

# 2021 National Healthcare Quality and Disparities Report Appendixes

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## U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

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AHRQ Publication No. 21(22)-0054-EF

December 2021

<https://www.ahrq.gov/research/findings/nhqdr/index.html>



## **APPENDIX A. DATA SOURCES USED FOR 2021 NHQDR**

The National Healthcare Quality and Disparities Report (NHQDR) is a comprehensive national overview of quality of healthcare in the United States. The report also examines disparities in healthcare among priority populations, such as racial and ethnic minority groups. The report is compiled from multiple federal, state, and private data sources, including databases and surveys.

### **Federal Sources of Data**

#### **Agency for Healthcare Research and Quality**

- Healthcare Cost and Utilization Project (HCUP) (see next page for details)
- Medical Expenditure Panel Survey (MEPS)
- National CAHPS® Benchmarking Database (NCBD) – Health Plan Survey Database
- National Patient Safety Database (NPSD)

#### **Centers for Disease Control and Prevention**

- Behavioral Risk Factor Surveillance System (BRFSS)
- National Ambulatory Medical Care Survey (NAMCS)
- National Health and Nutrition Examination Survey (NHANES)
- National Health Interview Survey (NHIS)
- National HIV Surveillance System (NHSS)
- National Hospital Ambulatory Medical Care Survey (NHAMCS)
- National Immunization Survey (NIS)
- National Program of Cancer Registries (NPCR)
- National Tuberculosis Surveillance System (NTSS)
- National Vital Statistics System—Linked Birth and Infant Death Data (NVSS-L)
- National Vital Statistics System—Mortality (NVSS-M)
- National Vital Statistics System—Nativity (NVSS-N)

#### **Centers for Medicare & Medicaid Services**

- Hospital Inpatient Quality Reporting (HIQR) Program

#### **Health Resources and Services Administration**

- Uniform Data System (UDS)
- HIV/AIDS Bureau - Ryan White HIV/AIDS Program

#### **Indian Health Service**

- Indian Health Service National Data Warehouse (NDW)

#### **National Institutes of Health**

- United States Renal Data System (USRDS)

#### **Substance Abuse and Mental Health Services Administration**

- National Survey on Drug Use and Health (NSDUH)
- Substance Use Disorder Treatment Episode Data Set (TEDS)

## Multi-Agency Data Sources

### Centers for Medicare & Medicaid Services and Agency for Healthcare Research and Quality

- Home Health Consumer Assessment of Healthcare Providers and Systems (HCHAHS)
- Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS)
- Medicare Patient Safety Monitoring System (MPSMS)

## Academic Institutions

### University of Michigan

- University of Michigan Kidney Epidemiology and Cost Center (UMKECC)

## Professional Organizations and Associations

### Commission on Cancer and American Cancer Society

- National Cancer Data Base (NCDB)

## Additional Information on Agency for Healthcare Research and Quality HCUP Partners

The State Inpatient Databases (SID) disparities analysis file was created from SID data to provide national estimates for the NHQDR. It consists of weighted records from a sample of hospitals from the following 36 states participating in the Healthcare Cost and Utilization Project (HCUP) that have high-quality race/ethnicity data: AR, AZ, CA, CO, CT, DC,<sup>i</sup> FL, GA, HI, IA, IL, IN, KS, KY, MD, MI, MO, NC, NJ, NM, NV, NY, OK, OR, PA, RI, SC, SD, TN, TX, VA, VT, WA, WI, WV, and WY.

In 2014, the 36 states accounted for 80% of U.S. discharges from community, nonrehabilitation hospitals (based on the American Hospital Association Annual Survey). A full list of HCUP partners appears below, including states that are not part of the disparities analysis file.

### Sources of HCUP Data

- Alaska Department of Health and Social Services
- Alaska State Hospital and Nursing Home Association
- Arizona Department of Health Services
- Arkansas Department of Health
- California Office of Statewide Health Planning and Development
- Colorado Hospital Association
- Connecticut Hospital Association
- District of Columbia Hospital Association
- Florida Agency for Health Care Administration
- Georgia Hospital Association
- Hawaii Health Information Corporation

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<sup>i</sup> For purposes of the NHQDR, the District of Columbia is treated as a state.

- Illinois Department of Public Health
- Indiana Hospital Association
- Iowa Hospital Association
- Kansas Hospital Association
- Kentucky Cabinet for Health and Family Services
- Louisiana Department of Health
- Maine Health Data Organization
- Maryland Health Services Cost Review Commission
- Massachusetts Center for Health Information and Analysis
- Michigan Health and Hospital Association
- Minnesota Hospital Association
- Mississippi State Department of Health
- Missouri Hospital Industry Data Institute
- Montana Hospital Association
- Nebraska Hospital Association
- Nevada Department of Health and Human Services
- New Hampshire Department of Health and Human Services
- New Jersey Department of Health
- New Mexico Department of Health
- New York State Department of Health
- North Carolina Department of Health and Human Services
- North Dakota (data provided by the Minnesota Hospital Association)
- Ohio Hospital Association
- Oklahoma State Department of Health
- Oregon Association of Hospitals and Health Systems
- Oregon Office of Health Analytics
- Pennsylvania Health Care Cost Containment Council
- Rhode Island Department of Health
- South Carolina Revenue and Fiscal Affairs Office
- South Dakota Association of Healthcare Organizations
- Tennessee Hospital Association
- Texas Department of State Health Services
- Utah Department of Health
- Vermont Association of Hospitals and Health Systems
- Virginia Health Information
- Washington State Department of Health
- West Virginia Health Care Authority
- Wisconsin Department of Health Services
- Wyoming Hospital Association

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## APPENDIX B. DEFINITIONS AND ABBREVIATIONS USED IN 2021 NHQDR

### Definitions

#### Racial and Ethnic Groups

Racial and ethnic groups are defined according to Standards for the Classification of Federal Data on Race and Ethnicity, issued by the Office of Management and Budget (available at <https://www.gpo.gov/fdsys/granule/FR-1997-10-30/97-28653>).

