Overall Health System Performance

Overall Performance
- ○ Top Quartile
- ● Second Quartile
- ● Third Quartile
- ● Bottom Quartile
- ● Not Populated
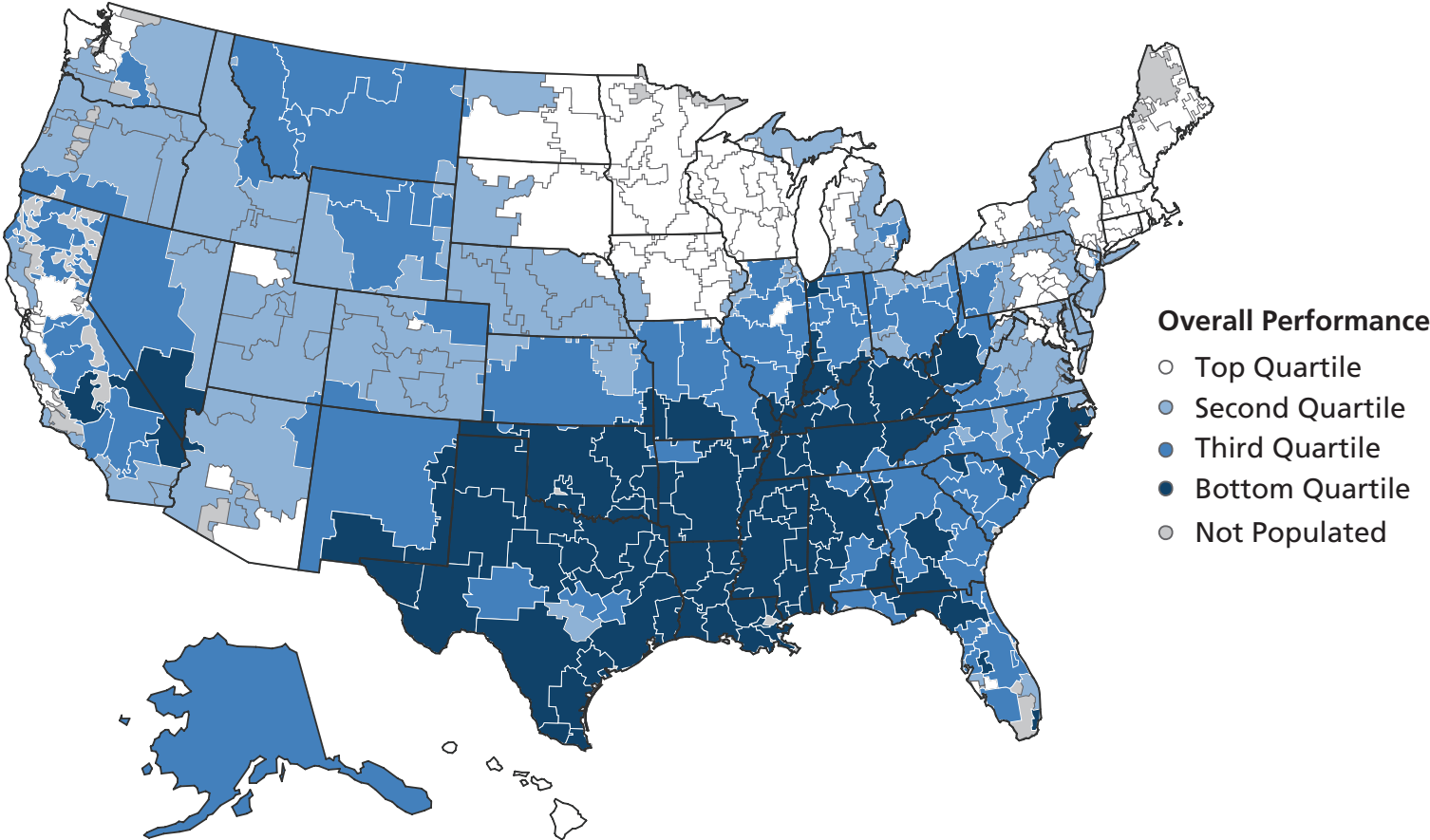
Source: Commonwealth Fund Scorecard on Local Health System Performance, 2012.

List of 43 Indicators in Scorecard on Local Health System Performance

Dimension and Indicator	Range of Hospital Referral Region Performance					Top Three Local Areas (in alphabetical order)*
	Best HRR	Top 90th Percentile	All-HRR Median	Bottom 10th Percentile	Worst HRR	
ACCESS						
1 Percent of adults ages 18–64 insured	94.6	87.5	80.2	71.8	46.8	Boston, MA; Springfield, MA; Worcester, MA
2 Percent of children ages 0–17 insured	98.8	96.3	93.8	87.2	79.8	Boston, MA; Springfield, MA; Worcester, MA
3 Percent of adults reported no cost-related problem seeing a doctor when they needed to within the past year	95.3	90.7	85.3	80.3	66.9	Appleton, WI; Bloomington, IL; Minot, ND
4 Percent of at-risk adults visited a doctor for routine checkup in the past two years	94.9	90.4	85.2	78.4	67.4	Bloomington, IL; Columbus, GA; Newport News, VA
5 Percent of adults visited a dentist, dental hygienist, or dental clinic within the past year	88.4	77.9	69.7	59.7	41.7	Arlington, VA; Aurora, IL; Bridgeport, CT
PREVENTION & TREATMENT						
6 Percent of adults with a usual source of care	93.0	88.8	82.4	74.2	58.7	Buffalo, NY; Johnstown, PA; Lancaster, PA; Rochester, NY
7 Percent of adults age 50 and older received recommended screening and preventive care	58.8	50.8	44.2	37.5	26.0	Arlington, VA; Manchester, NH; Worcester, MA
8 Percent of adult diabetics received recommended preventive care	69.1	55.7	45.5	36.5	26.9	Duluth, MN; Manchester, NH; Marshfield, WI
9 Percent of Medicare beneficiaries received at least one drug that should be avoided in the elderly (1)	11.4	17.9	25.0	36.2	44.0	Bronx, NY; East Long Island, NY; White Plains, NY
10 Percent of Medicare beneficiaries with dementia, hip/pelvic fracture, or chronic renal failure received prescription in an ambulatory care setting that is contraindicated for that condition (1)	9.5	15.3	19.7	26.2	30.6	Portland, ME; Rochester, MN; Santa Cruz, CA
11 Percent of patients hospitalized for heart failure who received recommended care (2)	99.7	97.5	94.7	89.6	77.2	Hudson, FL; Lynchburg, VA; Victoria, TX
12 Percent of patients hospitalized for pneumonia who received recommended care (2)	99.3	96.9	95.1	92.2	74.1	Clearwater, FL; Hudson, FL; Kettering, OH; San Luis Obispo, CA; Traverse City, MI
13 Percent of surgical patients received appropriate care to prevent complications (2)	99.3	97.4	96.2	93.5	88.0	Hudson, FL; Kettering, OH; Newport News, VA
14 Percent of hospitalized patients given information about what to do during their recovery at home	88.5	86.2	82.6	79.1	73.8	Dubuque, IA; Ogden, UT; Provo, UT
15 Percent of patients reported hospital staff always managed pain well, responded when needed help to get to bathroom or pressed call button, and explained medicines and side effects	70.9	67.1	63.2	59.0	52.8	Petoskey, MI; Rochester, MN; Traverse City, MI; Wichita Falls, TX
16 Risk-adjusted 30-day mortality among Medicare patients hospitalized for heart attack (3)	12.1	14.4	15.6	16.9	20.2	Elyria, OH; Hackensack, NJ; Traverse City, MI
17 Risk-adjusted 30-day mortality among Medicare patients hospitalized for heart failure (3)	8.5	9.9	11.4	12.8	14.8	Blue Island, IL; Munster, IN; Panama City, FL
18 Risk-adjusted 30-day mortality among Medicare patients hospitalized for pneumonia (3)	9.4	10.6	11.8	13.2	15.8	Allentown, PA; Cedar Rapids, IA; Great Falls, MT
19 Percent of home health care patients whose ability to walk or move around improved (4)	60.7	56.7	53.4	48.7	45.9	Gainesville, FL; Ogden, UT; Provo, UT
20 Percent of home health care patients whose wounds improved or healed after an operation (4)	92.4	90.3	88.0	85.3	79.3	Lake Charles, LA; Santa Rosa, CA; Tallahassee, FL
21 Percent of high-risk nursing home residents with pressure sores (5)	4.8	7.9	10.9	14.8	20.8	Mason City, IA; St. Cloud, MN; San Luis Obispo, CA
22 Percent of long-stay nursing home residents who were physically restrained (5)	0.4	1.5	3.3	6.8	13.6	Amarillo, TX; Tacoma, WA; Topeka, KS; Wausau, WI
23 Percent of long-stay nursing home residents who have moderate to severe pain (5)	0.4	2.2	3.6	5.2	11.1	New Brunswick, NJ; Paterson, NJ; Spartanburg , SC; Takoma Park, MD
24 Percent of Medicare decedents with a cancer diagnosis without any hospice or who enrolled in hospice in the last three days of life	30.1	46.6	55.6	64.2	84.4	Bend, OR; Salem, OR; Sun City, AZ

Exhibit 2 (continued)

Range of Hospital Referral Region Performance

Dimension and Indicator	Best HRR	Top 90th Percentile	All-HRR Median	Bottom 10th Percentile	Worst HRR	Top Three Local Areas (in alphabetical order)*
POTENTIALLY AVOIDABLE HOSPITAL USE & COST						
25 Hospital admissions among Medicare beneficiaries for ambulatory care–sensitive conditions, per 100,000 beneficiaries	1,535	4,045	6,184	7,919	9,611	Bend, OR; Ogden, UT; Salem, OR
26 Readmissions within 30 days of discharge as percent of all admissions among Medicare beneficiaries	12.5	15.1	17.7	20.5	24.8	Bend, OR; Ogden, UT; Rapid City, SD
27 Potentially avoidable emrgency department visits among Medicare beneficiaries, per 1,000 beneficiaries	129	162	197	236	294	Everett, WA; Grand Junction, CO; Santa Cruz, CA
28 Percent of long-stay nursing home residents hospitalized within six-month period	6.3	11.9	20.0	28.3	36.7	Bend, OR; St. Cloud, MN; Sun City, AZ
29 Percent of first-time nursing home residents readmitted within 30 days of hospital discharge to the nursing home	9.4	15.8	20.6	25.7	30.9	Grand Falls, MT; Ogden, UT; Rapid City, SD
30 Percent of home health care patients with a hospital admission	19.3	22.4	26.6	32.2	46.8	Idaho Falls, ID; Ogden, UT; Provo, UT
31 Medicare imaging costs per enrollee	$110	$189	$288	$443	$638	Grand Junction, CO; Lebanon, NH; Minot, ND
32 Total Medicare (Parts A & B) reimbursements per enrollee (6)	$5,089	$6,432	$7,952	$9,687	$15,813	Anchorage, AK; Grand Junction, CO; Honolulu, HI
33 Total reimbursements per commercially insured enrollee ages 18–64 (6)	$2,014	$2,801	$3,314	$4,006	$5,068	Buffalo, NY; Honolulu, HI; Rochester, NY
HEALTHY LIVES						
34 Potentially preventable mortality, deaths per 100,000 population (7)	51.5	71.6	91.3	128.7	169.0	Boulder, CO; Everett, WA; Grand Junction, CO
35 Breast cancer deaths per 100,000 female population	17.0	22.6	28.9	38.8	48.9	McAllen, TX; San Jose, CA; Santa Barbara, CA
36 Colorectal cancer deaths per 100,000 population	6.8	16.9	22.8	32.6	39.0	McAllen, TX; San Jose, CA; Santa Barbara, CA
37 Infant mortality, deaths per 1,000 live births	3.3	4.9	6.8	9.4	14.4	San Francisco, CA; Santa Rosa, CA; Victoria, TX
38 Percent of live births with low birth weight	4.9	6.0	7.5	9.9	13.2	Anchorage, AK, Dubuque, IA; Everett, WA; Santa Cruz, CA
39 Suicide deaths per 100,000 population	4.2	8.2	15.4	23.4	49.1	East long Island, NY; Hackensack, NJ; Newark, NJ; Ridgewood, NJ; White Plains, NY
40 Percent of adults who smoke	6.2	12.6	19.0	24.2	30.9	Provo, UT; San Mateo, CA; Santa Barbara, CA
41 Percent of adults ages 18–64 who are obese (BMI >= 30)	15.3	23.8	29.5	35.7	45.6	Boulder, CO; Bridgeport, CT; San Francisco, CA
42 Percent of adults ages 18–64 who have lost six or more teeth because of tooth decay, infection, or gum disease	2.8	5.9	10.1	16.4	28.0	Austin, TX; Boulder, CO; St. Cloud, MN
43 Percent of adults ages 18–64 report fair/poor health, 14 or more bad mental health days, or activity limitations	17.9	23.5	29.5	35.8	42.0	Appleton, WI; Bloomington, IL; Sioux City, IA

* As a result of ties, more than three local areas may be listed.

(1) Metric forms part of the score reflecting potentially inappropriate prescribing among elderly Medicare beneficiaries.

(2) Metric forms part of the score reflecting receipt of recommended hospital care.

(3) Metric forms part of the score reflecting hospital mortality.

(4) Metric forms part of the score reflecting quality of home health care.

(5) Metric forms part of the score reflecting quality of nursing home care.

(6) Total Medicare per-person spending estimates include payments made for hospital (part A) and outpatient (part B) services. Estimates exclude extra payments to support graduate medical education and treating a disproportionate share of low-income patients; adjustments are made for regional wage differences. Commercial spending estimates, generated from a sophisticated regression model, include reimbursed costs for health care services from all sources of payment, including the health plan, enrollee, and any third-party payers, incurred during 2009. Outpatient prescription drug charges are excluded, as were enrollees with capitated plans and their associated claims. Commercial spending estimates were adjusted for enrollee age and sex, the interaction of age and sex, partial-year enrollment, and regional wage differences.

(7) Data for this indicator come from county-level 2005–07 NVSS-M data files, aggregated to the HRR level, for most HRRs. Estimates for the Anchorage, AK, and Honolulu, HI, HRRs represent state-level data and are compiled from years 2006–07.

Source: Commonwealth Fund Scorecard on Local Health System Performance, 2012.

