

# 2025 NATIONAL AMBULATORY MEDICAL CARE SURVEY (NAMCS) PROVIDER SURVEY COMPONENT TECHNICAL DOCUMENTATION

For Physician Associate  
Restricted Use Data File



Division of Health Care Statistics  
National Center for Health Statistics  
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### Overview

This document provides detailed information and guidance for users of the 2025 National Ambulatory Medical Care Survey (NAMCS) Provider Survey Component Physician Associate (PA) restricted use data file (subsequently, NAMCS PA file). Restricted use files may only be accessed in the National Center for Health Statistics (NCHS) Research Data Center (RDC) and other federal data centers. The RDC is responsible for protecting the confidentiality of survey respondents, study subjects, and institutions while providing access to restricted use data for statistical purposes. For information on how to access the restricted version of the 2025 NAMCS PA file through the RDC, please see:

<https://www.cdc.gov/rdc/restricted-nchs-variables/namcs-nhamcs.html>.

The 2025 NAMCS Provider Survey Component collected provider-level data from a sample of physician associates (formerly known as physician assistants). In 2023 and 2024, a separate sample was also used for office-based physicians, but physicians were not surveyed in 2025. Data were collected through a self-administered, mixed-mode survey (web and mail modes) from a nationally representative sample of office-based PAs. The 2025 NAMCS Provider Survey Component was conducted by NCHS and is a member of the National Health Care Surveys – a family of surveys which measure health care utilization across a variety of health care providers and settings.

Section 1 of this document includes information on the scope of the survey, the data sources, and the confidentiality protections related to the data. Section 2 contains details on the sampling process and data collection procedures. Section 3 provides information on sampling, eligibility, and response rates.

**It is important to note that, because of low survey response potentially resulting in systematic differences between respondents and nonrespondents, these data are unweighted and reflect sample counts only. An inflation factor typically assigned to each record to produce national estimates has not been included on the file. Unweighted sample data should not be presumed to be nationally representative.**

Section 4 details the contents of the 2025 NAMCS Provider Survey Component restricted use data file and the edits used in the creation of the files. Because the data are unweighted, no information is provided on producing variance estimates, or on NCHS presentation standards for proportions, counts, and rates, or their relation to NAMCS Provider Survey Component data. Section 5 provides information on item missingness, and Section 6 provides a list of preferred reporting items for complex sample survey analysis.

## Suggested Citation

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## Contact Information

Data users can find the latest information about the NAMCS Provider Survey Component on our website, at: <https://www.cdc.gov/nchs/namcs/about/index.html>. If data users have queries about the data file, they may send their question through email to [ambcare@cdc.gov](mailto:ambcare@cdc.gov), or call us at 301-458-4600. A response to data user inquiries is generally provided in 1-2 business days.

NCHS also has an ambulatory health care data listserv, where updates and information about the most recent ambulatory care data (including the NAMCS Provider Survey Component) are sent out. Details on how to subscribe to the NCHS Listserv for ambulatory health care data can be found at:

[https://www.cdc.gov/nchs/products/nchs\\_listservs.htm](https://www.cdc.gov/nchs/products/nchs_listservs.htm).

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## Section 1 About the National Ambulatory Medical Care Survey Provider Survey Component

### Section 1.1 Background

The National Ambulatory Medical Care Survey (NAMCS) Provider Survey Component was first piloted in 2023 as a provider survey that collects data on two types of U.S. health care providers: physicians and physician associates (PAs). The survey was conducted again in 2024 using the same format. For 2025, only the PA sample was used. The survey is not being conducted in 2026.

NAMCS originally began as a national survey of office-based physicians and their visits in 1973. To be eligible for the survey, physicians had to be non-federally employed and primarily engaged in direct office-based patient care. NAMCS was conducted annually through 1981, again in 1985, and continued annually from 1989 through 2019. Statistics were collected at both the physician and the visit level. Visit-level data collection was severely impacted by the COVID-19 pandemic, and only physician-level data files were released through the NCHS Research Data Center for 2020 and 2021. The survey was not fielded in 2022 but was reintroduced in 2023 as a pilot, beginning with the restructured provider-level survey of office-based physicians and PAs. The survey was conducted again in 2024, but in 2025, only PAs were included. No visit data were collected with the NAMCS Provider Survey Component in 2023, 2024, and 2025. Because of low response rates, the decision was made to only release unweighted survey data in the NCHS Research Data Center for all three years. The 2025 PA survey is similar to the 2024 PA survey, but there are some important differences which are described below.

