2022 NATIONAL HEALTHCARE QUALITY AND DISPARITIES REPORT DETAILED METHODS FOR MEDICAL EXPENDITURE PANEL SURVEY TABLES

Background

The Medical Expenditure Panel Survey (MEPS) is designed to provide nationally representative estimates of healthcare use, expenditures, sources of payment, and insurance coverage for the U.S. civilian noninstitutionalized population. MEPS is cosponsored by the Agency for Healthcare Research and Quality (AHRQ) and the National Center for Health Statistics (NCHS). MEPS comprises three component surveys: the Household Component (HC), the Medical Provider Component (MPC), and the Insurance Component (IC). The HC is the core survey of MEPS. For the remainder of the document, the term MEPS refers to MEPS-HC.

MEPS collects medical expenditure data at both the person and household levels. MEPS collects detailed data on:

- Demographic characteristics,
- Health conditions,
- Health status, including adult disability status (as measured by activity limitations),
- Use of medical care services,
- Charges and payments,
- Access to care,
- Satisfaction with care,
- Health insurance coverage, Income, and
- Employment.

MEPS uses an overlapping panel design in which data are collected through a preliminary contact followed by a series of five rounds of interviews over a 2½-year period. Through the use of computer-assisted personal interviewing technology, data on medical expenditures and use for 2 calendar years are collected from each household. This series of data collection rounds is launched each year on a new sample of households to provide overlapping panels of survey data and, when combined with other ongoing panels, will provide continuous and current estimates of healthcare expenditures.

The sample of households selected for the MEPS is drawn from respondents to the National Health Interview Survey (NHIS), conducted by NCHS. NHIS provides a nationally representative sample of the U.S. civilian noninstitutionalized population, with oversampling of Hispanic, Black, and Asian groups starting in 2006.

Each new MEPS panel includes some oversampling in the NHIS sample of population groups of particular analytic interest. Since 2010 (Panel 15), the set of MEPS sample domains has included oversamples of Asian, Black, and Hispanic groups. White and other race households have been subsampled at varying rates across the years.

Beginning with the panel initiated in 2011 (Panel 16), a new sample domain was created by dividing what in prior years had been a single domain, the "White/other" domain, into two domains, one consisting of NHIS "partial completes," the other of NHIS "completes." The partial completes are sampled at a lower rate than the completes.

For more detailed information about MEPS and the information discussed here, refer to documentation for the MEPS Full Year Consolidated Data Files, available at https://www.meps.ahrq.gov/mepsweb.

Time Period

National healthcare estimates from MEPS for the *2022 National Healthcare Quality and Disparities Report* (NHQDR) were derived from the 2002-2019 MEPS data. The NHQDR measures include MEPS data from the Self-Administered Questionnaire (SAQ), the Child Health and Preventive Care section, the Diabetes Care Survey (DCS) and the supplemental surveys.

The SAQ is a supplement for MEPS that includes healthcare quality measures taken from the health plan version of the Consumer Assessment of Healthcare Providers and Systems (CAHPS®). CAHPS is an AHRQ-sponsored family of survey instruments designed to measure quality of care from the consumer's perspective; general health questions; attitudes about health questions; and health status questions as measured by the SF-12 and the EuroQol 5D.

The Child Health and Preventive Care section is part of the regular MEPS interview. It includes:

- Healthcare quality measures taken from the health plan version of CAHPS;
- Children with Special Health Care Needs (CSHCN) Screener questions;
- Children's general health status as measured by several questions from the General Health Subscale of the Child Health Questionnaire;
- Columbia Impairment Scale questions about possible child behavioral problems; and
- Child preventive care questions.

Researchers should note that the CAHPS and CSHCN questions changed from a self-administered parent questionnaire in 2000 to an interviewer-administered questionnaire starting in 2001.

Another supplement for MEPS, the DCS, is a self-administered questionnaire given to people identified with diabetes. It questions respondents about the care they received in the treatment of their diabetes.

