NATIONAL CENTER FOR HEALTH STATISTICS

Vital and Health Statistics

Series 1, Number 68

November 2026



Overview and Design of the National Electronic Health Records Survey, 2008–2024

Programs and Collection Procedures

U.S. CENTERS FOR DISEASE CONTROL AND PREVENTION

NCHS reports can be downloaded from: www.cdc.gov/nchs/products

Copyright information

All material appearing in this report is in the public domain and may be reproduced or copied without permission; citation as to source, however, is appreciated.

Suggested citation

Myrick KL, Mahar M, Ward BW. Overview and design of the National Electronic Health Records Survey, 2008–2024. Vital Health Stat 1. 2026 Nov(68):1–28. DOI: https://dx.doi.org/10.15620/cdc/252475.

For sale by the U.S. Government Publishing Office
Superintendent of Documents
Mail Stop: SSOP
Washington, DC 20401–0001
Printed on acid-free paper.

NATIONAL CENTER FOR HEALTH STATISTICS

Vital and Health Statistics

Series 1, Number 68 November 2026

Overview and Design of the National Electronic Health Records Survey, 2008–2024

Programs and Collection Procedures

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

Hyattsville, Maryland
November 2026

National Center for Health Statistics

Carolyn M. Greene, M.D., *Acting Director*

Amy M. Branum, Ph.D., *Associate Director for Science*

Division of Health Care Statistics

Carol J. DeFrances, Ph.D., *Director*

Alexander Strashny, Ph.D., *Associate Director for Science*

Contents

Acknowledgments vi

Abstract 1

Introduction 1

Sample Design 2

Estimation Procedures 3

Questionnaires and Survey Content 3

Data Collection Procedures 4
- 2008–2014 4
- 2015 and 2017–2019 4
- 2021 and 2024 5

Eligibility, Final Disposition, and Response Rates 5

Trends for Any EHR Use and Use of Certified EHR Systems 7

Summary 8

References 9

Appendix A. Definitions and Supplemental Information 15

Appendix B. 2024 National Electronic Health Records Survey Questionnaire 16

Figures

1. Percent distribution of mode of response by responding physicians, by year: National Electronic Health Records Survey, 2008–2024 5
2. Response rate, by year: National Electronic Health Records Survey, 2008–2024 7
3. Percentage of office-based physicians using any electronic health record or a certified electronic health record system, by year: National Electronic Health Records Survey, 2008–2024 8

Text Tables

A. Percent distribution of mode of response by responding physicians, by year: National Electronic Health Records Survey, 2008–2024 6

B. Response rate, by year: National Electronic Health Records Survey, 2008–2024 8

C. Percentage of office-based physicians using any electronic health record or certified electronic health record system: National Electronic Health Records Survey, 2008–2024 9

Detailed Tables

1. Overview of sample size, survey length, survey mode of administration, and design information: National Electronic Health Records Survey, 2008–2024 12
2. Survey question topic/module, by year: National Electronic Health Records Survey, 2008–2024 13
3. Survey mode of administration, by year: National Electronic Health Records Survey, 2008–2024 14
4. Percent distribution of eligibility and final disposition of physicians: National Electronic Health Records Survey, 2008–2024 14

Acknowledgments

The authors would like to thank Christopher Cairns for his assistance in validating the 2008–2010 estimates in Figure 3.

Overview and Design of the National Electronic Health Records Survey, 2008–2024

Kelly L. Myrick, Ph.D., C.P.H., Mohsin Mahar, M.P.H., and Brian W. Ward, Ph.D.

Abstract

Objectives

This report provides an overview of the National Electronic Health Records Survey (NEHRS), which was conducted from 2008 to 2024. NEHRS's goal was to collect information about the progress of health information technology adoption by office-based physicians, including use of electronic health record (EHR) systems and EHR interoperability.