The NAMCS Provider Survey Component PA survey collected data on general provider characteristics and areas of special interest. For 2025, these areas included:

- workforce, revenue, and compensation,
- electronic health records and telemedicine,
- PA availability,
- PA autonomy, and
- PA demographics.

In 2025, 10,000 PAs were sampled. The PA file contains data for the 991 eligible PAs who participated. For more detailed information regarding the sampling methodology, see Sections 2.2 and 2.3.

## **Section 1.2 Data Sources**

In 2025, the NAMCS Provider Survey Component was a primary data collection which used a self-administered, mixed-mode survey in both web and mail formats. For more information on data collection, see Section 2.3.

## **Section 1.3 Data Confidentiality**

NCHS and its agents take the security and confidentiality of the NAMCS Provider Survey Component very seriously. Strict laws have been implemented to establish minimum Federal standards for safeguarding the privacy of individually identifiable health information. Assurance of confidentiality is provided to all survey participants according to Section 308(d) of the Public Health Services Act [42 United States Code 242m (d)]. Strict procedures according to Section 3572 of the Confidential Information Protection and Statistical Efficiency Act (44 U.S.C. 3561-3583) are utilized to prevent disclosure of personal identifiable information in NAMCS Provider Survey Component data. All information which could identify a participating PA is confidential and seen only by persons associated with NAMCS Provider Survey Component and is not disclosed or released to others for any other purpose. Prior to the release of restricted use and public use data files, if any, NCHS conducts extensive disclosure risk analysis to minimize the chance of inadvertent disclosure. As a result, selected characteristics and/or data elements may be omitted or masked even on restricted files to minimize the potential risk of disclosure. Masking is typically performed in such a way to cause minimal impact on the data.

The protocol for the NAMCS Provider Survey Component has been approved by the NCHS Research Ethics Review Board since it was first piloted in 2023.

## Section 2 Methodology

### Section 2.1 Brief Overview

The 2025 NAMCS Provider Survey Component included a national probability sample of office-based PAs to produce estimates of PA characteristics. This sample included 10,000 PAs. The sample was designed to allow for nationally representative estimates for this provider group in the United States. As previously stated, however, because of low survey response, the decision was made not to weight the data, and nationally representative estimates cannot be made. The data reflect sample counts only.

### Section 2.2 Physician Associate Sampling Design

The NAMCS Provider Survey Component target population for the PA survey included non-federally employed PAs practicing in the United States and classified as engaging in office-based patient care. Some PA specialty groups were identified as ineligible, using similar guidelines to those used with the 2023 and 2024 NAMCS Provider Survey Component physician sample and previous years of NAMCS. Changes in the 2025 sampling included the exclusion of PAs specializing in anesthesiology, and of those whose primary employment was listed as “no classification”.

For the universe of PAs, NCHS obtained a file from the American Academy of Physician Associates (AAPA). This was used to construct the initial provider list that was later used as the sampling frame.

The 2025 PA sample had the following characteristics:

- A sample size of 10,000 PAs,
- The sample size allocation of an equal minimum sample size of PAs to smaller strata and allocation of the remaining sample proportionally to the remaining larger strata,
- PA age was younger than 71 years, and
- PAs with a specialty of anesthesiology were excluded, unlike in 2023 and 2024 when they were piloted as a separate sampling stratum; PAs unclassified as to type of employment and PAs without a listed specialty were also excluded, unlike in 2023 and 2024. These decisions were made based on results from the 2023 and 2024 surveys. Other excluded specialties were hospital medicine, nuclear medicine, pathology, radiation oncology, and radiology.

Sampling stratification variables were region and a recode of self-designated individual specialty to broader PA specialty groups for sampling. These included general/family medicine, internal medicine, pediatrics, general surgery, obstetrics and gynecology, orthopedic surgery, cardiovascular diseases, dermatology, urology, psychiatry, neurology, ophthalmology, otolaryngology, and an “other” group for

all other eligible specialties. The sample of PAs was allocated to the specialty group by region using a mix of equal allocation with minimum 55 cases for small strata and proportional allocation for the remaining large strata.

