

The National Health Care Surveys and Meaningful Use

What is the National Center for Health Statistics?

- The National Center for Health Statistics (NCHS) is the federal statistics agency responsible for monitoring the nation's health.
- It is part of the Centers for Disease Control and Prevention (CDC).
- Through its surveys of providers and individuals NCHS monitors the health of nation by providing data on:
 - Health care trends;
 - Health status of population; and
 - Impact of health policy decisions on programs.

Mission of the Division of Health Care Statistics in NCHS

- The mission of the Division of Health Care Statistics (DHCS) is to produce accurate, objective statistics on health care to inform health care policy and serve a variety of research needs.
- DHCS carries out its mission by collecting, analyzing, and disseminating data on the use, access and quality of health care provided in the United States, and the health care organizations and professionals who deliver that care.
- The National Health Care Surveys are the means for carrying out our mission.

NCHS' National Health Care Surveys

- The National Health Care Surveys are a family of surveys on encounters with health-care providers. The surveys are designed to answer key questions of interest to health care policy makers, public health professionals, and researchers.
- The National Health Care Surveys include:
 - National Ambulatory Medical Care Survey (NAMCS)
 - National Hospital Ambulatory Medical Care Survey (NHAMCS)
 - National Hospital Care Survey (NHCS)

NCHS' National Health Care Surveys

- The National Health Care Surveys are a little different from the other surveys conducted by NCHS in that they are surveys of establishments, not households. Thus rather than providing estimates of the population they provide estimates about health care providers and encounters with providers.
- The surveys are nationally representative and collect core information over time. Thus trends in the types of care delivered in each setting can be monitored in an objective and reliable manner and can be examined in relation to characteristics of providers, patients, and clinical management of patients' care.

Uses of National Health Care Survey Data

NHCS data are used by policy makers, researchers, providers, companies and private individuals.

The data are used to describe the US health care system including:

- Care provided to sub-populations such as children or the aging;
- Patterns of medication use;
- Population based implementation of guidelines;
- Use of emergency rooms; and
- Adoption of electronic health records.

Uses of National Health Care Survey Data

Data collected in the National Health Care Surveys are available free.

Downloadable data sets are available at
http://www.cdc.gov/nchs/data_access/ftp_data.htm

Data tables and NCHS publications using National Health Care Survey data are available at

- http://www.cdc.gov/nchs/dhcs/dhcs_products.htm and
- <http://www.cdc.gov/nchs/doqs/index.htm>

Examples of uses of National Health Care Survey data are on the next two slides.

Uses of National Health Care Survey Data: National Center for Health Statistics Publications

NCHS Data Brief ■ No. 212 ■ September 2015

Variation in Physician Office Visit Rates by Patient Characteristics and State, 2012

Jill J. Ashman, Ph.D.; Esther Hing, M.P.H.; and Anjali Talwalkar, M.D., M.P.H.

Key findings

Data from the National Ambulatory Medical Care Survey

- In 2012, there were an estimated 301 physician office visits per 100 persons. The visit rate among females exceeded the rate for males.
- The rate for adults aged 65 and over was more than twice the rate for adults aged 18–64 and children under age 18 years.
- Among the 34 most populous states, Missouri had the lowest rate of physician office visits for both adult age groups (18–64 and 65 and over), and Connecticut had the highest rate.
- The percentage of visits made by adults aged 18–64 with private insurance as the expected source of payment varied across the 34 most populous states, ranging from 53% in New York and Arkansas to 79% in Maryland.

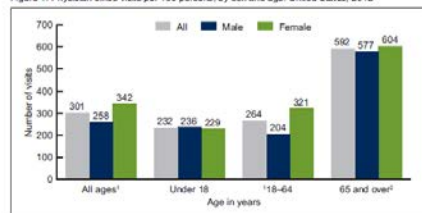
In 2012, 74% of children and adults with a usual place to visit listed a doctor's office as their usual place of care (1,2). This report examines the rate of physician office visits by patient age, sex, and state. Visits by adults with private insurance as their expected source of payment were also examined. Estimates are based on the 2012 National Ambulatory Medical Care Survey (NAMCS), a nationally representative survey of physician office visits. State estimates for the 34 most populous states are available for the first time. State refers to the location of the physician office visit.

Keywords: ambulatory care • state estimates

Did office-based physician visit rates vary by patient age and sex?

- In 2012, there were an estimated 929 million physician office visits or 301 visits per 100 persons (Figure 1).