The basic racial and ethnic categories for federal statistics and program administrative reporting are defined as follows:

1. **American Indian or Alaska Native (AI/AN).** A person having origins in any of the original peoples of North and South America (including Central America) and who maintains tribal affiliation or community attachment.
2. **Asian.** A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.
3. **Black or African American.** A person having origins in any of the Black racial groups of Africa. Terms such as “Haitian” can be used in addition to “Black or African American.”
4. **Hispanic or Latino.** A person of Cuban, Mexican, Puerto Rican, Central or South American, or other Spanish culture or origin, regardless of race. The term “Spanish origin” can be used in addition to “Hispanic or Latino.”
5. **Native Hawaiian/Pacific Islander (NHPI).** A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.
6. **White.** A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

#### Income

Income groups are based on the federal poverty level (FPL) for a family of four:

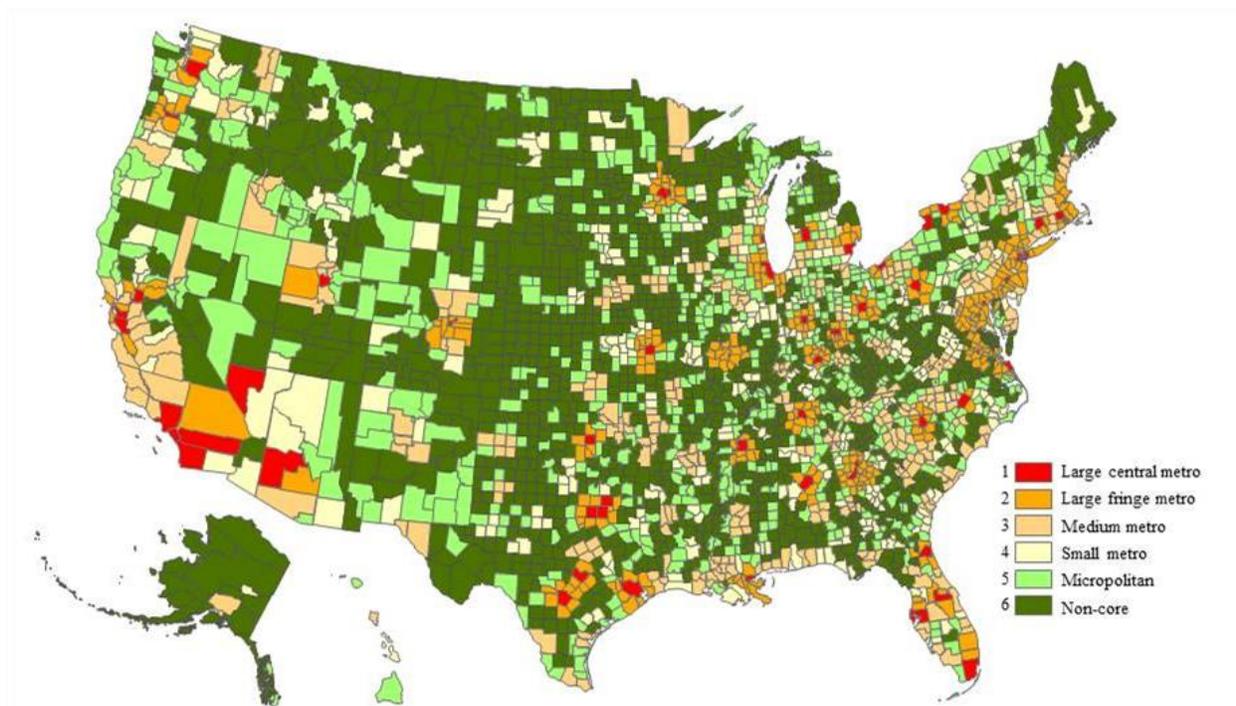
- • Poor: Less than 100% of FPL
- • Low income: 100% to less than 200% of FPL
- • Middle income: 200% to less than 400% of FPL
- • High income: 400% or more of FPL

The poverty guidelines are available at <https://aspe.hhs.gov/poverty-guidelines>.

## Urban-Rural Areas

Urban and rural areas are defined based on the National Center for Health Statistics 2013 Urban-Rural Classification Scheme.

**Figure B-1. Map Showing 2013 NCHS Urban-Rural County Classifications in the United States**



- Metropolitan counties:
  - Large central metro counties in metropolitan statistical area (MSA) of 1 million or more population that: (1) contain the entire population of the largest principal city of the MSA, or (2) are completely contained within the largest principal city of the MSA, or (3) contain at least 250,000 residents of any principal city in the MSA
  - Large fringe metro counties in MSA of 1 million or more population that do not qualify as large central.
  - Medium metro counties in MSA of 250,000-999,999 population.
  - Small metro counties in MSAs of less than 250,000 population.
- Nonmetropolitan counties:
  - Micropolitan: Counties in a micropolitan statistical area.
  - Noncore: Nonmetropolitan counties that are not in a micropolitan statistical area.

More information is available at [https://www.cdc.gov/nchs/data\\_access/urban\\_rural.htm](https://www.cdc.gov/nchs/data_access/urban_rural.htm).

## Disabilities

Disability status is defined by following the methodology of the American Community Survey, which is different from the Activity Limitation used in the 2007-2018 NHQDR.

- Adults age 18 and over are defined as with disability if one reported with serious difficulty in hearing, serious difficulty in vision, serious cognitive difficulty, serious difficulty in walking or climbing stairs, difficulty in dressing or bathing, and difficulty in doing errands.
- Children with special health care needs (CSHCN): Children ages 0-17 with activity limitations or need or use of more healthcare or other services than is usual for most children of the same age. Question sequences<sup>ii</sup> are asked about the following five health consequences: the need or use of medicines prescribed by a doctor; the need or use of more medical care, mental health care, or education services than is usual for most children; limitations or inability to do things most children can do; the need or use of special therapy, such as physical, occupational, or speech therapy; and the need or use of treatment or counseling for emotional, developmental, or behavioral problems. Children with responses to at least one of the five health consequences were identified as having a special health care need.

