

# Quality Measures Compared to Achievable Benchmarks

The NHQR quality measures are compared to achievable benchmarks, which are derived from the top-performing States. Better performance of a State can mean higher or lower values of a measure, depending on the desired outcome. For example, low values are desirable for measures such as infant mortality, whereas high values are desirable for measures such as preventative screening. The categories of achievement have been standardized across the measure definitions so that:

**Far away from benchmark** - a State's value for a measure has not achieved 50% of the benchmark.

**Close to benchmark** - a State's value for a measure is between 50% and 90% of a benchmark (i.e., worse than the benchmark but has achieved at least half of the benchmark but not as much as 90% of a benchmark).

**Achieved benchmark or better** - a State's the value for a measure is no worse than 90% of the benchmark value, the measure has achieved the benchmark. This category also includes the case in which the measure's value is equal to or better than the benchmark.

## Measures That Achieved Benchmark or Better

Measure	Estimate	Benchmark	Distance to Benchmark
Adolescents ages 16-17 who received 1 or more doses of tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis (Tdap) since the age of ten years	84.0	47.8	Achieved: 76% better
Hospital admissions for immunization-preventable influenza per 100,000 population age 65 and over	14.9	31.3	Achieved: 52% better
Persons aged 16 to 17 years who received 1 or more doses of meningococcal conjugate vaccine	83.9	59.9	Achieved: 40% better
Hospital admissions for short-term complications of diabetes per 100,000 population, ages 6-17	11.8	17.0	Achieved: 31% better
Adolescents ages 13-15 who received 1 or more doses of tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis (Tdap) since the age of ten years	82.4	63.4	Achieved: 30% better
Persons aged 13 to 15 years who received 1 or more doses of meningococcal conjugate vaccine	79.3	61.3	Achieved: 29% better
Rate of U.S. active non-Federal general physician assistants per 100,000 population	60.9	47.6	Achieved: 28% better
Infant mortality per 1,000 live births, birth weight 2,500 grams or more	1.30	1.52	Achieved: 14%

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Rating of health care 0-6 on a scale from 0 to 10 (best grade) by adults who had a doctor's office or clinic visit in the last 12 months, Medicare fee-for-service	7.80	9.04	Achieved: 14% better
Hospital admissions for perforated appendix per 1,000 admissions with appendicitis, adults	215.6	231.6	Achieved: 7% better
Deaths per 1,000 adult hospital admissions with pneumonia	23.8	25.1	Achieved: 5% better
Colorectal cancer deaths per 100,000 population per year	12.7	13.3	Achieved: 5% better
Hospital patients age 65 and over with pneumonia who received pneumococcal screening or vaccination	95.9	92.8	Achieved: 3% better
Hospital patients with pneumonia who received the initial antibiotic consistent with current recommendations	95.4	93.2	Achieved: 2% better
Hospital patients age 50 and over with pneumonia who received influenza screening or vaccination	92.4	90.9	Achieved: 2% better
Hospital patients with heart failure discharged home with written instructions or educational material	88.4	87.9	Achieved: 1% better
Hospital patients with pneumonia who had blood cultures collected before antibiotics were administered	95.7	95.7	0%
Hospice patients who received the right amount of medicine for pain	95.9	95.9	0%
Children ages 19-35 months who received 1 or more doses of measles-mumps-rubella vaccine	95.0	95.0	0%
Women ages 21-65 who received a Pap smear in the last 3 years	89.7	89.8	0%
Children ages 19-35 months who received 1 or more doses of varicella vaccine	94.1	94.2	0%
Hospice patient caregivers who perceived patient was referred to hospice at the right time	90.3	90.5	0%
Children ages 19-35 months who received 4 or more doses of diphtheria-tetanus-pertussis vaccine	88.8	89.3	1%
Hospital patients with heart failure and left ventricular systolic dysfunction who were prescribed ACE inhibitor or ARB at discharge	94.3	95.1	1%
Children ages 19-35 months who received 3 or more doses of polio vaccine	96.7	97.7	1%
Hospice patients who received care consistent with their stated end-of-life	95.5	96.5	1%