Methods

NEHRS was sponsored by the Assistant Secretary for Technology Policy and conducted by the National Center for Health Statistics' Division of Health Care Statistics. NEHRS was first fielded in 2008 as the mixed-mode National Ambulatory Medical Care Survey (NAMCS) Electronic Medical Records Supplement, where data were collected through mailings and computer-assisted telephone interviews. Beginning in 2012, NEHRS was conducted as its own survey independent from NAMCS, and in 2015, a web mode of data collection was added. In 2021 and 2024, the survey used only self-administered web and mail modes of data collection.

Results

The weighted response rates for NEHRS ranged from 33.6% in 2017 to 70.0% in 2009. Completion of the survey through the mail remained the most common mode of response during the duration of the survey. However, in 2021 and 2024, one in five respondents did so via the web. Over the course of NEHRS, the use of an EHR system by physicians more than doubled, from 42.0% in 2008 to 94.6% in 2024. The percentage of physicians using a certified EHR system also increased from 67.5% in 2013 to 83.4% in 2024.

Conclusions

NEHRS has served as a unique data resource for researchers and others interested in studying and understanding the adoption and use of EHRs by office-based physicians. With the survey content being adapted over the years to collect data on relevant topics related to electronic information exchange and EHRs, NEHRS can also be used to study other health information technology topics.

Keywords: electronic health record (EHR) • interoperability • health information technology • National Electronic Health Records Survey (NEHRS)

Introduction

The National Ambulatory Medical Care Survey (NAMCS), which provides detailed statistics on the provision and use of ambulatory medical care services in the United States, was first conducted by the National Center for Health Statistics in 1973 (1). In 2001, NAMCS started to track physician offices that used electronic health records (EHRs) through its NAMCS Physician Induction Interview. The Physician Induction Interview consisted of a series of questions that determined survey eligibility of the physician and collected data on physician and medical practice characteristics, including revenue and workforce. This interview preceded the portion of NAMCS where patient visit data were collected.

In 2004, the U.S. federal government set a goal for every American to have an EHR by 2014 (2). This increased interest in collecting more information about the progress of health information technology adoption by healthcare providers. Due to these time-sensitive data collection needs, an annual mixed-mode supplemental survey known as the NAMCS Electronic Medical Records Supplement was initially fielded in 2008. The NAMCS Electronic Medical Records Supplement was funded by the Assistant Secretary for Technology Policy (ASTP),

which at the time was called the Office of the National Coordinator for Health Information Technology. This survey supplement was developed to produce timely data to measure progress in the adoption of EHR systems among office-based physicians. Further highlighting the importance of this survey supplement, in February 2009, the American Recovery and Reinvestment Act was signed into law. It included a portion titled the Health Information Technology for Economic and Clinical Health (HITECH) Act, which authorized incentive payments through Medicare and Medicaid to providers that used certified EHRs to achieve specified improvements in care delivery, known as "meaningful users" of EHR systems (3). Physicians answering "yes" to having a current system that met "meaningful use criteria (certified EHR) as defined by the Department of Health and Human Services" or met "U.S. Department of Health and Human Services requirements" were categorized as having a certified EHR system.

Starting in 2010, funding permitted an increase in the sample size of the NAMCS Electronic Medical Records Supplement, which allowed the measurement of EHR adoption rates by all 50 U.S. states and the District of Columbia (D.C.). The resulting data were used to produce state-level estimates that could be informative in the development of programs and approaches to support physicians and healthcare providers. These annual data could be used across years to monitor the changes in the adoption and use of EHRs.

The NAMCS Electronic Medical Records Supplement was fielded from 2008 through 2011. In 2012, it became its own standalone mixed-mode survey, independent of NAMCS called the National Electronic Health Records Survey (NEHRS). Its purpose was no longer to collect data solely on EHR adoption and capabilities, but also on the progress that office-based physicians were making toward meeting the goals of the HITECH Act. In recent years, NEHRS data have been used to measure the use and exchange of health data through health information technology and the strengthening of EHR interoperability (as stated in the 21st Century Cures Act [PL.114–255] [4]), the Centers for Medicare & Medicaid Services (CMS) Promoting Interoperability programs, and measuring the burden associated with EHRs (for a definition of interoperability, see Appendix A). NEHRS was conducted every year during 2008–2024 except for years 2016, 2020, 2022, and 2023. Data collection did not occur in 2016 due to changes in contract procurement, in 2020 due to delays in approval, and in 2022 and 2023 due to a lack of funding.

