



THE
COMMONWEALTH
FUND

U.S. Variations in Child Health System Performance: A State Scorecard

May 2008

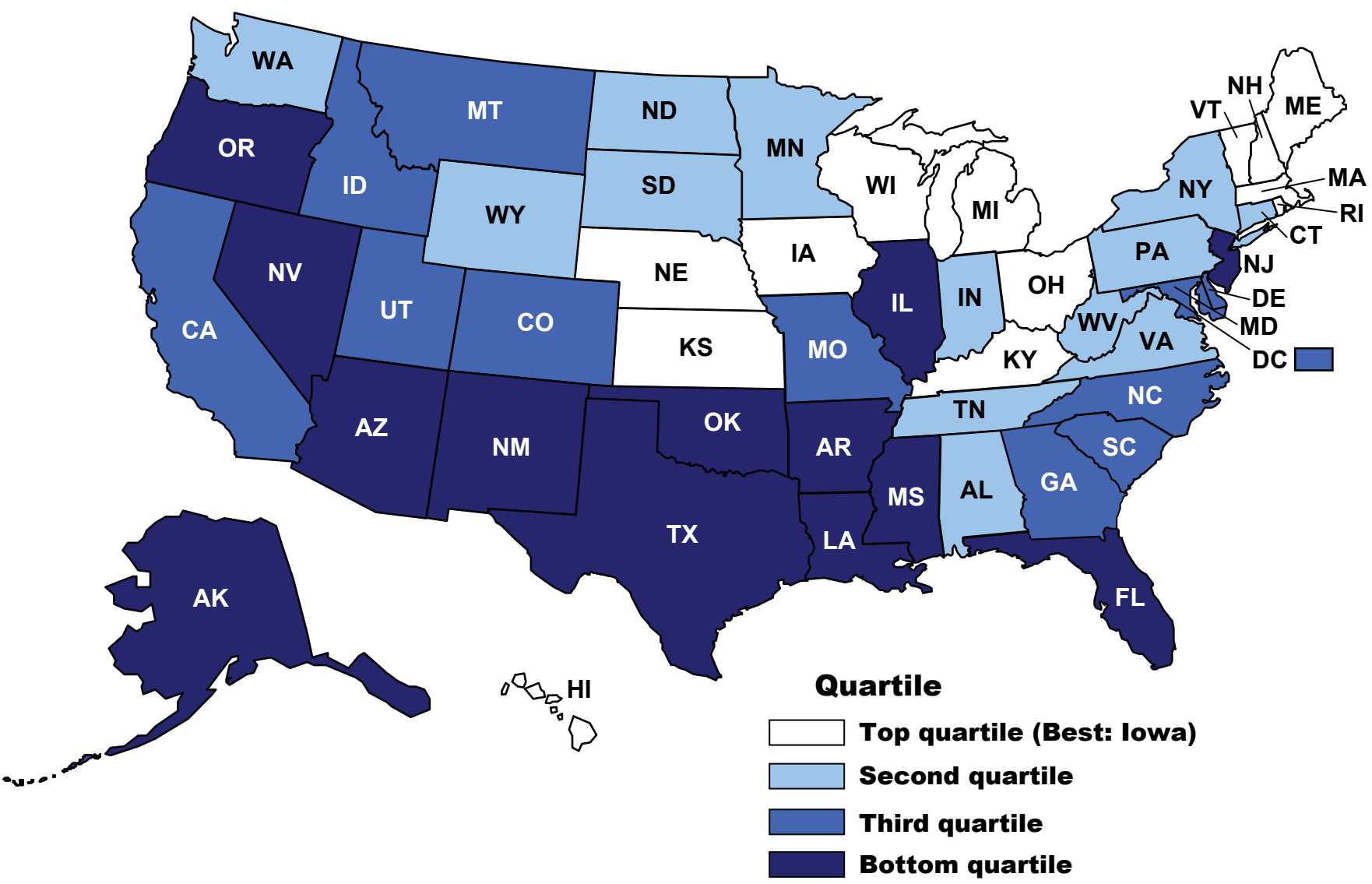
Chartpack

Figure ES-1. Indicators of State Child Health System Performance

Access	Year	All States Median	Range of State Performance (Bottom–Top)	Best State
Children uninsured	2005–2006	9.1%	20.1–4.9	MI
Low-income children uninsured	2005–2006	16.6%	34.5–7.0	DC
Quality				
Children ages 19–35 months received all recommended doses of five key vaccines	2005	81.6%	66.7 – 93.5	MA
Children with both medical and dental preventive care visits	2003	59.2%	45.7 – 74.9	MA
Children with emotional, behavioral, or developmental problems received mental health care	2003	61.9%	43.4 – 77.2	WY
Children with a medical home	2003	47.6%	33.8 – 61.0	NH
Children needing specialty care, those whose personal doctor or nurse follows up after they get specialty care services	2003	57.9%	49.8 – 68.0	WV
Children with special health care needs who needed specialist care with problems getting referrals to specialty care services	2001	22.0%	33.5 – 13.5	SD
Hospital admissions for pediatric asthma per 100,000 children	2002	176.7	314.2 – 54.9	VT
Costs				
State total personal health spending	2004	\$5,327	\$8,295 – \$3,972	UT
Family premium for employer-based health insurance	2005	\$10,637	\$8,334 – \$11,924	ND
Potential to Lead Healthy Lives				
Young children at moderate/high risk for developmental delay	2003	23.6%	32.9 – 16.4	VT
Infant mortality: deaths per 1,000 live births	2002	7.1	11.0 – 4.3	ME
Equity				
Income	2003	-11 point gap	-33.7 – 6.4 gap	VT
Race/Ethnicity	2003	-14.2 point gap	-29.3 – 13.2 gap	VT
Insurance coverage	2003	-19.2 point gap	-36.2 – 3.9 gap	MA

Source: State Variations in Child Health System Performance. The Commonwealth Fund, May 2008.

Figure ES-2. State Ranking on Child Health System Performance



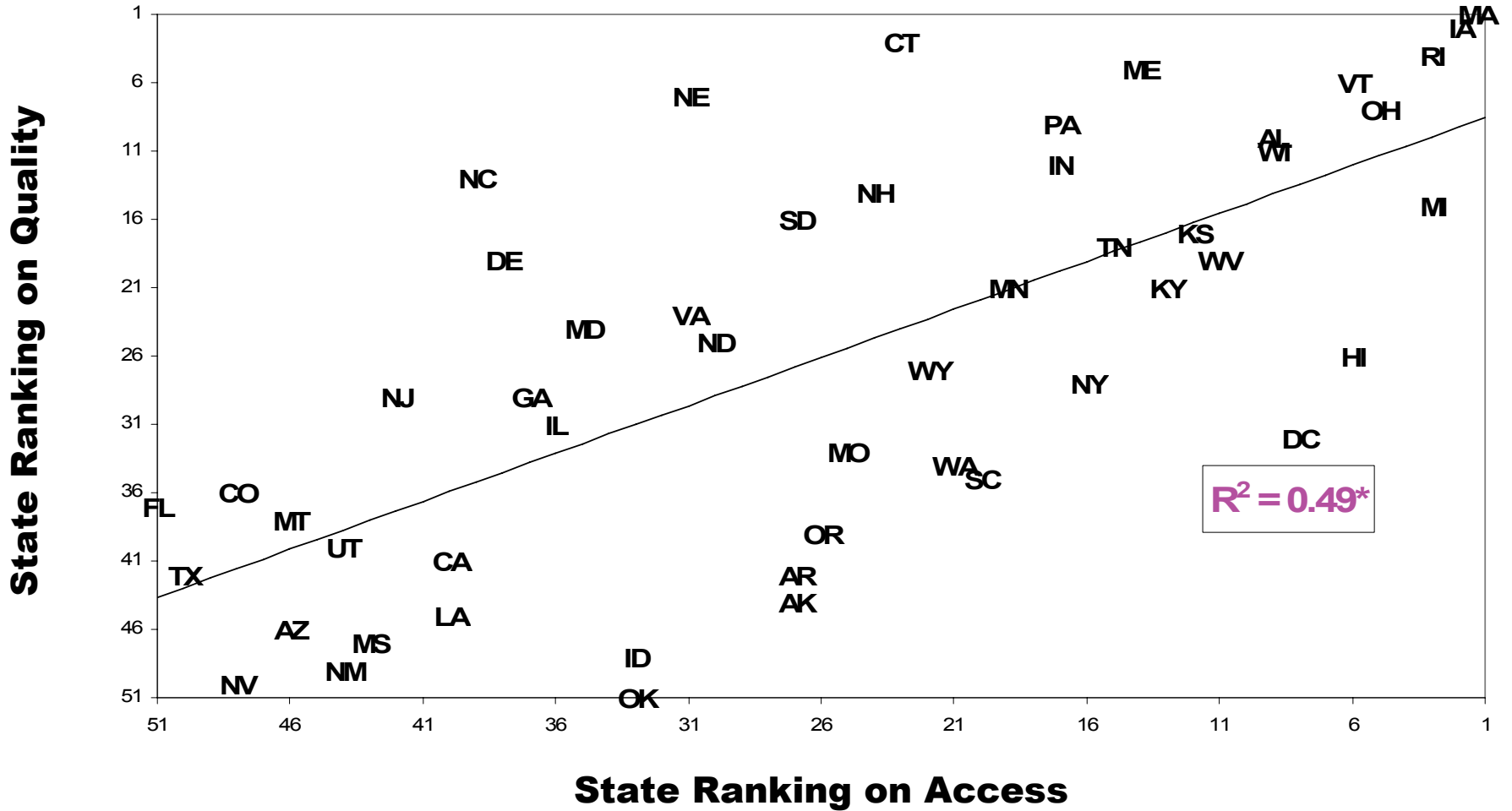
Source: The Commonwealth Fund calculations based on state's rankings on access, quality, cost, healthy lives, and equity dimensions.