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Hospital patients with pneumonia who received the initial antibiotic dose within 6 hours of hospital arrival	95.2	96.7	2%
Hospital patients with heart attack who received percutaneous coronary intervention (PCI) within 90 minutes of arrival	94.3	95.8	2%
Women ages 50-74 who received a mammogram in the last 2 years	86.1	87.9	2%
Children ages 19-35 months who received 3 or more doses of hepatitis B vaccine	94.2	96.8	3%
Adults who received a blood cholesterol measurement in the last 5 years	80.4	82.6	3%
Avoidable admissions for bacterial pneumonia per 100,000 population age 18 and over	241.4	234.9	3%
Hospice patients who received the right amount of help for feelings of anxiety or sadness	90.8	93.6	3%
Long-stay nursing home residents with a urinary tract infection	6.30	6.10	3%
Women with clinical Stage I-IIb breast cancer who received axillary node dissection or sentinel lymph node biopsy (SLNB) at the time of surgery (lumpectomy or mastectomy)	93.7	97.1	3%
Family caregivers who did not want more information about what to expect while the patient was dying	85.3	88.7	4%
Adults age 65 and over who ever received pneumococcal vaccination	69.0	72.5	5%
Short-stay nursing home residents with pressure sores	1.30	1.24	5%
Hospitals with computerized system that supports computerized physician order entry (CPOE) of medications	70.0	74.4	6%
Long-stay nursing home residents who were assessed for pneumococcal vaccination	91.7	97.6	6%
Adults age 65 and over who received an influenza vaccination in the last 12 months	72.4	77.1	6%
Deaths per 1,000 hospital admissions with expected low-mortality	0.28	0.26	6%
Prostate cancer deaths per 100,000 male population per year	20.7	19.5	6%
Adults age 40 and over with diagnosed diabetes who received at least two hemoglobin A1c measurements in the calendar year	71.8	76.9	7%
Children with special healthcare needs who received coordinated, ongoing, comprehensive care within a medical home	46.0	49.6	7%

Patients with colon cancer who received surgical resection of colon cancer that included at least 12 lymph nodes pathologically examined	82.6	89.4	8%
Hospital admissions for perforated appendix per 1,000 admissions with appendicitis, children	237.3	220.1	8%
Long-stay nursing home residents who received influenza vaccination during the flu season	86.3	93.9	8%
Persons aged 13 to 17 years who received 1 or more doses of meningococcal conjugate vaccine	68.1	74.3	8%
Adults age 40 and over with diagnosed diabetes who had their feet checked for sores or irritation in the calendar year	77.6	84.7	8%
Home health care patients whose surgical wound was improved	87.9	80.9	9%
Deaths per 1,000 adult hospital admissions with acute myocardial infarction (AMI)	52.6	48.3	9%
Women under age 70 treated for breast cancer with breast-conserving surgery who received radiation therapy to the breast within 1 year of diagnosis	86.5	95.0	9%
Dialysis patients under age 70 who were registered on a waiting list for transplantation	24.4	26.8	9%
Short-stay nursing home residents who were assessed for pneumococcal vaccination	82.5	90.8	9%