Local Variation: Overall Health System Performance

Performance Quartile
- ☐ Top Quartile
- ▨ Second Quartile
- ▧ Third Quartile
- ▦ Bottom Quartile

Top 10% of Local Areas

Overall Rank	Local Area	Population Count	Access	Prevention & Treatment	Potentially Avoidable Hospital Use & Cost	Healthy Lives
1	St. Paul, MN	1,077,980				
2	Dubuque, IA	154,083				
3	Rochester, MN	418,800				
4	Minneapolis, MN	3,237,168				
5	Appleton, WI	333,220				
6	Santa Rosa, CA	488,469				
7	La Crosse, WI	350,219				
7	St. Cloud, MN	260,500				
9	Manchester, NH	893,654			Second	
9	San Mateo County, CA	820,908				
11	Cedar Rapids, IA	299,158				
12	Green Bay, WI	510,108				
12	Lancaster, PA	666,199				Second
14	Neenah, WI	237,203				Second
15	Arlington, VA	2,306,470			Second	
16	Fargo/Moorhead MN, ND	528,764				Second
17	Honolulu, HI	1,360,301		Second		
18	Hartford, CT	1,510,268			Second	
18	Portland, ME	1,071,122				
20	Iowa City, IA	344,473				
21	San Luis Obispo, CA	255,521	Second			
21	Worcester, MA	824,358			Second	
23	Madison, WI	1,097,923				Second
23	Springfield, MA	738,817			Second	
25	Lebanon, NH	397,373	Second			
25	San Jose, CA	1,737,862		Second		
27	Des Moines, IA	1,086,663				Second
27	Providence, RI	1,225,202			Second	
27	Rochester, NY	1,304,602			Second	Second
30	Sioux Falls, SD	772,490				Second

Bottom 10% of Local Areas

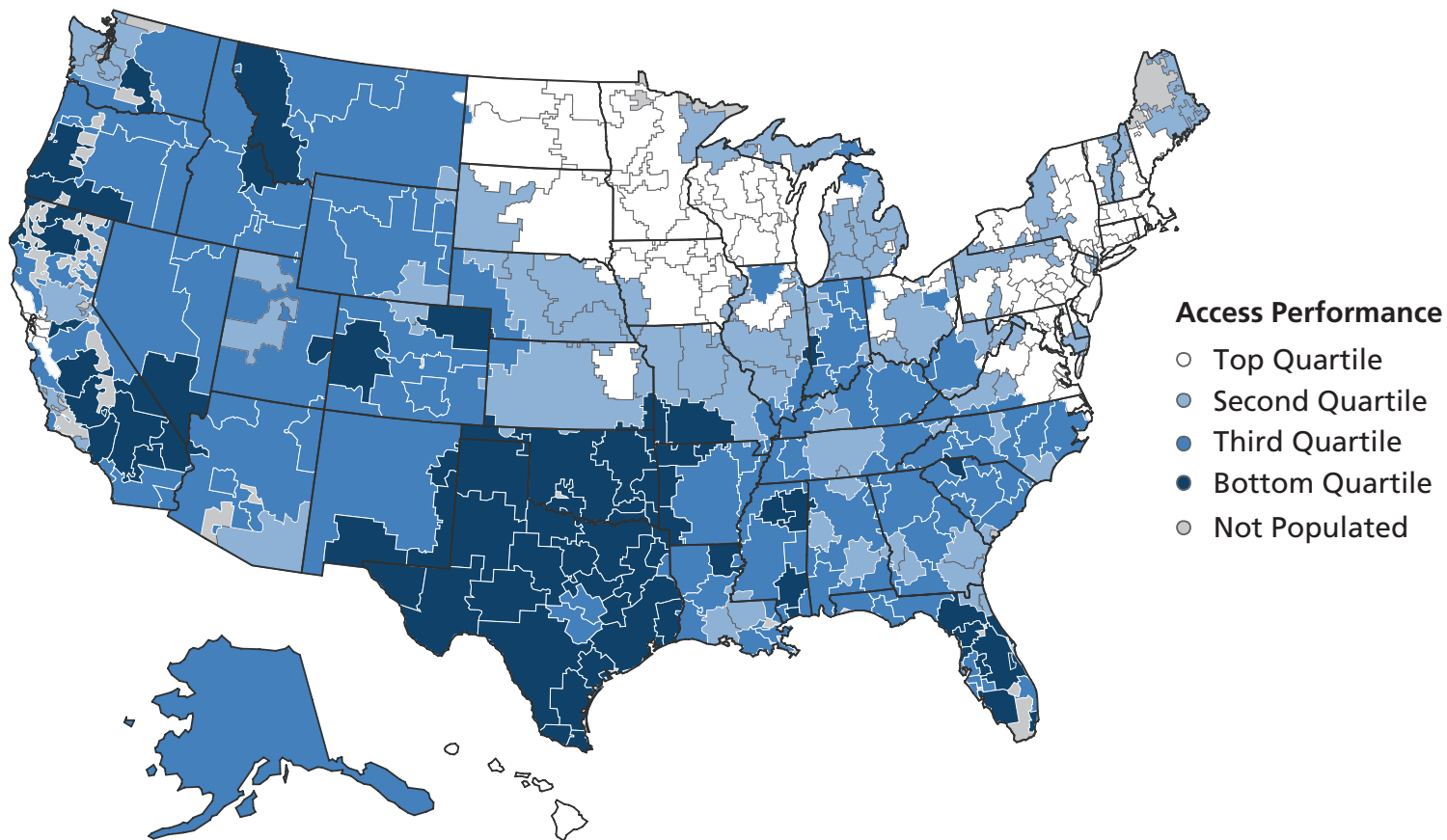| Overall Rank	Local Area	Population Count	Access	Prevention & Treatment	Potentially Avoidable Hospital Use & Cost	Healthy Lives
276	Metairie, LA	469,603	Third	Bottom	Bottom	Bottom
276	New Orleans, LA	639,673	Third	Bottom	Bottom	Bottom
278	Paducah, KY	371,499	Third	Bottom	Bottom	Bottom
279	Lake Charles, LA	271,045	Third	Bottom	Bottom	Bottom
279	Tyler, TX	572,677	Bottom	Bottom	Bottom	Third
281	Memphis, TN	1,814,827	Third	Bottom	Bottom	Bottom
281	Tulsa, OK	1,373,182	Bottom	Bottom	Third	Bottom
283	Gulfport, MS	196,812	Bottom	Third	Bottom	Bottom
283	Houston, TX	6,369,027	Bottom	Bottom	Bottom	Third
283	Jonesboro, AR	234,106	Third	Bottom	Bottom	Bottom
286	Houma, LA	279,132	Third	Bottom	Bottom	Bottom
286	Lawton, OK	205,383	Bottom	Bottom	Third	Bottom
288	Charleston, WV	833,536	Third	Bottom	Bottom	Bottom
288	Lubbock, TX	705,146	Bottom	Bottom	Bottom	Third
290	Jackson, TN	335,391	Third	Bottom	Bottom	Bottom
291	Huntington, WV	361,141	Bottom	Bottom	Bottom	Bottom
291	Wichita Falls, TX	205,297	Bottom	Bottom	Bottom	Bottom
293	Abilene, TX	294,137	Bottom	Bottom	Third	Bottom
294	Lexington, KY	1,518,597	Third	Bottom	Bottom	Bottom
295	Florence, SC	359,716	Bottom	Bottom	Bottom	Bottom
295	Tupelo, MS	394,380	Bottom	Bottom	Third	Bottom
297	Meridian, MS	201,585	Third	Bottom	Bottom	Bottom
298	Oklahoma City, OK	1,879,596	Third	Bottom	Bottom	Bottom
298	Shreveport, LA	700,013	Third	Bottom	Bottom	Bottom
300	Jackson, MS	1,070,263	Third	Bottom	Bottom	Bottom
301	Alexandria, LA	292,937	Third	Bottom	Bottom	Bottom
301	Texarkana, AR	261,650	Bottom	Bottom	Bottom	Bottom
303	Beaumont, TX	464,624	Bottom	Bottom	Bottom	Bottom
304	Hattiesburg, MS	316,829	Bottom	Bottom	Bottom	Bottom
304	Oxford, MS	152,428	Bottom	Bottom	Bottom	Bottom
306	Monroe, LA	270,188	Bottom	Bottom	Bottom	Bottom

Exhibit 4

Overall Performance on Access Dimension

Access Performance
- ○ Top Quartile
- ● Second Quartile
- ● Third Quartile
- ● Bottom Quartile
- ● Not Populated

Percent of Adults Ages 18–64 Uninsured, 2009–2010

Percent of Adults

○ 5%–14% (57 HRRs)
● 15%–19% (91)
● 20%–24% (79)
● 25%–53% (75)
○ Not Populated or Missing Data (4)

HRR = hospital referral region.
Data: U.S. Census Bureau, 2009–10 American Community Survey.

Source: Commonwealth Fund Scorecard on Local Health System Performance, 2012.

Percent of Children Ages 0–17 Uninsured, 2009–2010

Percent of Children

○ 1%–4% (68 HRRs)
○ 5%–9% (153)
◉ 10%–14% (62)
● 15%–20% (19)
○ Not Populated or
   Missing Data (4)

HRR = hospital referral region
Data: U.S. Census Bureau, 2009–10 American Community Survey.

Source: Commonwealth Fund Scorecard on Local Health System Performance, 2012.

Local Variation: Access Indicators

☐ Best HRR   ☐ Top 90th percentile   ☐ All-HRR median   ■ Bottom 10th percentile   ■ Worst HRR

Percent

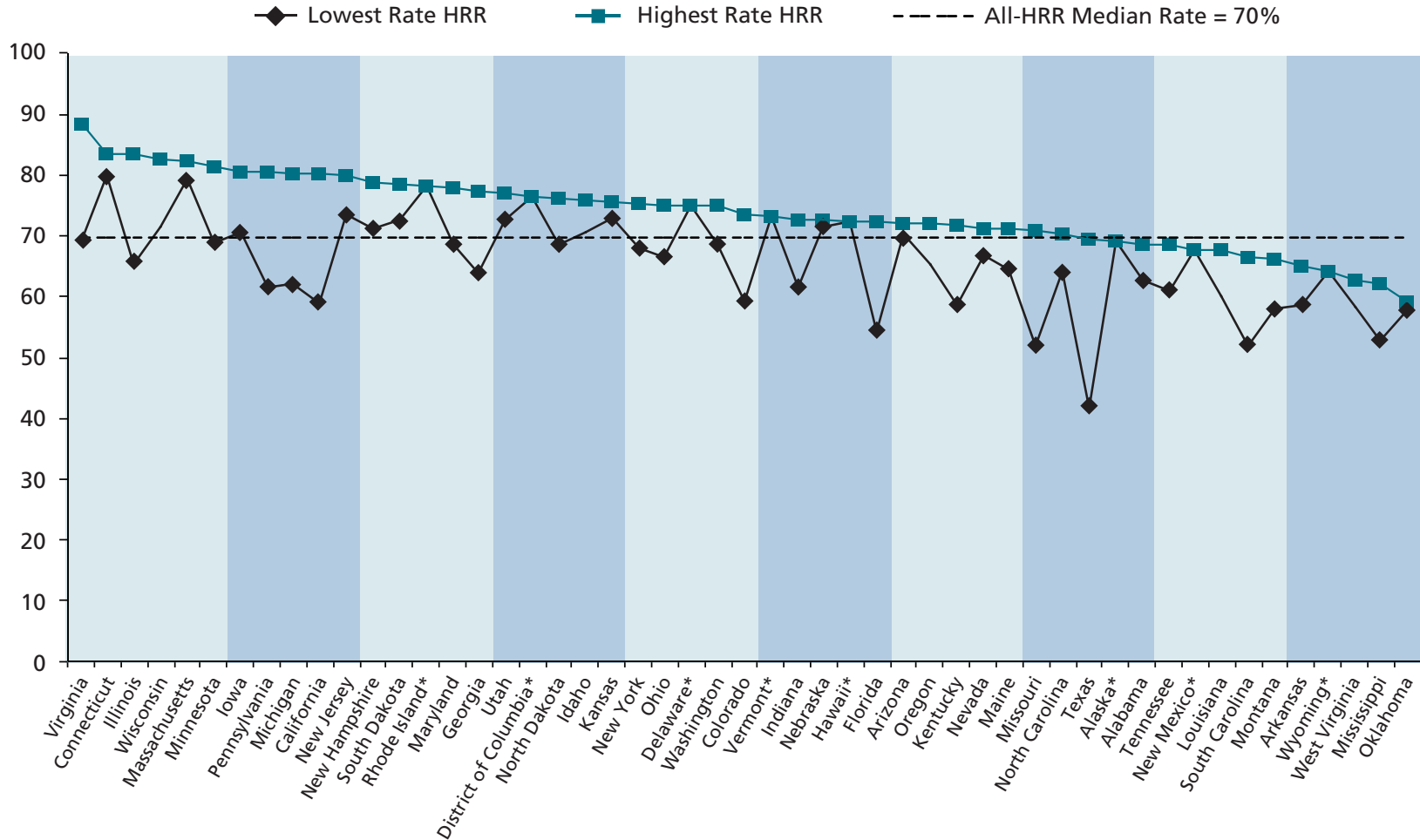|	Adults ages 18–64 insured	Children ages 0–17 insured	Adults reported no cost-related problem seeing a doctor when they needed to	At-risk adults visited a doctor for routine checkup in the past two years	Adults visited a dentist, dental hygenist, or dental clinic in past year
Best HRR	95	99	95	95	88
Top 90th percentile	88	96	91	90	78
All-HRR median	80	94	85	85	70
Bottom 10th percentile	72	87	80	78	60
Worst HRR	47	80	67	67	42

HRR = hospital referral region
Data: Adult and children Insured—2009–10 ACS; No cost-related problem seeing a doctor and checkup in past two years—2009–10 BRFSS; Dental visit— 2010 BRFSS.
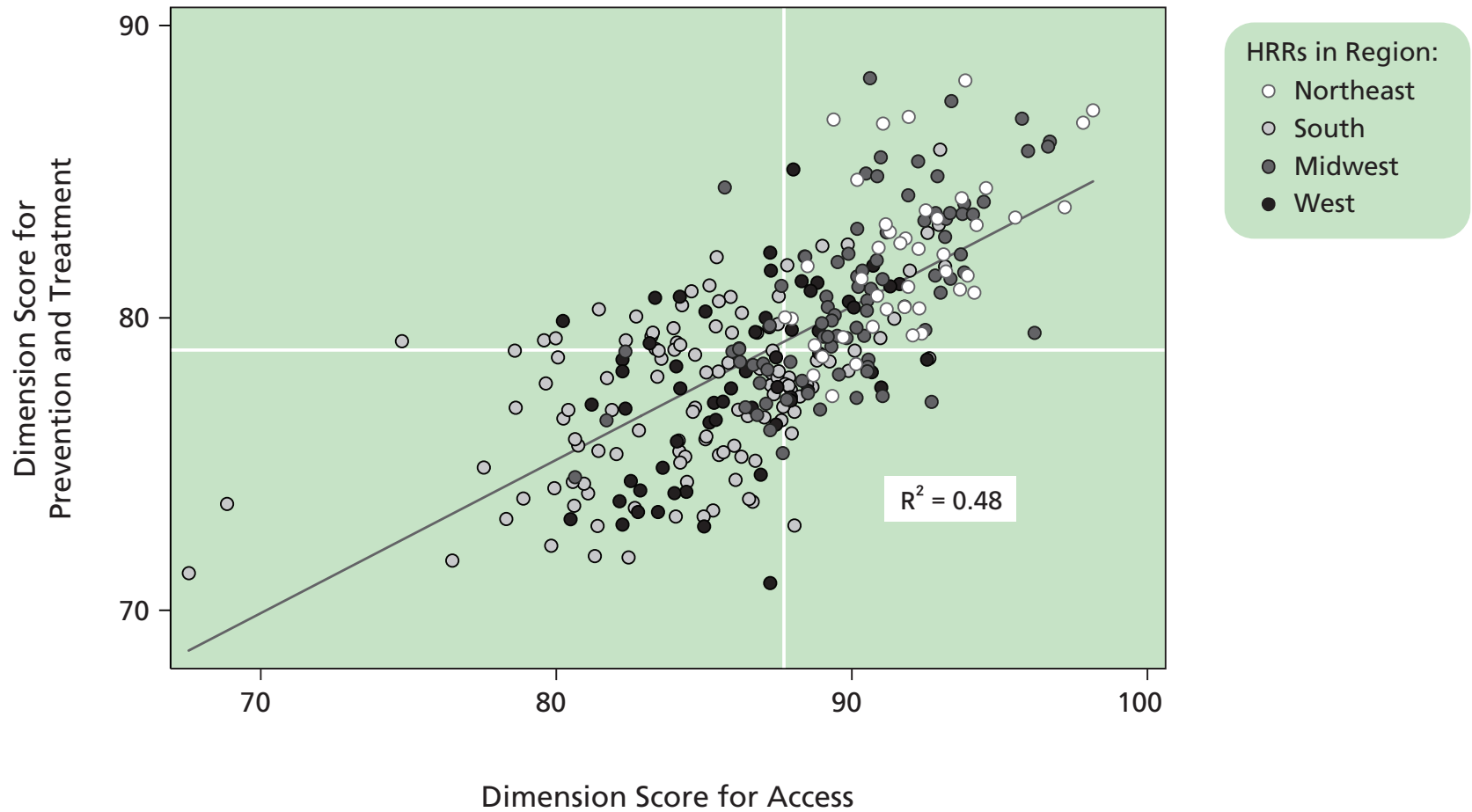
Dental Visit in Past Year, 2010: Highest and Lowest Rate Local Areas in Each State

Percent of adults who visited a dentist, dental hygienist, or dental clinic within the past year

◆ Lowest Rate HRR   ■ Highest Rate HRR   – – – All-HRR Median Rate = 70%

*These states have only one HRR based within the state.
HRR = hospital referral region
Data: 2010 BRFSS.

Source: Commonwealth Fund Scorecard on Local Health System Performance, 2012.