Figure ES-3 Summary of Variations in Child Health System Performance

Overall Rank*	State	Access	Quality	Costs	Equity	Potential to Lead Healthy Lives	Performance Metrics			
							Top quartile	Second quartile	Third quartile	Bottom quartile
1	Iowa	2	2	12	19	17				
2	Vermont	6	6	44	1	1				
3	Maine	14	5	46	3	2				
4	Massachusetts	1	1	47	2	20				
5	Ohio	5	8	34	10	31				
6	Hawaii	6	26	5	11	41				
6	New Hampshire	24	14	40	7	4				
8	Rhode Island	3	4	49	5	31				
9	Kentucky	13	21	32	12	18				
10	Kansas	12	17	16	30	23				
10	Wisconsin	9	11	38	14	26				
12	Michigan	3	15	28	17	36				
13	Nebraska	31	7	22	23	18				
14	Connecticut	23	3	49	6	21				
15	Alabama	9	10	8	28	48				
16	South Dakota	27	16	22	36	11				
16	Wyoming	22	27	37	18	8				
18	Pennsylvania	17	9	42	8	37				
18	Washington	21	34	32	20	6				
20	West Virginia	11	19	39	4	43				
21	North Dakota	30	25	21	32	9				
22	Indiana	17	12	28	30	33				
23	Minnesota	19	21	36	38	7				
24	Virginia	31	23	8	35	25				
25	New York	16	28	45	8	27				
26	Tennessee	15	18	26	24	43				
27	Utah	44	40	2	39	3				
28	Maryland	35	24	31	12	28				
29	Missouri	25	33	17	27	29				
30	Montana	46	38	12	22	15				
31	North Carolina	39	13	11	25	46				
32	District of Columbia	8	32	51	15	38				
33	Idaho	33	48	7	45	13				
34	California	40	41	12	40	15				
34	Colorado	48	36	17	42	5				
36	South Carolina	20	35	20	33	41				
37	Delaware	38	19	40	20	34				
38	Georgia	37	29	6	36	47				
39	Illinois	36	31	25	26	38				
39	New Mexico	44	49	12	41	10				
41	New Jersey	42	29	43	16	29				
42	Alaska	27	44	47	29	13				
42	Oregon	26	39	24	47	24				
44	Arkansas	27	42	1	46	48				
45	Nevada	48	50	2	51	21				
46	Texas	50	42	28	44	12				
47	Arizona	46	46	2	49	35				
48	Louisiana	40	45	17	33	51				
49	Mississippi	43	47	10	48	50				
50	Florida	51	37	34	43	38				
51	Oklahoma	33	51	26	49	45				

*Final rank for overall health system performance across five dimensions.
 Source: The Commonwealth Fund's calculations based on state's rankings on access, quality, cost, healthy lives, and equity dimensions.

Figure ES-4. State Ranking on Access and Quality Dimensions



*p<.05

Source: The Commonwealth Fund's calculations based on state's rankings on access dimension and quality dimension.

Figure ES-5. National Cumulative Impact if All States Achieved Top-State Rates

Indicator	If all states improved their performance to the level of the best-performing state for this indicator, then:
Children uninsured	4,691,326 more children would be covered by health insurance (public or private), and therefore would be more likely to receive health care when needed
Children ages 19–35 months received all recommended doses of five key vaccines	756,942 more children (ages 19 to 35 months) would be up-to-date on all recommended doses of five key vaccines
Children with both medical and dental preventive care visits	11,775,795 more children (ages 0–17) would have both a medical and dental preventive care visit each year
Children with a medical home	10,858,812 more children (ages 0–17) would have a medical home to help ensure that care is coordinated and accessible when needed
Children with special health care needs who needed specialist care with problems getting referrals to specialty care services	412,895 fewer children with special health care needs (ages 0–17) who needed specialist care would have problems getting referrals to specialty care services
Children at risk for developmental delays	1,613,347 fewer children (ages 1–5) would be at risk for developmental delays

Source: The Commonwealth Fund’s calculations based on summation of differences between highest-achieving state and all other states for each indicator.

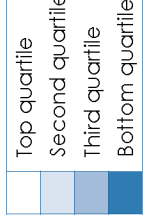
Figure 1. Indicators of State Child Health System Performance

Access	Year	All States Median	Range of State Performance (Bottom–Top)	Best State
Children uninsured	2005–2006	9.1%	20.1–4.9	MI
Low-income children uninsured	2005–2006	16.6%	34.5–7.0	DC
Quality				
Children ages 19–35 months received all recommended doses of five key vaccines	2005	81.6%	66.7 – 93.5	MA
Children with both medical and dental preventive care visits	2003	59.2%	45.7 – 74.9	MA
Children with emotional, behavioral, or developmental problems received mental health care	2003	61.9%	43.4 – 77.2	WY
Children with a medical home	2003	47.6%	33.8 – 61.0	NH
Children needing specialty care, those whose personal doctor or nurse follows up after they get specialty care services	2003	57.9%	49.8 – 68.0	WV
Children with special health care needs who needed specialist care with problems getting referrals to specialty care services	2001	22.0%	33.5 – 13.5	SD
Hospital admissions for pediatric asthma per 100,000 children	2002	176.7	314.2 – 54.9	VT
Costs				
State total personal health spending	2004	\$5,327	\$8,295 – \$3,972	UT
Family premium for employer-based health insurance	2005	\$10,637	\$8,334 – \$11,924	ND
Potential to Lead Healthy Lives				
Young children at moderate/high risk for developmental delay	2003	23.6%	32.9 – 16.4	VT
Infant mortality: deaths per 1,000 live births	2002	7.1	11.0 – 4.3	ME
Equity				
Income	2003	-11 point gap	-33.7 – 6.4 gap	VT
Race/Ethnicity	2003	-14.2 point gap	-29.3 – 13.2 gap	VT
Insurance coverage	2003	-19.2 point gap	-36.2 – 3.9 gap	MA

Source: State Variations in Child Health System Performance. The Commonwealth Fund, May 2008.