### **Section 2.3 Data Collection Procedures**

The 2025 NAMCS Provider Survey Component PA survey used an instrument which was administered in a mixed-mode format, with the two separate modes being web and mail. A minority of participating PA's (34.6%, unweighted) completed the survey using the mailed paper questionnaire, while the remainder completed it using the web instrument. The sampled provider was the preferred respondent, but knowledgeable office staff or other proxies were also allowed to respond. For most respondents, the sampled provider responded, with 92.3% (unweighted) of PAs completing the survey themselves.

Data collection was conducted by Research Triangle Institute (RTI) International, Research Triangle Park, NC and occurred over a 5-month period in the latter half of 2025. NCHS and RTI invited sampled PAs to participate in the survey by using up to six mail contacts and up to eight email contacts. For all questionnaires received, data keying and initial processing was carried out by RTI. NCHS developed and performed comprehensive edits and data quality checks on the files received from RTI.

### **Section 2.4 Weighting**

Due to low survey response, the decision was made not to weight these data and to release them only as unweighted files in the RDC. That is, the files only reflect sample counts, not national estimates.

## Section 3 Sample Size, Eligibility, and Response Rate

The 2025 NAMCS Provider Survey Component PA sample included 10,000 PAs. A total of 179 PAs did not meet all the criteria and were determined to be ineligible for the survey. The most frequent reasons for being ineligible were that the PA did not provide ambulatory care, was retired or deceased, or was not office-based. Eighty PAs responded with a refusal. Eligibility could not be determined for more than three-quarters of the sampled PAs (87.5%) who either did not respond to the survey (n=8,717) or who refused or had a partial response (n=33). Of the 991 PAs who responded to the survey, 970 were full respondents and 21 were partial respondents. The unweighted response rate was 11.6% based on the number of full and partial responders. See Table 3.1 below for more details.

**Table 3.1 Final disposition of the 2025 NAMCS Provider Survey Component physician associate sample**

Final Disposition	Unweighted
Total number of PAs sampled	10,000
Final=1, Eligible respondent, completed survey	970
Final=2, Eligible respondent, refused survey	80
Final=3, Ineligible (out of scope) respondent	179
Final=4, Unknown eligibility (made no response to survey)	8,717
Final=5, Unknown eligibility (refused or partial response)	33
Final=6, Eligible respondent, partial response	21
Factor used to estimate eligibility for PAs with unknown eligibility (Eligible PAs divided by all those with known eligibility)	0.86
PA response rate	11.6%

NOTE: PA is physician associate. PA response rate was calculated based on AAPOR Response Rate 4, described here: [Standards-Definitions-10th-edition.pdf](#)

## Section 4 Data Processing

Because of small sample sizes, the data included in the restricted use data files underwent additional processing to facilitate analysis. For some variables, response categories were collapsed into broader categories. These recoded variables are listed below along with their names on the restricted use files. Original data are also included on the files but may be subject to additional scrutiny before they can be released.

- During a typical week, approximately how many patient visits do you personally receive at your reporting location? (ESTTOTVIS\_CAT)

- Data were aggregated into the following categories: 20 or fewer visits; 21-40 visits; 41-60 visits; 61-80 visits; 81-100 visits; more than 100 visits.
- At your reporting location, how many other providers are employed? (NUMPROV\_CAT)
  - Data were aggregated into the following categories: 1 provider; 2-3 providers; 4-10 providers; 11-50 providers; and 51-100 providers.
- At your reporting location, are you a full- or part-owner, employee, independent contractor, or a volunteer? (OWNERSHR)
  - Data were aggregated into the following categories: full owner; part owner; employee; and “other”.
- At your reporting location, who owns the practice? (OWNS\_RLR)
  - Data were aggregated into the following categories: physician/physician group; health center; academic medical center or teaching hospital; other hospital; other health care corporation; and “other”.

## Section 5 Survey Content

For the 2025 NAMCS Provider Survey Component restricted use data files, 125 variables were included on the PA file.