Population Characteristics

Estimates derived from MEPS are presented at both an aggregate level and for select subpopulations. Characteristics used to define subpopulations include:

- Age,
- Gender,
- Race,
- Ethnicity,
- Family income,
- Education,
- Health insurance,
- Medicaid/Children's Health Insurance Program (CHIP) for people under age 65,
- Residence location,
- Employment status,
- Perceived health status,
- CSHCN,
- Adult disability status as measured by activity limitations,
- Language spoken at home/language spoken most often at home,
- Whether U.S. born,
- Usual primary care provider,
- CAHPS composite measure,
- Adults age 65 and over who received potentially inappropriate prescription medications in the calendar year, and
- Financial burden of healthcare costs and underinsurance.

A brief description of how each of these population characteristics was defined is provided below.

Age—With the exception of analytic variables associated with round-specific questions noted below, age was defined as a person's age on December 31 of the data year.

For measures using analytic variables associated with round-specific questions (e.g., questions from the SAQ, the Child Health and Preventive Care supplement, and access-to-care measures), corresponding round-specific age variables were exclusively used to determine age.

Gender—Male or female.

Race—MEPS tables are shown starting with 2002 data, the year MEPS transitioned to the Office of Management and Budget (OMB) standards issued in 1997 for collecting racial and ethnic data. The new standards allow respondents to identify more than one racial group (https://obamawhitehouse.archives.gov/omb/fedreg_1997standards). For all tables, race was classified into five single race categories and a multiple-race category, as follows: (1) White, (2) Black, (3) Asian, (4) Native Hawaiian or Other Pacific Islander, (5) American Indian or Alaska Native, and (6) multiple races. Because of differences in the classification of race, racial estimates reported using MEPS data from 2002 and subsequent years are not directly comparable with estimates that use data prior to 2002.

Ethnicity—Ethnicity was designated as either Hispanic or non-Hispanic. People of Hispanic origin may be of any race. Estimates were derived for both Hispanic and non-Hispanic subpopulations. In addition, race was combined with ethnicity to enable estimation of data for categories that include non-Hispanic White, non-Hispanic Black, and non-Hispanic other. For 2002 and later years, non-Hispanic White and non-Hispanic Black categories excluded multiple-race individuals. Beginning with the 2019 NHQDR, non-Hispanic Asian data were also analyzed.

Family income—MEPS includes a five-level categorical variable for family income as a percentage of the poverty guideline (PG). For construction of this variable, definitions of income, family, and poverty were taken from the poverty statistics developed by the Current Population Survey. For the purposes of analysis and reporting in the NHQDR, the near-poor and low-income categories were combined. This approach resulted in a four-level categorical variable of poverty status: (1) household incomes below the PG; (2) the PG to just below 200% of the PG; (3) 200% to just below 400% of the PG; and (4) 400% or more of the PG.

Education—The education variable was constructed only for people age 18 years and over and any measure presented for the education subpopulations includes only people in this age group. Reporting of educational attainment is based on the number of completed years of education when they first entered MEPS. For the NHQDR, this measure was grouped into three categories: (1) less than high school refers to people with less than 12 completed years of education; (2) high school graduate, people with exactly 12 completed years of education; and (3) at least some college, people with greater than 12 completed years of education. A different education question was asked in 2012-2014 and used to produce estimates for the same three categories.

Health insurance coverage—Insurance coverage was constructed in a hierarchical manner and in relation to a person's age. For the population under age 65, those who were uninsured for the entire year were classified as "uninsured"; those who had any private coverage at any time during the year (including TRICARE/CHAMPVA) were classified as having "private insurance"; and those who had only public coverage (i.e., no private) at any time during the year were classified as "public only."

The population age 65 and over was classified as "Medicare only," "Medicare and private," or "Medicare and other public assistance." A small number of people age 65 and over were found to only have private insurance or to be uninsured. This residual group was not shown in the tables.