## Abbreviations Used in the NHQDR

- AAA: abdominal aortic aneurysm
- ACIP: Advisory Committee on Immunization Practices
- ADE: adverse drug event
- AI/AN: American Indian or Alaska Native
- API: Asian and Pacific Islander
- BMI: body mass index
- BRFSS: Behavioral Risk Factor Surveillance System
- CAH: critical access hospital
- CAHPS: Consumer Assessment of Healthcare Providers and Systems
- CAP: community-acquired pneumonia
- CHIP: Children's Health Insurance Program
- CLAS: culturally and linguistically appropriate services
- COPD: chronic obstructive pulmonary disease
- ED: emergency department
- EMT: emergency medical technician
- FFS: fee for service
- FPL: Federal Poverty Level
- HCUP: Healthcare Cost & Utilization Project
- HCAHPS: Hospital Consumer Assessment of Healthcare Providers and Systems
- HHCAHPS: Home Health Consumer Assessment of Healthcare Providers and Systems

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<sup>ii</sup> A CSHCN Screener instrument was developed through a national collaborative process as part of the Child and Adolescent Health Measurement Initiative coordinated by the Foundation for Accountability. For more information, refer to Bethell CD, Read D, Stein REK, et al. Identifying children with special health care needs: development and evaluation of a short screening instrument. *Ambul Pediatr* 2002 Feb;2(1):38-48. <https://www.ncbi.nlm.nih.gov/pubmed/11888437>. Accessed May 23, 2019.

- HHS: U.S. Department of Health and Human Services
- HIQR: Hospital Inpatient Quality Reporting program
- HIVAIDSS: HIV/AIDS Surveillance System
- HPV: human papillomavirus
- ICD-9: International Classification of Diseases, Ninth Revision
- ICD-10: International Classification of Diseases, Tenth Revision
- IOM: Institute of Medicine
- LMWH: low-molecular-weight heparin
- MA: Medicare Advantage
- MDS: Minimum Data Set
- MEPS: Medical Expenditure Panel Survey
- MPSMS: Medicare Patient Safety Monitoring System
- MSA: metropolitan statistical area
- NAMCS: National Ambulatory Medical Care Survey
- NCBD: National CAHPS Benchmarking Database
- NCAPPS: National Center on Advancing Person-Centered Practices and Systems
- NCDB: National Cancer Data Base
- NEDS: National Emergency Department Sample
- NHAMCS: National Hospital Ambulatory Medical Care Survey
- NHANES: National Health and Nutrition Examination Survey
- NHIS: National Health Interview Survey
- NHPI: Native Hawaiian/Pacific Islander
- NHQDR: National Healthcare Quality and Disparities Report
- NICU: neonatal intensive care unit
- NIDDK: National Institute of Diabetes and Digestive and Kidney Diseases
- NIS: National Immunization Survey
- NPCR-USCS: National Program of Cancer Registries – U.S. Cancer Statistics
- NPSD: National Patient Safety Databases
- NSDUH: National Survey on Drug Use and Health
- NTBSS: National Tuberculosis Surveillance System
- NVSS-M: National Vital Statistics System - Mortality
- OASIS: Outcome and Assessment Information Set
- OCR: Office for Civil Rights
- PA: physician assistant
- PSO: Patient Safety Organization
- RWHAP: Ryan White HIV/AIDS Program
- SHPEP: Summer Health Professionals Education Program
- SID: State Inpatient Databases
- TEDS: Treatment Episode Data Set
- UM-KECC: University of Michigan Kidney Epidemiology and Cost Center
- USC: usual source of care
- USRDS: U.S. Renal Data System
- YPLL: years of potential life lost

## Agencies and Offices in the U.S. Department of Health and Human Services

- AHRQ: Agency for Healthcare Research and Quality
  - CFACT: Center for Financing, Access, and Cost Trends
  - CQuIPS: Center for Quality Improvement and Patient Safety
  - OC: Office of Communications
  - OEREP: Office of Extramural Research, Education, and Priority Populations
- ACL: Administration for Community Living
- ASPE: Office of the Assistant Secretary for Planning and Evaluation
- CDC: Centers for Disease Control and Prevention
  - NCHS: National Center for Health Statistics
  - NPCR: National Program of Cancer Registries
  - NCCDPHP-ONDIEH: National Center for Chronic Disease Prevention and Health Promotion, Office of Noncommunicable Diseases, Injury, and Environmental Health
- CMS: Centers for Medicare & Medicaid Services
- FDA: Food and Drug Administration
- HRSA: Health Resources and Services Administration
- IHS: Indian Health Service
- NIH: National Institutes of Health
  - NCI: National Cancer Institute
  - NIDA: National Institute on Drug Abuse
  - NIMHD: National Institute on Minority Health and Health Disparities
  - OD-ORWH: Office of the Director-Office of Research on Women's Health
- OASH: Office of the Assistant Secretary for Health
- SAMHSA: Substance Abuse and Mental Health Services Administration

## Other Federal Agencies

- VHA: Veterans Health Administration

## Private Organizations

- ACS NSQIP: American College of Surgeons National Surgical Quality Improvement Program

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## APPENDIX C: MEASURES USED IN THE 2021 STATE MAPS