This report provides an overview of the design and operations of NEHRS, from its initial years in 2008–2011 (then known as the NAMCS Electronic Medical Records Supplement) to 2012–2024, when it was fielded as its own standalone survey. While this report discusses both the NAMCS Electronic Medical Records Supplement and NEHRS, all the data collected during the years of 2008–2024 will be referred to as NEHRS. This report provides an overview of the sampling procedures, questionnaire content, and data collection throughout the 2008–2024 period. It also discusses physician eligibility and final disposition for NEHRS, as well as survey response rates. Lastly, to reflect NEHRS' goal of monitoring health information technology adoption (specifically EHRs), this report presents 2008–2024 NEHRS national trend data of EHR system adoption (both any and certified) by office-based physicians.

Sample Design

Over the years NEHRS was conducted, the availability of databases from which sampling frames of physicians could be drawn increased, and research has discussed and evaluated some of these available database resources (5–10). Since 2008, NEHRS consistently used the American Medical Association (AMA) masterfile (called the AMA Physician Professional Data in more recent years) and American Osteopathic Association (AOA) masterfile to create its sampling frame.

The NEHRS sampling frame was developed to consist of nonfederally employed, office-based physicians and excluded those in anesthesiology, radiology, and pathology specialties. The specialty coding scheme provided by the AMA masterfile was used to define physician specialty, and eligible specialties were categorized into 14 specialty groups. For example, the individual physician specialties of ophthalmology, ophthalmic plastic and reconstructive surgery, and pediatric ophthalmology were all included in the ophthalmology specialty group. A list of these specialty groups and the most recent specialties included in them can be found elsewhere (11). The specialties of anesthesiology, radiology, and pathology specialties were excluded to ensure comparability with NAMCS and because they are not included in the CMS Promoting Interoperability incentive programs, may have their own information systems, and may not be required to use EHRs (although they may still need to document aspects of care provision in EHR systems [12]).

Physicians were classified as office-based if they provided care to patients receiving health services without admission to a hospital or other facility, and if this care was provided in one of the following settings: private solo or group practice, freestanding clinic or urgent care center, federally qualified health center (FQHC) or FQHC look-alike, mental health center, government clinic that is not federally funded, family planning clinic, integrated delivery system, health maintenance organization, health system or other prepaid practice, or a faculty practice plan (in 2024, the Indian Health Service, federally qualified rural health clinics, and hospital outpatient departments were also included). Office-based physicians were the initial focus of NEHRS as this population was shared with NAMCS; in later years,

this focus was consistent with the structure of the CMS EHR Meaningful Use/Promoting Interoperability incentive programs as it excluded hospital-based physicians.

Once the sampling frame was created, it was used to draw a national probability sample of office-based physicians to represent all office-based physicians in the United States. Although the sample was nationally representative each year NEHRS was conducted, some differences were seen across years in both sample size and sample design (Table 1). During 2008–2024, the sample size ranged from 2,000 to 16,633 physicians. However, for most survey years, the sample size was 10,302 physicians. This variation in size depended on several considerations, including expected response rate, the need to make subnational estimates, and resource availability.

Only national estimates could be calculated with the 2008–2009 NEHRS data. However, during 2010–2021, NEHRS yielded data that supported both national- and state-level estimates (including D.C.), except in 2018 because resource limitations only permitted national estimates (13). State-level estimates allowed NEHRS to provide a more granular geographical understanding of how adoption of EHRs and their use occurred throughout the United States. Although 2024 had a sample of 16,633 physicians, the survey was designed only to yield national estimates, given changing priorities of ASTP.