Performance in the Access and Prevention & Treatment Dimensions Is Related

HRRs in Region:
○ Northeast
○ South
● Midwest
● West

$R^2 = 0.48$

Dimension Score for Prevention and Treatment
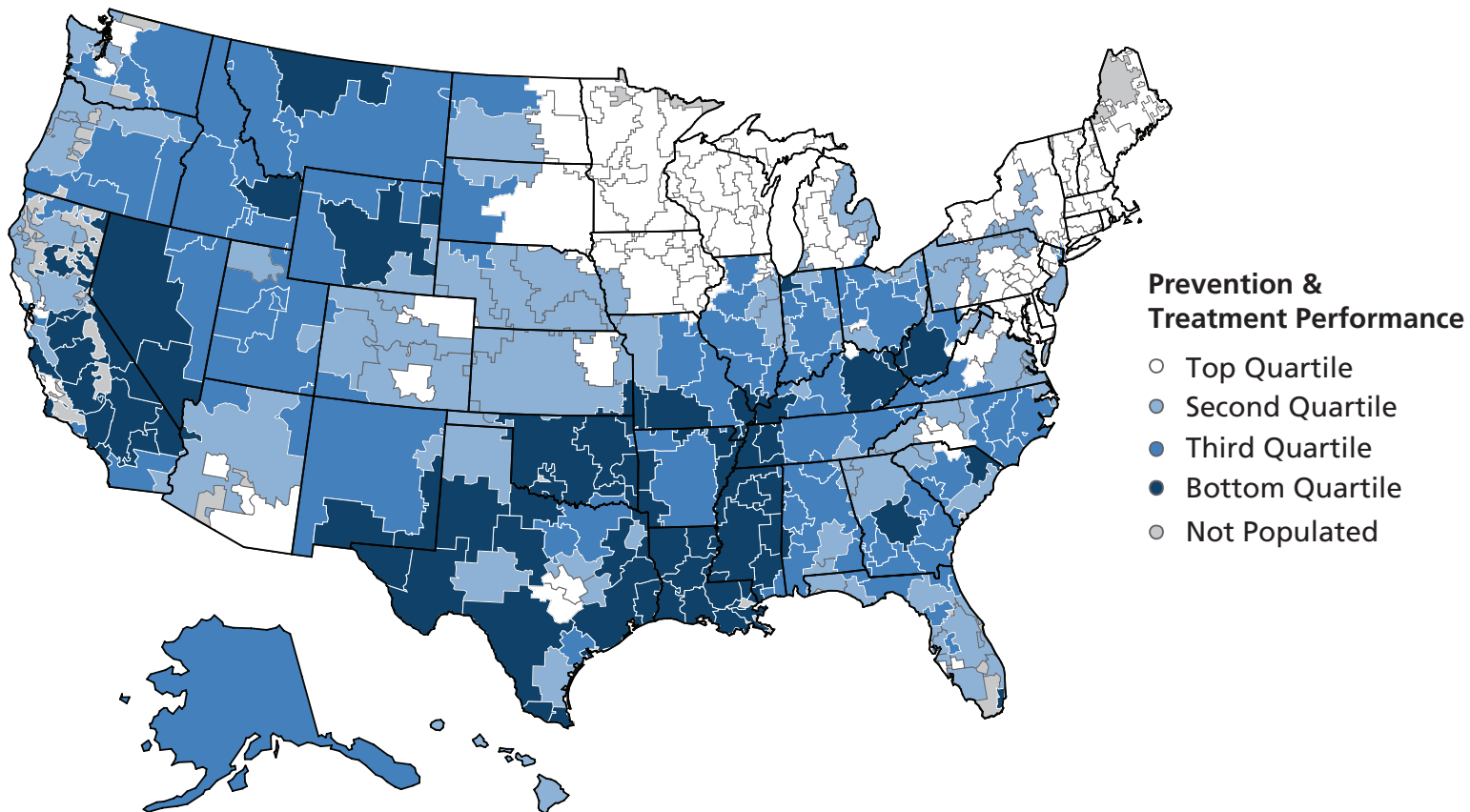
Dimension Score for Access

HRR = hospital referral region

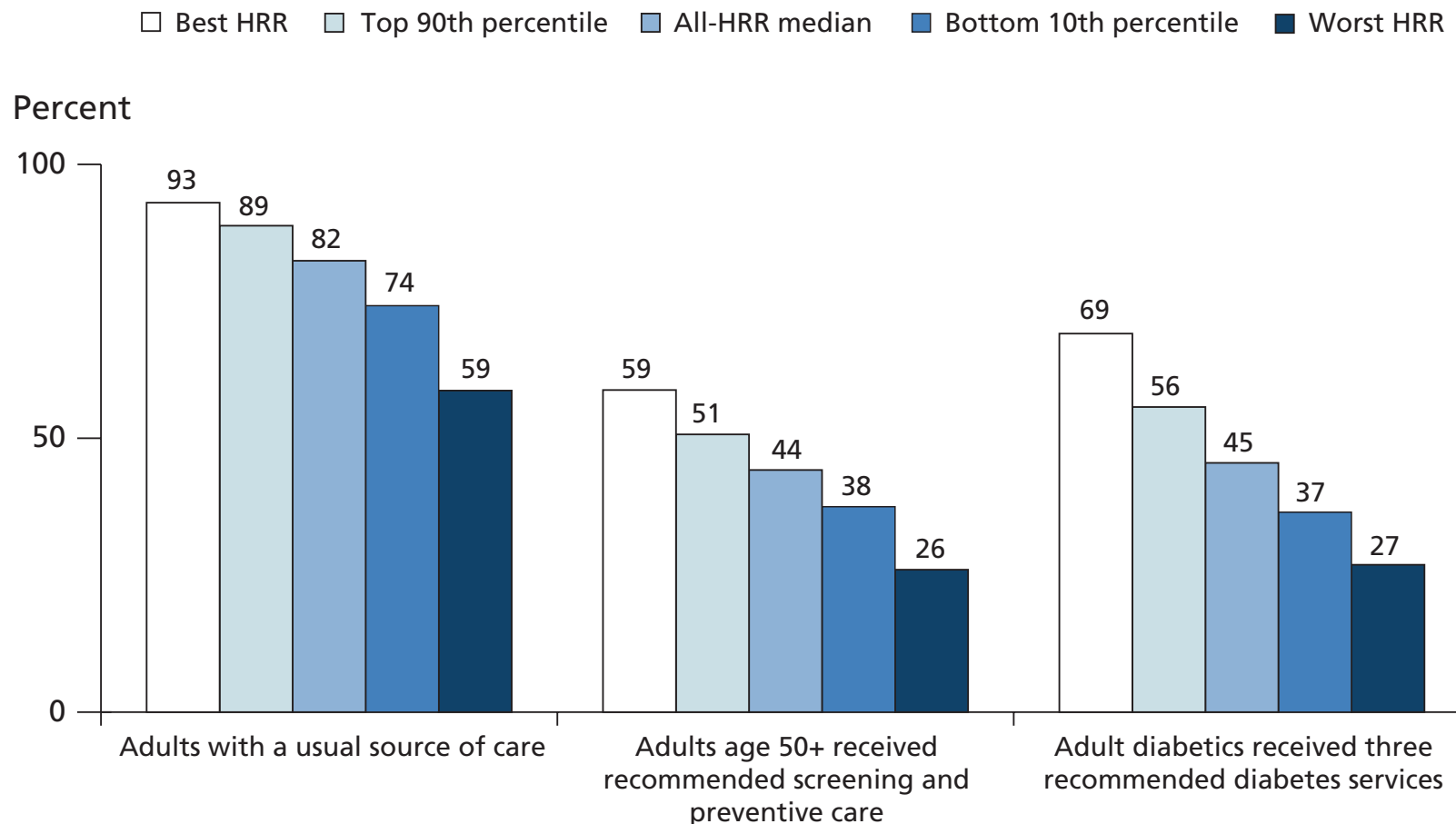Source: Commonwealth Fund Scorecard on Local Health System Performance, 2012.

Performance of Top and Bottom 10 Percent of Hospital Referral Regions

Performance Quartile
- ☐ Top Quartile
- Second Quartile
- Third Quartile
- Bottom Quartile
- ◉ Missing Data

Dimension Rank	Local Area	Population Count	Adults Insured	Children Insured	Routine Checkup in Past Two Years	No Cost-Related Problems Seeing Doctor	Dental Visit in Past Year
1	Boston, MA	4,825,960					
1	Worcester, MA	824,358					
3	Dubuque, IA	154,083					
3	Rochester, MN	418,800					
3	Springfield, MA	738,817					
6	Appleton, WI	333,220					
6	Bloomington, IL	194,699					◉
6	Cedar Rapids, IA	299,158					
6	Hartford, CT	1,510,268					
10	New Haven, CT	1,473,068					
11	Bridgeport, CT	686,120	▓				
11	Buffalo, NY	1,376,734					
11	Des Moines, IA	1,086,663			▓		
11	Manchester, NH	893,654					
11	Minneapolis, MN	3,237,168		▓			
11	Morristown, NJ	1,014,970					
11	Pontiac, MI	458,382					
11	Providence, RI	1,225,202		▓			
11	Reading, PA	591,042		▓			
11	Royal Oak, MI	688,178					
11	St. Paul, MN	1,077,980			▓		
11	Waterloo, IA	217,149			▓		
23	Albany, NY	1,843,942					
23	Arlington, VA	2,306,470		▓	▓		
23	Aurora, IL	324,452	▓			▓	
23	Baltimore, MD	2,519,510		▓	▓		
23	Fargo/Moorhead MN, ND	528,764			▓		
23	Grand Forks, ND	167,292					▓
23	Green Bay, WI	510,108			▓		
23	Iowa City, IA	344,473			▓		▓
23	La Crosse, WI	350,219			▓		
23	Mason City, IA	132,853	◉	◉	▓		
23	Minot, ND	126,147	◉	◉	▓		▓
23	Neenah, WI	237,203			▓		
23	New Brunswick, NJ	1,069,921	▓	▓			
23	Newport News, VA	562,370	▓	▓			▓
23	Rochester, NY	1,304,602		▓			▓
23	San Jose, CA	1,737,862	▓		▓		
23	Sioux Falls, SD	772,490		▓	▓		
23	Washington, DC	2,651,966					
23	Wilmington, DE	799,906		▓	▓	▓	
23	York, PA	439,785					
276	Fort Smith, AR	373,855	▓	▓	▓	▓	▓
276	Hattiesburg, MS	316,829	▓	▓	▓	▓	▓
276	Joplin, MO	371,319	▓	▓	▓	▓	▓
276	Longview, TX	197,945	▓	▓			▓
276	Lubbock, TX	705,146	▓	▓	▓	▓	▓
276	Miami, FL	3,134,285	▓	▓	▓	▓	▓
276	Missoula, MT	383,540	▓	▓	▓	▓	▓
276	Oklahoma City, OK	1,879,596	▓	▓	▓	▓	▓
276	Texarkana, AR	261,650	▓	▓	▓	▓	▓
276	Tulsa, OK	1,373,182	▓	▓	▓	▓	▓
276	Tupelo, MS	394,380	▓	▓	▓	▓	▓
276	Tyler, TX	572,677	▓	▓	▓	▓	▓
288	Bakersfield, CA	1,148,420	▓	▓	▓	▓	▓
288	Corpus Christi, TX	563,764	▓	▓	▓	▓	▓
288	Dallas, TX	4,840,913	▓	▓	▓	▓	▓
288	Grand Junction, CO	305,320	▓	▓	▓	▓	▓
288	Houston, TX	6,369,027	▓	▓	▓	▓	▓
288	Lakeland, FL	357,008	▓	▓	▓	▓	▓
288	Ocala, FL	527,004	▓	▓	▓	▓	▓
288	Oxford, MS	152,428	◉	◉	▓	▓	▓
288	San Angelo, TX	159,097	▓	▓	◉	◉	◉
288	Spartanburg, SC	377,800	▓	▓	▓	▓	▓
298	Amarillo, TX	448,849	▓	▓	▓	▓	▓
298	Beaumont, TX	464,624	▓	▓	▓	▓	▓
298	Victoria, TX	146,306	▓	▓	◉	▓	◉
301	Abilene, TX	294,137	▓	▓	▓	▓	▓
301	Odessa, TX	351,798	▓	▓	▓	▓	▓
303	El Paso, TX	1,115,274	▓	▓	▓	▓	▓
304	Waco, TX	342,961	▓	▓	▓	▓	▓
305	Harlingen, TX	565,440	▓	▓	▓	▓	▓
306	McAllen, TX	647,659	▓	▓	▓	▓	▓

Top 10% of Local Areas (ranks 1–23 above)

Bottom 10% of Local Areas (ranks 276–306 above)

Source: Commonwealth Fund Scorecard on Local Health System Performance, 2012.

Overall Performance on Prevention & Treatment Dimension

**Prevention &
Treatment Performance**

○ Top Quartile
○ Second Quartile
○ Third Quartile
○ Bottom Quartile
○ Not Populated

Source: Commonwealth Fund Scorecard on Local Health System Performance, 2012.

Local Variation: Usual Source of Care and Preventive Care

☐ Best HRR   ☐ Top 90th percentile   ◼ All-HRR median   ◼ Bottom 10th percentile   ◼ Worst HRR

Percent

HRR = hospital referral region.
Data: Adults with usual source of care—2009–10 BRFSS; Adults received preventive care—2008 & 2010 BRFSS; Adult diabetic recommended care—2008–10 BRFSS.

Source: Commonwealth Fund Scorecard on Local Health System Performance, 2012.

Prescription of Potentially Unsafe Medications, 2007

Percent of Beneficiaries

○ 11.4%–20.6% (78 HRRs)
◉ 20.7%–24.9% (75)
● 25.0%–30.6% (78)
● 30.7%–44.0% (75)
◉ Not Populated
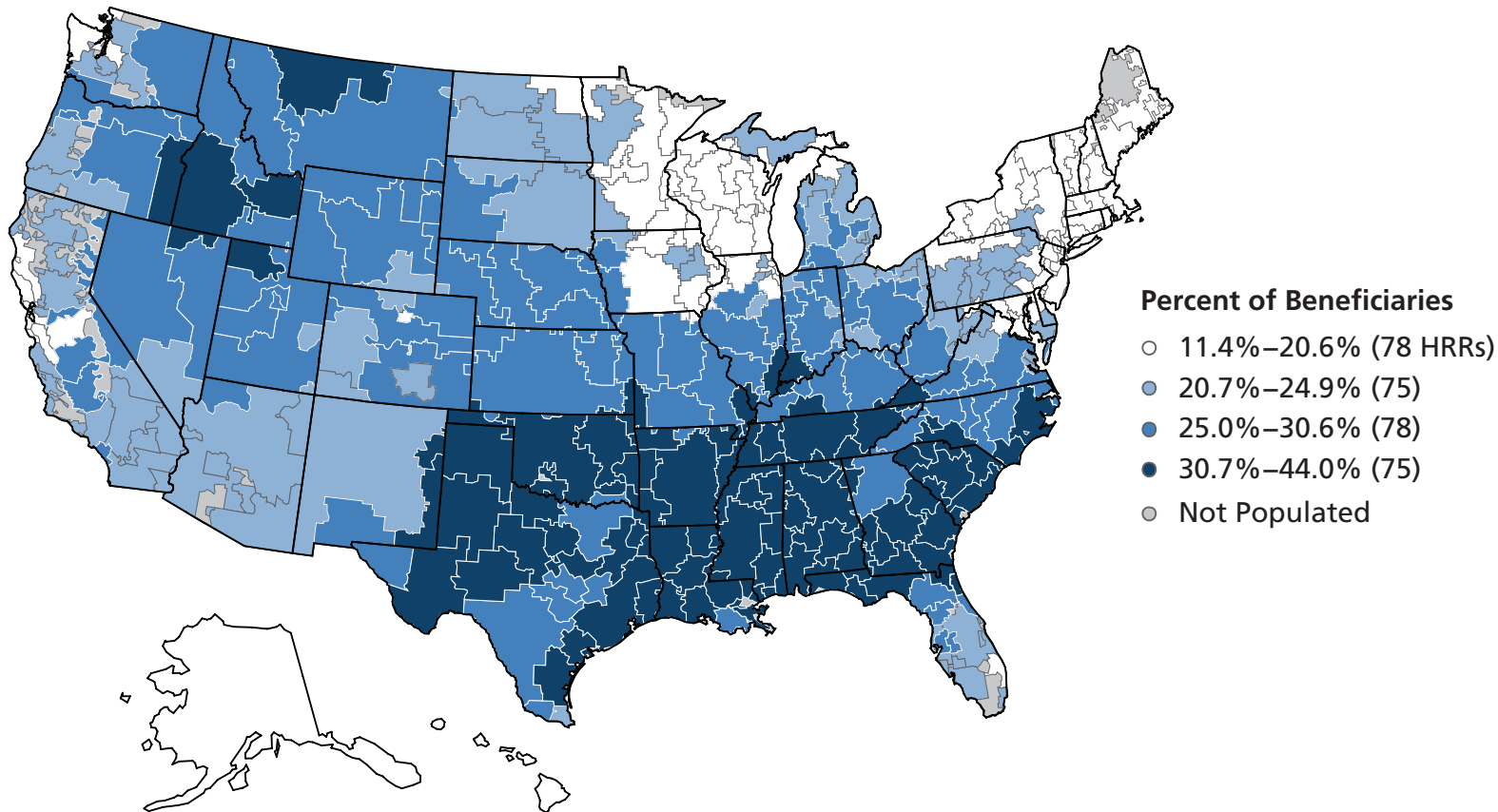
HRR = hospital referral region.
Note: Quartiles denoted in this map reflect the distribution of HRRs on only one of two indicators of prescribing quality (indicator #9). In other instances in this report, and in scorecard data reported online, the reported quartile value reflects the combined score for both prescription quality indicators (indicators #9 and #10), and may differ. See Appendix B for more information.
Data: 2007 Medicare Part D 5% Data.