Figure 2. Summary of Variations in Child Health System Performance

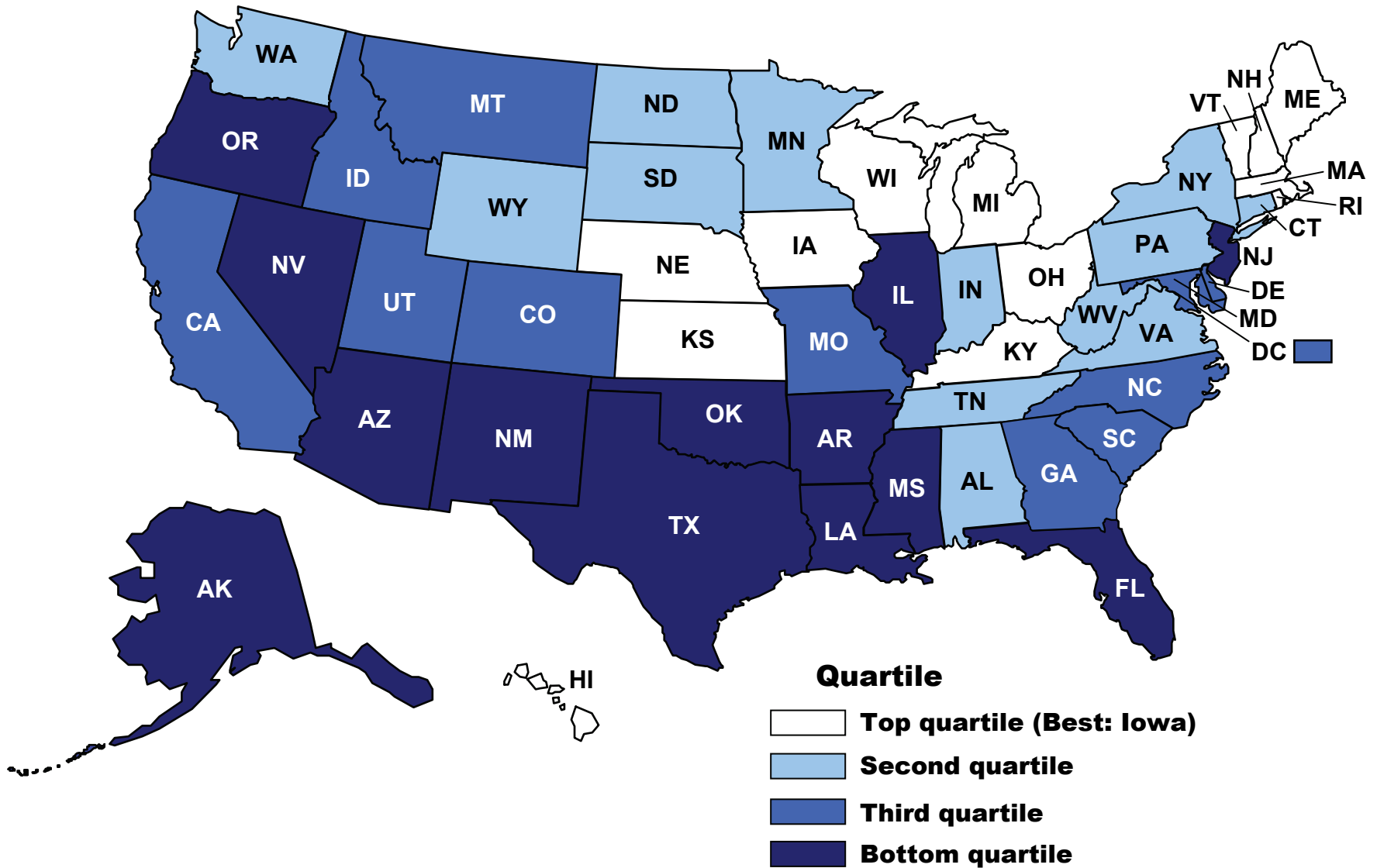
Overall Rank*	State	Access	Quality	Costs	Equity	Potential to Lead Healthy Lives
1	Iowa	2	2	12	19	17
2	Vermont	6	6	44	1	1
3	Maine	14	5	46	3	2
4	Massachusetts	1	1	47	2	20
5	Ohio	5	8	34	10	31
6	Hawaii	6	26	5	11	41
6	New Hampshire	24	14	40	7	4
8	Rhode Island	3	4	49	5	31
9	Kentucky	13	21	32	12	18
10	Kansas	12	17	16	30	23
10	Wisconsin	9	11	38	14	26
12	Michigan	3	15	28	17	36
13	Nebraska	31	7	22	23	18
14	Connecticut	23	3	49	6	21
15	Alabama	9	10	8	28	48
16	South Dakota	27	16	22	36	11
16	Wyoming	22	27	37	18	8
18	Pennsylvania	17	9	42	8	37
18	Washington	21	34	32	20	6
20	West Virginia	11	19	39	4	43
21	North Dakota	30	25	21	32	9
22	Indiana	17	12	28	30	33
23	Minnesota	19	21	36	38	7
24	Virginia	31	23	8	35	25
25	New York	16	28	45	8	27
26	Tennessee	15	18	26	24	43
27	Utah	44	40	2	39	3
28	Maryland	35	24	31	12	28
29	Missouri	25	33	17	27	29
30	Montana	46	38	12	22	15
31	North Carolina	39	13	11	25	46
32	District of Columbia	8	32	51	15	38
33	Idaho	33	48	7	45	13
34	California	40	41	12	40	15
34	Colorado	48	36	17	42	5
36	South Carolina	20	35	20	33	41
37	Delaware	38	19	40	20	34
38	Georgia	37	29	6	36	47
39	Illinois	36	31	25	26	38
39	New Mexico	44	49	12	41	10
41	New Jersey	42	29	43	16	29
42	Alaska	27	44	47	29	13
42	Oregon	26	39	24	47	24
44	Arkansas	27	42	1	46	48
45	Nevada	48	50	2	51	21
46	Texas	50	42	28	44	12
47	Arizona	46	46	2	49	35
48	Louisiana	40	45	17	33	51
49	Mississippi	43	47	10	48	50
50	Florida	51	37	34	43	38
51	Oklahoma	33	51	26	49	45



*Final rank for overall health system performance across five dimensions.

Source: The Commonwealth Fund's calculations based on state's rankings on access, quality, cost, healthy lives, and equity dimensions.

Figure 3. State Ranking on Child Health System Performance

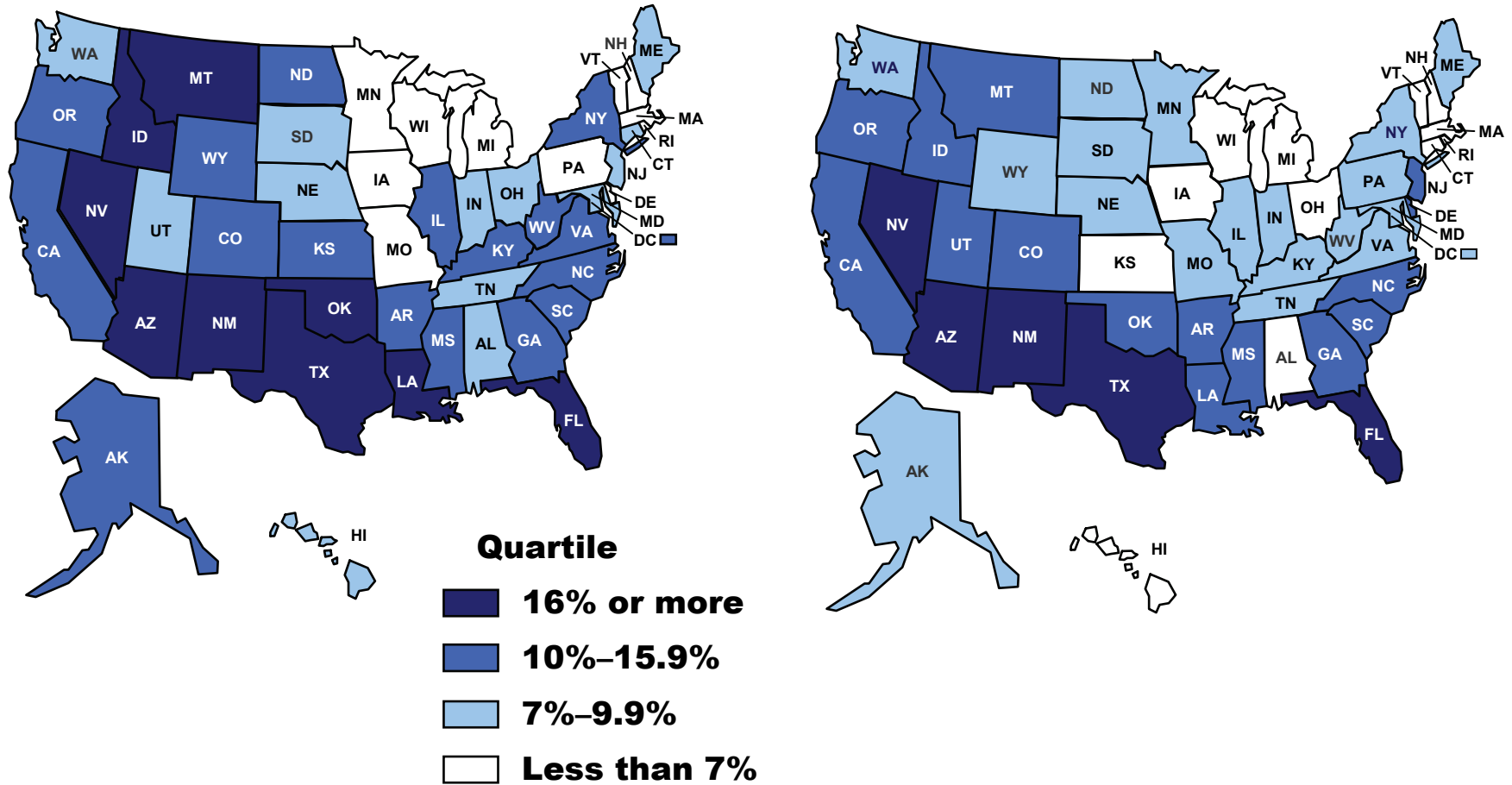


Source: The Commonwealth Fund calculations based on state's rankings on access, quality, cost, healthy lives, and equity dimensions.

Figure 4. Percent of Uninsured Children Declined Since Enactment of SCHIP in 1997, but Gaps Remain