Figure 1. Physician office visits per 100 persons, by sex and age: United States, 2012



¹Visit rate is statistically significantly higher ($p < 0.05$) for females compared with males, based on a two-tailed test.
²Visit rate is statistically significantly higher ($p < 0.05$) for age 65 and over compared with under age 18 and 18–64, based on a two-tailed test.
NOTE: Data for 2012 are based on a sample of 76,353 physician office visits, representing an estimated weighted total of 929 million visits. Includes visits to nonfederal, office-based physicians. Excludes physician in community health centers, ambulatory clinics, radiologists, and pathologists. For more information, see the 2012 NAMCS methodology documentation: <http://www.cdc.gov/nchs/namcs>. Visit rates per 100 persons are based on estimates from special tabulations developed by the Population Division, U.S. Census Bureau using the July 1, 2012, set of state population estimates and reflect Census 2010 data. More information may be obtained from the U.S. Census Bureau website at <http://www.census.gov>.
SOURCE: CDC/NCHS, National Ambulatory Medical Care Survey, 2012.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
National Center for Health Statistics



NCHS Data Brief ■ No. 215 ■ September 2015

Emergency Department Visits Related to Schizophrenia Among Adults Aged 18–64: United States, 2009–2011

Michael Albert, M.D., M.P.H.; and Linda F. McCaig, M.P.H.

Key findings

Data from the National Hospital Ambulatory Medical Care Survey, 2009–2011

- During 2009–2011, an estimated 382,000 emergency department (ED) visits related to schizophrenia occurred each year among adults aged 18–64, with an overall ED visit rate of 20.1 per 10,000 adults.
- The overall rate for ED visits related to schizophrenia for men (26.5 per 10,000) was approximately double the rate for women (13.8 per 10,000).
- Public insurance (Medicaid, Medicare, or dual Medicare and Medicaid) was used more frequently at ED visits related to schizophrenia compared with ED visits not related to schizophrenia.
- About one-half of ED visits related to schizophrenia led to either a hospital admission (32.7%) or a transfer to a psychiatric hospital (16.7%); these percentages were higher than for ED visits not related to schizophrenia.

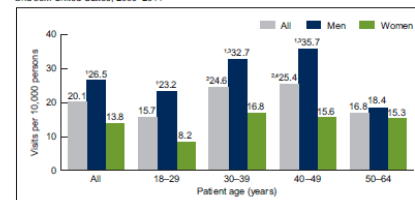
Schizophrenia is a severe brain disorder with clinical manifestations that may include hallucinations, delusions, and thought and movement disorders (1,2). This report describes the rate and characteristics of emergency department (ED) visits related to schizophrenia among adults aged 18–64. Visits with an *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD-9-CM) code of 295 for any of the up to three diagnoses listed as being related to the visit were included in this analysis to broadly describe ED visits related to schizophrenia (3).

Keywords: mental health • health care utilization • National Hospital Ambulatory Medical Care Survey

Did ED visit rates related to schizophrenia vary by age and sex?

- During 2009–2011, an estimated 382,000 ED visits related to schizophrenia occurred each year among adults aged 18–64. The overall

Figure 1. Schizophrenia-related emergency department visit rates for adults aged 18–64, by age and sex: United States, 2009–2011



¹Visit rate is significantly different ($p < 0.05$) for men compared with women of the same age group, based on a two-tailed test.
²Visit rate is significantly different ($p < 0.05$) compared with all persons aged 18–29, based on a two-tailed test.
³Visit rate is significantly different ($p < 0.05$) compared with men aged 50–64, based on a two-tailed test.
⁴Visit rate is significantly different ($p < 0.05$) compared with all persons aged 50–64, based on a two-tailed test.
NOTE: Figure is based on 3-year averages. Emergency department visits related to schizophrenia are defined as code 295 of the *International Classification of Diseases, Ninth Revision, Clinical Modification* for any of the up to three collected visit diagnoses. Data are based on a sample of ED emergency department visits related to schizophrenia made during 2009–2011, representing an average weighted total of 382,000 visits per year. Visit rates are based on the set of estimates of the civilian noninstitutionalized population of the United States, as developed by the U.S. Census Bureau's Population Division.
SOURCE: CDC/NCHS, National Hospital Ambulatory Medical Care Survey, 2009–2011.

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Uses of National Health Care Survey Data: Researchers and Media



Psychiatry



Kids' Psychiatric Visits a Growing Concern

CME

Health Affairs

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Where Americans Get Acute Care:
Increasingly, It's Not At Their Doctor's
Office

Stephen R. Pitts¹, Emily R. Carrier², Funmi C. Rich³ and Arthur I. Kellermann⁴

National Health Care Surveys Content and Sample Selection

The next slides describe each individual survey in more detail.

