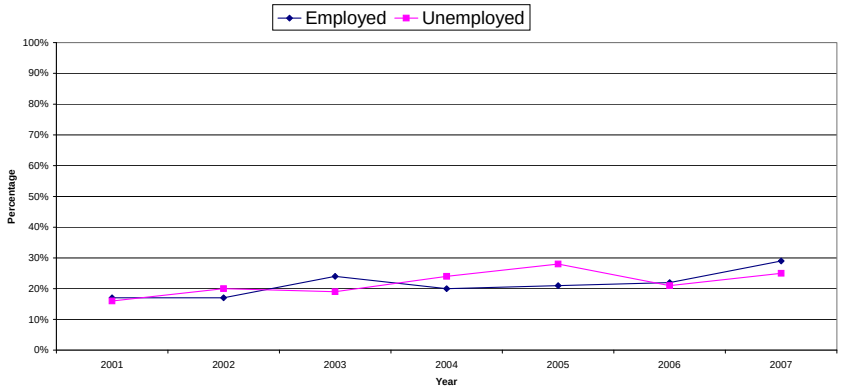
By Region



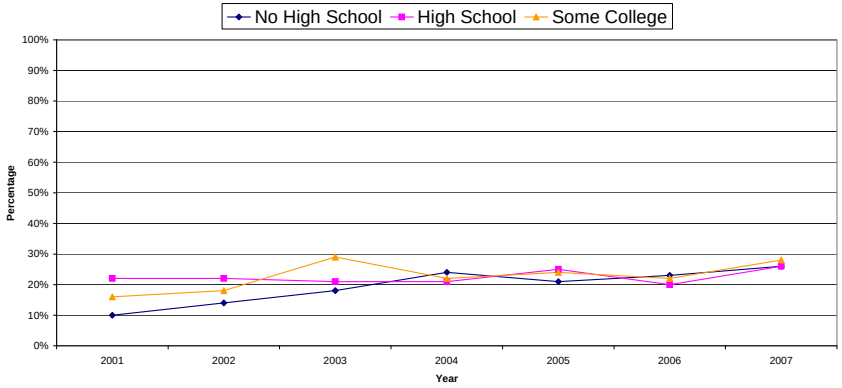
By Race/Ethnicity



By Employment Status