### Disparities Map

Measure Title	Data Source	Data Year
Sepsis diagnoses per 1,000 elective-surgery admissions of length 4 or more days, adults	HCUP	2018
Reclosure of postoperative abdominal wound dehiscence per 1,000 abdominopelvic-surgery admissions of length 2 or more days, adults	HCUP	2018
Home health care patients whose surgical wound was improved	OASIS	2018
Hospital admissions with iatrogenic pneumothorax per 1,000 medical and surgical admissions, adults	HCUP	2018
Deaths per 1,000 elective-surgery admissions having developed specified complications of care during hospitalization, adults ages 18-89 or obstetric admissions	HCUP	2018
Deaths per 1,000 hospital admissions with expected low-mortality	HCUP	2018
Home health care patients whose management of oral medications improved	OASIS	2018
Birth trauma - injury to neonate per 1,000 selected live births	HCUP	2018
High-risk, long-stay nursing home patients with pressure ulcer	MDS	2018
Low-risk, long-stay nursing home residents with a catheter inserted and left in the bladder	MDS	2018
Long-stay nursing home residents with a urinary tract infection	MDS	2018
Long-stay nursing home patients experiencing one or more falls with major injury	MDS	2018
Short-stay nursing home patients with pressure ulcers that are new or worsened	MDS	2018
Adults who reported a home health care provider talking with them about how to set up their home so they can move around safely when they first started getting home health care	HHCAHPS	2019
Adults who reported a home health care provider talking with them about all the prescription and over-the-counter medicines they were taking when they first started getting home health care	HHCAHPS	2019
Adults who reported a home health care provider asking to see all the prescription and over-the-counter medicines they were taking, when they first started getting home health care	HHCAHPS	2019
Adults who reported that home health care providers talked with them about the purpose for taking their new or changed prescription medicines in the last 2 months of care	HHCAHPS	2019
Adults who reported that home health care providers talked with them about when to take medicines in the last 2 months of care	HHCAHPS	2019
Adults who reported that home health care providers talked with them about the side effects of medicines in the last 2 months of care	HHCAHPS	2019
Adult hospital patients who sometimes or never had good communication about medications they received in the hospital	HCAHPS	2019

<b>Measure Title</b>	<b>Data Source</b>	<b>Data Year</b>
Adults who reported being told what care and services they would get when they first started getting home health care	HHCAHPS	2019
Adults who reported that home health care providers talk about pain in the last 2 months of care	HHCAHPS	2019
Adults who reported that home health care providers always kept them informed about when they would arrive at their home in the last 2 months of care	HHCAHPS	2019
Adults who reported that home health care providers always treated them as gently as possible in the last 2 months of care	HHCAHPS	2019
Adults who reported that home health care providers always explained things in a way that was easy to understand in the last 2 months of care	HHCAHPS	2019
Adults who reported that home health care providers always listen carefully to them in the last 2 months of care	HHCAHPS	2019
Adults who reported that home health care providers always treated them with courtesy and respect in the last 2 months of care	HHCAHPS	2019
Adults who reported getting the help or advice they needed when they contacted their home health care providers in the last 2 months of care	HHCAHPS	2019
Adults who did not have any problem with the care they received from their home health care providers in the last 2 months of care	HHCAHPS	2019
Adult hospital patients who did not receive good communication about discharge information	HCAHPS	2019
Adult hospital patients who strongly disagree or disagree that staff took their preferences and those of their family and caregiver into account when deciding what the patients discharge health care would be	HCAHPS	2019
Hospital admissions for uncontrolled diabetes without complications per 100,000 population, adults	HCUP	2018
Hospital admissions for short-term complications of diabetes per 100,000 population, adults	HCUP	2018
Hospital admissions for short-term complications of diabetes per 100,000 population, children ages 6-17	HCUP	2018
Hospital admissions for long-term complications of diabetes per 100,000 population, adults	HCUP	2018
Hospital admissions for lower extremity amputations per 1,000 population, adults age 18 and over with diabetes	HCUP	2018
Hospital admissions for asthma per 100,000 population, adults ages 18-39	HCUP	2018
Hospital admissions for asthma per 100,000 population, children ages 2-17	HCUP	2018
Home health care patients who had an emergency department visit and then hospitalized	OASIS	2018
Home health care patients who had an emergency department visit without a hospitalization	OASIS	2018
Home health care patients who had to be admitted to the hospital	OASIS	2018
Home health care patients who had timely initiation of care	OASIS	2018

<b>Measure Title</b>	<b>Data Source</b>	<b>Data Year</b>
Adults who reported that home health care providers always seem informed and up-to-date about all the cares or treatments they got at home in the last 2 months of care	HHCAHPS	2019
Hospital admissions for hypertension per 100,000 population, adults age 18 and over	HCUP	2018
Hospital admissions for chronic obstructive pulmonary disease or asthma per 100,000 population, adults age 40 and over	HCUP	2018
Hospital admissions for community-acquired pneumonia per 100,000 population, adults age 18 and over	HCUP	2018
Deaths per 1,000 adult hospital admissions with acute myocardial infarction (AMI)	HCUP	2018
Hospital admissions for heart failure per 100,000 population	HCUP	2018
Deaths per 1,000 adult hospital admissions with heart failure	HCUP	2018
Deaths per 1,000 adult hospital admissions with abdominal aortic aneurysm (AAA) repair	HCUP	2018
Deaths per 1,000 hospital admissions with coronary artery bypass surgery, adults age 40 and over	HCUP	2018
Deaths per 1,000 hospital admissions with percutaneous coronary intervention (PCI), age 40 and over	HCUP	2018
Adults age 40 and over with diagnosed diabetes who received at least two hemoglobin A1c measurements in the calendar year	BRFSS	2019
Adults age 40 and over with diagnosed diabetes who received a dilated eye examination in the calendar year	BRFSS	2019
Adults age 40 and over with diagnosed diabetes who had their feet checked for sores or irritation in the calendar year	BRFSS	2019
Adults age 40 and over with diagnosed diabetes who received a flu vaccination in the calendar year	BRFSS	2019
Long-stay nursing home residents have depressive symptoms	MDS	2018
Deaths per 1,000 adult hospital admissions with pneumonia	HCUP	2018
Home health care patients whose ability to walk or move around improved	OASIS	2018
Home health care patients whose ability to get in and out of bed improved	OASIS	2018
Home health care patients whose bathing improved	OASIS	2018
Home health care patients who had improvement in toileting	OASIS	2018
Long-stay nursing home residents whose need for help with daily activities increased	MDS	2018
Long-stay nursing home residents whose ability to move independently worsened	MDS	2018
Long-stay nursing home residents with too much weight loss	MDS	2018
Low-risk, long-stay nursing home residents with loss of control of bowels or bladder	MDS	2018
Long-stay nursing home residents with physical restraints	MDS	2018
Home health care patients whose shortness of breath decreased	OASIS	2018