## Measures That Are Close to Benchmark

Measure	Estimate	Benchmark	Distance to Benchmark
Adults who had an appointment for routine health care in the last 12 months who sometimes or never got appointments for routine care as soon as wanted, Medicare fee-for-service	10.1	9.16	10%
Adults age 40 and over with diagnosed diabetes who received a dilated eye examination in the calendar year	74.3	82.8	10%
Adults who had a doctor's office or clinic visit in the last 12 months who sometimes or never got advice to quit smoking from provider, Medicare managed care	40.4	36.5	11%
Low-risk, long-stay nursing home residents with a catheter inserted and left in the bladder	3.60	3.24	11%
Short-stay nursing home residents who received influenza vaccination during the flu season	79.4	89.4	11%
Deaths per 1,000 hospital admissions with coronary artery bypass surgery, age 40 and over	22.0	19.8	11%
Adult home health care patients whose pain when moving around decreased	62.9	71.1	11%
Hospitals with computerized system that supports drug decision support	70.0	79.3	12%
Cancer deaths per 100,000 population per year for all cancers	163.4	145.7	12%
Adult home health care patients whose ability to walk or move around improved	54.7	62.5	12%
Adults age 40 and over with diagnosed diabetes who received an influenza vaccination in the calendar year	62.2	71.2	13%
Children with special healthcare needs and needed care coordination who received effective care coordination	54.7	62.9	13%
Breast cancer diagnosed at advanced stage (regional, distant stage, or local stage with tumor greater than 2 cm) per 100,000 women age 40 and over	91.7	80.8	14%
Adult home health care patients whose bathing improved	60.2	69.8	14%
Adults ages 18-64 at high risk (e.g., COPD) who received an influenza vaccination in the last 12 months	42.5	49.4	14%
Adult home health care patients who stayed at home after an episode of home health care	66.3	77.0	14%

Infant mortality per 1,000 live births, birth weights 1,500-2,499 grams	11.3	9.88	14%
Ratio of observed deaths to expected deaths among Medicare hemodialysis patients	0.86	0.75	15%
Long-stay nursing home residents with pressure sores	6.30	5.48	15%
Adult home health care patients whose shortness of breath decreased	59.9	70.7	15%
People age 12 and over who needed treatment for illicit drug use and who received such treatment at a specialty facility in the last 12 months	22.0	26.0	15%
High-risk, long-stay nursing home residents with pressure sores	6.34	5.48	16%
Adults who had a doctor's office or clinic visit in the last 12 months whose health providers sometimes or never explained things in a way they could understand, Medicare managed care	4.00	3.45	16%
Adults who needed to see a specialist in the last 12 months who sometimes or never found it easy to see a specialist, Medicare fee-for-service	6.50	5.58	16%
Cervical cancer diagnosed at advanced stage (all invasive tumors) per 100,000 women age 20 and over	8.60	7.38	17%
Adult hospital patients who did not receive good communication about discharge information	13.0	11.1	18%
Colorectal cancer diagnosed at advanced stage (tumors diagnosed at regional or distant stage) per 100,000 population age 50 and over	69.9	59.4	18%
Infant mortality per 1,000 live births, all birth weights	5.90	5.00	18%
Postoperative sepsis per 1,000 elective-surgery admissions of length 4 or more days, adults	10.7	9.00	19%
Adults who had a doctor's office or clinic visit in the last 12 months whose health providers sometimes or never listened carefully to them, Medicare fee-for-service	3.90	3.28	19%
People age 12 and over treated for substance abuse who completed treatment course	59.7	73.9	19%
Adult home health care patients whose ability to get in and out of bed improved	49.5	61.7	20%
Adults who received mental health treatment or counseling in the last 12 months	14.9	18.6	20%
Deaths per 1,000 adult hospital admissions with congestive heart failure	24.1	20.0	20%
Avoidable admissions for angina per 100,000 population age 18 and over	13.5	11.2	21%