The questions asked included general questions about the PA’s reporting location, defined as the setting where most patient visits were received. These included number of patient visits received in a typical week, number of providers at the reporting location, single or multi-specialty status, employment status of the PA, and ownership of practice. Other items included types of payment accepted, acceptance of new patients, electronic health records and telemedicine. PA demographics (sex, race, ethnicity) were also collected. One section included in 2024 was removed for 2025; this included questions on health equity and language barriers.

PAs were asked to respond to a special section on provider autonomy, which included questions on number of years practicing in current specialty, number of years working clinically as a PA, supervision/collaboration guidelines, patient panel, billing, and a checklist of 16 tasks which the PA might personally perform.

The files also contain information on whether the survey was submitted on paper or online.

A codebook for the NAMCS Provider Survey Component Physician Associate Restricted Use File is available. Please refer to it for detailed information on the variables, including variable names, variable type, variable descriptions, and variable values.

**Section 5.1 Item Missingness Rates**

Unweighted item nonresponse rates for survey items that exceeded 5% are shown in Table 5.1. Item nonresponse rates were calculated to include blank entries and responses of “Unknown” or “Don’t know” and have been adjusted to account for skip patterns in the data. Imputation was not conducted for any data elements with missing values.

**Table 5.1. Item missingness rates for the 2025 NAMCS Provider Survey Component Physician Associate restricted use data file**

<b>Variable Name</b>	<b>Variable Description</b>	<b>Description</b>	<b>% Missing: Includes blank entries and responses of “Don’t Know” and “Unknown”</b>
SASDAPPT	Does your reporting location set aside time for same-day appointments?	All PAs	5.85
APPTTIME	On average, about how long does it take to get an appointment with you for a routine medical exam at your reporting location? By 'routine medical exam,' we mean any medical care considered 'routine' for your specialty.	All PAs	5.15
MDAGE	PA Age	All PAs	8.17
PA_CLAIMS	At your reporting location, how are claims submitted most of the time?	All PAs	37.34

**Section 6 Preferred Reporting Items for Complex Sample Survey Analysis (PRICSSA) Checklist for the 2025 NAMCS Provider Survey Component Physician Associate Restricted Use Data File**

Table 6.1 below provides a Preferred Reporting Items for Complex Survey Analysis (PRICSSA) checklist (Seidenberg, Moser, & West, 2023) for users of the 2025 NAMCS Provider Survey Component Physician

Associate restricted use data file. This information may be helpful to users when analyzing data from the file.

**Table 6.1 Preferred Reporting Items for Complex Sample Survey Analysis – Physician Associate Restricted Use Data File**

Preferred Reporting Items for Complex Sample Survey Analysis (PRICSSA)	Description
<b>Name of survey</b>	National Ambulatory Medical Care Survey Provider Survey Component: Physician Associate Survey
<b>Data collection mode</b>	Self-report by mail using a paper survey instrument or online using a web-based survey instrument
<b>Target population</b>	Office-based physician associates primarily engaged in direct patient care in the 50 U.S. states and the District of Columbia
<b>Populations excluded</b>	Federally employed, not primarily engaged in office-based care, age 71 years or older at time of sampling, those specializing in anesthesiology, hospital medicine, nuclear medicine, pathology, radiation oncology, or radiology
<b>Sample design</b>	Stratified systematic sampling
<b>Variance and standard error estimation</b>	Design-based variance estimation for national inference is not applicable because no weights/design variables are provided; analyses should be treated as descriptive of the sample. (unweighted data file)
<b>Weighting</b>	Not applicable (unweighted data file)
<b>Presentation standards</b>	Not applicable (unweighted data file)
<b>Unweighted total sample size</b>	991 physician associates
<b>Weighted total sample size</b>	Not applicable (unweighted data file)
<b>Response rate (unweighted)</b>	11.6%
<b>Location of example code</b>	Not applicable (unweighted data file)

## Section 7 Reference

Seidenberg AB, Moser RP, West BT. Preferred Reporting Items for Complex Sample Survey Analysis (PRICSSA). *J Surv Stat Methodol* 11(4). 2023. <https://doi.org/10.1093/jssam/smac040>.