<b>Measure Title</b>	<b>Data Source</b>	<b>Data Year</b>
Home health care patients who stayed at home after an episode of home health care	OASIS	2018
Home health care patients who had improvement in upper body dressing	OASIS	2018
Home health care patients who had improvement in confusion frequency	OASIS	2018
Home health care patients whose pain when moving around decreased	OASIS	2018
Women ages 50-74 who received a mammogram in the last 2 years	BRFSS	2018
Women ages 21-65 who received a Pap smear in the last 3 years or human papillomavirus (HPV) vaccines in the last 5 years	BRFSS	2018
Adults who received a blood cholesterol measurement in the last 5 years	BRFSS	2019
Adults ages 18-64 at high risk (e.g., COPD) who received an influenza vaccination in the last flu season	BRFSS	2019
Adults age 65 and over who received an influenza vaccination in the last flu season	BRFSS	2019
Hospital admissions for immunization-preventable influenza per 100,000 population, adults age 65 and over	HCUP	2018
Adults ages 18-64 at high risk (e.g., COPD) who ever received pneumococcal vaccination	BRFSS	2019
Adults age 65 and over who ever received pneumococcal vaccination	BRFSS	2019
Long-stay nursing home patients who were assessed and appropriately given the seasonal influenza vaccine	MDS	2018
Long-stay nursing home residents who were assessed for pneumococcal vaccination	MDS	2018
Short-stay nursing home patients who had flu vaccination appropriately given	MDS	2018
Short-stay nursing home residents who were assessed for pneumococcal vaccination	MDS	2018
Home health care patients who had influenza vaccination during flu season	OASIS	2018
Home health care patients who had pneumococcal polysaccharide vaccination	OASIS	2018
Adults who had an appointment for routine health care in the last 6 or 12 months who sometimes or never got an appointment for routine care as soon as wanted, Medicare managed care	NCBD	2019
Adults who had an appointment for routine health care in the last 6 or 12 months who sometimes or never got an appointment for routine care as soon as wanted, Medicare fee-for-service	NCBD	2019
Adults who needed care right away for an illness, injury, or condition in the last 6 or 12 months who sometimes or never got care as soon as wanted, Medicare managed care	NCBD	2019
Adults who needed care right away for an illness, injury, or condition in the last 6 or 12 months who sometimes or never got care as soon as wanted, Medicare fee-for-service	NCBD	2019

<b>Measure Title</b>	<b>Data Source</b>	<b>Data Year</b>
Adults who needed to see a specialist in the last 6 or 12 months who sometimes or never found it easy to see a specialist, Medicare managed care	NCBD	2019
Adults who needed to see a specialist in the last 6 or 12 months who sometimes or never found it easy to see a specialist, Medicare fee-for-service	NCBD	2019
Adults who had a doctor's office or clinic visit in the last 12 months and needed care, tests, or treatment who sometimes or never found it easy to get the care, tests, or treatment, Medicare managed care	NCBD	2019
Adults who had a doctor's office or clinic visit in the last 12 months and needed care, tests, or treatment who sometimes or never found it easy to get the care, tests, or treatment, Medicare fee-for-service	NCBD	2019
Composite measure: Adults who had a doctor's office or clinic visit in the last 6 or 12 months whose health providers sometimes or never listened carefully, explained things clearly, respected what they had to say, and spent enough time with them, Medicare managed care	NCBD	2019
Composite measure: Adults who had a doctor's office or clinic visit in the last 6 or 12 months whose health providers sometimes or never listened carefully, explained things clearly, respected what they had to say, and spent enough time with them, Medicare-fee-for-service	NCBD	2019
Adults who had a doctor's office or clinic visit in the last 6 or 12 months whose health providers sometimes or never listened carefully to them, Medicare managed care	NCBD	2019
Adults who had a doctor's office or clinic visit in the last 6 or 12 months whose health providers sometimes or never listened carefully to them, Medicare fee-for-service	NCBD	2019
Adults who had a doctor's office or clinic visit in the last 6 or 12 months whose health providers sometimes or never explained things in a way they could understand, Medicare managed care	NCBD	2019
Adults who had a doctor's office or clinic visit in the last 6 or 12 months whose health providers sometimes or never explained things in a way they could understand, Medicare fee-for-service	NCBD	2019
Adults who had a doctor's office or clinic visit in the last 6 or 12 months whose health providers sometimes or never showed respect for what they had to say, Medicare managed care	NCBD	2019
Adults who had a doctor's office or clinic visit in the last 6 or 12 months whose health providers sometimes or never showed respect for what they had to say, Medicare fee-for-service	NCBD	2019
Adults who had a doctor's office or clinic visit in the last 6 or 12 months whose health providers sometimes or never spent enough time with them, Medicare managed care	NCBD	2019
Adults who had a doctor's office or clinic visit in the last 6 or 12 months whose health providers sometimes or never spent enough time with them, Medicare fee-for-service	NCBD	2019
Rating of health care 0-6 on a scale from 0 (worst grade) to 10 (best grade) by adults who had a doctor's office or clinic visit in the last 12 months, Medicare managed care	NCBD	2019

Measure Title	Data Source	Data Year
Rating of health care 0-6 on a scale from 0 (worst grade) to 10 (best grade) by adults who had a doctor's office or clinic visit in the last 12 months, Medicare fee-for-service	NCBD	2019
Adults who had a doctor's office or clinic visit in the last 6 or 12 months who sometimes or never got advice to quit smoking from provider, Medicare managed care	NCBD	2019
Adults who had a doctor's office or clinic visit in the last 6 or 12 months who sometimes or never got advice to quit smoking from provider, Medicare fee-for-service	NCBD	2019