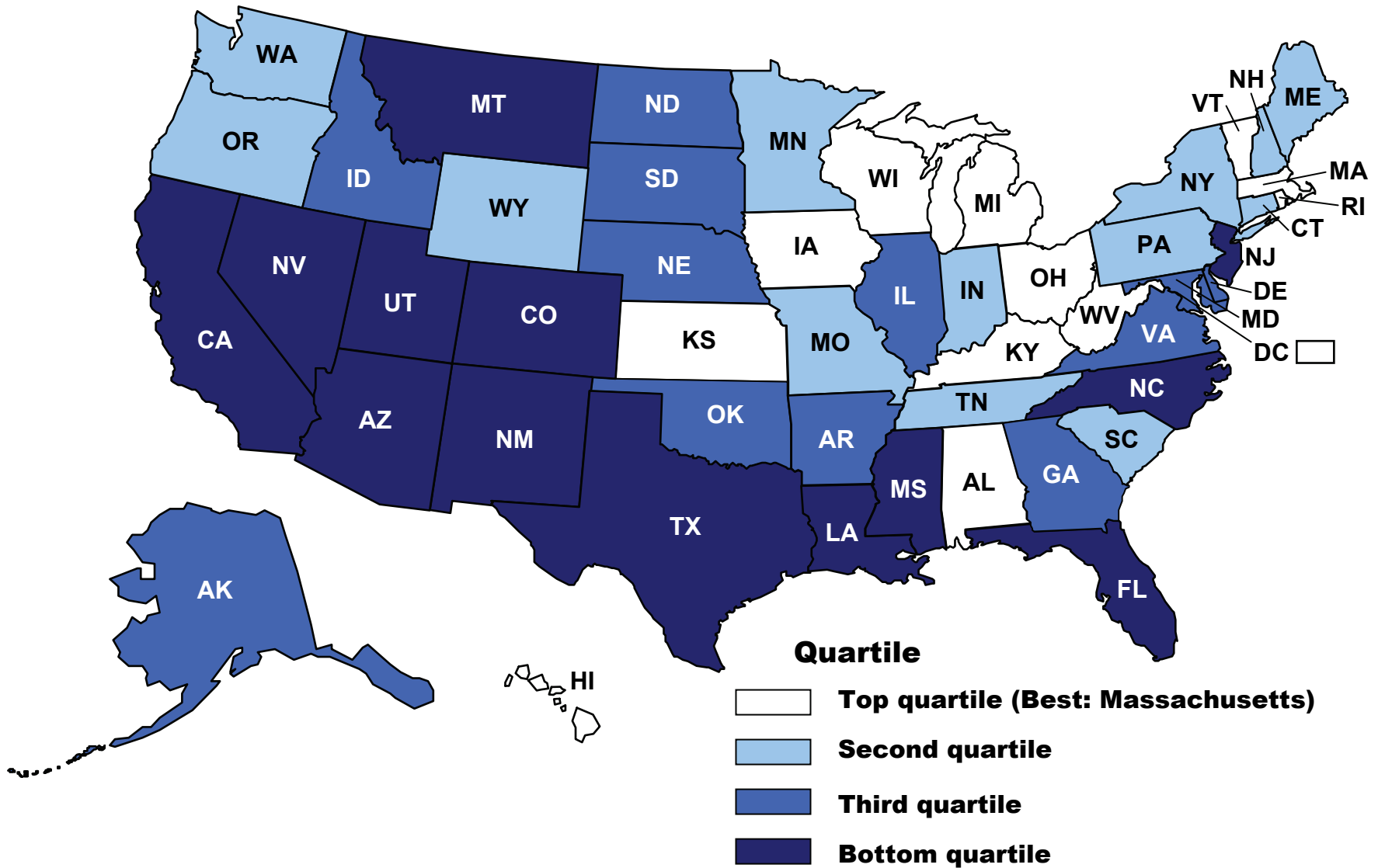
1999–2000

2005–2006



Source: The Commonwealth Fund’s two-year averages 1999–2000, updated with 2007 CPS correction, and 2005–2006 from the Census Bureau’s March 2000, 2001 and 2006, 2007 Current Population Surveys.

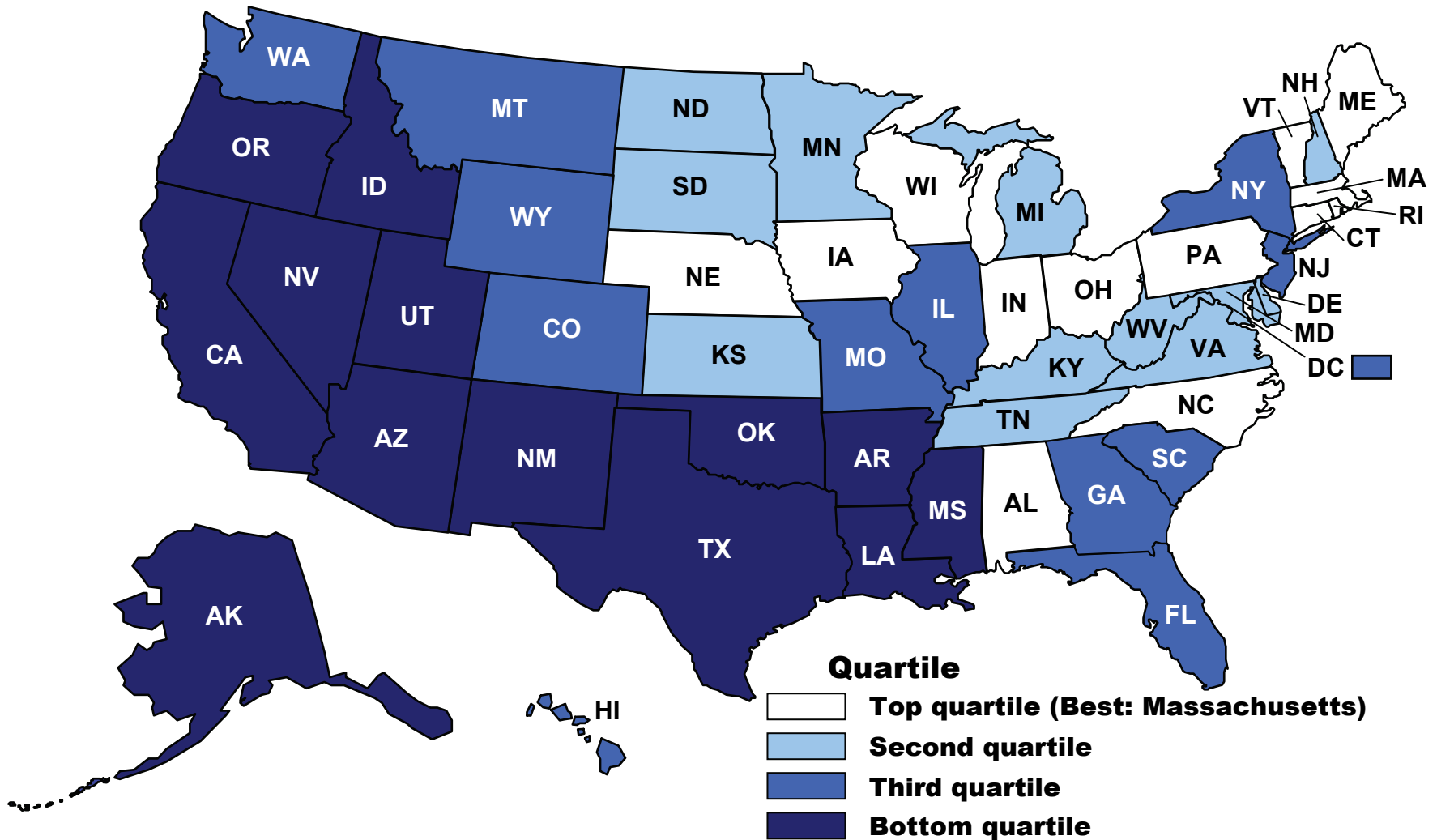
Figure 5. State Ranking on Access Dimension



Access dimension includes: percent of children uninsured and percent of low-income (below 200% of the federal poverty level) children uninsured.

Source: U.S. Census Bureau, Current Population Survey, 2007, 2006 and 2005 Annual Social and Economic Supplements.

Figure 6. State Ranking on Quality Dimension



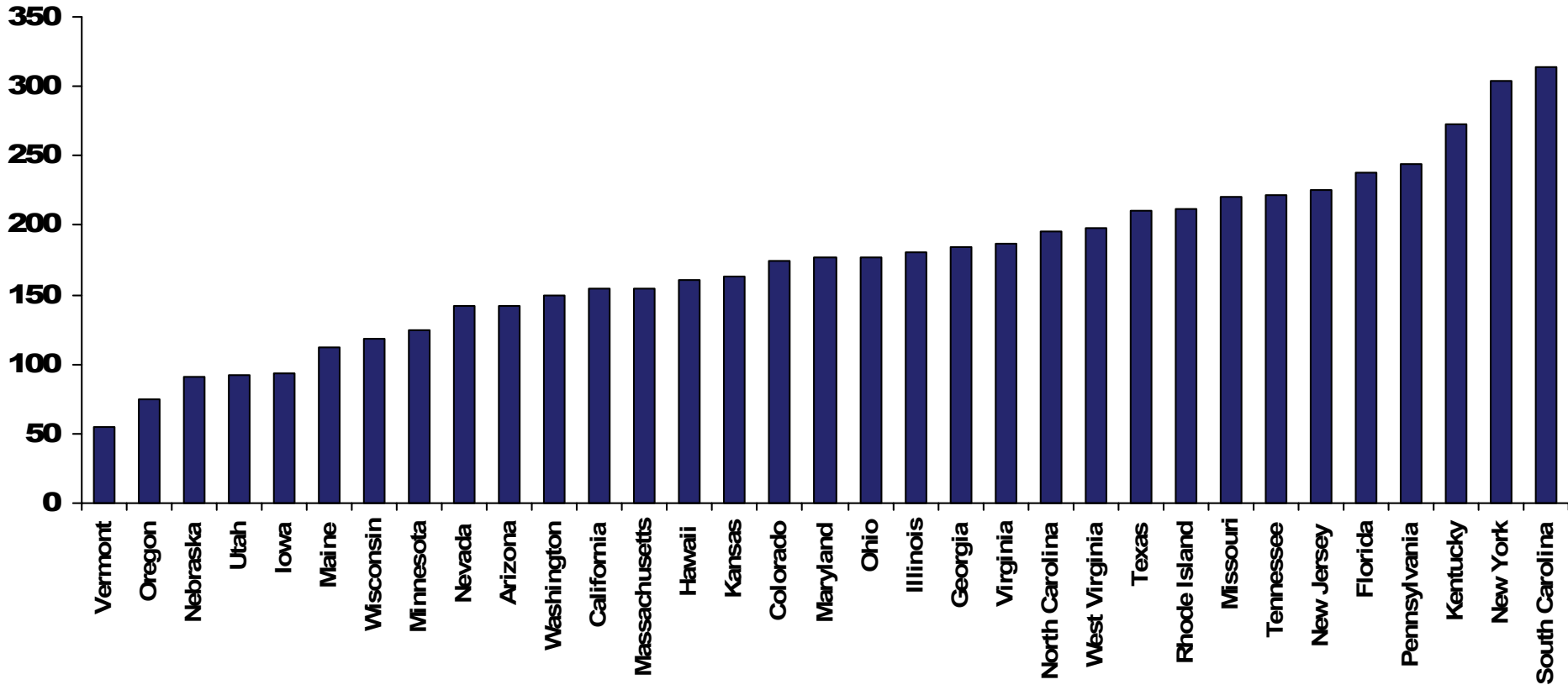
Quality dimension includes: percent of children 19–35 months who received all recommended doses of five key vaccines; children with both a medical and dental preventive visit in past year; children with emotional, behavioral, or developmental problems received mental health care; children with a medical home; children whose personal doctor or nurse follows-up after they get specialty care services; hospital admissions for pediatric asthma per 100K children; and children with special health care needs with problems getting referrals to specialty care services. Note: Medical home is defined as having at least one preventive medical care visit in the past year; being able to access needed specialist care and services; and having a personal doctor/nurse who usually/always spends enough time and communicates clearly, provides telephone advice and urgent care when needed, and follows up after specialist care.