Adolescents ages 13-15 who received 3 or more doses human papillomavirus vaccine, either quadrivalent or bivalent	23.4	29.8	21%
Adult hospital patients who sometimes or never had good communication about medications they received in the hospital	11.7	9.62	22%
Adult hemodialysis patients whose primary mode of vascular access is an arteriovenous fistula	20.9	26.7	22%
Adult home health care patients whose management of oral medications improved	41.3	53.5	23%
Adult home health care patients whose urinary incontinence decreased	43.1	56.2	23%
Hospital admissions with iatrogenic pneumothorax per 1,000 medical and surgical admissions, adults	1.30	1.05	24%
Rating of health care 0-6 on a scale from 0 to 10 (best grade) by adults who had a doctor's office or clinic visit in the last 12 months, Medicare managed care	10.9	8.80	24%
End stage renal disease (ESRD) patients who saw a nephrologist at least 12 months prior to initiation of renal replacement therapy, age 18 and over	38.1	50.7	25%
Adults who received inpatient mental health treatment or counseling in the last 12 months	0.60	0.48	25%
Breast cancer deaths per 100,000 female population per year	21.1	16.9	25%
Low-risk, long-stay nursing home residents with loss of control of bowels or bladder	39.1	31.2	25%
Infant mortality per 1,000 live births, birth weight less than 1,500 grams	241.2	192.2	26%
Deaths per 1,000 hospital admissions with percutaneous transluminal coronary angioplasty (PTCA), age 40 and over	12.5	9.95	26%
Long-stay nursing home residents with too much weight loss	9.30	7.38	26%
Suicide deaths per 100,000 population	11.3	8.96	26%
Hospitals with computerized system that supports medication lists	43.3	59.1	27%
Adults who had a doctor's office or clinic visit in the last 12 months whose health providers sometimes or never showed respect for what they had to say, Medicare managed care	3.40	2.67	27%
Adults who had a doctor's office or clinic visit in the last 12 months whose health providers sometimes or never explained things in a way they could understand, Medicare fee-for-service	4.10	3.20	28%
People age 12 and over who needed treatment for alcohol problem who	9.50	13.2	28%

received such treatment at a specialty facility in the last 12 months

Adults who had an appointment for routine health care in the last 12 months who sometimes or never got appointments for routine care as soon as wanted, Medicare managed care	12.5	9.73	29%
Short-stay nursing home residents with moderate to severe pain	24.1	18.6	30%
Long-stay nursing home residents with moderate to severe pain	9.40	7.10	32%
Long-stay nursing home residents whose need for help with daily activities increased	19.4	14.6	33%
Lung cancer deaths per 100,000 population per year	44.3	33.2	33%
Adults who had a doctor's office or clinic visit in the last 12 months whose health providers sometimes or never listened carefully to them, Medicare managed care	4.70	3.53	33%
Adults who had a doctor's office or clinic visit in the last 12 months whose health providers sometimes or never spent enough time with them, commercial plans	8.10	6.07	33%
Hospital admissions for short-term complications of diabetes per 100,000 population, adults	51.6	38.5	34%
Adults ages 18-64 at high risk (e.g., COPD) who ever received pneumococcal vaccination	24.1	37.0	35%
Potentially avoidable hospitalizations for acute conditions	540.9	398.6	36%
Deaths per 1,000 adult hospital admissions with abdominal aortic aneurysm (AAA) repair	45.2	33.1	37%
Adults who had a doctor's office or clinic visit in the last 12 months who sometimes or never got advice to quit smoking from provider, Medicare fee-for-service	44.8	32.7	37%
Adults who had a doctor's office or clinic visit in the last 12 months whose health providers sometimes or never showed respect for what they had to say, Medicare fee-for-service	3.20	2.33	38%
Adults who needed care right away for an illness, injury, or condition in the last 12 months who sometimes or never got care as soon as wanted, Medicare fee-for-service	8.00	5.68	41%
Adult hospital patients who sometimes or never had good communication with nurses in the hospital	4.37	3.08	42%
Adults who needed to see a specialist in the last 12 months who sometimes or never found it easy to see a specialist, Medicare managed care	8.70	6.12	42%