Medicaid/CHIP for people under age 65—The Medicaid coverage variable was constructed in a hierarchical manner based on yearly and monthly insurance variables for people under age 65. First, if a person had any Medicaid or CHIP coverage for at least one day of at least one month, the person was classified as "Any Medicaid/CHIP." If a person did not have any coverage in any month, the person was classified as "Uninsured all year." If a person did not have Medicaid in any month but had other insurance in at least one month, the person was classified as "Other non-Medicaid/CHIP."

Two additional subcategories were defined for people with Medicaid/CHIP coverage. "Only Medicaid/CHIP" included people with Medicaid/CHIP only and no evidence of other types of insurance. "Medicaid/CHIP with other" included people who also had other types of insurance.

People with "Only Medicaid/CHIP" were further grouped into "full year" or "part year." Full-year coverage included people whose number of months with Medicaid coverage was the same as with any type of coverage. Part-year coverage included people whose total coverage months was more than Medicaid/CHIP coverage.

Residence location—Residence location was categorized based on the NCHS Urban-Rural Classification Scheme for Counties (URCSC). The 2003-2017 NHQDR used the 2006 URCSC. Since the 2018 NHQDR, the 2013 URCSC has been used. The 2013 URCSC was based on OMB's February 2013 delineation of metropolitan and nonmetropolitan counties; the Rural-Urban Continuum Codes and the Urban Influence Codes developed by the Economic Research Service of the U.S. Department of Agriculture; and county-level data from Census 2010 population estimates.

Urban-rural categories are:

- Large central metro: counties that contain the entire population of the largest principal city of a metropolitan statistical area (MSA), have their entire population contained in the largest principal city of the MSA, or contain at least 250,000 inhabitants of any principal city of the MSA.
- Large fringe metro: counties in MSAs of 1 million or more population that did not qualify as large central metro counties.
- Medium metro: counties in MSAs of 250,000 to 999,999 population.
- Small metro: counties in MSAs of less than 250,000 population.
- Micropolitan: counties in micropolitan statistical areas.
- Noncore: nonmetropolitan counties that did not qualify as micropolitan.

Employment status—MEPS includes four-level round-specific categorical variables for employment status for people age 16 years and over. For the NHQDR, employment status variables were set for adults ages 18-64 and had two categories: Employed, which refers to adults who were (1) currently employed, (2) had a job to return to, or (3) had a job but did not work during the reference period; and Not employed.

Perceived health status—MEPS includes five-level round-specific categorical variables for perceived health status; these categories include "excellent," "very good," "good," "fair," and "poor." For the NHQDR, these five levels were collapsed into two: (1) excellent, very good, or good; and (2) fair or poor.

Children with special health care needs (CSHCN)—The Child Health and Preventive Care section identifies CSHCN based on the CSHCN Screener instrument developed through a national collaborative process as part of the Child and Adolescent Health Measurement Initiative under the coordination of the Foundation for Accountability. Children whose "special health care needs" status could not be determined were coded as "unknown." Data for individuals classified as "unknown" were not shown in the NHQDR tables.

Adult disability status—The MEPS disability measures used in the 2007-2018 NHQDR were for adults only and based on work of an interagency Disability Working Group (DWG) convened by AHRQ whose purpose was to develop cross-survey comparable measures of disability to use with existing data of surveys included in the NHQDR. For the purpose of the NHQDR, adults with disabilities are defined to be those with physical, sensory, and/or mental health conditions that can be associated with a decrease in functioning in such day-to-day activities as bathing, walking, doing everyday chores, and/or engaging in work or social activities.

The DWG recommended using paired measures in displaying disability data for adults to preserve the qualitative aspects of the data. The first measure, limitations in *basic activities*, represents problems with mobility and other basic functioning at the person level. The second measure, limitations in *complex activities*, represents limitations encountered when the person, in interaction with their environment, attempts to participate in community life.