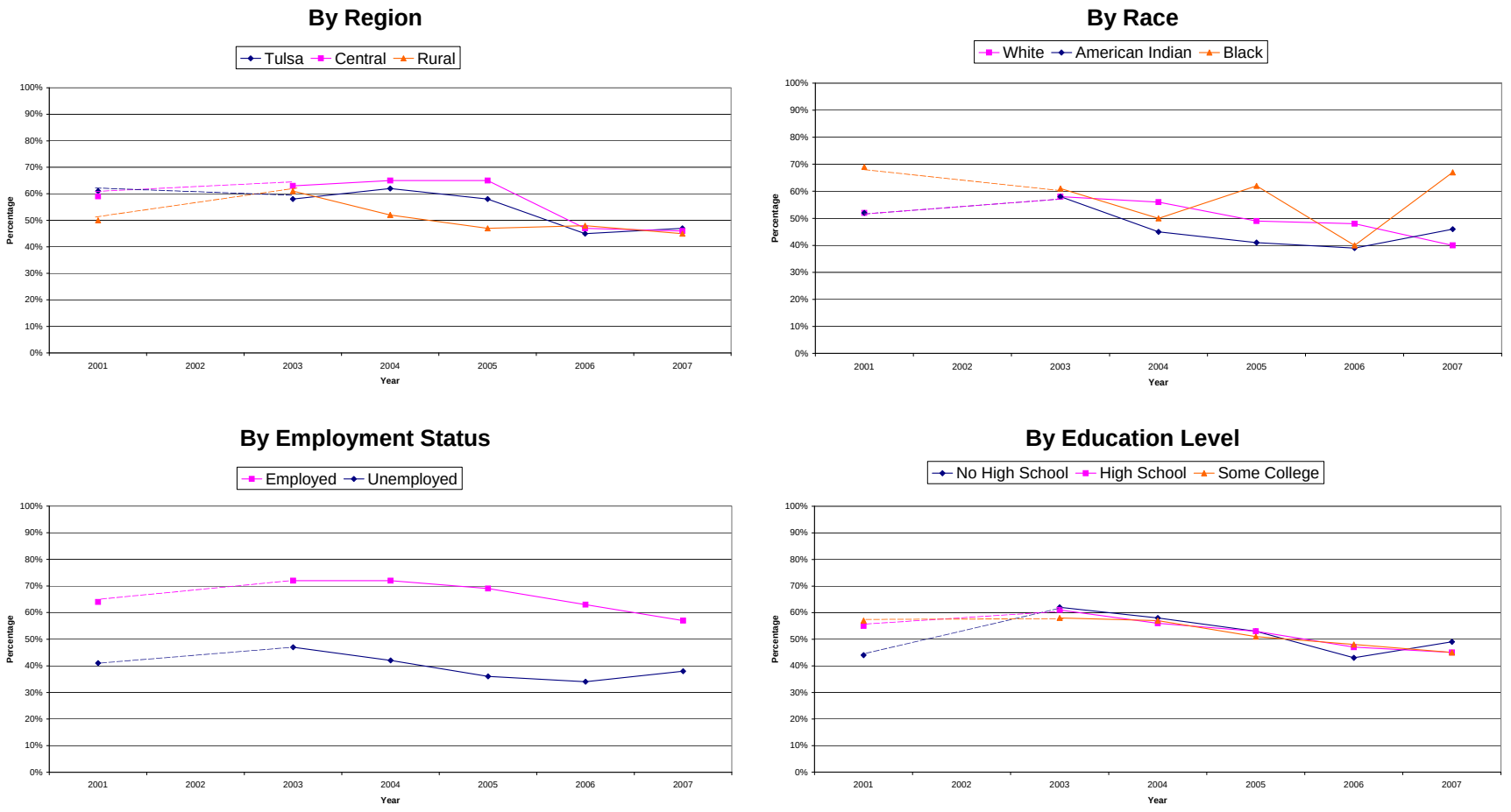


By Education Level



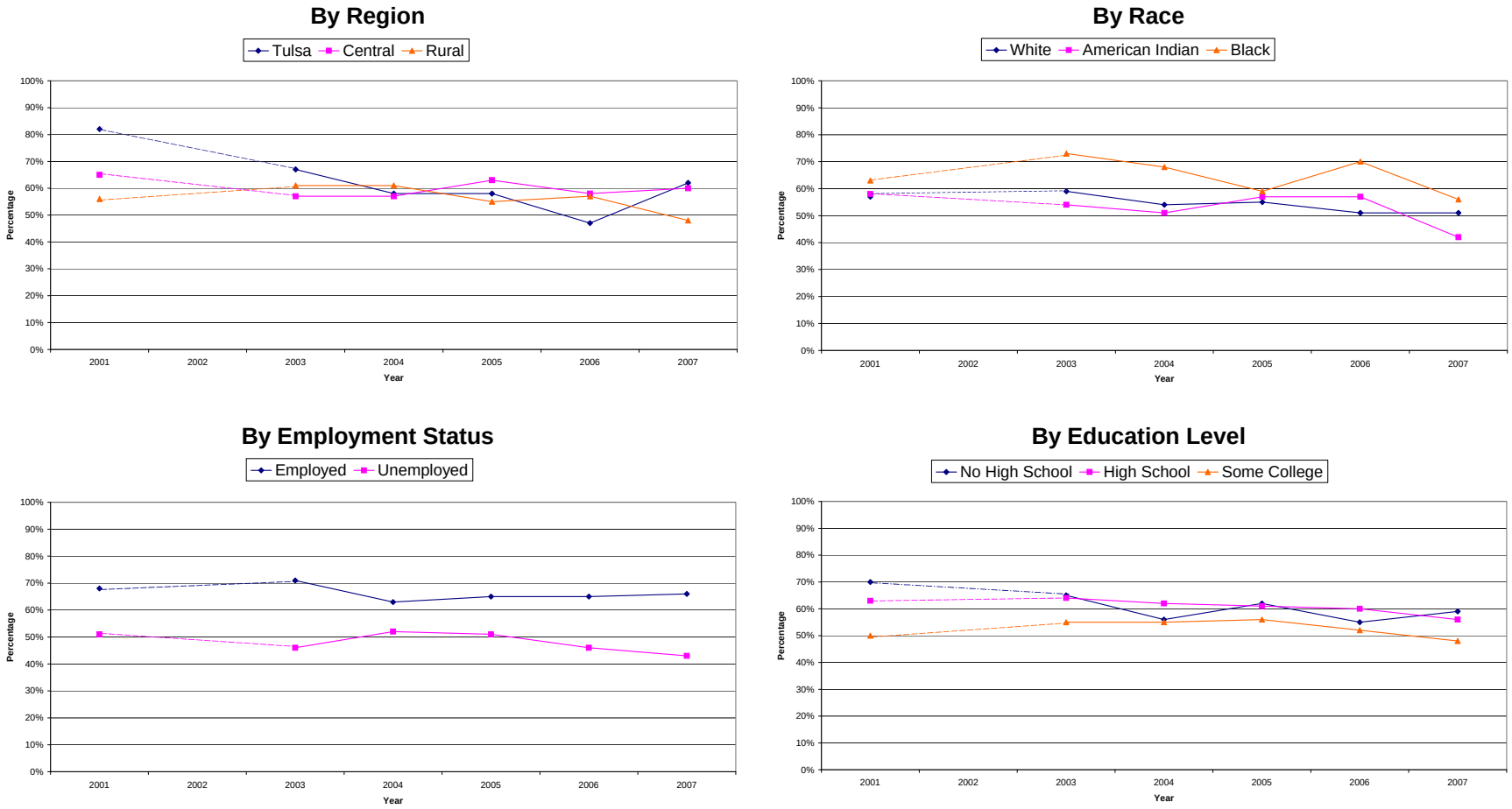
Note: Central region includes Oklahoma City and surrounding counties.