National Ambulatory Medical Care Survey (NAMCS)

NAMCS collects data on visits to physician offices and Community Health Centers.

- **Physician offices:**
 - Data are collected on sampled physicians, and a sample of patient visits. Sampled physicians are nationally representative of non-federal, employed, office-based physicians primarily engaged in direct patient care. Physicians are selected from the master files maintained by the American Medical Association and the American Osteopathic Association.
 - Visits for a selected week are sampled from the annual practices of sample physicians. The total physician sample is divided into 52 random subsamples of approximately equal size, and each subsample is randomly assigned to 1 of the 52 weeks in the survey.
- **Community Health Centers (CHCs)**
 - Provider and visit data, similar to what is collected at physician offices, is also collected from a sample of physician and non-physician medical providers working in Federally funded CHCs throughout the country.

National Hospital Ambulatory Medical Care Survey (NHAMCS)

NHAMCS data are collected from

- emergency departments;
- outpatient departments; and
- hospital-based ambulatory surgery locations.

Data are collected on a sample of visits to emergency and outpatient departments of a nationally representative sample of hospitals that are non-Federal, non-institutional, general and short stay , i.e., length of stay is less than 30 days.

The sample frame comprises 600 hospitals that are divided into 16 panels. Each panel in turn comprises about 30 hospitals. With only 13 of those panels used within a given year. The panels are rotated every year for 3 years, until a new sample frame is purchased.

Visits to the hospitals over a selected four-week period are sampled from each eligible department. Hospitals in the same panel have the same reporting period.

National Hospital Care Survey (NHCS)

- Data for the NHCS are collected for all inpatient discharges and encounters in emergency and outpatient departments, including ambulatory surgery.
- Clinical and demographic information on the patients and encounters are collected.
- Patient-level identifiers are also collected. These identifiers will allow a patient's episodes of care to be linked between different hospital inpatient and outpatient settings, as well as to outside databases such as the National Death Index. These linkages will provide a more complete picture of patient care and outcomes such as readmissions and mortality.
- Information on facility characteristics is also collected.

National Health Care Surveys and Meaningful Use

The National Health Care Surveys are now an option available to meet the specialized registry public health reporting objectives, per the final rule on modifications to meaningful use in 2015 through 2017.

Eligible professionals (EPs), eligible hospitals (EHs), or critical access hospitals (CAHs) can now use submission of data to the National Health Care Surveys as one of the measures to meet their public health objectives requirements under the Electronic Health Record Incentive Programs.

Once providers register, they do not need to re-register annually.

National Health Care Surveys and Meaningful Use

Participation in the National Health Care Surveys is listed as an option for both Modified Stage 2 and Stage 3.

- Under Modified Stage 2 (2016 and 2017):
 - Reporting data to the National Health Care Surveys falls under Objective 10: Public Health Reporting – Measure 3: Specialized Registry Reporting
- Under Meaningful Use Stage 3 (optional in 2017 and mandatory in 2018 and beyond):
 - Reporting data to the National Health Care Surveys falls under Objective 8 – Public Health and Clinical Data reporting – Measure 4 Public Health Registry Reporting

Declaration of Readiness for Public Health Reporting

Updated Declaration of Readiness for the National Health Care Surveys June 30, 2016

Meaningful Use Incentive Programs Modified Stage 2: Objective 10: Public Health Reporting, Measure 3: Specialized Registry Reporting

The National Center for Health Statistics (NCHS) has been and continues to accept National Health Care Surveys data from Eligible Professionals (EPs), Eligible Hospitals (EHs) and Critical Access Hospitals (CAHs) in fulfillment of the Meaningful Use Incentive Programs Modified Stage 2: Objective 10: Public Health Reporting, Measure 3: Specialized Registry Reporting.


One of the following formats are required to generate and transmit data to NCHS for Measure 3: Specialized Registry Reporting:

1. HL7 CDA* documents, as described by the Implementation Guide for National Health Care Surveys Release 1, DSTU Release 1.1–U.S. Realm, available from the HL7 website. (Note: This is the preferred format and the format that is required for Stage 3 accreditation for this measure.)
2. A custom extract built to include data elements as specified in the National Health Care Surveys Data Elements list, available from NCHS.
3. Continuity of Care Documents (CCDs) produced by your Certified Electronic Health Record Technology (CEHRT) platform.