Limitations in *basic activities* include problems with mobility; self-care (activities of daily living); domestic life (instrumental activities of daily living); and activities dependent on sensory functioning (limited to people who are blind or deaf). Limitations in *complex activities* include limitations experienced in work; and in community, social, and civic life. These two categories are not mutually exclusive; people may have limitations in basic activities *and* in complex activities. The residual category *neither* includes adults with neither basic nor complex activity limitations.

The MEPS disability variables used in the 2019 NHQDR and forward were defined by following the methodology of the American Community Survey, which is different from the Activity Limitation used in the 2007-2018 NHQDR. Instead, adults age 18 and over were defined as with disability if they reported a serious difficulty in hearing, serious difficulty in vision, serious cognitive difficulty, serious difficulty in walking or climbing stairs, difficulty in dressing or bathing, or difficulty in doing errands. Adults who did not report any of the six difficulties were excluded.

Language spoken at home/Language spoken most often at home—From 2002 to 2013, families were asked what language was spoken in their home most of the time, with the categories English, Spanish, Other. The categories were collapsed into two levels: English and Other (includes Spanish and Other).

From 2014 to 2017, families were asked whether anyone age 5 and above in their family spoke a language other than English at home. The two categories with this question were: Speak only English and Speak a language other than English. In 2018, the questionnaire changed to ask at the person level if they spoke a language other than English at home.

Whether U.S. born—The Demographics section ascertains whether a person was born in the United States. This question was previously asked only if a language other than English was spoken in the home and only of those people uncomfortable speaking English. Beginning in 2007, the question was asked of all reporting unit (RU) members regardless of the language most often spoken in the home and regardless of whether all household members were comfortable speaking English. Therefore, only data beginning in 2007 were shown in the NHQDR tables.

Usual primary care provider—People were considered to have a usual primary care provider if they had a usual source of care not located in a hospital emergency room, to which they go for new health problems; preventive health care such as general checkups, examinations, and immunizations; and referrals to other professionals when needed. Some of the source variables were dropped from the 2018 MEPS and the measure was also dropped from the 2021 NHQDR.

CAHPS composite measure (adults and children)—This measure identified people who had a doctor's office or clinic visit in the last 12 months whose health providers listened carefully, explained things clearly, showed respect for what they had to say, and spent enough time with them. For adults or children who had a doctor's office or clinic visit in the last 12 months, percent distribution of how often the response categories of Always, Usually, and Sometimes or Never were selected for the four CAHPS questions asking about health providers: (1) listening carefully; (2) explaining things clearly; (3) showing respect for what they had to say; and (4) spending enough time with them.

For example, if a person responded "Always" for each of the four questions, the composite measure would be 100% for Always, 0% for Usually, and 0% for Sometimes or Never. If a person did not complete all four questions, the percentage estimates were weighted by the percentage of the four questions they completed for the 2003-2020 NHQDR. Starting in the 2022 NHQDR, the adult composite measure excluded adults who answered fewer than four questions and used original SAQ weight without adjustment for the nonresponses.

Adults age 65 and over who received potentially inappropriate prescription medications in the calendar year—Prescription medications received include all prescribed medications initially purchased or otherwise obtained during the calendar year, as well as any refills. Inappropriate medications are defined by the implementation of the Beers criteria in MEPS.[1] According to this definition, the 11 drugs that should always be avoided for older patients include barbiturates, flurazepam, meprobamate, chlorpropamide, meperidine, pentazocine, trimethobenzamide, bellodonna alkaloids, dicyclomine, hyoscyamine, and propantheline.

An additional 22 drugs that should often be avoided for older patients include carisoprodol, chlorzoxazone, cyclobenzaprine, metaxalone, methocarbamol, amitriptyline, chlordiazepoxide, diazepam, doxepin, indomethacin, dipyridamole, ticlopidine, methyldopa, reserpine, disopyramide, oxybutynin, chlorpheniramine, cyproheptadine, diphenhydramine, hydroxyzine, promethazine, and propoxyphene.