Adult hospital patients who sometimes or never had good communication with doctors in the hospital	4.69	3.28	43%
Adults who needed to see a specialist in the last 12 months who sometimes or never found it easy to see a specialist, commercial plans	14.4	10.00	44%
Adults who had a doctor's office or clinic visit in the last 12 months whose health providers sometimes or never spent enough time with them, Medicare fee-for-service	5.80	4.00	45%
Adults who had an appointment for routine health care in the last 12 months who sometimes or never got appointments for routine care as soon as wanted, commercial plans	13.5	9.30	45%
Adults who received prescription medications for mental health treatment in the last 12 months	12.4	8.44	47%
Adults who had a doctor's office or clinic visit in the last 12 months whose health providers sometimes or never explained things in a way they could understand, commercial plans	4.60	3.13	47%
Adults who had a doctor's office or clinic visit in the last 12 months whose health providers sometimes or never listened carefully to them, commercial plans	5.50	3.70	49%
Adults who had a doctor's office or clinic visit in the last 12 months whose health providers sometimes or never spent enough time with them, Medicare managed care	7.40	4.97	49%
Hospital admissions for congestive heart failure per 100,000 population	290.9	195.4	49%
Avoidable admissions for chronic obstructive pulmonary disease per 100,000 population age 18 and over	156.8	105.1	49%

### Measures That Are Far From Benchmark

Measure	Estimate	Benchmark	Distance to Benchmark
Long-stay nursing home residents whose depression or anxiety increased	5.50	3.66	50%
Hospitals with computerized system that supports pharmaceutical bar coding	34.4	70.7	51%
Adults who had a doctor's office or clinic visit in the last 12 months whose health providers sometimes or never showed respect for what they had to say, commercial plans	4.30	2.80	54%
Adults who needed care right away for an illness, injury, or condition in the last 12 months who sometimes or never got care as soon as wanted,	11.0	7.15	54%

commercial plans

Rating of health care 0-6 on a scale from 0 to 10 (best grade) by adults who had a doctor's office or clinic visit in the last 12 months, commercial plans	11.8	7.57	56%
Obstetric trauma per 1,000 instrument-assisted deliveries	178.5	114.3	56%
Adults who had a doctor's office or clinic visit in the last 12 months who sometimes or never got advice to quit smoking from provider, commercial plans	47.1	29.3	61%
Hospital admissions for long-term complications of diabetes per 100,000 population, adults	99.4	61.8	61%
End stage renal disease (ESRD) due to diabetes per million population	115.3	71.0	62%
Adult home health care patients who had to be admitted to the hospital	29.0	17.7	64%
Adults who needed care right away for an illness, injury, or condition in the last 12 months who sometimes or never got care as soon as wanted, Medicare managed care	9.60	5.80	66%
Potentially avoidable hospitalizations for chronic conditions	683.3	409.5	67%
Rate of U.S. active non-Federal general nurse practitioners per 100,000 population	26.4	88.1	70%
Hospital admissions for asthma per 100,000 population, age 65 and over	188.1	107.4	75%
Obstetric trauma per 1,000 vaginal deliveries without instrument assistance	31.5	17.9	76%
Adult home health care patients who received urgent, unplanned medical care	27.1	15.2	79%
Adults who received outpatient mental health treatment or counseling in the last 12 months	9.20	5.08	81%
Home health care patients who had an emergency department visit and then hospitalized	21.7	11.9	82%
People age 12 and over who received any treatment for illicit drug or alcohol abuse in the last 12 months	2.10	1.14	84%
Home health care patients who had an emergency department visit without hospitalization	5.40	2.86	89%
Hospital admissions for asthma per 100,000 population, adults	108.8	55.3	97%
Hospital admissions for uncontrolled diabetes without complications per 100,000 population, adults, HCUP data	9.90	4.55	118%
Birth trauma - injury to neonate per 1,000 selected live births	3.40	1.55	119%

Hospital admissions for asthma per 100,000 population, ages 2-17	110.0	49.9	120%
HIV infection deaths per 100,000 population	2.00	0.90	122%
Adults who needed to see a specialist in the last 6 months who sometimes or never found it easy to see a specialist, Medicaid	40.3	18.1	122%
Avoidable admissions for hypertension per 100,000 population age 18 and over	38.6	16.1	139%
Long-stay nursing home residents with physical restraints	1.70	0.68	150%
New AIDS cases per 100,000 population age 13 and over	10.6	2.80	279%