Meaningful Use Incentive Programs Stage 3: Objective 8: Public Health and Clinical Data Registry Reporting, Measure 4: Public Health Registry Reporting

The National Center for Health Statistics (NCHS) will be ready to accept National Health Care Surveys data from Eligible Professionals (EPs), Eligible Hospitals (EHs) and Critical Access Hospitals (CAHs) in fulfillment of the Meaningful Use Incentive Programs Stage 3: Objective 8: Public Health and Clinical Data Registry Reporting, Measure 4: Public Health Registry Reporting on January 1, 2017.

To register intent to submit data to NCHS, please email NCHSMUinfo@cdc.gov.

National Center for Health Statistics
National Health Care Surveys 

The Declaration of Readiness for Public Health Reporting for the National Health Care Surveys is shown above and also is available at <http://www.cdc.gov/nchs/dhcs.htm>.

Registration is offered free of charge.

National Health Care Surveys and Provider Active Engagement

Providers intending to meet Modified Stage 2 and Stage 3 public health measures with the National Health Care Surveys must demonstrate active engagement.

Active engagement may demonstrated under 3 options:

1. The provider completes registration to submit data; OR
2. The provider is in the process of testing and validation of the electronic submission of data; OR
3. The provider has completed testing and validation of the electronic submission and is electronically submitting production data.

National Health Care Surveys and Provider Active Engagement

Registration through this portal will satisfy active engagement
Option 1: The provider completes registration to submit data.

Providers identified as in one of the National Health Care
Surveys' sample will be asked move to the testing and validation
(Option 2) and production (Option 3) stages.

Participation option for Eligible Professionals

- Eligible Professionals (EPs) are defined as providers that have registered for MU credit. Independent of MU registration, some EPs may also be sampled for the National Ambulatory Medical Care Survey (NAMCS).
- If a registered EP is in the sample for NAMCS, NCHS will invite the EP to submit EHR data for the testing and validation stage and then for the production stage.
- Non-NAMCS sampled EPs will not need to send data for now, but may be invited in the future.
- Data would be submitted for a randomly selected one-week reporting period in each survey year. NCHS defines the reporting week.
- Data for all patient visits to the EP during the selected week would be submitted to NCHS or a designated agent.
- Data about the provider and office/practice characteristics will also be collected.

Participation option for Eligible Professionals

- An encounter will be considered closed two weeks after the encounter date.
- EPs invited to submit EHR data will be notified at least a month in advance.
- NCHS staff will work with EPs and their technical contacts to facilitate submission.

NAMCS

Data Collected About Eligible Professional (EP)

Data are collected on the Eligible Professional (EP), and the medical care they provided at the encounter (visit).

Data on the EP are collected once, at induction to the survey. These data include, but are not limited to:

- Physician medical specialty;
- Whether an MD or DO;
- Whether physician is in patient care, research, administration or teaching;
- Whether physician works in a federal location or an office-based practice owned by a hospital;
- Total number of estimated and actual visits at sampled locations and total number of actual days working during sampled week.

NAMCS

Data Collected on Patient Visit

- Patient Characteristics: Age, Sex, Race, Ethnicity, Patient's zip code, Expected Source of Payment
- Vital Signs: Height, Weight, Temperature, Blood Pressure
- Current Reason for visit
- Injury/Poisoning/Adverse Effect
- Continuity of care including number of visits in the previous 12 months
- Diagnoses related to visit

NAMCS

Data Collected on Patient Visit (cont.)

- Current chronic conditions including but not limited to:
 - Asthma
 - Cancer
 - Diabetes
 - Obesity
- Medical procedures and services ordered or provided at visit
- Medications or immunizations continued, ordered or provided at visit
- Types of providers seen and estimated time spent with sampled provider
- Visit disposition
- Laboratory and other diagnostic tests and results
- CPT & HCPCS codes related to visit

Participation Options for Eligible Hospitals and Critical Access Hospitals

- Hospitals may participate in either NHAMCS or NHCS, depending on which sample they are in.
- If a registered EH or CAH is in the sample for NHAMCS or NHCS, NCHS will invite the EH or CAH to submit EHR data for the testing and validation stage and then for the production stage.
- Non-sampled EHs or CAHs will not need to send data for now, but may be invited in the future.

Participation Options for EHs and CAHs: National Hospital Care Survey (NHCS)

- If the hospital is selected to participate in NHCS, data would be collected for all inpatient discharges and all encounters in all hospital-based emergency service areas and hospital-based outpatient departments for a year.
- Information on hospital facility characteristics will also be collected.