Financial burden of healthcare costs and underinsurance—Financial burden of healthcare costs and underinsurance are defined for people under age 65. Financial burden of healthcare costs was defined as present when a person's family level out-of-pocket health insurance premiums and medical expenditures were greater than 10% of total family income. Underinsurance was defined as present for people with private insurance when a person's family-level out-of-pocket medical expenditures (excluding premiums) were greater than 10% of total family income.[2]

The following family level variables were defined for these measures:

- *Family*. The definition of family was based on the MEPS health insurance eligibility unit (HIEU), which includes all members of the family who would typically be covered under a private insurance family plan. HIEUs included adults, their spouses, and their unmarried natural/adoptive children under age 18 and children under age 24 who were full-time students.

  Nonelderly families included families in which at least one person was under age 65. In these cases, family-level expenditures included the expenditures for the elderly person as well. This analysis did not include elderly families in which all people were age 65 years or above.
- *Out-of-pocket expenditures on healthcare services*. Out-of-pocket expenses included all out-of-pocket payments for deductibles, coinsurance, copayments, and payments for any noncovered services and supplies. Using the HIEU definition of family unit, we added out-of-pocket expenditures on healthcare services across all members of the family to calculate family-level out-of-pocket expenditures on healthcare services.
- *Out-of-pocket expenditures on health insurance premiums*. MEPS collects data on out-of-pocket expenditures on premiums for private health insurance from household respondents. We added private out-of-pocket premium costs and (imputed) Medicare Part B premiums across all health insurance policies covering family members. For example, a childless couple unit had two single policies covering the two adults, we added premiums for the two policies together. We prorate premiums to account for the number of months of coverage during the year. For employer-sponsored group coverage, this analysis did not include employer contributions toward premiums.
- *Person-level insurance status*. Results were reported by individual health insurance status, which was defined hierarchically for the categories below:

  - Private, employer sponsored: people who had at least 1 month of employer-sponsored insurance and no uninsured months in the year.
  - Private, nongroup: people who had least 1 month of nongroup private insurance and no uninsured months in the year.
  - Public only: people who had public insurance only for all available months in MEPS during the year.
  - Part-year uninsured: people whose number of uninsured months was less than the number of available months in MEPS during the year.
  - Full-year uninsured: people whose number of uninsured months was equal to the number of available months in MEPS during the year.

- *Total family income*. Total family income was the sum of person-level pretax total income, refund income, and sales income.

Round-specific variables—For analytic data collected during specific rounds, age and other population characteristics variables were also defined using the round-specific variables. In some cases, missing values were replaced with the value from the closest prior round.

MEPS Estimates

MEPS estimates were generated for each year from 2002 to 2018. Standard errors of the estimates were provided to permit an assessment of sampling variability. All estimates and standard errors were derived using SUDAAN statistical software, which accounts for the complex survey design of MEPS.

All estimated proportions and ratios were weighted to reflect the experiences of the U.S. civilian noninstitutionalized population at the aggregate and subpopulation levels. Person-level weights, specific to the SAQ and DCS, were used for measures derived with data from these supplements. For other person-level measures, including those from the Child Health and Preventive Care section, the overall person-level weight was used. In analyzing data from the Child Health and Preventive Care section, the full file was used and subset to cases eligible for this section. More information about the weights is available at https://www.meps.ahrq.gov/mepsweb/.

In analyzing data from the DCS, we used a "diabetes pseudo-weight" with the file subset to cases where the original DCS weight is positive in order to produce the same variance estimates using different statistical software. The "diabetes pseudo-weight" was defined as equal to the diabetes weight when the diabetes weight was positive; equal to 1 when the diabetes weight was zero and the SAQ weight was positive; and undefined when the SAQ weight was zero.