## QUALITY MAP

Measure Title	Data Source	Data Year
Home health care patients whose surgical wound was improved	OASIS	2018
Home health care patients whose management of oral medications improved	OASIS	2018
High-risk, long-stay nursing home patients with pressure ulcer	MDS	2018
Low-risk, long-stay nursing home residents with a catheter inserted and left in the bladder	MDS	2018
Long-stay nursing home residents with a urinary tract infection	MDS	2018
Long-stay nursing home patients experiencing one or more falls with major injury	MDS	2018
Short-stay nursing home patients with pressure ulcers that are new or worsened	MDS	2018
Adults who reported a home health care provider talking with them about how to set up their home so they can move around safely when they first started getting home health care	HHCAHPS	2019
Adults who reported a home health care provider talking with them about all the prescription and over-the-counter medicines they were taking when they first started getting home health care	HHCAHPS	2019
Adults who reported a home health care provider asking to see all the prescription and over-the-counter medicines they were taking, when they first started getting home health care	HHCAHPS	2019
Adults who reported that home health care providers talked with them about the purpose for taking their new or changed prescription medicines in the last 2 months of care	HHCAHPS	2019
Adults who reported that home health care providers talked with them about when to take medicines in the last 2 months of care	HHCAHPS	2019
Adults who reported that home health care providers talked with them about the side effects of medicines in the last 2 months of care	HHCAHPS	2019
Adult hospital patients who sometimes or never had good communication about medications they received in the hospital	HCAHPS	2019
Adults who reported being told what care and services they would get when they first started getting home health care	HHCAHPS	2019

<b>Measure Title</b>	<b>Data Source</b>	<b>Data Year</b>
Adults who reported that home health care providers talk about pain in the last 2 months of care	HHCAHPS	2019
Adults who reported that home health care providers always kept them informed about when they would arrive at their home in the last 2 months of care	HHCAHPS	2019
Adults who reported that home health care providers always treated them as gently as possible in the last 2 months of care	HHCAHPS	2019
Adults who reported that home health care providers always explained things in a way that was easy to understand in the last 2 months of care	HHCAHPS	2019
Adults who reported that home health care providers always listen carefully to them in the last 2 months of care	HHCAHPS	2019
Adults who reported that home health care providers always treated them with courtesy and respect in the last 2 months of care	HHCAHPS	2019
Adults who reported getting the help or advice they needed when they contacted their home health care providers in the last 2 months of care	HHCAHPS	2019
Adults who did not have any problem with the care they received from their home health care providers in the last 2 months of care	HHCAHPS	2019
Hospice patients whose hospice care team always communicated well with their family caregivers about taking care them	HOSPICE CAHPS	2019
Hospice patients and family caregivers who always got help as soon as they need from hospice care team	HOSPICE CAHPS	2019
Hospice patients whose hospice care team always treated them with dignity and respect, and really cared about them	HOSPICE CAHPS	2019
Hospice patients who always received enough helps for pain, sadness, breathing, or constipations from hospice care team	HOSPICE CAHPS	2019
Family members who definitely received trainings about taking care their family member from hospice care team	HOSPICE CAHPS	2019
Family caregivers who received right amount of emotional and spiritual supports from hospice care team	HOSPICE CAHPS	2019
Family caregivers who rated the hospice care for their family member best (9-10) on a scale of 0-10 (where 0 is the worst and 10 is the best)	HOSPICE CAHPS	2019
Family caregivers who would definitely recommend this hospice to their friends and family	HOSPICE CAHPS	2019
Adult hospital patients who did not receive good communication about discharge information	HCAHPS	2019
Adult hospital patients who strongly disagree or disagree that staff took their preferences and those of their family and caregiver into account when deciding what the patients discharge health care would be	HCAHPS	2019
Home health care patients who had an emergency department visit and then hospitalized	OASIS	2018
Home health care patients who had an emergency department visit without a hospitalization	OASIS	2018
Home health care patients who had to be admitted to the hospital	OASIS	2018
Home health care patients who had timely initiation of care	OASIS	2018

Appendix C: Measures Used in the 2021 State Maps

<b>Measure Title</b>	<b>Data Source</b>	<b>Data Year</b>
Adults who reported that home health care providers always seem informed and up-to-date about all the cares or treatments they got at home in the last 2 months of care	HHCAHPS	2019
Women with clinical Stage I-IIb breast cancer who received axillary node dissection or sentinel lymph node biopsy at the time of breast cancer surgery (lumpectomy or mastectomy)	NCDB	2017
Women under age 70 treated for breast cancer with breast-conserving surgery who received radiation therapy to the breast within 1 year of diagnosis	NCDB	2017
Breast cancer deaths per 100,000 female population per year	NVSS_M	2018
Patients with colon cancer who received surgical resection of colon cancer that included at least 12 lymph nodes pathologically examined	NCDB	2017
Colorectal cancer deaths per 100,000 population per year	NVSS_M	2018
Lung cancer deaths per 100,000 population per year	NVSS_M	2018
Adult end stage renal disease (ESRD) patients who saw a nephrologist at least 12 months prior to initiation of renal replacement therapy	USRDS	2018
Ratio of observed deaths to expected deaths among Medicare hemodialysis patients	UMKECC	2019
Dialysis patients who were registered on a waiting list for transplantation	USRDS	2017
Patients with treated chronic kidney failure who received a transplant within 3 years of date of kidney failure	USRDS	2015
Hemodialysis patients whose hemoglobin level is less than 10 g/dL	UMKECC	2019
Adult hemodialysis patients who use arteriovenous fistulas as the primary mode of vascular access	USRDS	2018
Adults age 40 and over with diagnosed diabetes who received at least two hemoglobin A1c measurements in the calendar year	BRFSS	2019
Adults age 40 and over with diagnosed diabetes who received a dilated eye examination in the calendar year	BRFSS	2019
Adults age 40 and over with diagnosed diabetes who had their feet checked for sores or irritation in the calendar year	BRFSS	2019
Adults age 40 and over with diagnosed diabetes who received a flu vaccination in the calendar year	BRFSS	2019
New HIV cases per 100,000 population age 13 and over	HIVAIDSSS	2019
People age 13 and over living with HIV who know their serostatus	HIVAIDSSS	2019
People age 13 and over living with diagnosed HIV who had at least two CD4 or viral load tests performed at least 3 months apart during the last year, among reporting jurisdictions	HIVAIDSSS	2018
People age 13 and over living with diagnosed HIV whose most recent viral load in the last 12 months was under 200 copies/mL	HIVAIDSSS	2018
HIV infection deaths per 100,000 population	NVSS_M	2018
Adults with a major depressive episode in the last 12 months who received treatment for depression in the last 12 months	NSDUH	2019
Children ages 12-17 with a major depressive episode in the last 12 months who received treatment for depression in the last 12 months	NSDUH	2019