Estimation Procedures

Weighting estimation information and item nonresponse for all NEHRS years can be found on the NEHRS Questionnaires, Datasets, and Documentation site. The information in the rest of this section includes brief estimation procedures and item nonresponse from the 2024 NEHRS technical documentation (11). The 2024 NEHRS data file includes a physician-level analysis weight (MAILWGT) for producing unbiased national estimates from the sample data and interview data. This weight is a vital component of the survey data, and microdata file users should understand how to use and apply it correctly. Each record on the data file represents one physician in the sample, and that single physician represents many physicians within their geographic area and medical specialty. Statistics produced from the 2024 NEHRS use a multistage estimation procedure. The procedure has three components: inflation by reciprocals of the selection probabilities, adjustment for nonresponse, and a calibration ratio adjustment to fixed totals. Unweighted item nonresponse rates that exceed 5% are typically reported.

Questionnaires and Survey Content

For each year NEHRS was fielded, the survey questionnaire included many questions that asked physicians about the adoption and use of EHRs and computerized capabilities in their practices. In addition, several questions were included annually that collected information on physician and practice characteristics, and physician or practice revenue. Several of the survey questions in NEHRS were cognitively tested by the National Center for Health Statistics (NCHS) Collaborating Center for Questionnaire Design and Evaluation Research and the results, including a discussion of cross-item findings and a question-by-question analysis, are available elsewhere (14).

During the 2008–2024 period, the use of EHRs by physicians changed, and the content of the questionnaire was changed to ensure that NEHRS continued to collect relevant data. The result was that the content of the NEHRS questionnaire would not only add or change the questions being asked about the use of EHRs, physician/practice characteristics, and revenue, but would also include different survey question modules from year to year that asked about other aspects of health information exchange.

The main reason for the shift from focus on adoption and use of EHRs and computerized capabilities in the earlier years of NEHRS to other aspects of health information exchange was to better capture the rapidly changing health information technology field. With the passing of the 2009 HITECH Act, the 2016 21st Century Cures Act, and advances in health information technologies, the use of EHRs in healthcare settings continued to grow (15). By 2015, research using NEHRS data showed that over three-quarters (77.9%) of office-based physicians had adopted a certified EHR system (16). Therefore, to keep data collection relevant to the changes occurring in the field, NEHRS began including questions that focused on not only if EHRs were used, but also on how they were used. For example, question modules on the four aspects of interoperability of EHR systems (the ability to send, receive, integrate, and search for information; for a definition of interoperability, see Appendix A) were added to the 2014 questionnaire, and this module was expanded in future years. As another example, concerns over the burden of using medical record systems for documentation became a focus of healthcare providers (17–19), and in 2018, the NEHRS questionnaire included a variety of questions to capture data on this topic. That same year, NEHRS also included questions about the use of telemedicine, which continued to be important as the survey moved into the 2020s. With these changes, NEHRS was able to continue not only the collection of data used to produce estimates on the adoption and use of EHRs but also had the flexibility to ask questions on current topics related to the rapidly changing field of health information technology.

Table 2 provides a summary of question topics over the 2008–2024 period and in which years these questions were asked. A topic may have been covered in the survey across different years; however, this does not mean that the exact same survey question(s) on that topic appeared in each of those years. Data users can examine the 2008–2024 NEHRS questionnaires to see which questions were asked in each year.

Data Collection Procedures

Throughout its history, NEHRS has been a mixed-mode survey with data collection procedures informed by Dillman and colleagues' Tailored Design Method (20). Over the 2008–2024 period, NEHRS used a combination of a self-administered web survey, a self-administered mail survey, and computer-assisted telephone interviewing (CATI) in its data collection procedures. However, not all these modes, or combinations of modes, were used in every survey cycle (Table 1). Only mail mode was used for each year of NEHRS. Furthermore, the survey was also designed to allow for a proxy to respond on behalf of the sampled physician. While the sampled physician was the preferred respondent, an office manager or other knowledgeable staff member could respond to NEHRS on behalf of the sampled physician. In the next sections, details on the survey data collection modes used for each year that NEHRS was fielded. A summary of the data collection procedures is also presented in Table 3.