Source: 2003 National Survey of Children’s Health. Data assembled by the Child and Adolescent Health Measurement Initiative (CAHMI 2005). Retrieved from www.childhealthdata.org, 2008.

Quality

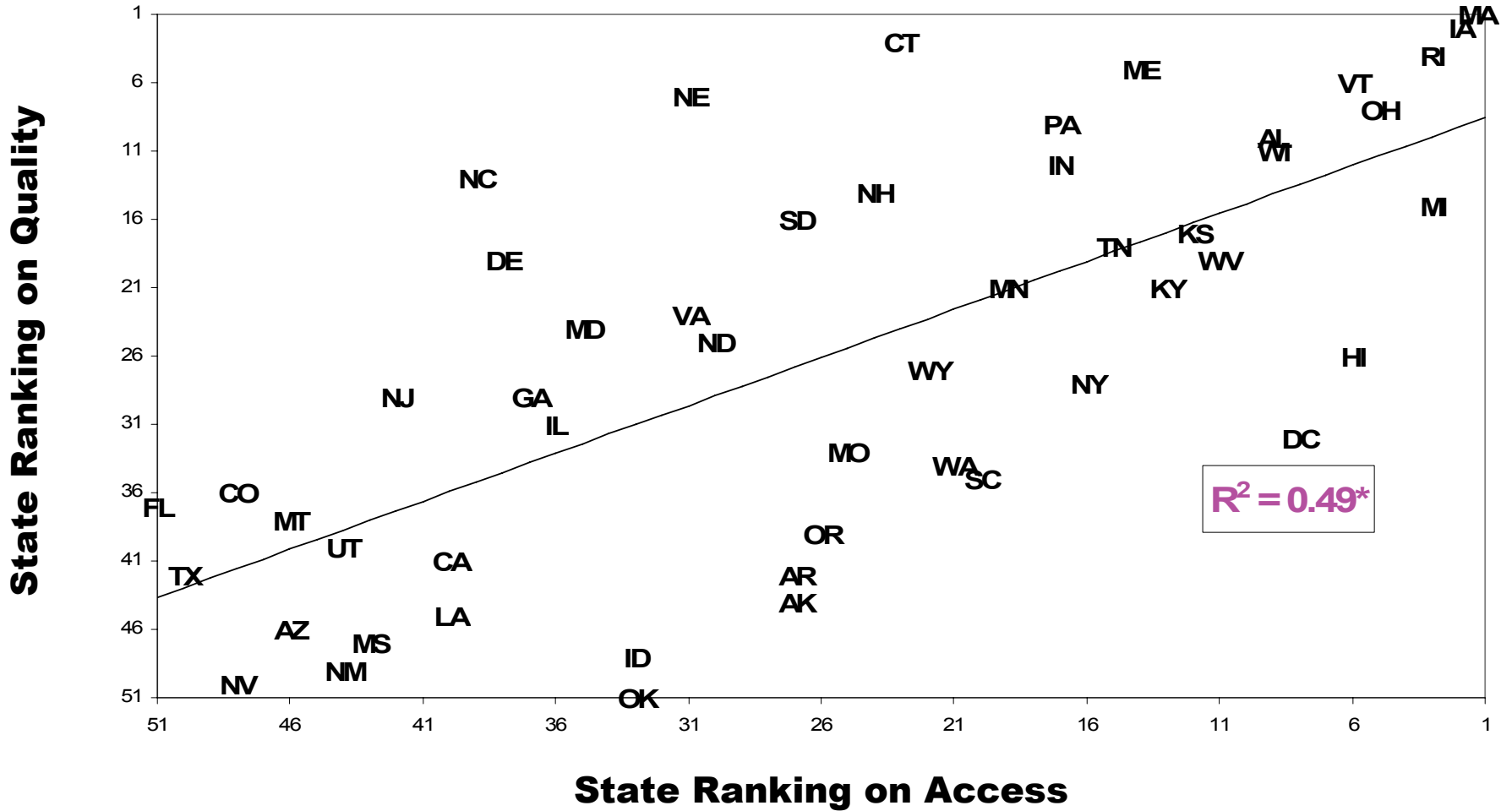
Figure 7. State Rates of Hospital Admissions for Pediatric Asthma per 100,000 Children, 2002

Rate for children 0–17 years



Source: 2002 Healthcare Cost and Utilization Project State Inpatient Databases (AHRQ, HCUP-SID 2002).

Figure ES-4. State Ranking on Access and Quality Dimensions

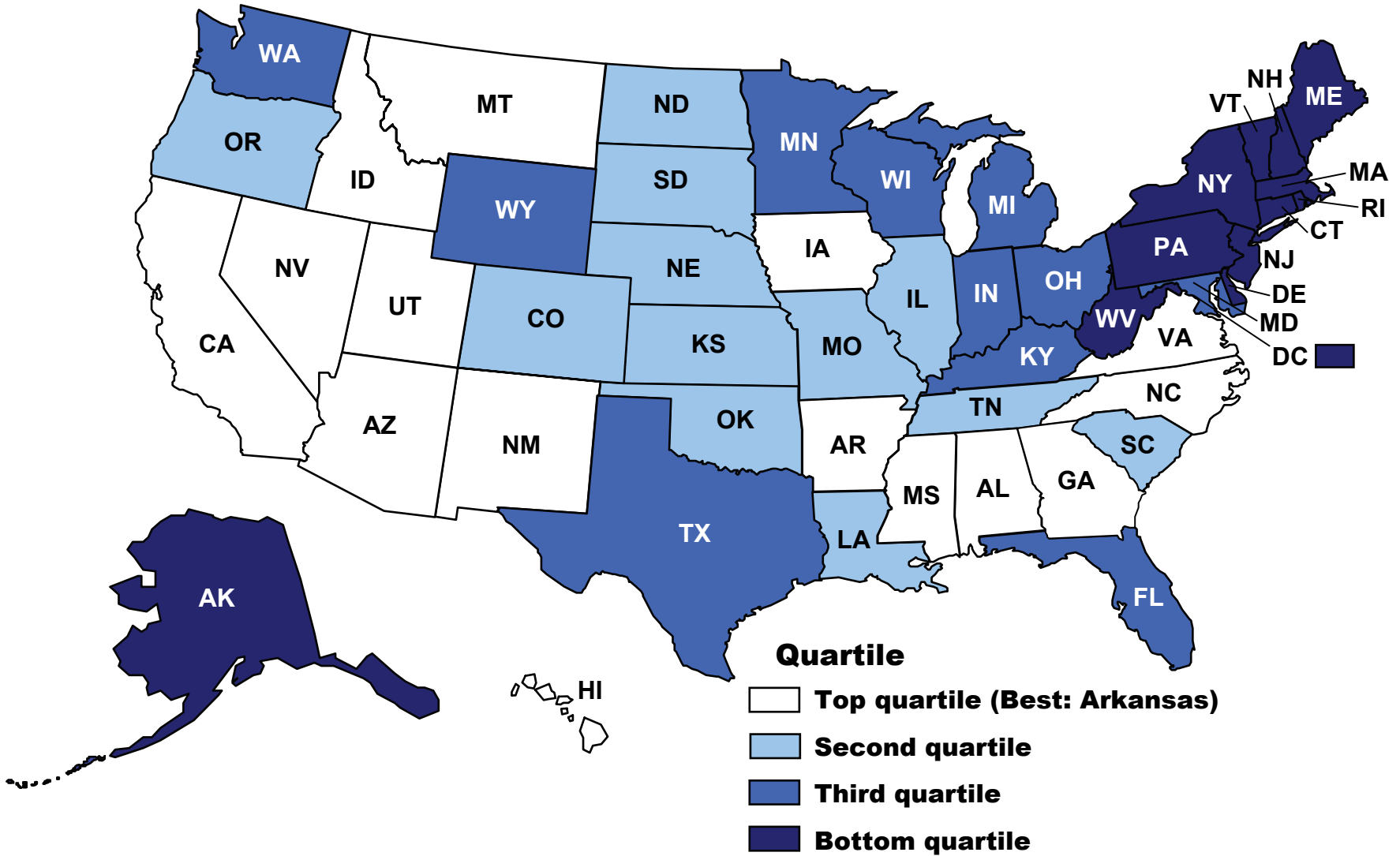


*p<.05

Source: The Commonwealth Fund's calculations based on state's rankings on access dimension and quality dimension.