<b>Measure Title</b>	<b>Data Source</b>	<b>Data Year</b>
Suicide deaths among people age 12 and over per 100,000 population	NVSS_M	2018
Long-stay nursing home residents have depressive symptoms	MDS	2018
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	NSDUH	2019
People age 12 and over who needed treatment for alcohol problem who received such treatment at a specialty facility in the last 12 months	NSDUH	2019
People age 12 and over treated for substance abuse who completed treatment course	TEDSD	2018
Patients with tuberculosis who completed a curative course of treatment within 1 year of initiation of treatment	NTBSS	2017
Infants born in the calendar year who received breastfeeding exclusively through 3 months	NIS	2018
Home health care patients whose ability to walk or move around improved	OASIS	2018
Home health care patients whose ability to get in and out of bed improved	OASIS	2018
Home health care patients whose bathing improved	OASIS	2018
Home health care patients who had improvement in toileting	OASIS	2018
Long-stay nursing home residents whose need for help with daily activities increased	MDS	2018
Long-stay nursing home residents whose ability to move independently worsened	MDS	2018
Long-stay nursing home residents with moderate to severe pain	MDS	2017
Long-stay nursing home residents with too much weight loss	MDS	2018
Low-risk, long-stay nursing home residents with loss of control of bowels or bladder	MDS	2018
Long-stay nursing home residents with physical restraints	MDS	2018
Short-stay nursing home residents with moderate to severe pain	MDS	2017
Home health care patients whose shortness of breath decreased	OASIS	2018
Home health care patients who stayed at home after an episode of home health care	OASIS	2018
Home health care patients who had improvement in upper body dressing	OASIS	2018
Home health care patients who had improvement in confusion frequency	OASIS	2018
Home health care patients whose pain when moving around decreased	OASIS	2018
Women ages 50-74 who received a mammogram in the last 2 years	BRFSS	2018
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	NPCR USCS	2017
Women ages 21-65 who received a Pap smear in the last 3 years	BRFSS	2018

Appendix C: Measures Used in the 2021 State Maps

<b>Measure Title</b>	<b>Data Source</b>	<b>Data Year</b>
Cervical cancer diagnosed at advanced stage (all invasive tumors) per 100,000 women age 20 and over	NPCR USCS	2017
Colorectal cancer diagnosed at advanced stage (tumors diagnosed at regional or distant stage) per 100,000 population age 50 and over	NPCR USCS	2017
Adults who received a blood cholesterol measurement in the last 5 years	BRFSS	2019
Adults ages 18-64 at high risk (e.g., COPD) who received an influenza vaccination in the last flu season	BRFSS	2019
Adults age 65 and over who received an influenza vaccination in the last flu season	BRFSS	2019
Adults ages 18-64 at high risk (e.g., COPD) who ever received pneumococcal vaccination	BRFSS	2019
Adults age 65 and over who ever received pneumococcal vaccination	BRFSS	2019
Hospital patients who received influenza vaccination	HIQR	2018
Children ages 19-35 months who received 4 or more doses of diphtheria-tetanus-pertussis vaccine	NIS	2018
Children ages 19-35 months who received 3 or more doses of polio vaccine	NIS	2018
Children ages 19-35 months who received 1 or more doses of measles-mumps-rubella vaccine	NIS	2018
Children ages 19-35 months who received 3 or more doses of hepatitis B vaccine	NIS	2018
Children ages 19-35 months who received 1 or more doses of varicella vaccine	NIS	2018
Adolescents ages 13-15 who received 1 or more doses of meningococcal conjugate vaccine	NIS TEEN	2018
Adolescents ages 16-17 who received 1 or more doses of meningococcal conjugate vaccine	NIS TEEN	2018
Adolescents females ages 13-15 who received 3 or more doses human papillomavirus vaccine	NIS TEEN	2018
Adolescents females ages 16-17 who received 3 or more doses human papillomavirus vaccine	NIS TEEN	2018
Adolescent males ages 13-15 who received 3 or more doses of human papillomavirus (HPV) vaccine	NIS TEEN	2018
Adolescent males ages 16-17 who received 3 or more doses of human papillomavirus (HPV) vaccine	NIS TEEN	2018
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	NIS TEEN	2018
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	NIS TEEN	2018
Long-stay nursing home patients who were assessed and appropriately given the seasonal influenza vaccine	MDS	2018
Long-stay nursing home residents who were assessed for pneumococcal vaccination	MDS	2018