Source: Commonwealth Fund Scorecard on Local Health System Performance, 2012.

Local Variation: Hospital Care Processes and Responsiveness to Patients

☐ Best HRR   ☐ Top 90th percentile   ☐ All-HRR median   ■ Bottom 10th percentile   ■ Worst HRR

Percent

	Patients hospitalized for heart failure who received recommended care	Surgical patients received appropriate care to prevent complications	Patients given information about what to do during their recovery at home	Hospital staff always managed pain well, responded when needed help, and explained medicines
Best HRR	>99	99	89	71
Top 90th percentile	98	97	86	67
All-HRR median	95	96	83	63
Bottom 10th percentile	90	94	79	59
Worst HRR	77	88	74	53

HRR = hospital referral region.
Data: 2010 CMS Hospital Compare.

Source: Commonwealth Fund Scorecard on Local Health System Performance, 2012.

Local Variation: Home Health Quality Indicators

□ Best HRR ☐ Top 10th percentile ■ All-HRR median ■ Bottom 90th percentile ■ Worst HRR
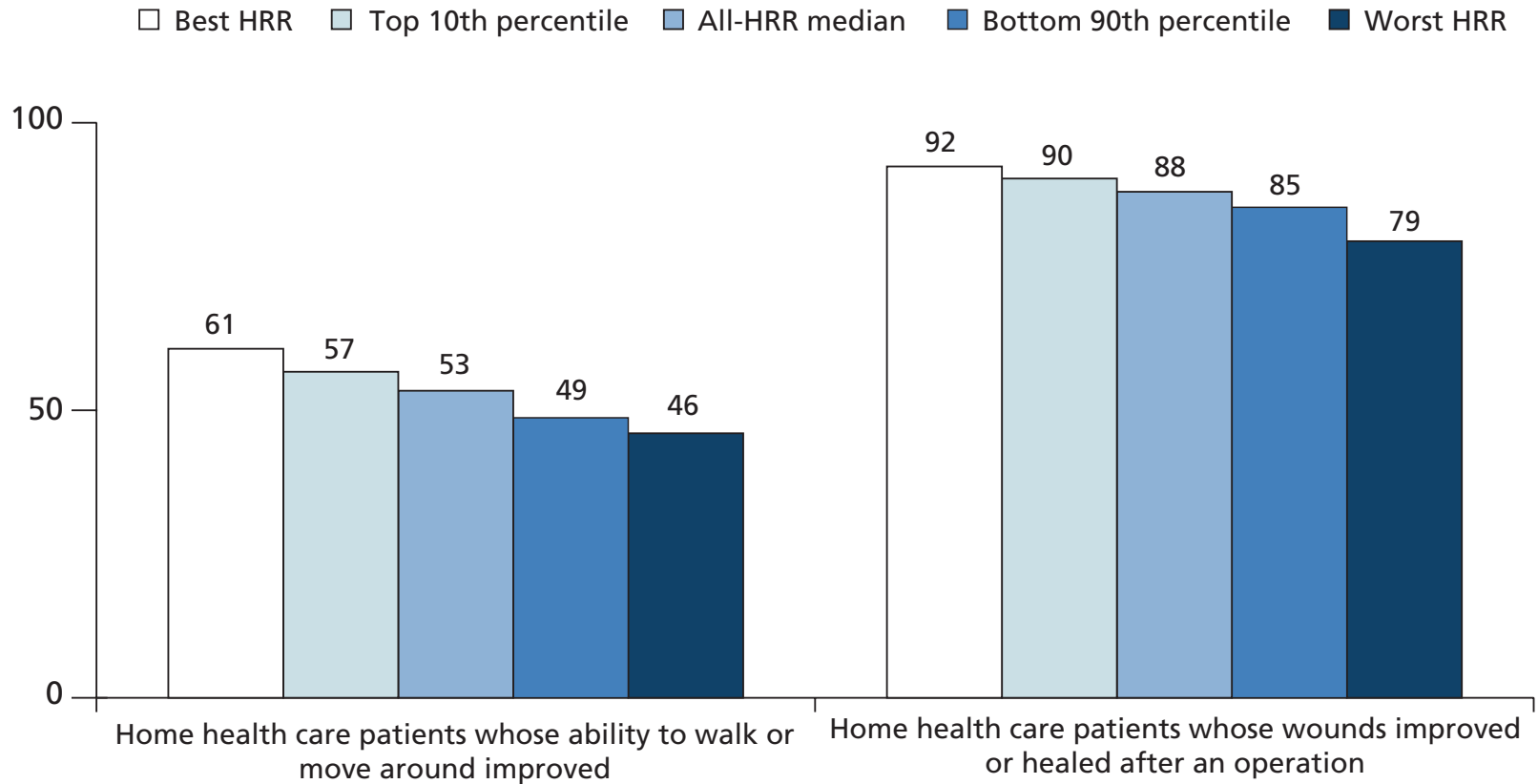
HRR = hospital referral region.
Data: April 2010–March 2011 OASIS, as reported by CMS Home Health Compare.

Source: Commonwealth Fund Scorecard on Local Health System Performance, 2012.

Nursing Home Pressure Sores and Admission to Hospital from Nursing Homes
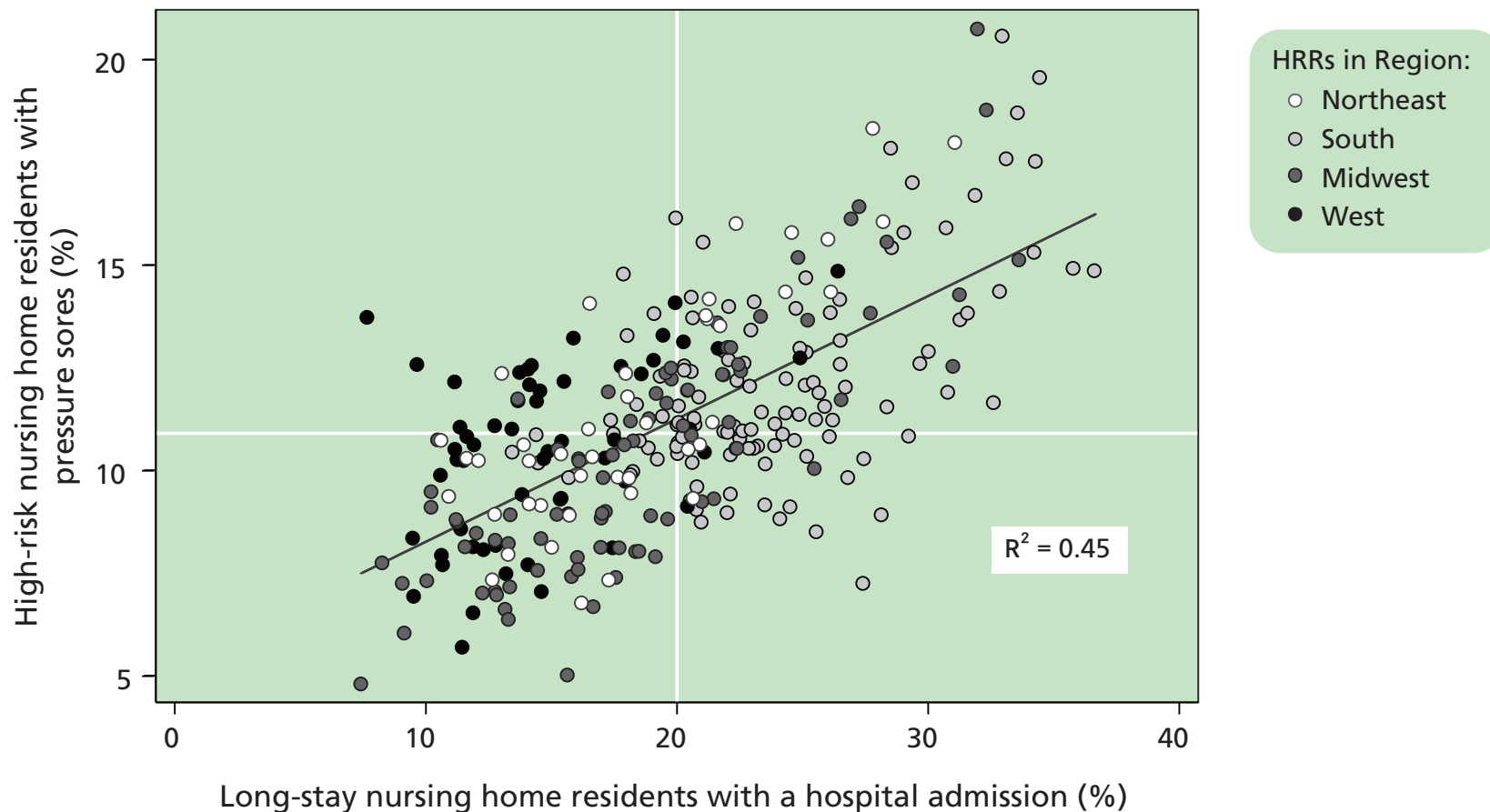
HRR = hospital referral region.
Data: Residents with pressure sores—2008-09 MDS, as reported by CMS Nursing Home Compare; Residents with hospital admission—2008 MEDPAR, MDS.

Performance of Top and Bottom 10 Percent of Hospital Referral Regions

Performance Quartile
- ☐ Top Quartile
- ■ Second Quartile
- ■ Third Quartile
- ■ Bottom Quartile
- ⊡ Missing Data

Column dimensions (left to right):
Adult Usual Source of Care · Adult Preventive Care · Diabetic Preventive Care · Inappropriate Prescription Among Elderly (1) · Hospital Quality (2) · Hospital 30-Day Mortality (3) · Patient-Centered Hospital Care · Home Recovery Discharge Instructions · Home Health Quality (4) · Nursing Home Quality (5) · Medicare Cancer Decedents with Late or No Hospice

Top 10% of Local Areas

Dimension Rank	Local Area	Population Count
1	Manchester, NH	893,654
1	Wausau, WI	189,109
3	Bangor, ME	398,446
3	Boston, MA	4,825,960
3	Cedar Rapids, IA	299,158
3	Lancaster, PA	666,199
3	Neenah, WI	237,203
3	Portland, ME	1,071,122
3	Worcester, MA	824,358
10	Appleton, WI	333,220
10	Arlington, VA	2,306,470
10	Dubuque, IA	154,083
10	Rochester, MN	418,800
14	Boulder, CO	286,366
14	Grand Rapids, MI	1,175,042
14	Lebanon, NH	397,373
14	Marshfield, WI	371,943
14	Mason City, IA	132,853
14	St. Cloud, MN	260,500
14	Traverse City, MI	231,931
21	Des Moines, IA	1,086,663
21	Green Bay, WI	510,108
21	La Crosse, WI	350,219
21	Madison, WI	1,097,923
21	Minneapolis, MN	3,237,168
21	New Haven, CT	1,473,068
21	Petoskey, MI	177,769
21	Providence, RI	1,225,202
21	Rochester, NY	1,304,602
21	Springfield, MA	738,817
21	St. Paul, MN	1,077,980
21	Waterloo, IA	217,149

Bottom 10% of Local Areas

Dimension Rank	Local Area	Population Count
273	Beaumont, TX	464,624
273	Fort Smith, AR	373,855
273	Fresno, CA	1,244,368
273	Harlingen, TX	565,440
273	Houma, LA	279,132
273	Houston, TX	6,369,027
273	Jackson, TN	335,391
273	Las Vegas, NV	2,075,263
273	Lawton, OK	205,383
273	Lubbock, TX	705,146
273	Memphis, TN	1,814,827
273	Paducah, KY	371,499
273	Palm Springs/Rancho Mirage, CA	590,216
273	Reno, NV	753,253
273	Santa Barbara, CA	439,848
273	Tulsa, OK	1,373,182
273	Tupelo, MS	394,380
290	Abilene, TX	294,137
290	Alexandria, LA	292,937
290	Bakersfield, CA	1,148,420
290	Casper, WY	194,084
290	Jackson, MS	1,070,263
290	Lafayette, LA	622,943
290	Los Angeles, CA	9,874,390
290	Meridian, MS	201,585
290	Oklahoma City, OK	1,879,596
290	San Bernardino, CA	2,995,146
290	Stockton, CA	592,259
301	El Paso, TX	1,115,274
301	Hattiesburg, MS	316,829
301	Monroe, LA	270,188
301	Oxford, MS	152,428
305	Idaho Falls, ID	239,146
305	McAllen, TX	647,659

(1) Quartile ranking is based on an average of 2 metrics: 1) Percent of Medicare beneficiaries received at least one drug that should be avoided in the elderly; 2) Percent of Medicare beneficiaries with dementia, hip/pelvic fracture, or chronic renal failure received prescription in an ambulatory care setting that is contraindicated for that condition.
(2) Quartile ranking is based on an average of 3 metrics: 1) Percent of patients hospitalized for heart failure who received recommended care; 2) Percent of patients hospitalized for pneumonia who received recommended care; 3) Percent of surgical patients received appropriate care to prevent complications.
(3) Quartile ranking is based on an average of 3 metrics: 1) Risk-adjusted 30-day mortality among Medicare patients hospitalized for heart attack; 2) Risk-adjusted 30-day mortality among Medicare patients hospitalized for heart failure; 3) Risk-adjusted 30-day mortality among Medicare patients hospitalized for pneumonia.
(4) Quartile ranking is based on an average of 2 metrics: 1) Percent of home health care patients whose ability to walk or move around improved; 2) Percent of home health care patients whose wounds improved or healed after an operation.
(5) Quartile ranking is based on an average of 3 metrics: 1) Percent of high-risk nursing home residents with pressure sores; 2) Percent of long-stay nursing home residents who were physically restrained; 3) Percent of long-stay nursing home residents who have moderate to severe pain.

Source: Commonwealth Fund Scorecard on Local Health System Performance, 2012.