Measures With No Available Benchmark Information

Measure	Estimate	Benchmark	Distance to Benchmark
Patients under age 70 with treated chronic kidney failure who received a transplant within 3 years of date of renal failure	19.7		
The rate of Ryan-White HIV patients with at least one HIV care visit and at least one ambulatory visit date and prescribed HAART during the year during the year	77.9		
The rate of Ryan-White HIV patients with at least one HIV care visit and at least 2 ambulatory visit dates at least 90 days apart during the year	77.6		
The rate of Ryan-White HIV patients with at least one HIV care visit and most recent viral load 200 during the year	71.0		
Adolescents ages 16-17 who received 3 or more doses human papillomavirus vaccine, either quadrivalent or bivalent	70.7		
Adults who had a doctor's office or clinic visit in the last 6 months who sometimes or never got advice to quit smoking from provider, Medicaid	56.4		
Long-stay nursing home residents whose ability to move about in and around their room decreased	16.1		
Long-stay nursing home residents with most of their time spent in bed or in a chair	2.12		
Short-stay nursing home residents with delirium	2.20		
Low-risk, long-stay nursing home residents with pressure sores	1.32		
Central line-associated bloodstream infection per 1,000 central line-days in all intensive care units	0.69		
Reclosure of postoperative abdominal wound dehiscence per 1,000 abdominopelvic-surgery admissions of length 2 or more days, adults	1.80		
Adults who needed care right away for an illness, injury, or condition in the last 6 months who sometimes or never got care as soon as wanted, Medicaid	26.4		
Adults who had an appointment for routine health care in the last 6 months who sometimes or never got appointments for routine care as soon as wanted, Medicaid	27.1		
Hospital patients with heart attack who received fibrinolytic medication within 30 minutes of arrival	48.4		
Children who had an appointment for routine health care in the last 6 months who sometimes or never got appointments for routine care as soon as wanted, Medicaid	17.6		
Children who had a doctor's office or clinic visit in the last 6 months whose health providers sometimes or never listened carefully, Medicaid	7.00		

Adults who had a doctor's office or clinic visit in the last 12 months whose health providers sometimes or never listened carefully to them, Medicaid	7.20
Adults who had a doctor's office or clinic visit in the last 6 months whose health providers sometimes or never explained things in a way they could understand, Medicaid	9.80
Children who had a doctor's office or clinic visit in the last 6 months whose health providers sometimes or never explained things clearly, to child, Medicaid	6.80
Rating of health care 0-6 on a scale from 0 to 10 (best grade) by adults who had a doctor's office or clinic visit in the last 12 months, Medicaid	19.6
Children who had a doctor's office or clinic visit in the last 6 months whose health providers sometimes or never showed respect for what they or their parents had to say, Medicaid	5.20
Children who had a doctor's office or clinic visit in the last 6 months whose health providers sometimes or never spent enough time with them, Medicaid	11.5
Children who needed care right away for an illness, injury, or condition in the last 6 months who sometimes or never got care as soon as wanted, Medicaid	14.8
Children who had a doctor's office or clinic visit in the last 6 months whose health providers sometimes or never explained things clearly, to their parents, Medicaid	6.30
Adults who had a doctor's office or clinic visit in the last 6 months whose health providers sometimes or never spent enough time with them, Medicaid	13.5
Rating of health care 0-6 on a scale from 0 to 10 (best grade) by parents for children who had a doctor's office or clinic visit in the last 6 months, Medicaid	7.60
Adults who had a doctor's office or clinic visit in the last 6 months whose health providers sometimes or never showed respect for what they had to say, Medicaid	6.50
Children who needed to see a specialist in the last 6 months who sometimes or never found it easy to see a specialist, Medicaid	24.5