Some MEPS measures were age adjusted to the 2000 U.S. standard population. Among the age-adjusted measures are the following pertaining to:

- Diabetes.
- Asthma.
- Adult current smokers.
- Adults with obesity.

Measures pertaining to children were not age adjusted. Table 1 lists measures that were age adjusted in the NHQDR tables and provides information about the age groups used for adjustment.

Table 1. Age-adjusted measures in the NHQDR

Measure Title	Age Groups Used in Adjustment (Years)
Composite measure: Adults age 40 and over with diagnosed diabetes who received all four recommended services for diabetes in the calendar year (2 or more hemoglobin A1c measurements, dilated eye examination, foot examination, and flu vaccination)	40-59, 60+
Adults age 40 and over with diagnosed diabetes who received 2 or more hemoglobin A1c measurements in the calendar year	40-59, 60+
Adults age 40 and over with diagnosed diabetes who received a dilated eye examination in the calendar year	40-59, 60+
Adults age 40 and over with diagnosed diabetes who had their feet checked for sores or irritation in the calendar year	40-59, 60+

Measure Title	Age Groups Used in Adjustment (Years)
Adults age 40 and over with diagnosed diabetes who received a flu vaccination in the calendar year	40-59, 60+
People with current asthma who are now taking preventive medicine daily or almost daily (either oral or inhaler)	0-17, 18-44, 45-64, 65+
People with current asthma	0-17, 18-44, 45-64, 65-74, 75+
Adult current smokers with a checkup in the last 12 months who received advice to quit smoking	18-44, 45-64, 65+
Adults with obesity who ever received advice from a health professional to exercise more	18-44, 45-64, 65+
Adults with obesity who ever received advice from a health professional about eating fewer high-fat or high-cholesterol foods	18-44, 45-64, 65+
Adults with obesity who do not now spend half an hour or more in moderate or vigorous physical activity at least five times a week	18-44, 45-64, 65+
Adults with obesity	18-44, 45-64, 65-74, 75+
Adults who do not now spend half an hour or more in moderate or vigorous physical activity at least five times a week	18-44, 45-64, 65-74, 75+

Consistent with the established criteria for NHQDR data reporting, MEPS estimates in the NHQDR tables were suppressed when they were based on sample sizes of fewer than 100 or when their relative standard errors were 30% or more. In the tables, the cell value of these estimates was replaced with the notation DSU (data statistically unreliable). Records in which analytic variables had missing values were excluded for most analysis.

Measure Changes Due to 2018 MEPS Redesign

The MEPS instrument design changed beginning in spring 2018, affecting Panel 23 Round 1, Panel 22 Round 3, Panel 21 Round 5, and later panels. For the Full-Year 2017 Public Use Files (PUFs), the Panel 22 Round 3 and Panel 21 Round 5 data were transformed to the degree possible to conform to the previous design.

The Full-Year 2018 PUFs were the first year all rounds of data were collected with the redesigned instrument, and no data were transformed to conform to the previous design.

This section briefly describes the NHQDR measures affected by the redesign. “Measure type” in the tables below indicates if the NHQDR trend analysis was affected because only core measures were included in the trend analysis.

Terminated Measures

Measures in Table 2 below were dropped beginning in the 2021 NHQDR because the questions were terminated in the 2018 MEPS. The core measures were excluded from NHQDR trend analysis.