Overall Performance on Potentially Avoidable Hospital Use & Cost Dimension

Potentially Avoidable Hospital Use & Cost Performance
- ○ Top Quartile
- ● Second Quartile
- ● Third Quartile
- ● Bottom Quartile
- ● Not Populated

Source: Commonwealth Fund Scorecard on Local Health System Performance, 2012.
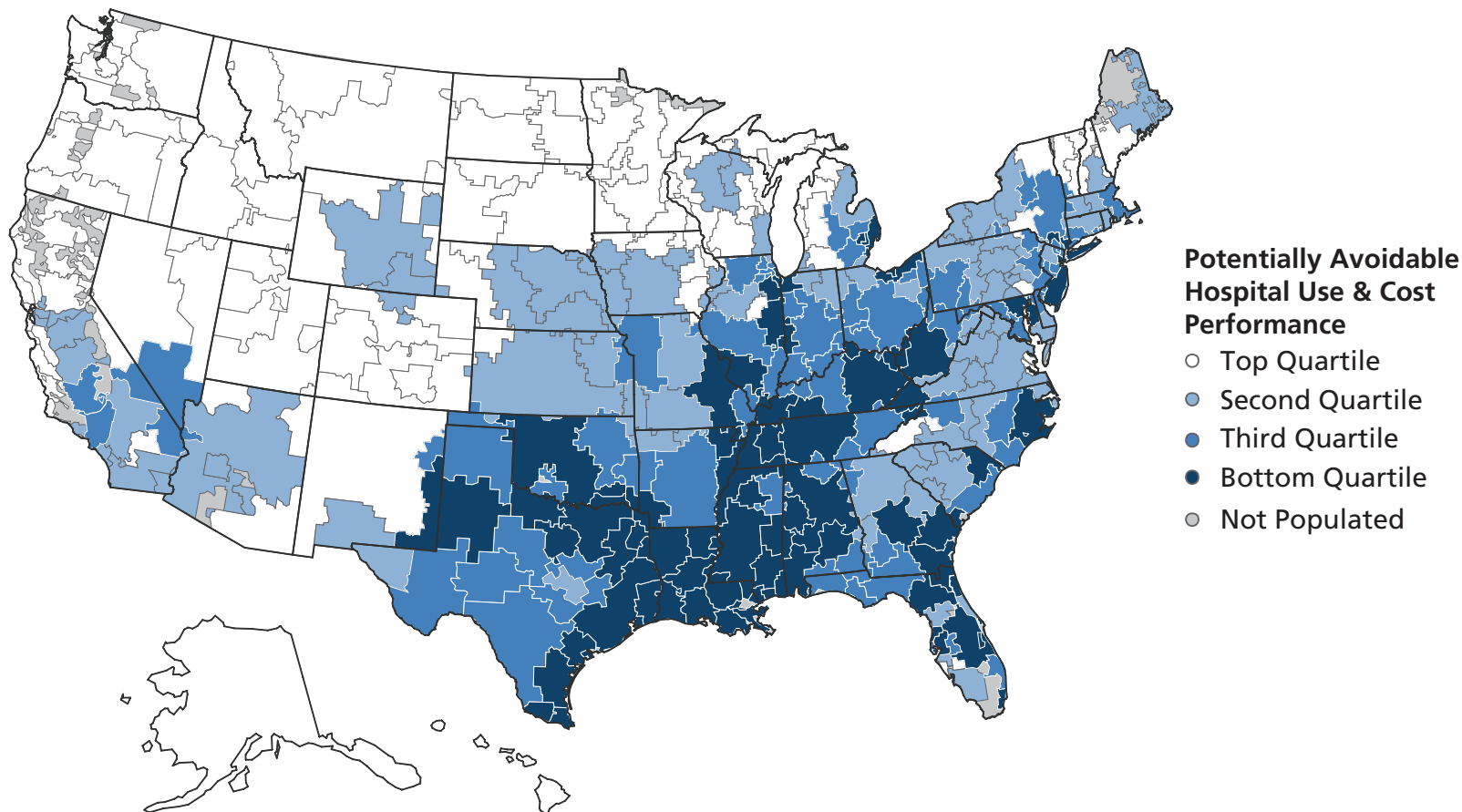
Local Variation: Potentially Avoidable Hospital Admissions

☐ Best HRR   ☐ Top 10th percentile   ☐ All-HRR median   ■ Bottom 90th percentile   ■ Worst HRR
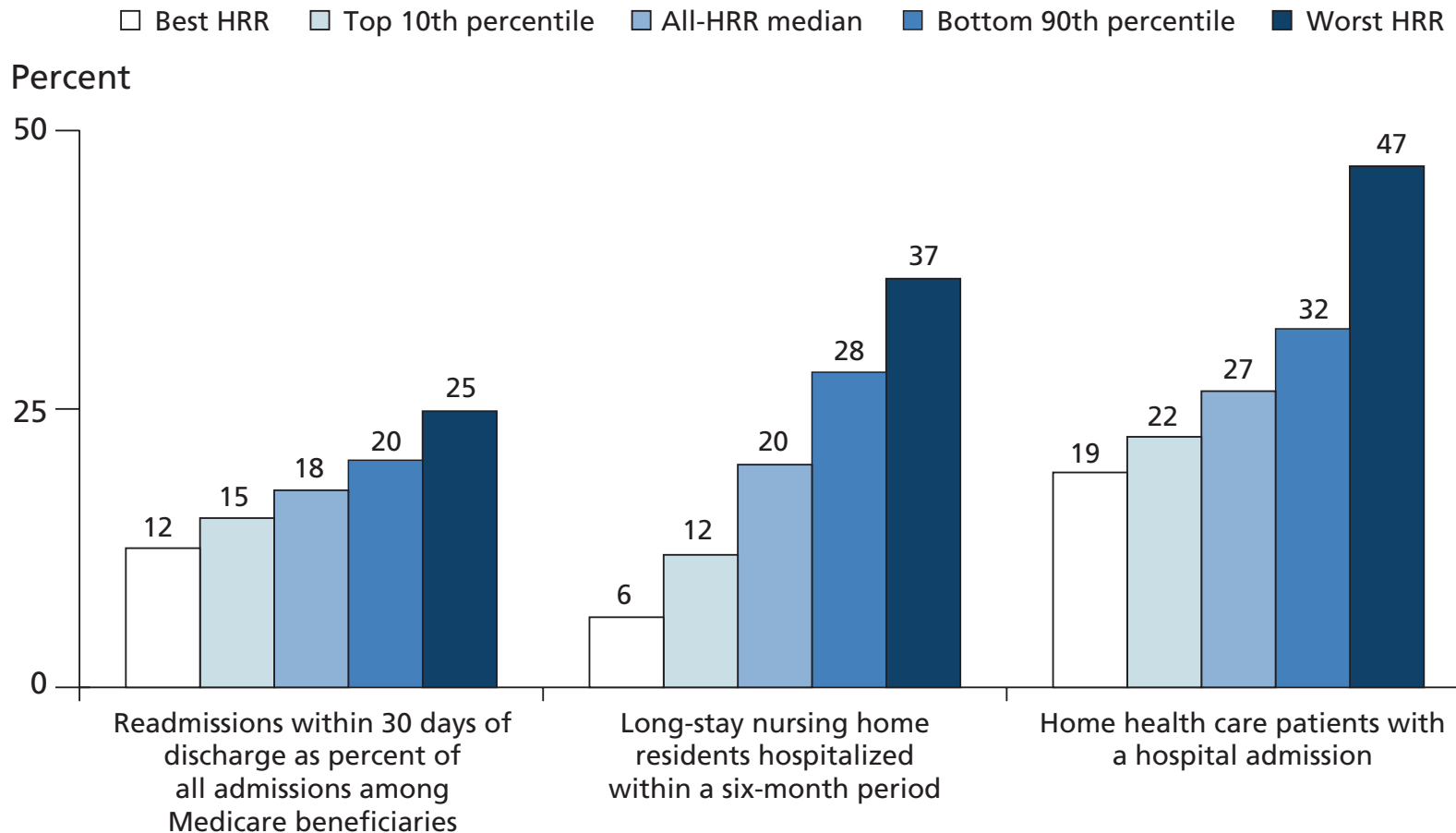
HRR = hospital referral region.
Data: Readmissions within 30 days of discharge—2008 Medicare claims as reported by IOM; long-stay nursing home residents hospitalized—2008 MEDPAR, MDS; Home health care patients with hospital admission—April 2010–March 2011 OASIS as reported by CMS Home Health Compare.

Potentially Avoidable Emergency Department (ED) Use Among Medicare Beneficiaries

All ED visits

Potentially avoidable ED visits

Avoidable ED visits
Rate per 1,000 beneficiaries
○ 129.0–178.5 (77 HRRs)
● 178.9–196.6 (76)
● 196.9–216.1 (77)
● 216.4–294.4 (76)
○ Not Populated
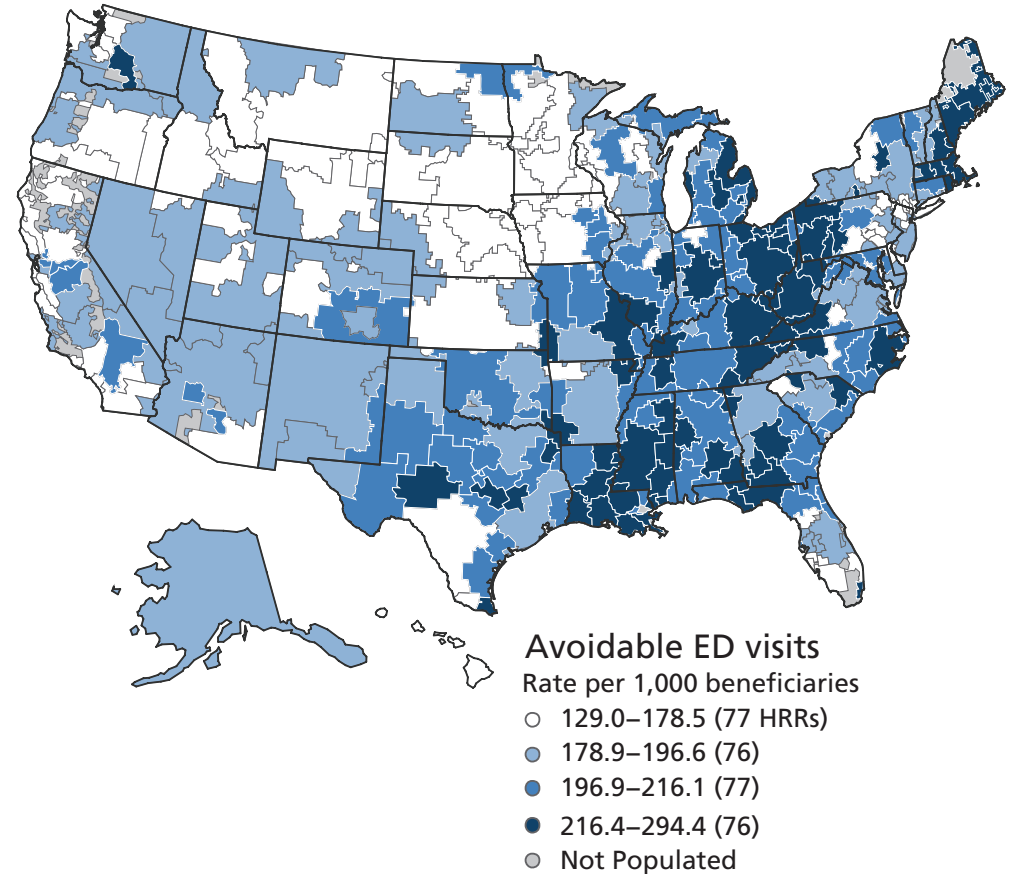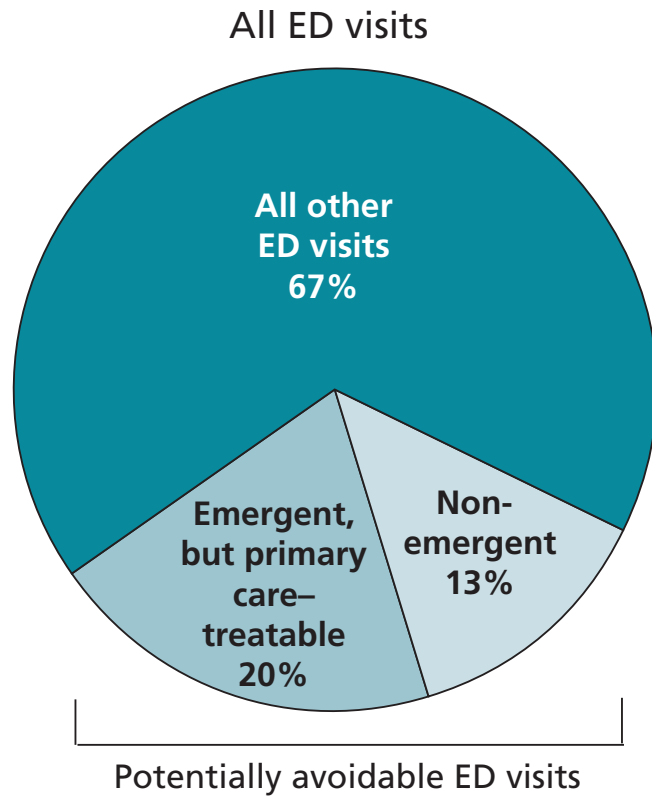
HRR = hospital referral region.
Data: 2009 5% Medicare SAF.
Note: Potentially avoidable emergency department (ED) visits are considered either nonemergent, where treatment was not required within 12 hours, or emergent but primary care–treatable, where care was needed within 12 hours, but the services provided in the ED could have been provided in a primary care setting.

Source: Commonwealth Fund Scorecard on Local Health System Performance, 2012.

Hospitalizations for Potentially Avoidable Hospital Admissions and 30-Day Readmissions, by Medicare Reimbursement
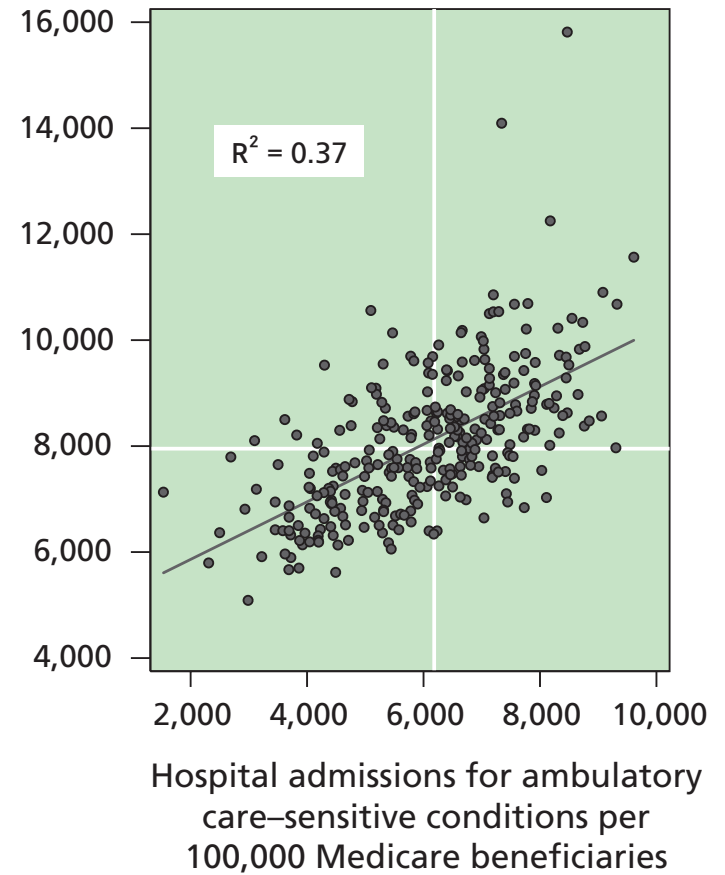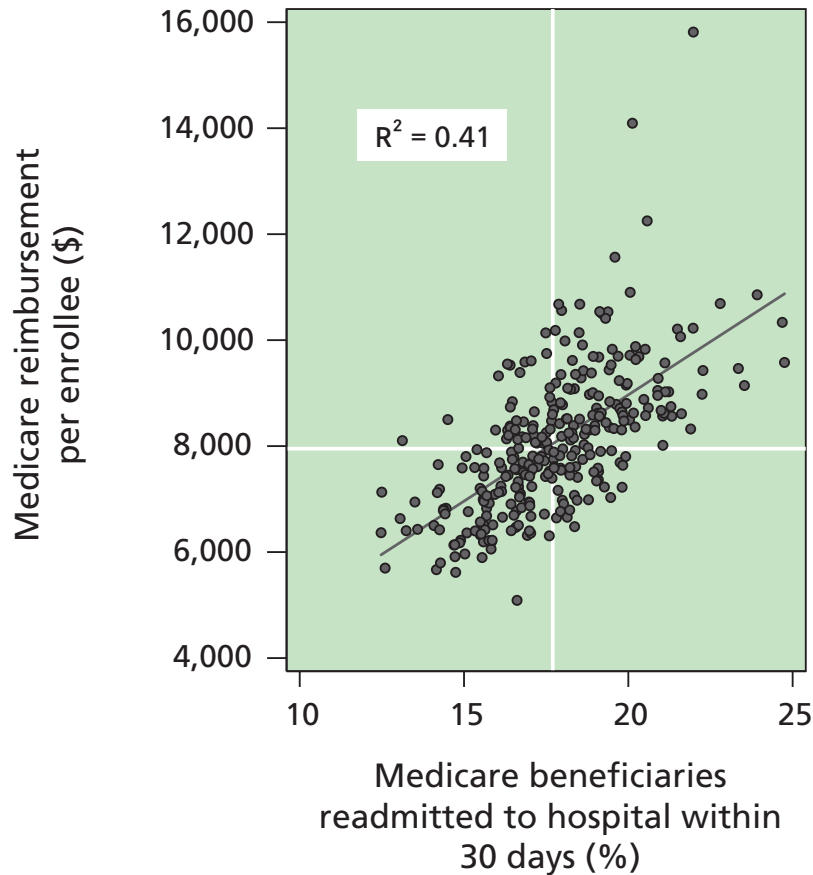
Note: Each dot represents one of 306 hospital referral regions.
Data: Medicare reimbursement and Medicare beneficiaries readmitted to hospital—2008 Medicare claims as reported by IOM; ACS hospital admissions—2009 5% Medicare SAF.