Costs

Figure 9. State Ranking on Costs Dimension

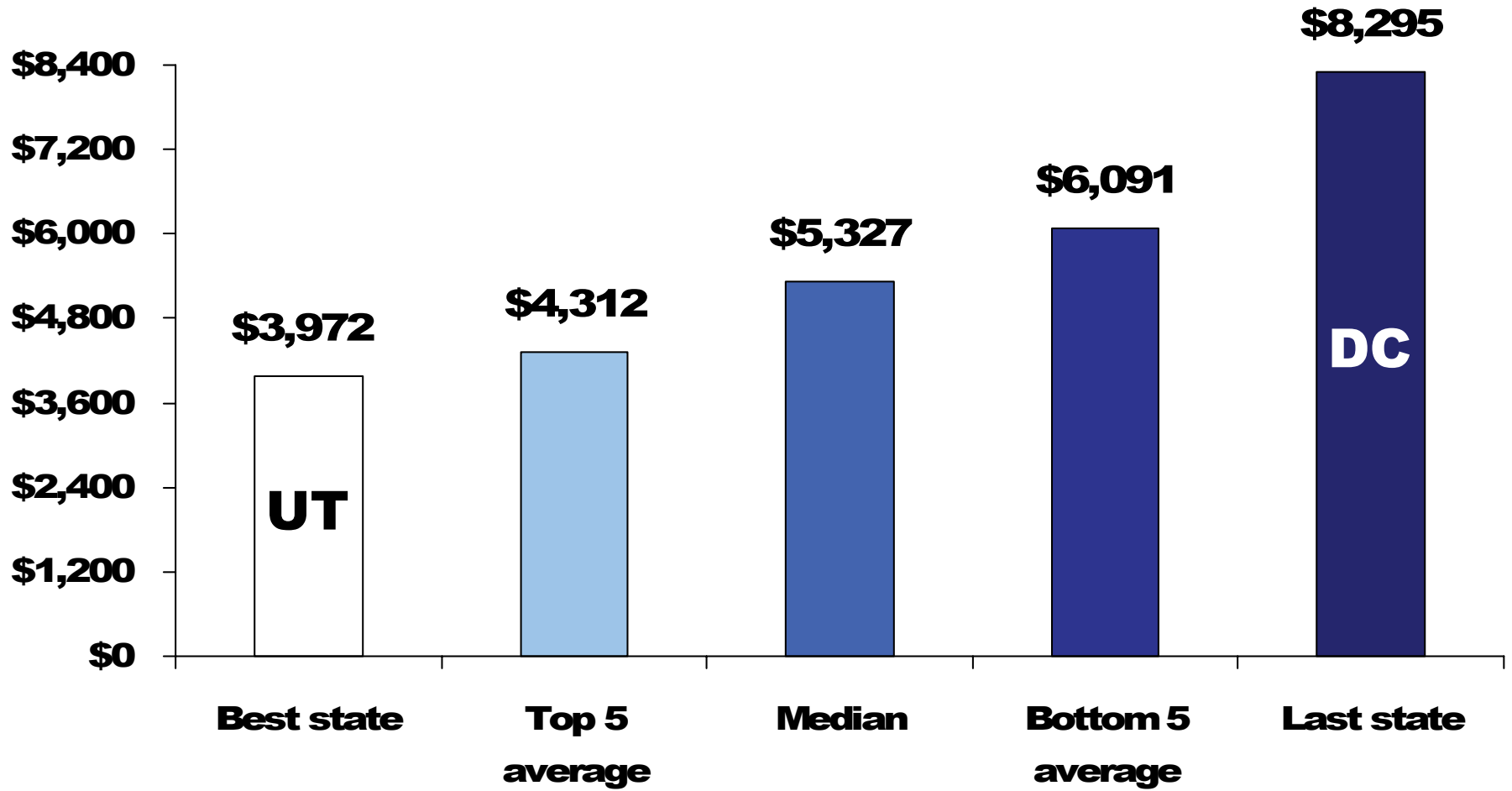


Costs dimension includes: total personal health spending per capita and average family premium for employer-sponsored health insurance.

Source: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group and Kaiser Family Foundation State Health Facts.

**Figure 10. State Variation:
Personal Health Care Spending per Capita, 2004**

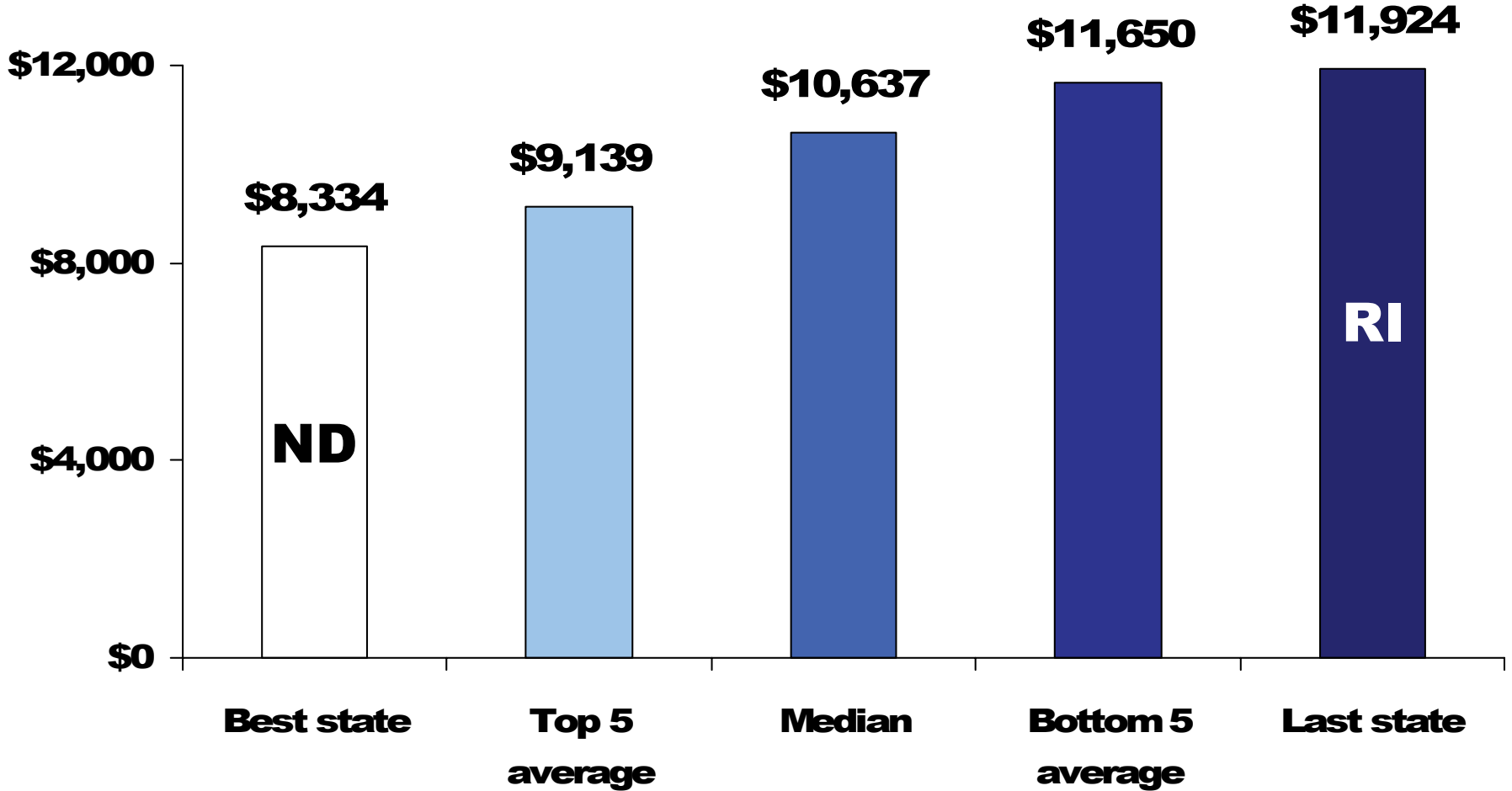
Total personal health care spending in dollars



Source: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group.