Figure B.30
Percent of Low-Income Adults Residing in Households without Children Reporting Zero Poor Physical Health Days, BRFSS 2001-2007



Note: Central region includes Oklahoma City and surrounding counties.

Figure B.31
Percent of Low-Income Adults Residing in Households with Children Reporting Zero Poor Physical Health Days, BRFSS 2001-2007

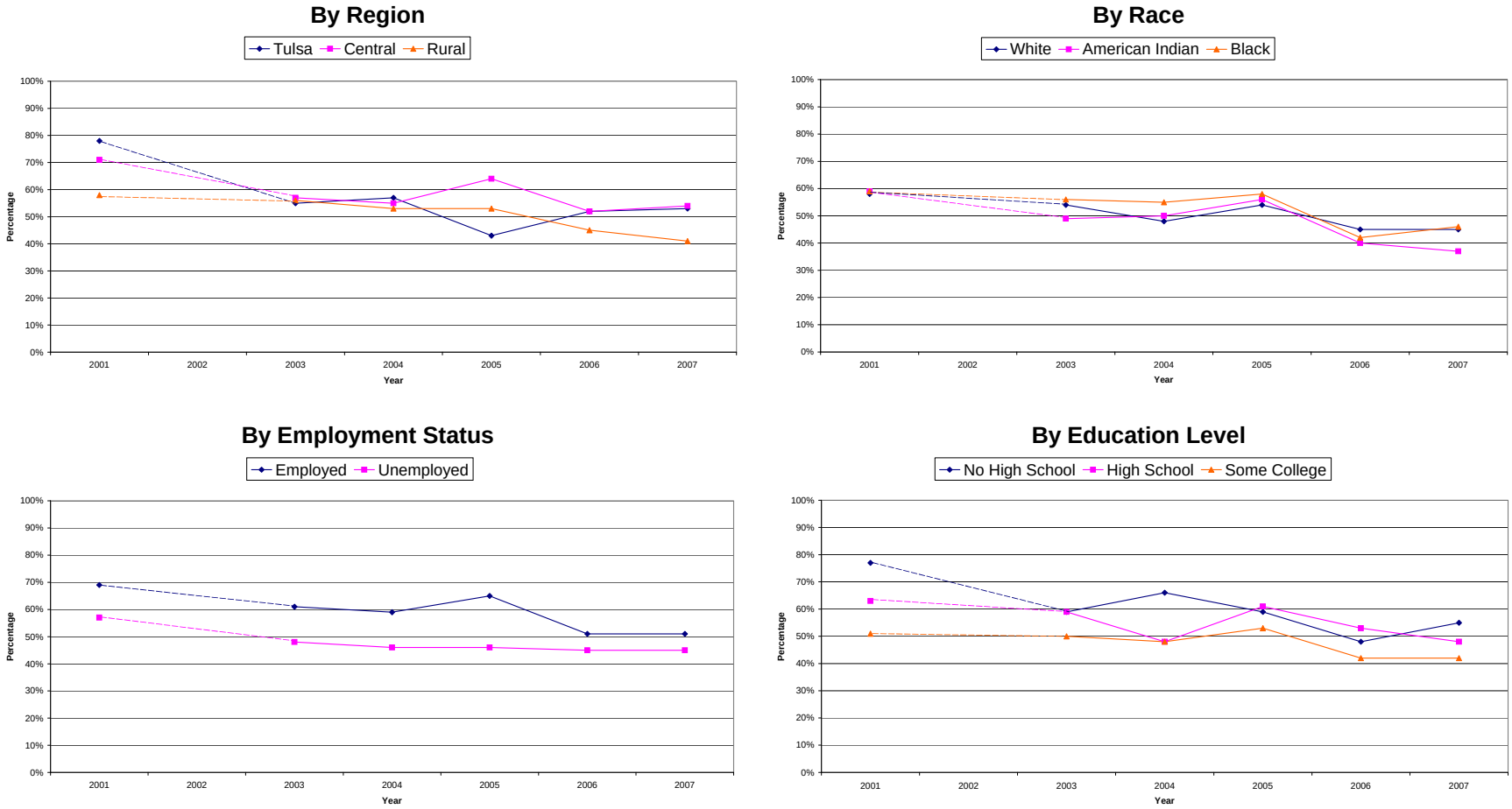


Note: Central region includes Oklahoma City and surrounding counties.

Figure B.32
Percent of Low-Income Adults Residing in Households without Children Reporting Zero Poor Mental Health Days, BRFSS 2001-2007

Note: Central region includes Oklahoma City and surrounding counties.

Figure B.33
Percent of Low-Income Adults Residing in Households with Children Reporting Zero Poor Mental Health Days, BRFSS 2001-2007



Note: Central region includes Oklahoma City and surrounding counties.