Source: Commonwealth Fund Scorecard on Local Health System Performance, 2012.

Commercially Insured and Medicare Spending per Enrollee, Relative to U.S. Median Spending for Each Population

Commercial Spending

Expressed as ratio to median commercial spending

- ○ 0.61–0.89 (71 HRRs)
- ◔ 0.90–0.99 (79)
- ● 1.00–1.09 (80)
- ● 1.10–1.53 (71)
- ● Not Populated or Missing Data (5)

Medicare Spending

Expressed as ratio to median Medicare spending

- ○ 0.63–0.89 (81 HRRs)
- ◔ 0.90–0.99 (72)
- ● 1.00–1.09 (75)
- ● 1.10–2.00 (78)
- ● Not Populated
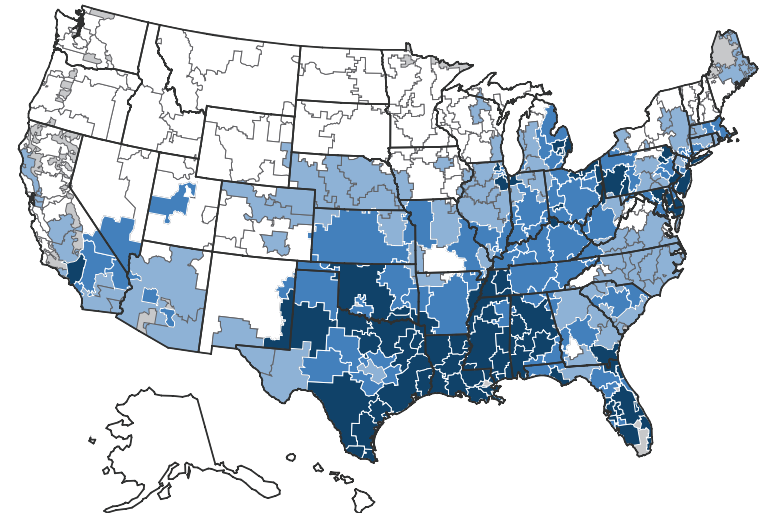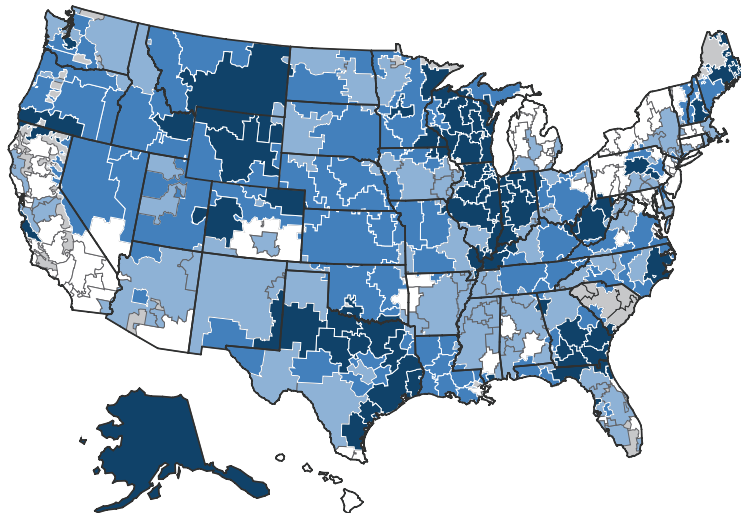
HRR = hospital referral region.
Data: Commercial – 2009 Thomson Reuters MarketScan Database, analysis by M.Chernew, Harvard Medical School. Medicare – 2008 Medicare claims as reported by IOM.
Note: Ratio values lower than 1.0 indicate lower than median spending, ratio values higher than 1.0 indicate higher than median spending. Median spending is determined separately for the commercially insured (ages 18–64) and Medicare populations (age 65 and older).

Performance of Top and Bottom 10 Percent of Hospital Referral Regions

Performance Quartile
- ☐ Top Quartile
- Second Quartile
- Third Quartile
- Bottom Quartile
- ◉ Missing Data

Column headers (left to right):
- Medicare Admissions for Ambulatory Care–Sensitive Conditions
- Medicare 30-Day Readmissions
- Medicare Potentially Avoidable Emergency Department Visits
- Nursing Home Admissions
- Nursing Home 30-Day Readmissions
- Home Health Care Admissions
- Total Medicare Reimbursements, per Enrollee
- Medicare Imaging Costs
- Total Commercial Reimbursements, per Enrollee

Dimension Rank	Local Area	Population Count
Top 10% of Local Areas		
1	Honolulu, HI	1,360,301
2	Ogden, UT	488,280
3	Boise, ID	882,040
3	Grand Junction, CO	305,320
3	Rapid City, SD	218,020
3	Santa Rosa, CA	488,469
7	Salem, OR	326,508
7	Salt Lake City, UT	1,998,814
9	Bend, OR	218,854
9	Idaho Falls, ID	239,146
11	La Crosse, WI	350,219
11	Provo, UT	597,216
13	Medford, OR	433,410
13	Neenah, WI	237,203
13	Santa Barbara, CA	439,848
16	Fargo/Moorhead MN, ND	528,764
16	Missoula, MT	383,540
16	Portland, OR	2,678,718
16	San Luis Obispo, CA	255,521
16	Santa Cruz, CA	271,146
21	Duluth, MN	340,489
21	San Mateo County, CA	820,908
21	Traverse City, MI	231,931
24	Albuquerque, NM	1,667,755
24	Appleton, WI	333,220
24	Eugene, OR	699,687
24	Everett, WA	659,750
24	Minot, ND	126,147
24	Muskegon, MI	278,538
24	Redding, CA	351,283
Bottom 10% of Local Areas		
277	Charleston, WV	833,536
277	Detroit, MI	1,797,778
277	Florence, SC	359,716
277	Gary, IN	539,247
277	Harlingen, TX	565,440
277	Hattiesburg, MS	316,829
277	Houston, TX	6,369,027
277	Joliet, IL	691,166
277	Lexington, KY	1,518,597
286	Corpus Christi, TX	563,764
286	Gulfport, MS	196,812
286	Lake Charles, LA	271,045
286	Manhattan, NY	5,107,497
290	Beaumont, TX	464,624
290	Blue Island, IL	804,980
290	Bronx, NY	1,381,167
290	Houma, LA	279,132
290	Huntington, WV	361,141
290	Metairie, LA	469,603
290	New Orleans, LA	639,673
290	Shreveport, LA	700,013
298	Baton Rouge, LA	942,799
298	Chicago, IL	2,684,751
298	Miami, FL	3,134,285
298	Munster, IN	306,130
298	Texarkana, AR	261,650
303	Alexandria, LA	292,937
303	Lafayette, LA	622,943
303	Monroe, LA	270,188
303	Slidell, LA	193,826

Exhibit 24

Overall Performance on Healthy Lives Dimension

Healthy Lives Performance
○ Top Quartile
● Second Quartile
● Third Quartile
● Bottom Quartile
● Not Populated
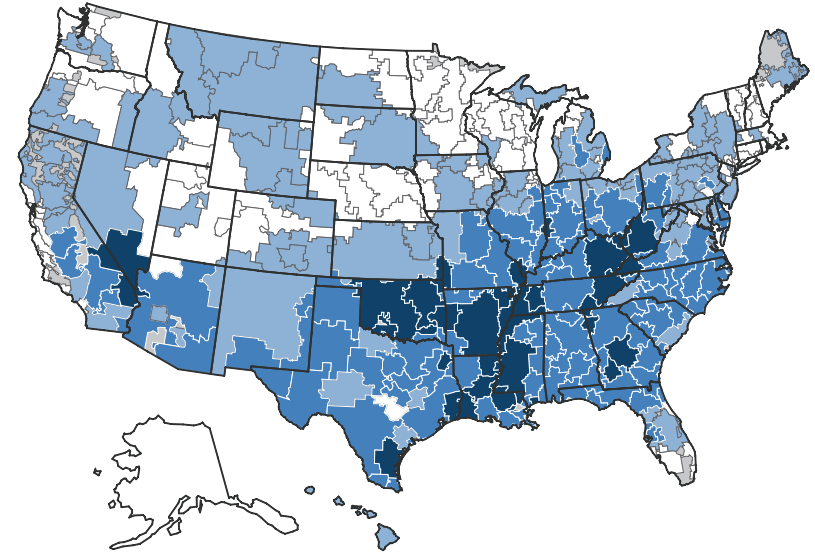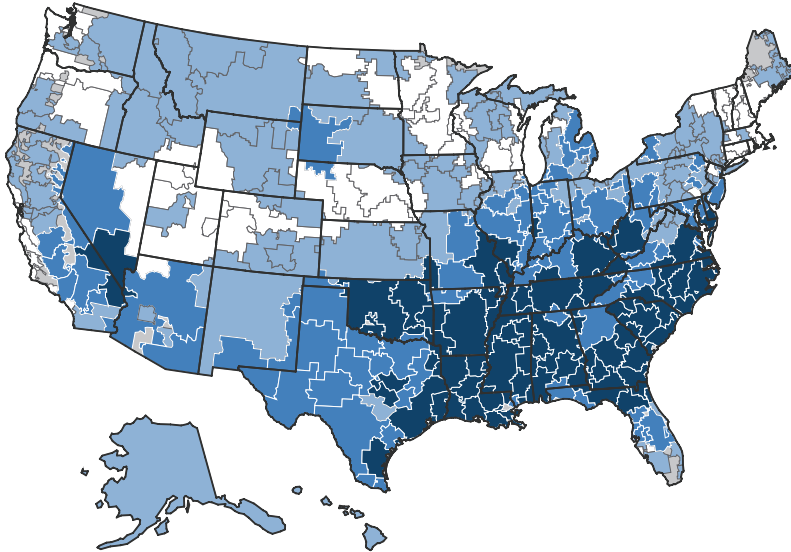
Mortality Amenable to Health Care

Deaths per 100,000 Population, 2005–2007

All Races

- ○ 51.5–74.9 (50 HRRs)
- ○ 75.0–89.9 (95)
- ● 90.0–109.9 (87)
- ● 110.0–169.0 (74)
- ○ Not Populated

White Race

- ○ 51.2–74.9 (82 HRRs)
- ○ 75.0–89.9 (96)
- ● 90.0–109.9 (96)
- ● 110.0–136.6 (32)
- ○ Not Populated

HRR = hospital referral region.
Data for this indicator come from county-level 2005–07 NVSS-M data files, aggregated to the HRR level, for most HRRs. Estimates for the Anchorage, AK, and Honolulu, HI, HRRs represent state-level data and are compiled from years 2006–07.
Data: 2005–07 NVSS-M.

Source: Commonwealth Fund Scorecard on Local Health System Performance, 2012.

Low Birth Weight and Infant Mortality
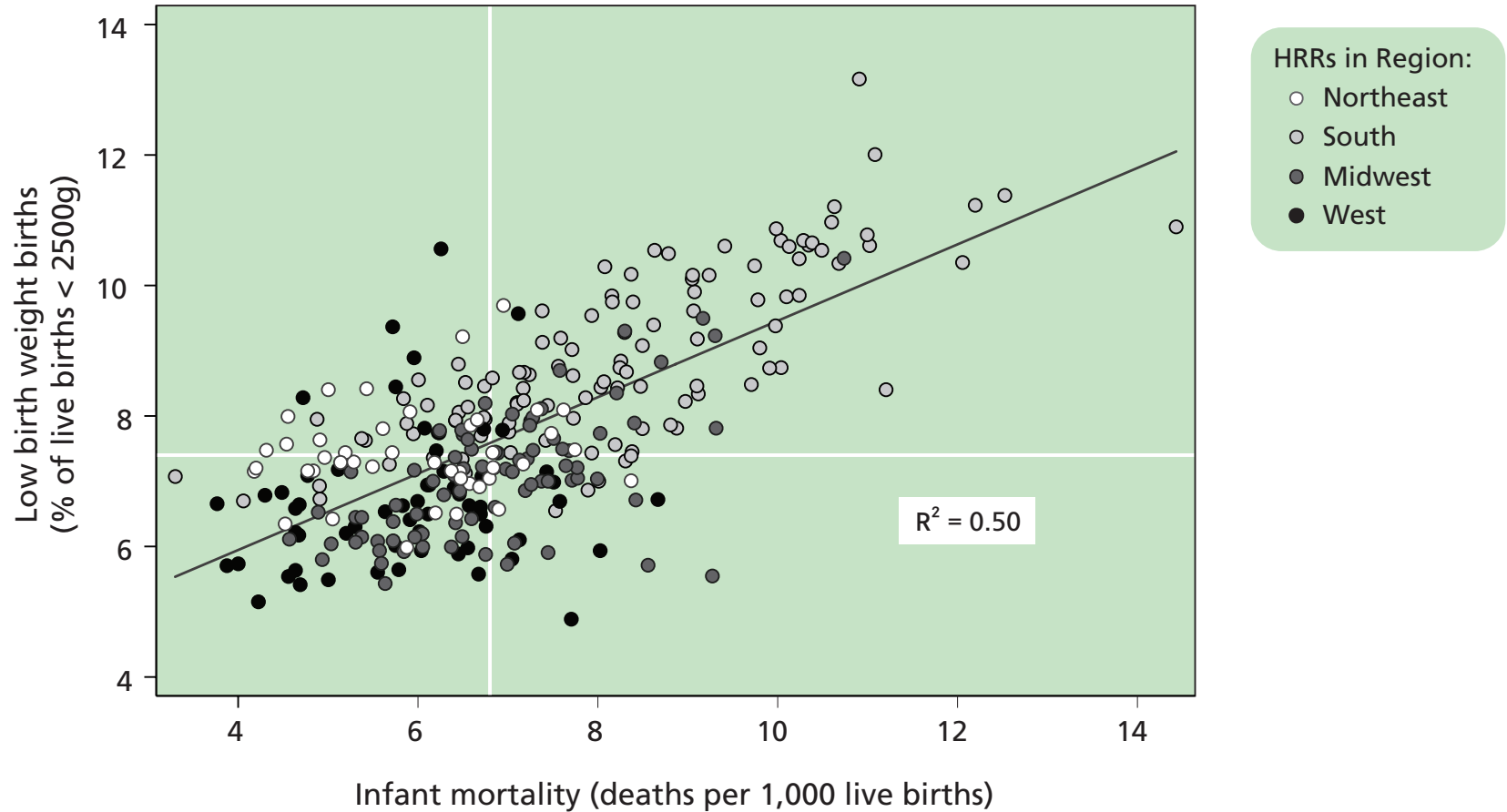
HRR = hospital referral region.
Data: 1996–2005 NVSS-M, as reported by Community Health Status Indicators (CHSI).
Note: CHSI data are reported at the county level. Counties with small populations require more years of data for stable estimates. HRR level estimates can, but do not necessarily, include data from each year between 1996–2005, depending on the population sizes in the counties in the HRR.

Source: Commonwealth Fund Scorecard on Local Health System Performance, 2012.