Table 2. Measures dropped beginning in the 2021 NHQDR

Note	Measure	Measure Type
Dropped from 2021 NHQDR	People with a usual primary care provider	Core
	Composite measure: People who were unable to get or delayed in getting needed medical care, dental care, or prescription medicines in the last 12 months	Noncore
	People who were unable to get or delayed in getting needed medical care in the last 12 months	Core
	People who were unable to get or delayed in getting needed dental care in the last 12 months	Core
	People who were unable to get or delayed in getting needed prescription medicines in the last 12 months	Core
Replaced with similar measure[i]	Replaced "Composite: People unable to get or delayed in getting needed medical care, dental care, or prescription medicines due to financial or insurance reasons" with: "Composite measure: People unable to get or delayed in getting needed medical care, dental care, or prescription medicines due to cost"	Remained noncore
	Replaced "People unable to get or delayed in getting needed medical care due to financial or insurance reasons" with: "People unable to get or delayed in getting needed medical care due to cost"	Changed from "core" to "noncore" in 2021 and later years
	Replaced "People unable to get or delayed in getting needed dental care due to financial or insurance reasons" with: "People unable to get or delayed in getting needed dental care due to cost"	Changed from "core" to "noncore" in 2021 and later years
	Replaced "People unable to get or delayed in getting needed prescription medicines due to financial or insurance reasons" with "People unable to get or delayed in getting needed prescription medicines due to cost"	Changed from "core" to "noncore" in 2021 and later years

[i] Prior to 2018, the Access to Care supplement gathered information on family members' ability to receive treatment and receive it without delay. The supplement was redesigned in 2018 to gather information on whether treatment was not used or was delayed because of cost. The four measures were replaced with people who were unable to get or delayed in getting needed care (medical, dental, or prescription medicines) due to cost. The denominators for the old measures were people who were unable to get or delayed in getting needed care. The denominator for the new measures is all people who answered the questions.

Note	Measure	Measure Type
Converted to noncore in 2021 and dropped in 2022 NHQDR because the questions were terminated in the survey[ii]	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	Changed from "core" to "noncore" in 2021 and dropped in 2022
	Children 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	Changed from "core" to "noncore" in 2021 and dropped in 2022
	Adults with obesity who ever received advice from a health professional to exercise more	Changed from "core" to "noncore" in 2021 and will be dropped in 2023
	Adults with obesity who ever received advice from a health professional about eating fewer high-fat or high-cholesterol foods	Changed from "core" to "noncore" in 2021 and will be dropped in 2023

MEPS Survey Instruments Administered Every Other Year

In past years, all survey instruments were administered every year. Due to the 2018 redesign, some of the instruments are only administered in even or odd years. Starting in 2018, the Child Preventive Care questions are asked in even years and the CAHPS and Columbia Impairment Scale (CIS) questions are administered in odd years. Table 3 summarizes the data years in which these survey instruments are asked.

Table 3. MEPS survey instruments, by year administered

MEPS Survey Instruments	2017	2018	2019	2020	2021
Child Preventive Care	X	X		X	
Columbia Impairment Scale (CIS)	X		X		X
Consumer Assessment of Healthcare Providers and Systems (CAHPS)	X		X		X

Table 4 lists NHQDR measures from the CAHPS and CIS questions that are administered in odd years only due to the 2018 redesign.

[ii] Source variables for the four measures were not in 2018 and 2019, therefore, should be dropped from the 2022 NHQDR. Prior to Panel 21 Round 5/Panel 22 Round 3, a series of questions was asked for each person about the receipt of preventive care or screening examinations. In Panel 21 Round 5/Panel 22 Round 3, this section was dropped from MEPS. Variables for getting the care, tests, or treatment measures were dropped in 2018 and 2019.