Data Collected on Patients: NHCS

- Patient Characteristics: Age, Sex, Race, Ethnicity, Expected Source of Payment
- Personally Identifiable Information (PII) for linking: Name, Address, SSN, Medical Record Number
- Vital signs on arrival and last taken: Height, Weight and Blood pressure

Data Collected on Inpatient stay: NHCS

- All diagnoses including admission diagnosis and Present on Admission flags
- Problems and reason for visit
- Procedures during stay
- Priority of admission
- Use of ICU, NICU or CCU
- Medications and immunizations continued, ordered or provided during stay
 - Includes oxygen, dietary supplements, anesthetics and chemotherapy
- Laboratory and other diagnostic tests and results
- Types of providers seen
- Discharge disposition

Data Collected on ED and OPD encounters: NHCS

- Reason for visit, chief complaint and diagnoses for visit including chronic continuing problems
- Procedures and services ordered or provided at encounter
- Medications or immunizations continued, ordered or provided at encounter
 - Includes oxygen, dietary supplements, anesthetics and chemotherapy
- Laboratory and other diagnostic tests and results
- Types of providers seen
- Encounter disposition
- For ED and OPD encounters that result in hospital admission details of hospital stay
- Selected clinical notes for emergency department encounters

Participation Options for EHs and CAHS: National Hospital Ambulatory Medical Care Survey (NHAMCS)

- If the hospital is selected to participate in NHAMCS, data would be collected for all encounters from all Emergency Service Areas and Outpatient Departments for one month.
- Information on the Emergency Service Areas and Outpatient Departments characteristics will also be collected.

Data Collected on Patients: NHAMCS

- Patient Characteristics: Age, Sex, Race, Ethnicity, Expected Source of Payment
- Personally Identifiable Information (PII) for linking: Name, Address, SSN, Medical Record Number
- Vital Signs on arrival and last taken:
 - ED: : Height, Weight, Temperature, Blood Pressure, Pulse, Respiratory Rate, Pulse Oximetry, Pain
 - OPD: Height, Weight, Temperature, Blood Pressure

Data Collected on ED and OPD encounters: NHAMCS

- Reason for visit, chief complaint and diagnoses for visit including chronic continuing problems
- Procedures and services ordered or provided at encounter
- Medications or immunizations continued, ordered or provided at encounter
 - Includes oxygen, dietary supplements, anesthetics and chemotherapy
- Laboratory and other diagnostic tests and results
- Types of providers seen
- Encounter disposition
- For ED and OPD encounters that result in hospital admission details of hospital stay
- Selected clinical notes for emergency department encounters

Reporting Format Stage 2: 2015-2017

- The ONC “2015 Edition” final rule indicates EPs and EHs that choose to report National Health Care Surveys to NCHS in 2015-2017 to fulfill the MU public health objective are required to use standards and format options specified by NCHS.
- The ONC 2015 Final Rule is available at the following link:
<https://www.healthit.gov/policy-researchers-implementers/2015-edition-final-rule>
- Data submissions will be accepted by CDC/NCHS in one of 3 formats.

Reporting Format Stage 2: 2015-2017

Option 1: HL7 CDA® Documents

The preferred format, and the one required for Stage 3 starting in 2018 is HL7 CDA® documents as described by the Implementation Guide for National Health Care Surveys Release 1, DSTU Release 1.1 - US Realm.

The Implementation Guide is available at:

http://www.hl7.org/implement/standards/product_brief.cfm?product_id=385

Reporting Format Stage 2: 2015-2017

Option 2: Custom Extract

- A second option is a custom extract built to include data elements as specified in the National Health Care Surveys Data Elements list, and available from NCHS.
- NCHS is working with EHR vendors to develop interfaces based on the HL7 CDA Implementation Guide.
 - Contact your vendor to get the latest information on the status of the interface development.

Reporting Format Stage 2: 2015-2017

Option 3: CCDs

NCHS will also accept:

- Continuity of Care Documents (CCDs) produced by Certified Electronic Health Record Technology (CEHRT) platform.; OR
- Exit records; OR
- Discharge summaries; OR
- Similar documents approved after discussion with National Health Care Survey staff.

Transmission of EHR Data for Stage 2

Data transmission will be via Secured File Transmission Protocol (SFTP). The specific SFTP site depends upon which survey data are being submitted. Each data submitter will be provided with their own secure account for data transmission.

Reporting Format Stage 3: 2018 and on

In 2018 and onward, all data submissions must be HL7 CDA® documents as described by the Implementation Guide for National Health Care Surveys Release 1, DSTU Release 1.1 - US Realm.

These submissions must be through Certified EHR technology.

Any questions please e-mail
NCHSMUINFO@cdc.gov or call 301-458-4321.