Exhibit 27

Local Variation: Healthy Lives Indicators

□ Best HRR   □ Top 10th percentile   ■ All-HRR median   ■ Bottom 90th percentile   ■ Worst HRR

Percent
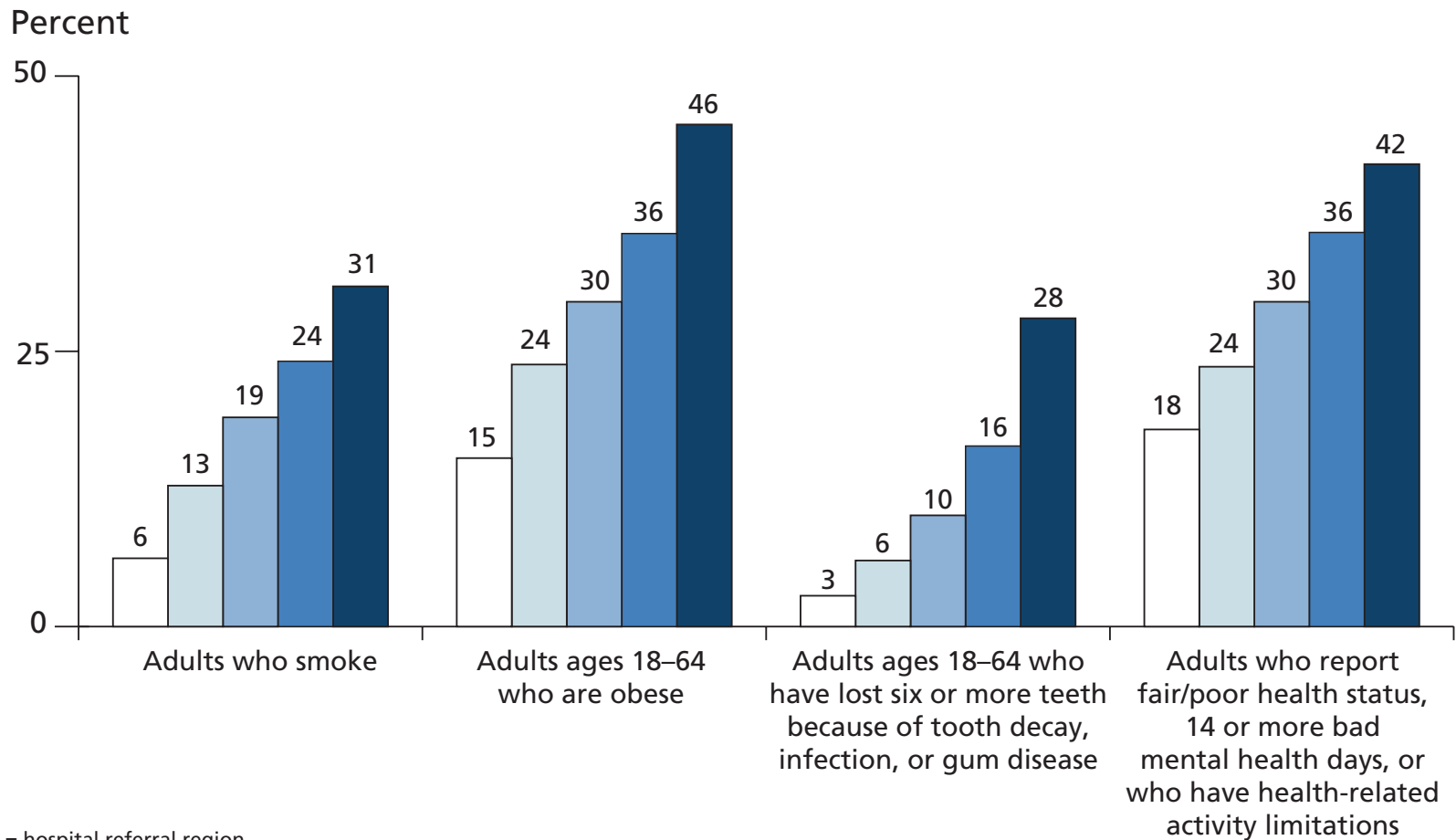
HRR = hospital referral region
Data: 2009–10 BRFSS.

Source: Commonwealth Fund Scorecard on Local Health System Performance, 2012.

Poor Health-Related Quality of Life and Access Dimension Score

People who report fair/poor health status, 14 or more bad mental health days, or who have health-related activity limitations (%)

$R^2 = 0.41$

HRRs in Region:
○ Northeast
○ South
● Midwest
● West

Dimension Score for Access
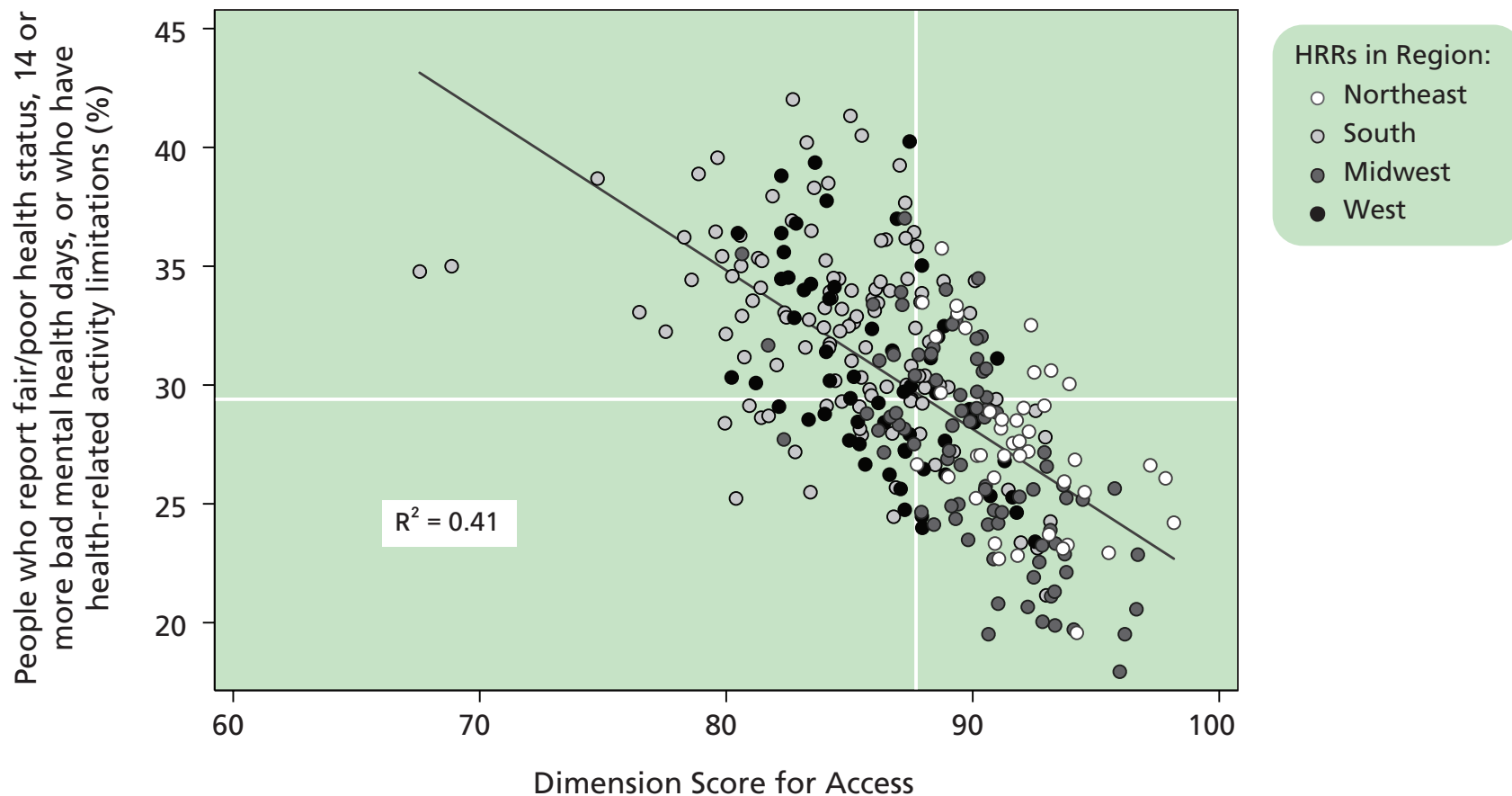
HRR = hospital referral region.
Data: Adults reporting poor health or health-related limitations—2009–10 BRFSS.

Source: Commonwealth Fund Scorecard on Local Health System Performance, 2012.

Performance of Top and Bottom 10 Percent of Hospital Referral Regions

Performance Quartile

☐ Top Quartile
◻ Second Quartile
◼ Third Quartile
◼ Bottom Quartile

Column headers: Mortality Amenable to Health Care · Breast Cancer Deaths · Colorectal Cancer Deaths · Infant Mortality · Low Birth Weight Infants · Suicide Deaths · Adults Who Smoke · Adults Who Are Obese · Adults with Poor Oral Health · Health-Related Poor Quality of Life

Top 10% of Local Areas

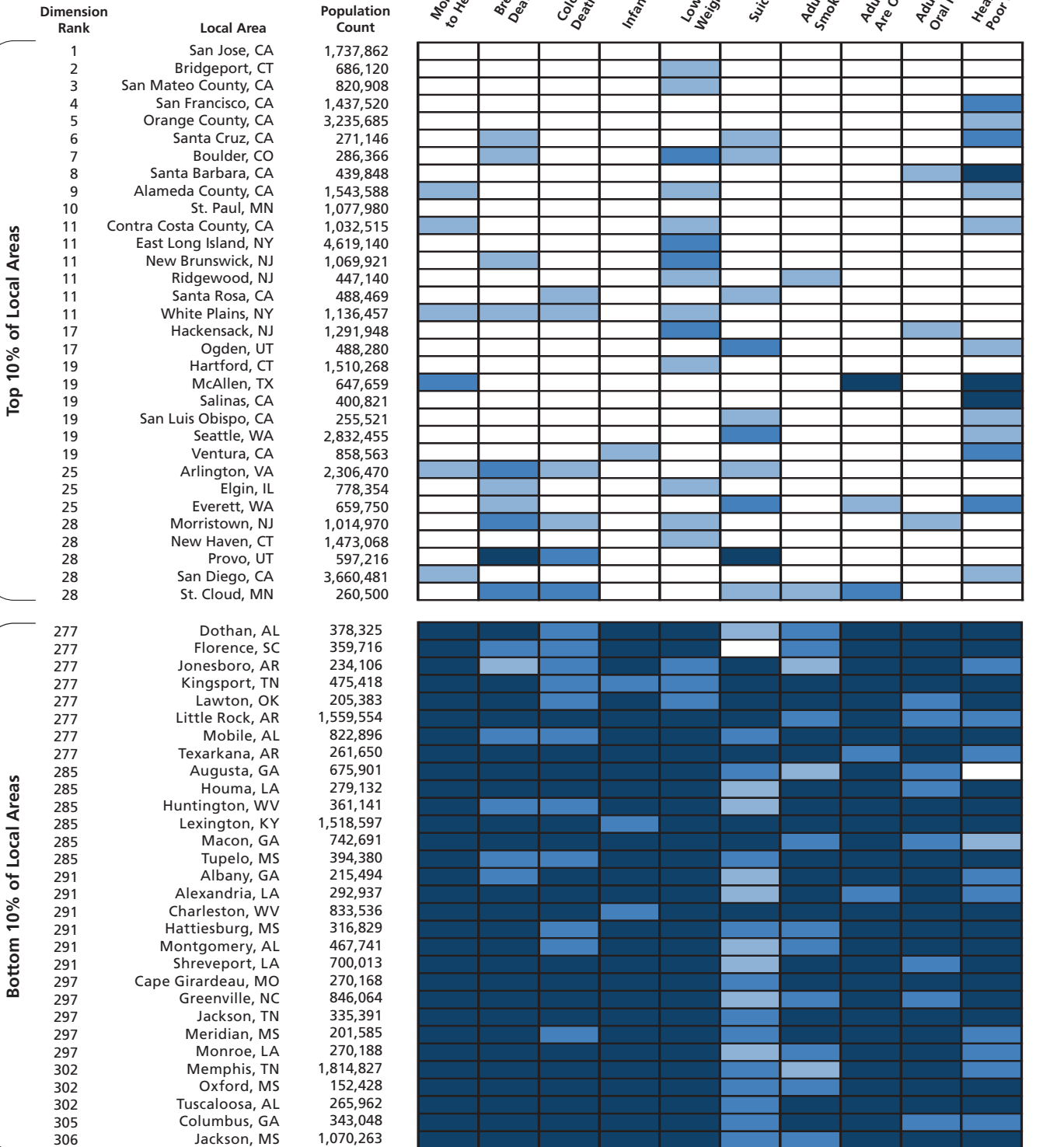| Dimension Rank	Local Area	Population Count
1	San Jose, CA	1,737,862
2	Bridgeport, CT	686,120
3	San Mateo County, CA	820,908
4	San Francisco, CA	1,437,520
5	Orange County, CA	3,235,685
6	Santa Cruz, CA	271,146
7	Boulder, CO	286,366
8	Santa Barbara, CA	439,848
9	Alameda County, CA	1,543,588
10	St. Paul, MN	1,077,980
11	Contra Costa County, CA	1,032,515
11	East Long Island, NY	4,619,140
11	New Brunswick, NJ	1,069,921
11	Ridgewood, NJ	447,140
11	Santa Rosa, CA	488,469
11	White Plains, NY	1,136,457
17	Hackensack, NJ	1,291,948
17	Ogden, UT	488,280
19	Hartford, CT	1,510,268
19	McAllen, TX	647,659
19	Salinas, CA	400,821
19	San Luis Obispo, CA	255,521
19	Seattle, WA	2,832,455
19	Ventura, CA	858,563
25	Arlington, VA	2,306,470
25	Elgin, IL	778,354
25	Everett, WA	659,750
28	Morristown, NJ	1,014,970
28	New Haven, CT	1,473,068
28	Provo, UT	597,216
28	San Diego, CA	3,660,481
28	St. Cloud, MN	260,500

Bottom 10% of Local Areas

Dimension Rank	Local Area	Population Count
277	Dothan, AL	378,325
277	Florence, SC	359,716
277	Jonesboro, AR	234,106
277	Kingsport, TN	475,418
277	Lawton, OK	205,383
277	Little Rock, AR	1,559,554
277	Mobile, AL	822,896
277	Texarkana, AR	261,650
285	Augusta, GA	675,901
285	Houma, LA	279,132
285	Huntington, WV	361,141
285	Lexington, KY	1,518,597
285	Macon, GA	742,691
285	Tupelo, MS	394,380
291	Albany, GA	215,494
291	Alexandria, LA	292,937
291	Charleston, WV	833,536
291	Hattiesburg, MS	316,829
291	Montgomery, AL	467,741
291	Shreveport, LA	700,013
297	Cape Girardeau, MO	270,168
297	Greenville, NC	846,064
297	Jackson, TN	335,391
297	Meridian, MS	201,585
297	Monroe, LA	270,188
302	Memphis, TN	1,814,827
302	Oxford, MS	152,428
302	Tuscaloosa, AL	265,962
305	Columbus, GA	343,048
306	Jackson, MS	1,070,263

Source: Commonwealth Fund Scorecard on Local Health System Performance, 2012.