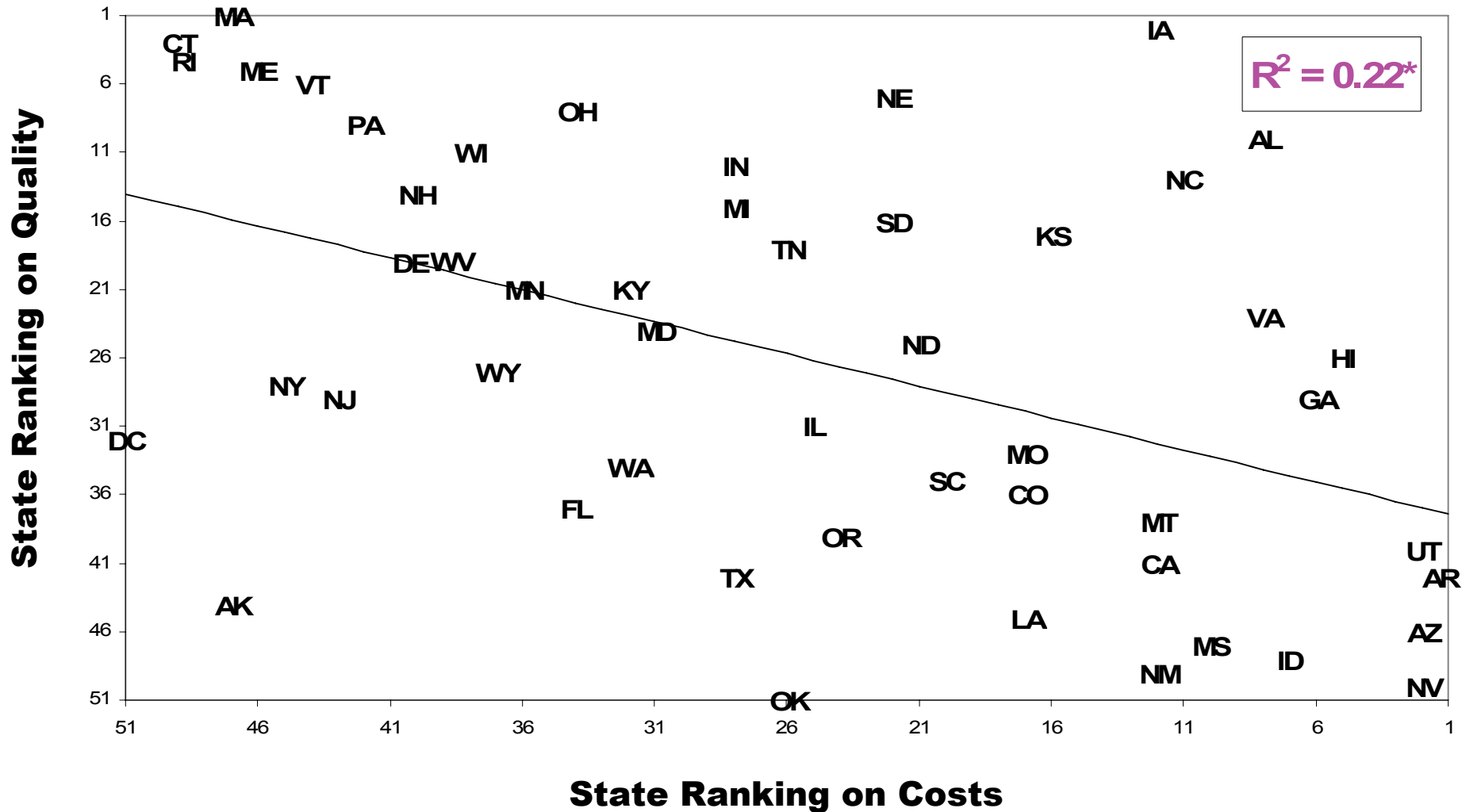
Figure 11. State Variation: Average Family Premium for Employer-Based Health Insurance, 2005

Total dollars per enrolled employee



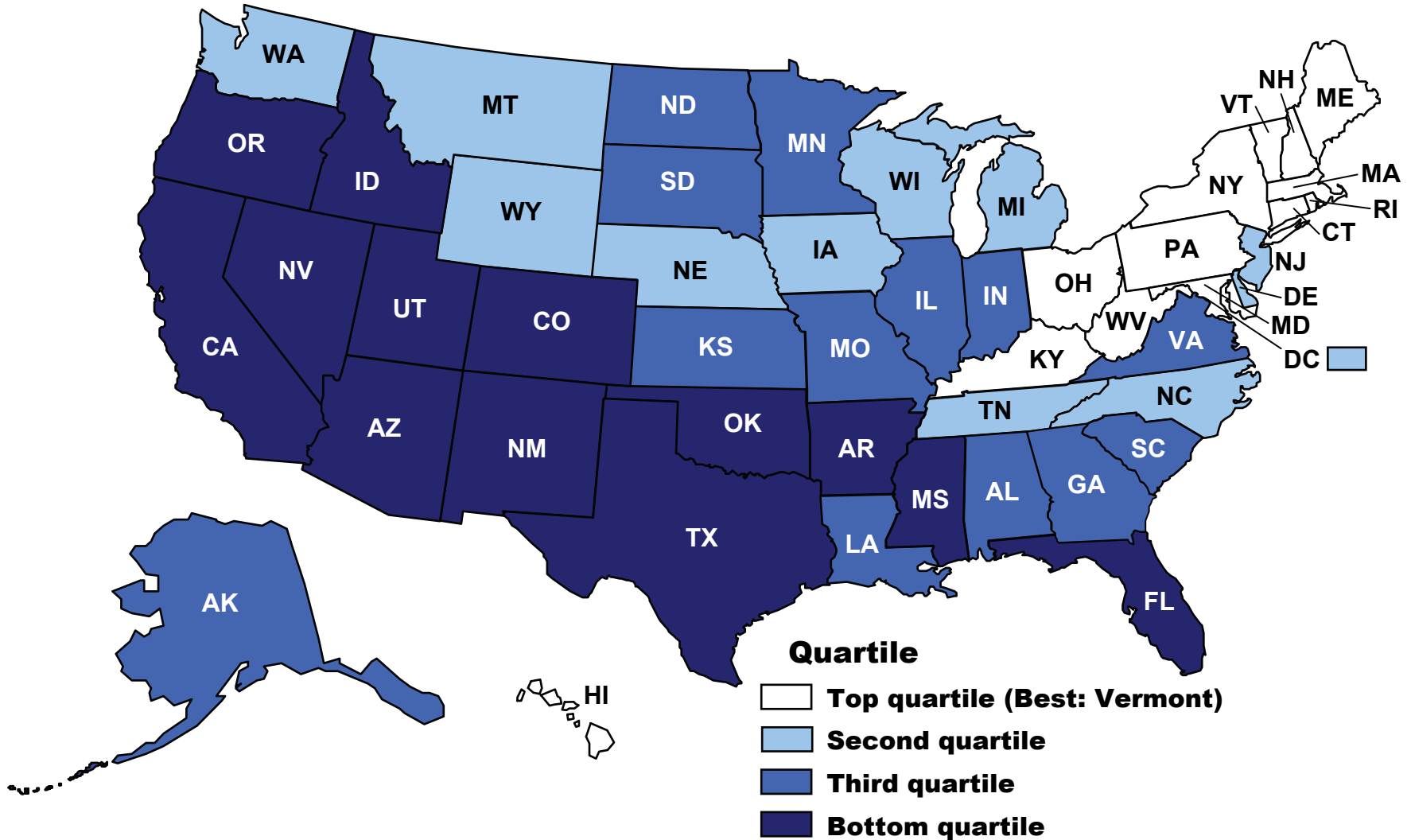
Source: Kaiser Family Foundation State Health Facts. Agency for Healthcare Research and Quality, Center for Financing, Access and Cost Trends. 2005 Medical Expenditure Panel Survey (MEPS)–Insurance Component. Tables II.D.1, II.D.2, II.D.3 available at: Medical Expenditure Panel Survey (MEPS), accessed August 8, 2007.

Figure 12. State Ranking on Costs and Quality Dimensions



*p<.05

Source: The Commonwealth Fund's calculations based on state's rankings on cost dimension and quality dimension.

Figure 13. State Ranking on Equity Dimension

Equity dimension is: the percentage point difference or “gaps” for each vulnerable subgroup (i.e., minority, low-income, uninsured) compared with the U.S. average for the full population for each of two indicators: percent of children with medical home and percent of children with at least one preventive and dental visit in past year.

Source: National Survey of Children's Health. Data assembled by the Child and Adolescent Health Measurement Initiative (CAHMI 2005). Retrieved from www.childhealthdata.org, 2008.

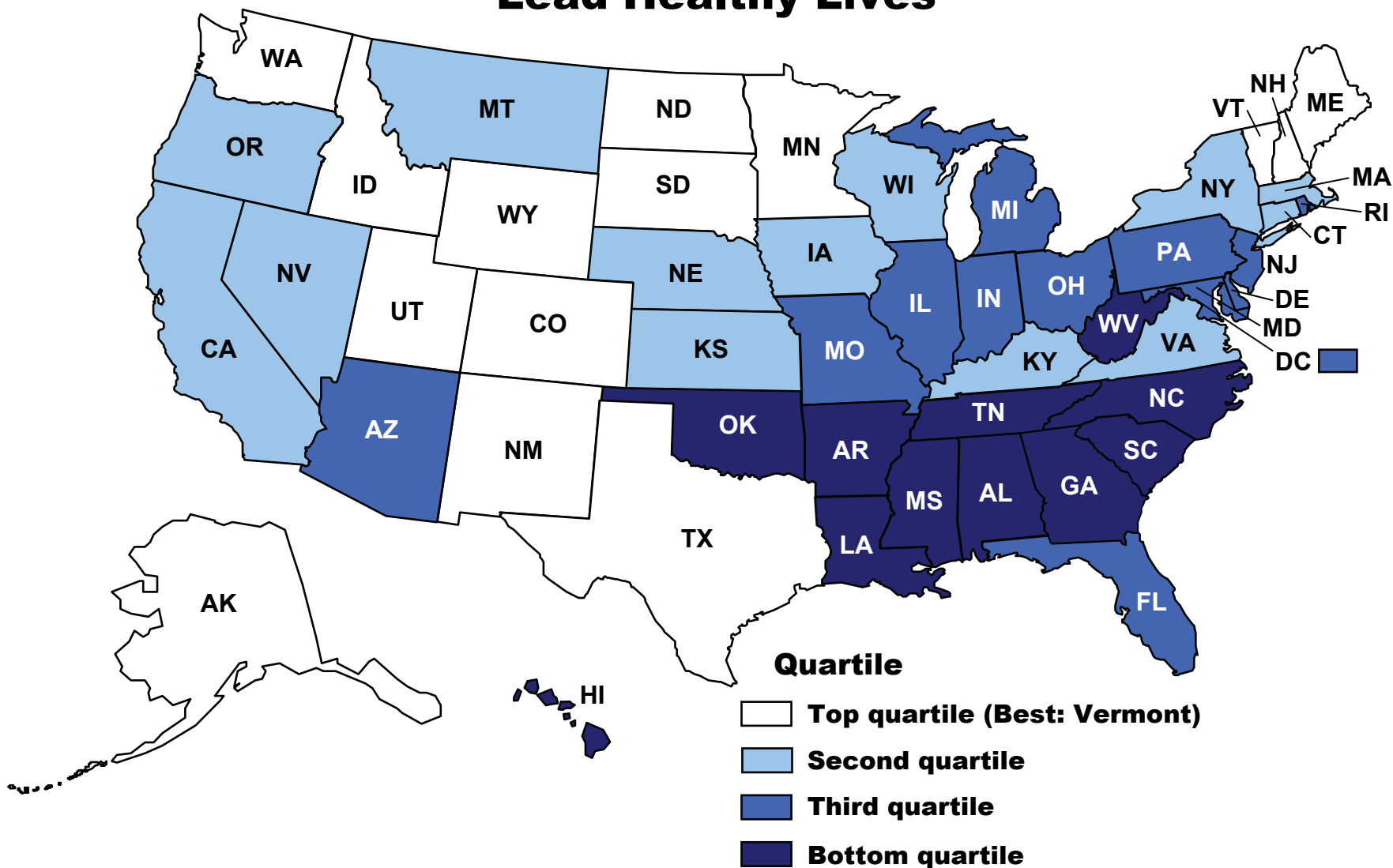
Income, Insurance Status, and Race/Ethnicity