<b>Measure Title</b>	<b>Data Source</b>	<b>Data Year</b>
Short-stay nursing home patients who had flu vaccination appropriately given	MDS	2018
Short-stay nursing home residents who were assessed for pneumococcal vaccination	MDS	2018
Home health care patients who had influenza vaccination during flu season	OASIS	2018
Home health care patients who had pneumococcal polysaccharide vaccination	OASIS	2018
Adults who had an appointment for routine health care in the last 6 months who sometimes or never got an appointment for routine care as soon as wanted, Medicaid	NCBD	2020
Adults who had an appointment for routine health care in the last 6 or 12 months who sometimes or never got an appointment for routine care as soon as wanted, Medicare managed care	NCBD	2019
Adults who had an appointment for routine health care in the last 6 or 12 months who sometimes or never got an appointment for routine care as soon as wanted, Medicare fee-for-service	NCBD	2019
Children who had an appointment for routine health care in the last 6 months who sometimes or never got an appointment for routine care as soon as wanted, Medicaid	NCBD	2020
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	NCBD	2020
Adults who needed care right away for an illness, injury, or condition in the last 6 or 12 months who sometimes or never got care as soon as wanted, Medicare managed care	NCBD	2019
Adults who needed care right away for an illness, injury, or condition in the last 6 or 12 months who sometimes or never got care as soon as wanted, Medicare fee-for-service	NCBD	2019
Adults who needed to see a specialist in the last 6 or 12 months who sometimes or never found it easy to see a specialist, Medicare managed care	NCBD	2019
Adults who needed to see a specialist in the last 6 or 12 months who sometimes or never found it easy to see a specialist, Medicare fee-for-service	NCBD	2019
Adults who needed to see a specialist in the last 6 months who sometimes or never found it easy to see a specialist, Medicaid	NCBD	2020
Children who needed to see a specialist in the last 6 months who sometimes or never found it easy to see a specialist, Medicaid	NCBD	2020
Adults who had a doctor's office or clinic visit in the last 6 months and needed care, tests, or treatment who sometimes or never found it easy to get the care, tests, or treatment, Medicaid	NCBD	2020
Adults who had a doctor's office or clinic visit in the last 12 months and needed care, tests, or treatment who sometimes or never found it easy to get the care, tests, or treatment, Medicare managed care	NCBD	2019

Appendix C: Measures Used in the 2021 State Maps

<b>Measure Title</b>	<b>Data Source</b>	<b>Data Year</b>
Adults who had a doctor's office or clinic visit in the last 12 months and needed care, tests, or treatment who sometimes or never found it easy to get the care, tests, or treatment, Medicare fee-for-service	NCBD	2019
Children who had a doctor's office or clinic visit in the last 6 months and needed care, tests, or treatment who sometimes or never found it easy to get the care, tests, or treatment, Medicaid	NCBD	2020
Composite measure: Adults who had a doctor's office or clinic visit in the last 6 or 12 months whose health providers sometimes or never listened carefully, explained things clearly, respected what they had to say, and spent enough time with them, Medicare managed care	NCBD	2019
Composite measure: Adults who had a doctor's office or clinic visit in the last 6 or 12 months whose health providers sometimes or never listened carefully, explained things clearly, respected what they had to say, and spent enough time with them, Medicare-fee-for-service	NCBD	2019
Composite measure: Adults who had a doctor's office or clinic visit in the last 6 months whose health providers sometimes or never listened carefully, explained things clearly, respected what they had to say, and spent enough time with them, Medicaid	NCBD	2020
Composite measure: Children who had a doctor's office or clinic visit in the last 6 months whose health providers always listened carefully, explained things clearly, respected what they or their parents had to say, and spent enough time with them, Medicaid	NCBD	2020
Adults who had a doctor's office or clinic visit in the last 6 or 12 months whose health providers sometimes or never listened carefully to them, Medicare managed care	NCBD	2019
Adults who had a doctor's office or clinic visit in the last 6 or 12 months whose health providers sometimes or never listened carefully to them, Medicare fee-for-service	NCBD	2019
Adults who had a doctor's office or clinic visit in the last 6 months whose health providers sometimes or never listened carefully to them, Medicaid	NCBD	2020
Children who had a doctor's office or clinic visit in the last 6 months whose health providers always listened carefully, Medicaid	NCBD	2020
Adults who had a doctor's office or clinic visit in the last 6 or 12 months whose health providers sometimes or never explained things in a way they could understand, Medicare managed care	NCBD	2019
Adults who had a doctor's office or clinic visit in the last 6 or 12 months whose health providers sometimes or never explained things in a way they could understand, Medicare fee-for-service	NCBD	2019
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	NCBD	2020
Children who had a doctor's office or clinic visit in the last 6 months whose health providers always explained things clearly to their parents, Medicaid	NCBD	2020

<b>Measure Title</b>	<b>Data Source</b>	<b>Data Year</b>
Children who had a doctor's office or clinic visit in the last 6 months whose health providers always explained things clearly to child, Medicaid	NCBD	2020
Adults who had a doctor's office or clinic visit in the last 6 or 12 months whose health providers sometimes or never showed respect for what they had to say, Medicare managed care	NCBD	2019
Adults who had a doctor's office or clinic visit in the last 6 or 12 months whose health providers sometimes or never showed respect for what they had to say, Medicare fee-for-service	NCBD	2019
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	NCBD	2020
Children who had a doctor's office or clinic visit in the last 6 months whose health providers always showed respect for what their parents had to say, Medicaid	NCBD	2020
Adults who had a doctor's office or clinic visit in the last 6 or 12 months whose health providers sometimes or never spent enough time with them, Medicare managed care	NCBD	2019
Adults who had a doctor's office or clinic visit in the last 6 or 12 months whose health providers sometimes or never spent enough time with them, Medicare fee-for-service	NCBD	2019
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	NCBD	2020
Children who had a doctor's office or clinic visit in the last 6 months whose health providers always spent enough time with them, Medicaid	NCBD	2020
Rating of health care 0-6 on a scale from 0 (worst grade) to 10 (best grade) by adults who had a doctor's office or clinic visit in the last 12 months, Medicare managed care	NCBD	2019
Rating of health care 0-6 on a scale from 0 (worst grade) to 10 (best grade) by adults who had a doctor's office or clinic visit in the last 12 months, Medicare fee-for-service	NCBD	2019
Rating of health care 0-6 on a scale from 0 (worst grade) to 10 (best grade) by adults who had a doctor's office or clinic visit in the last 12 months, Medicaid	NCBD	2020
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	NCBD	2020
Adults who had a doctor's office or clinic visit in the last 6 or 12 months who sometimes or never got advice to quit smoking from provider, Medicare managed care	NCBD	2019
Adults who had a doctor's office or clinic visit in the last 6 or 12 months who sometimes or never got advice to quit smoking from provider, Medicare fee-for-service	NCBD	2019