The Health System Experience in Select Cities[†]

Performance Quartile
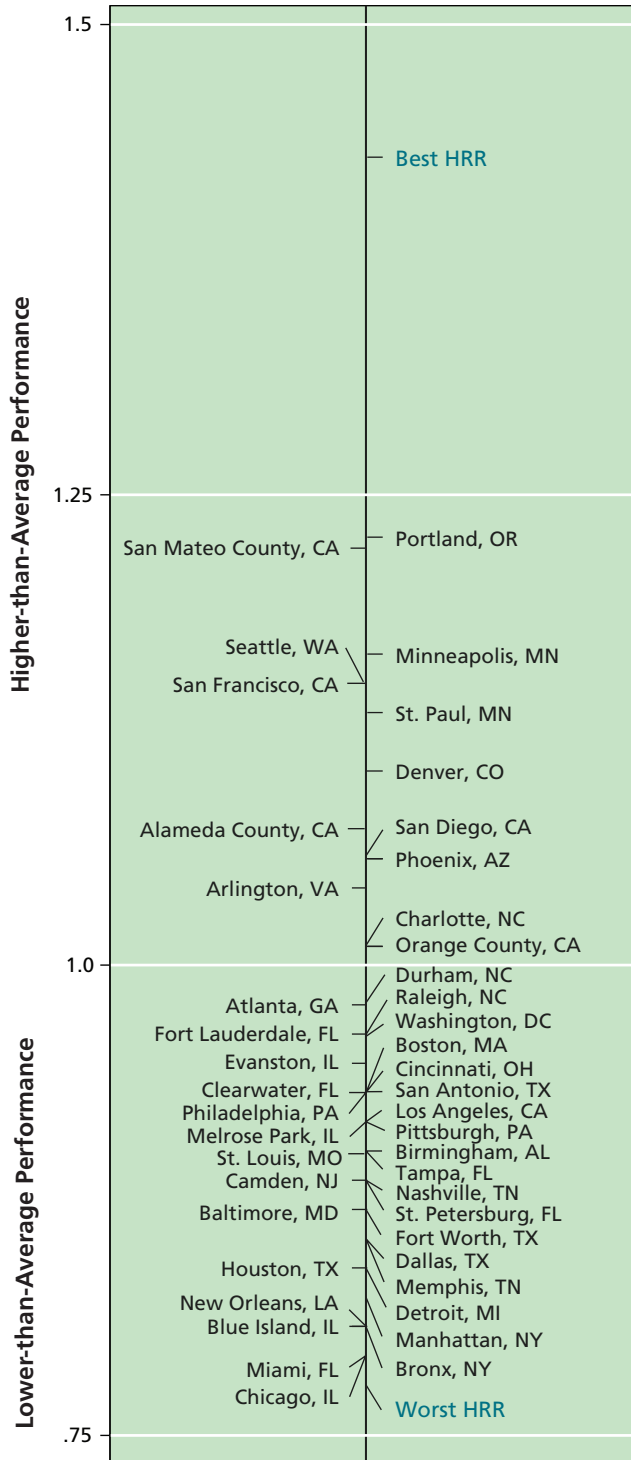- ☐ Top Quartile
- Second Quartile
- Third Quartile
- Bottom Quartile

Local Area			Population Count	Overall	Access	Prevention & Treatment	Potentially Avoidable Hospital Use & Cost	Healthy Lives
NORTHEAST								
MA	Boston		4,825,960					
NY	New York City Area	Bronx	1,381,167					
		Manhattan	5,107,497					
PA	Pittsburgh		2,913,805					
	Philadelphia Area	Camden, NJ	2,826,905					
		Philadelphia	4,186,372					
MIDWEST								
IL	Chicago Area	Blue Island	804,980					
		Chicago	2,684,751					
		Evanston	939,064					
		Melrose Park	1,263,506					
MI	Detroit		1,797,778					
MN	Minneapolis		3,237,168					
	St. Paul		1,077,980					
MO	St. Louis		3,418,466					
OH	Cincinnati		1,666,017					
WEST								
AZ	Phoenix		3,250,646					
CA	Los Angeles Area	Orange County	3,235,685					
		Los Angeles	9,874,390					
	San Diego		3,660,481					
	San Francisco Bay Area	Alameda County	1,543,588					
		San Mateo County	820,908					
		San Francisco	1,437,520					
CO	Denver		2,811,835					
OR	Portland		2,678,718					
WA	Seattle		2,832,455					
SOUTH								
AL	Birmingham		2,300,344					
DC	District of Columbia Area	Arlington, VA	2,306,470					
		Baltimore, MD	2,519,510					
		Washington, DC	2,651,966					
FL	Fort Lauderdale		2,821,280					
	Miami		3,134,285					
	Tampa Area	Clearwater	492,609					
		St. Petersburg	423,910					
		Tampa	1,369,627					
GA	Atlanta		6,235,550					
LA	New Orleans		639,673					
NC	Charlotte		2,463,839					
	Durham		1,369,067					
	Raleigh		2,042,645					
TN	Memphis		1,814,827					
	Nashville		2,784,531					
TX	Dallas		4,840,913					
	Fort Worth		2,174,455					
	Houston		6,369,027					
	San Antonio		2,716,484					

[†] Local regions were selected for inclusion if they approximated the largest metropolitan statistical areas (MSAs) by population per census regions based on April 1, 2010, United States Census Data. Please note that referral areas do not exactly match with MSAs and population estimates between these two geographic areas may differ. The Manhattan area includes Manhattan, Brooklyn, and Staten Island.
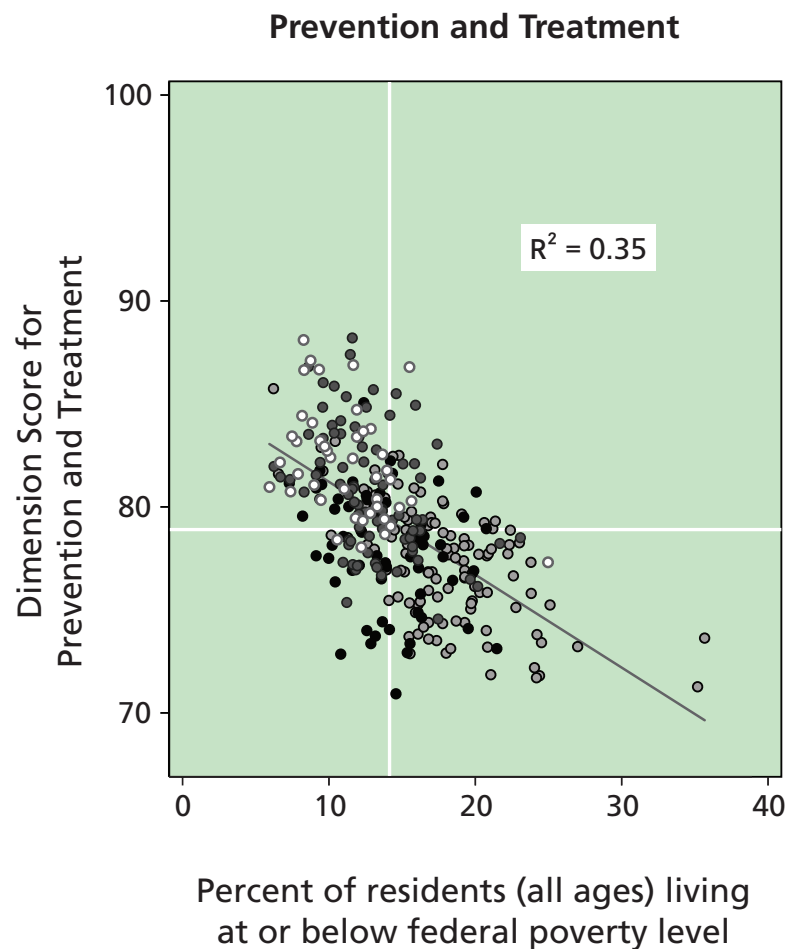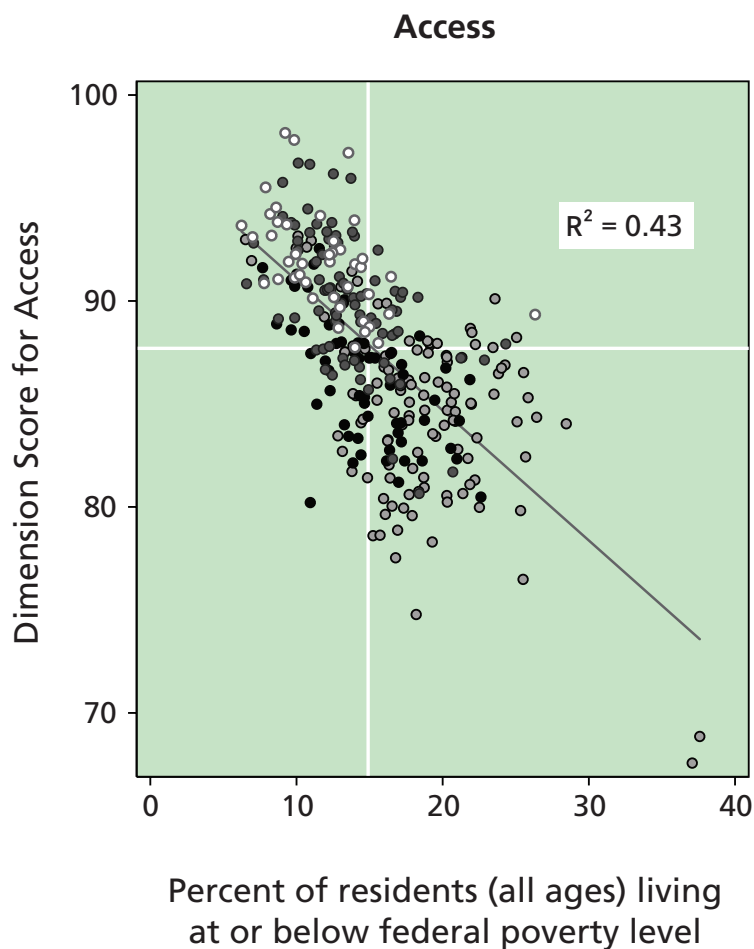
Performance on Potentially Avoidable Hospital Use and Cost in the Nation's Largest Metropolitan Areas Relative to the National Average

Higher-than-Average Performance

1.5 —

— Best HRR

1.25 —

San Mateo County, CA — — Portland, OR

Seattle, WA — — Minneapolis, MN
San Francisco, CA —

— St. Paul, MN

— Denver, CO

Alameda County, CA — — San Diego, CA
— Phoenix, AZ

Arlington, VA —

— Charlotte, NC
— Orange County, CA

1.0 —
— Durham, NC
— Raleigh, NC
Atlanta, GA — — Washington, DC
Fort Lauderdale, FL — — Boston, MA
Evanston, IL — — Cincinnati, OH
Clearwater, FL — — San Antonio, TX
Philadelphia, PA — — Los Angeles, CA
Melrose Park, IL — — Pittsburgh, PA
St. Louis, MO — — Birmingham, AL
Camden, NJ — — Tampa, FL
— Nashville, TN
Baltimore, MD — — St. Petersburg, FL
— Fort Worth, TX
— Dallas, TX
Houston, TX — — Memphis, TN
New Orleans, LA — — Detroit, MI
Blue Island, IL — — Manhattan, NY

Miami, FL — — Bronx, NY
Chicago, IL — — Worst HRR

.75 —

Lower-than-Average Performance

Note: Each HRR's potentially avoidable hospital use and cost dimension summary score was divided by the all-average dimension summary score for all HRRs. A value of 1.0 indicates average performance in this dimension, values lower than 1.0 indicate lower-than average performance, and values higher than 1.0 indicate higher-than-average performance.

Performance Is Lower in Places with a Higher Proportion of Residents Living in Poverty
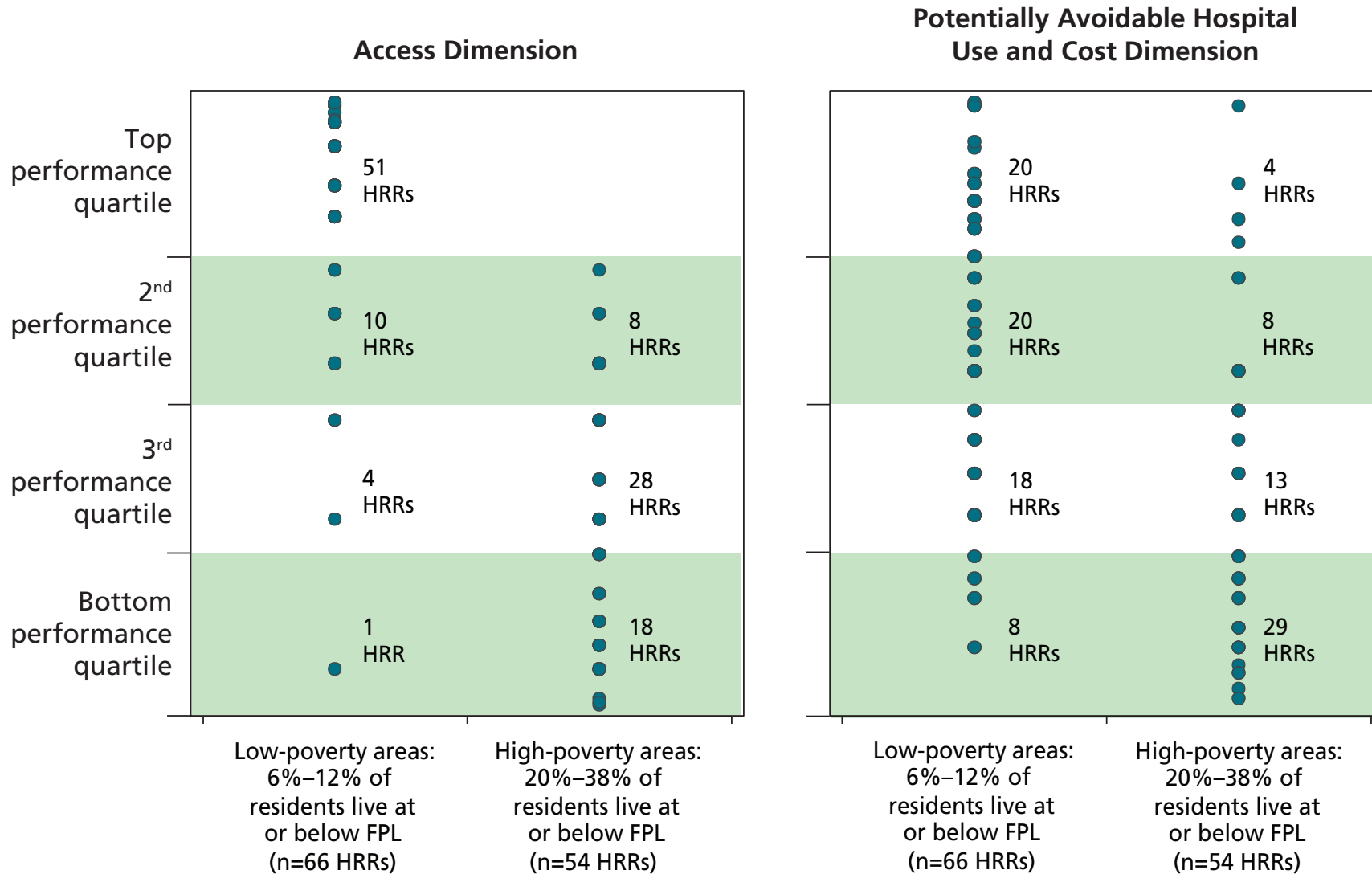
○ Northeast   ○ South   ● Midwest   ● West

Access

$R^2 = 0.43$

Dimension Score for Access

Percent of residents (all ages) living
at or below federal poverty level

Prevention and Treatment

$R^2 = 0.35$

Dimension Score for
Prevention and Treatment

Percent of residents (all ages) living
at or below federal poverty level

Note: Each dot represents one of 306 hospital referral regions.

Dimension Rankings Among Low-Poverty and High-Poverty Areas

Access Dimension

Potentially Avoidable Hospital Use and Cost Dimension

Top performance quartile

2nd performance quartile

3rd performance quartile

Bottom performance quartile

51 HRRs
10 HRRs
8 HRRs
4 HRRs
28 HRRs
1 HRR
18 HRRs

20 HRRs
4 HRRs
20 HRRs
8 HRRs
18 HRRs
13 HRRs
8 HRRs
29 HRRs

Low-poverty areas: 6%–12% of residents live at or below FPL (n=66 HRRs)

High-poverty areas: 20%–38% of residents live at or below FPL (n=54 HRRs)

Low-poverty areas: 6%–12% of residents live at or below FPL (n=66 HRRs)

High-poverty areas: 20%–38% of residents live at or below FPL (n=54 HRRs)

HRR = hospital referral region; FPL = federal poverty level.

Source: Commonwealth Fund Scorecard on Local Health System Performance, 2012.

National Cumulative Impact if All Local Areas Achieved Top 1 Percent of Regional Performance

Indicator	If all local areas improved their performance to the level of the best-performing (top 1 percentile) areas for this indicator, then:	
Insured adults	25,565,997	more adults (ages 18–64) would be covered by health insurance (public or private), and therefore would be more likely to receive health care when needed.
Insured children	4,586,316	more children (ages 0–17) would be covered by health insurance (public or private), and therefore would be more likely to receive health care when needed.
Adults with a usual source of care	25,002,702	more adults (age 18 and older) would have a usual source of care to help ensure that care is coordinated and accessible when needed.
Adult preventive care	9,432,924	more adults (age 50 and older) would receive recommended preventive care, such as colon cancer screenings, mammograms, Pap tests, and flu shots at appropriate ages.
Avoidable hospital admissions	883,209	fewer hospitalizations for ambulatory care–sensitive conditions would occur among Medicare beneficiaries (age 65 and older), and
	$6.8 billion	dollars would be saved from the reduction in hospitalizations.
Medicare readmissions	463,708	fewer hospital readmissions would occur among Medicare beneficiaries (age 65 and older).
Hospitalization of nursing home residents	140,795	fewer long-stay nursing home residents would be hospitalized, and
	$1.3 billion	dollars would be saved from the reduction in hospitalizations.
Inappropriate drug prescribed	1,293,296	fewer Medicare beneficiaries would receive an inappropriately prescribed medication.

Source: Commonwealth Fund Scorecard on Local Health System Performance, 2012.