Top quartile
Second quartile
Third quartile
Bottom quartile

Overall Rank on Dimension*	State	Income Equity	Insurance Coverage Equity	Race/Ethnicity Equity
1	Vermont	1	2	1
2	Massachusetts	4	1	5
3	Maine	4	8	3
4	West Virginia	3	12	1
5	Rhode Island	6	4	7
6	Connecticut	8	7	4
7	New Hampshire	2	4	14
8	New York	18	6	5
8	Pennsylvania	9	3	17
10	Ohio	15	9	11
11	Hawaii	12	17	9
12	Kentucky	10	14	15
12	Maryland	21	9	9
14	Wisconsin	15	9	17
15	District of Columbia	11	26	8
16	New Jersey	28	14	11
17	Michigan	24	18	23
18	Wyoming	18	32	16
19	Iowa	26	12	29
20	Delaware	25	22	21
20	Washington	27	30	11
22	Montana	31	23	17
23	Nebraska	7	43	24
24	Tennessee	13	33	33
25	North Carolina	17	29	34
26	Illinois	34	23	27
27	Missouri	42	18	25
28	Alabama	13	35	39
29	Alaska	43	14	32
30	Indiana	20	27	43
30	Kansas	35	21	34
32	North Dakota	33	20	38
33	Louisiana	37	39	17
33	South Carolina	21	25	47
35	Virginia	30	35	31
36	Georgia	21	35	49
36	South Dakota	38	30	37
38	Minnesota	40	27	39
39	Utah	28	45	34
40	California	44	42	22
41	New Mexico	32	40	39
42	Colorado	50	34	28
43	Florida	49	38	26
44	Texas	40	51	29
45	Idaho	38	40	51
46	Arkansas	36	47	48
47	Oregon	47	44	45
48	Mississippi	44	48	45
49	Arizona	47	50	42
49	Oklahoma	44	45	50
51	Nevada	51	49	43

*Equity rank on insurance, income, and race is the average difference between the US average for the indicators (medical home and preventive care) and each state's uninsured group, most vulnerable non-white group, or most vulnerable low-income (0-99% FPL or 100%-199% FPL) group. A positive or negative value indicates that this state's most vulnerable group is that much better or worse than the US average for the indicator.

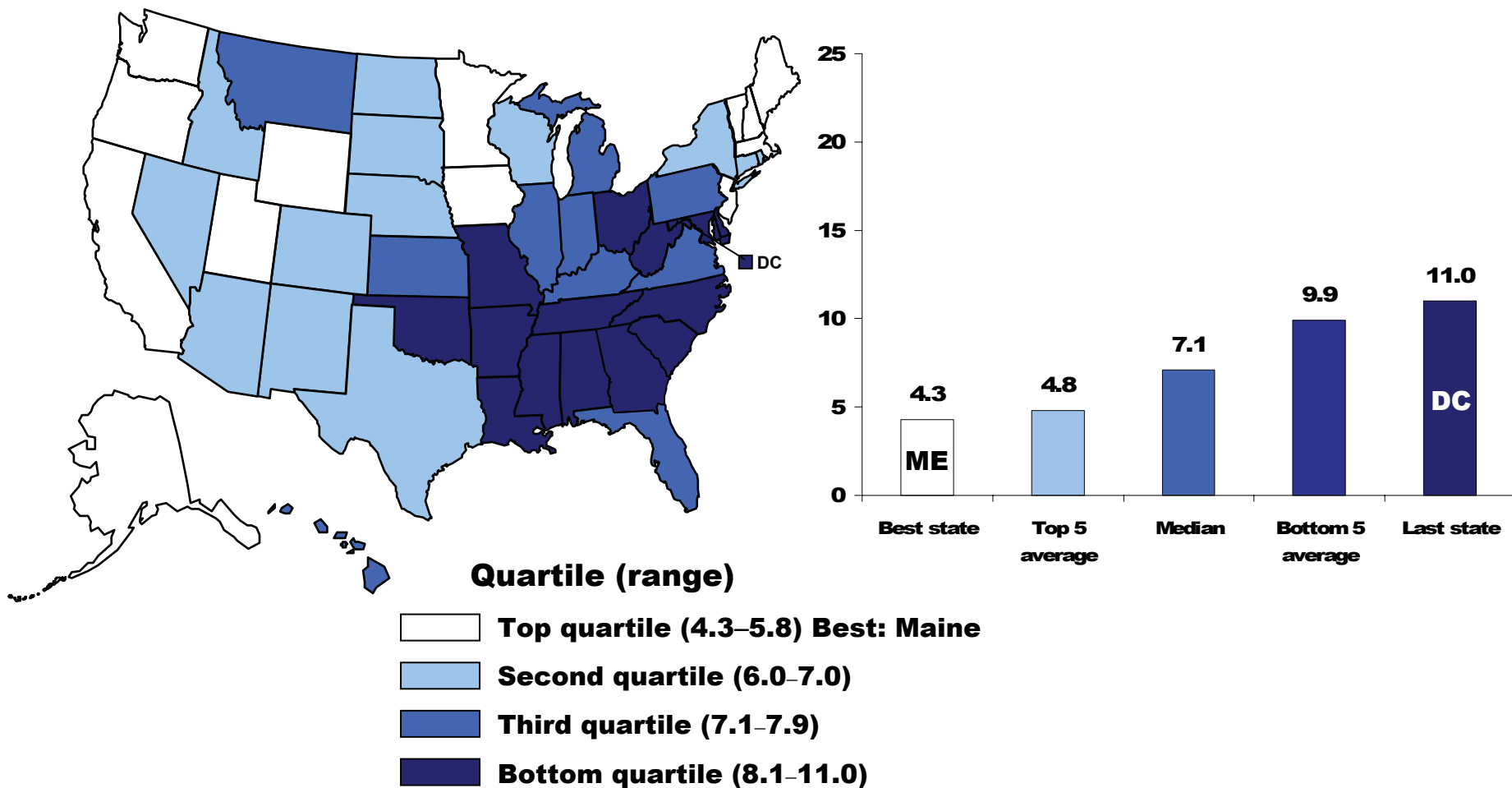
Figure 15. State Ranking on Potential to Lead Healthy Lives



Healthy Lives dimension includes: percent of young children at moderate/high risk for developmental delay and infant mortality (deaths per 1,000 live births) Source: National Vital Statistics System - Linked Birth and Infant Death Data (NCHS, NVSS n.d.). Reported in the 2005 National Healthcare Quality Report (AHRQ 2005) and National Survey of Children's Health. Data assembled by the Child and Adolescent Health Measurement Initiative (CAHMI 2005). Retrieved from www.childhealthdata.org, 2008.

Figure 16. Infant Mortality by State, 2002

Deaths per 1,000 live births
U.S. Average = 7.1 deaths per 1,000



Source: National Vital Statistics System—Linked Birth and Infant Death Data (NCHS, NVSS n.d.). Reported in the 2005 National Healthcare Quality Report (AHRQ 2005).

Figure 17. National Cumulative Impact if All States Achieved Top-State Rates

Indicator	If all states improved their performance to the level of the best-performing state for this indicator, then:
Children uninsured	4,691,326 more children would be covered by health insurance (public or private), and therefore would be more likely to receive health care when needed
Children ages 19–35 months received all recommended doses of five key vaccines	756,942 more children (ages 19 to 35 months) would be up-to-date on all recommended doses of five key vaccines
Children with both medical and dental preventive care visits	11,775,795 more children (ages 0–17) would have both a medical and dental preventive care visit each year
Children with a medical home	10,858,812 more children (ages 0–17) would have a medical home to help ensure that care is coordinated and accessible when needed
Children with special health care needs who needed specialist care with problems getting referrals to specialty care services	412,895 fewer children with special health care needs (ages 0–17) who needed specialist care would have problems getting referrals to specialty care services
Children at risk for developmental delays	1,613,347 fewer children (ages 1–5) would be at risk for developmental delays

Source: The Commonwealth Fund’s calculations based on summation of differences between highest-achieving state and all other states for each indicator.