Table 4. CAHPS and CIS measures asked in odd years only starting in 2018

Measure	Measure Type
Adults who had any appointments for routine healthcare in the last 12 months who sometimes or never got an appointment for routine care as soon as needed	Core
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 needed	Core
Children who had any appointments for routine healthcare in the last 12 months who sometimes or never got an appointment for routine care as soon as needed	Core
Adults who tried to make an appointment for seeing a specialist in the last 12 months who sometimes or never found it easy to get the appointment	Core
Children who needed to see a specialist in the last 12 months who sometimes or never found it easy to see a specialist	Core
Composite measure: Adults who had a doctor's office or clinic visit in the last 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	Noncore
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	Core
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	Core
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	Core
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	Core
Rating of healthcare 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	Core
Adults who had a doctor's office or clinic visit in the last 12 months whose health providers always gave them easy-to-understand instructions about what to do for a specific illness or health condition	Core
Adults who had a doctor's office or clinic visit in the last 12 months whose health providers always asked them to describe how they would follow the instructions	Core
Adults who had a doctor's office or clinic visit in the last 12 months whose health providers always offered help in filling out forms	Core
Composite measure: Children who had a doctor's office or clinic visit in the last 12 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	Noncore
Children who had a doctor's office or clinic visit in the last 12 months whose health providers always listened carefully	Noncore
Children who had a doctor's office or clinic visit in the last 12 months whose health providers always explained things in a way they or their parents could understand	Noncore
Children who had a doctor's office or clinic visit in the last 12 months whose health providers always showed respect for what they or their parents had to say	Noncore
Children who had a doctor's office or clinic visit in the last 12 months whose health providers always spent enough time with them	Noncore
Adults with obesity	Noncore

Measure	Measure Type
Adults with obesity who do not now spend half an hour or more in moderate or vigorous physical activity at least five times a week	Noncore
Children 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 needed	Retired
Composite measure: Children who had a doctor's office or clinic visit in the last 12 months whose health providers sometimes or never listened carefully, explained things clearly, respected what they or their parents had to say, and spent enough time with them	Retired
Children who had a doctor's office or clinic visit in the last 12 months whose health providers sometimes or never listened carefully	Retired
Children 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 or their parents could understand	Retired
Children 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 or their parents had to say	Retired
Children 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	Retired
Rating of health care 0-6 on a scale from 0 to 10 (best grade) for children who had a doctor's office or clinic visit in the last 12 months	Retired

Table 5 lists the NHQDR measures from the child preventive care questions that are administered in even years only starting in 2018 due to the redesign.

Table 5. Child Preventive Care measures asked in even years only starting in 2018

Measure	Measure Type
Children ages 2-17 for whom a health provider gave advice within the past 2 years about the amount and kind of exercise, sports, or physically active hobbies they should have	Core
Children ages 2-17 for whom a health provider gave advice within the past 2 years about healthy eating	Core
Children who had their height and weight measured by a health provider within the past 2 years	Core
Children ages 3-5 who ever had their vision checked by a health provider	Core
Children for whom a health provider gave advice within the past 2 years about how smoking in the house can be bad for a child	Core
Children 0-40 lb for whom a health provider gave advice within the past 2 years about using a child safety seat while riding in the car	Core
Children 41-80 lb for whom a health provider gave advice within the past 2 years about using a booster seat when riding in the car	Core
Children over 80 lb for whom a health provider gave advice within the past 2 years about using lap or shoulder belts when riding in a car	Core
Children ages 2-17 for whom a health provider gave advice within the past 2 years about using a helmet when riding a bicycle or motorcycle	Core

Impacts on Trend Analysis

Other features of the 2018 redesign may affect measure estimates. AHRQ recommends that data users assess possible effects on the data and especially trend analyses spanning 2018 due to the redesign transition. The 2021 and 2022 NHQDR excluded some measures because of instrument changes or unusual changes in trend results.

References

1. Zhan C, Sangl J, Bierman AS, Miller MR, Friedman B, Wickizer SW, Meyer GS. Potentially inappropriate medication use in the community-dwelling elderly: findings from the 1996 Medical Expenditure Panel Survey. JAMA. 2001 Dec 12;286(22):2823-29. https://pubmed.ncbi.nlm.nih.gov/11735757/. Accessed October 27, 2022.
2. Bernard D. Banthin J. Family-level expenditures on health care and insurance premiums among the U.S. nonelderly populations, 2004. Research Findings No. 26. Rockville, MD: Agency for Healthcare Research and Quality; April 2007. https://meps.ahrq.gov/mepsweb/data_stats/Pub_ProdResults_Details.jsp?pt=Research+Findings&opt=2&id=812.