2008–2014

Data collection procedures in 2008–2014 consisted of using a combination of self-administered mail and CATI modes of administration. In each of these years, sampled physicians were mailed a survey packet that included a letter describing NCHS signed by the NCHS director, a statistical report or factsheet used to highlight the survey data, and a paper copy of the survey questionnaire with a stamped envelope for easy return. During 2013–2014, an NEHRS-branded pen was also included to serve as a nonmonetary incentive. After about a week, a postcard that served as a thank you (for those who had responded) or a reminder (for those who had not responded) was mailed to sampled physicians. Any mailed survey packets returned by the U.S. Postal Service were deemed undeliverable. NCHS used various procedures to try and ensure the NEHRS questionnaire was received by the intended respondent. If a forwarding address was provided, the survey packet was sent to the new address. For returned mailings with no forwarding address, tracing searches were conducted to identify updated addresses. For mailed survey packets returned as undeliverable without a forwarding address, and where tracing was unable to identify a valid mailing address, no further mailings were sent.

About 2 weeks after the initial mailing, a second survey packet was mailed to NEHRS sampled physicians who had not responded. This second packet did not contain all the materials included with the first—only a letter (with slightly different language than the initial letter), the questionnaire, and a stamped return envelope. Finally, after another 2–3 weeks, if the physician still had not responded, a third survey packet with an updated letter was sent. The materials in this third survey packet were similar to the contents of the second mailing, except in 2013, when an NEHRS-branded pen was included.

If a sampled physician still had not responded to the survey after the third mailing, several attempts to reach the physician were made via telephone. For missing, incorrect, or invalid phone numbers, attempts were made to secure an accurate phone number for the sampled physician. If a valid telephone number could not be identified, no further contact attempts were made. If a physician was reached, an interview script that included screener questions to confirm eligibility and gather needed information helped guide the CATI.

During 2008–2014, the total fielding period for NEHRS lasted between 3 and 6 months, depending on the specific year. Factors such as seasonality, response rates, and available resources were factored into the length of fielding. At the end of each respective fielding period, if no completed survey was received from the physician through the mail, and no response was received through the call attempts, the physician was classified as a nonrespondent.

2015 and 2017–2019

A major fielding procedures change was implemented for the 2015 NEHRS, when a self-administered web survey mode was added to the data collection. An initial invitation letter asking physicians to participate in NEHRS was sent. This letter included a web address and a unique passcode to access an online version of the survey. Versions of this invitation were sent via USPS mail, as well as emailed to physicians with a valid email address. This web survey was the initial mode of administration for the survey during these years and remained accessible to sampled physicians for the entire NEHRS data collection period for a given year.

About 4–6 weeks (depending on the survey year) from when the initial web survey invitations were sent out, the self-administered mail mode of administration began. The same procedures used in previous years (that is, the mailing of three separate survey packets with a reminder or thank you between the first and second packets), with about the same timeline between mailings was used. This was followed by CATI. These data collection procedures were used in 2015 and 2017–2019 (NEHRS was not conducted in 2016).

For the 2017 NEHRS, after the initial data collection detailed above, sampled physicians were also administered a survey supplement titled the Physician Experiences with

Electronic Health Records Survey (PEEHRS). Although the PEEHRS supplement is not discussed in detail in this report, some details on this survey are in Appendix A.

2021 and 2024

NEHRS was not fielded in 2020, 2022, or 2023. For the 2021 and 2024 NEHRS, additional changes were made to the data collection and survey fielding procedures. The self-administered web and mail modes of administration were still used to collect data, and the relative timing of these contacts remained the same. Web response was only used by 3.6% of respondents when first introduced in 2015; however, this percentage increased to 19.3% in 2017, and by 2019, more than one in five respondents (23.2%) used the web (Figure 1, Table A). For 2008–2024, mail continued to be the most common mode of response, ranging from 62.8% in 2018 to 79.0% in 2008.

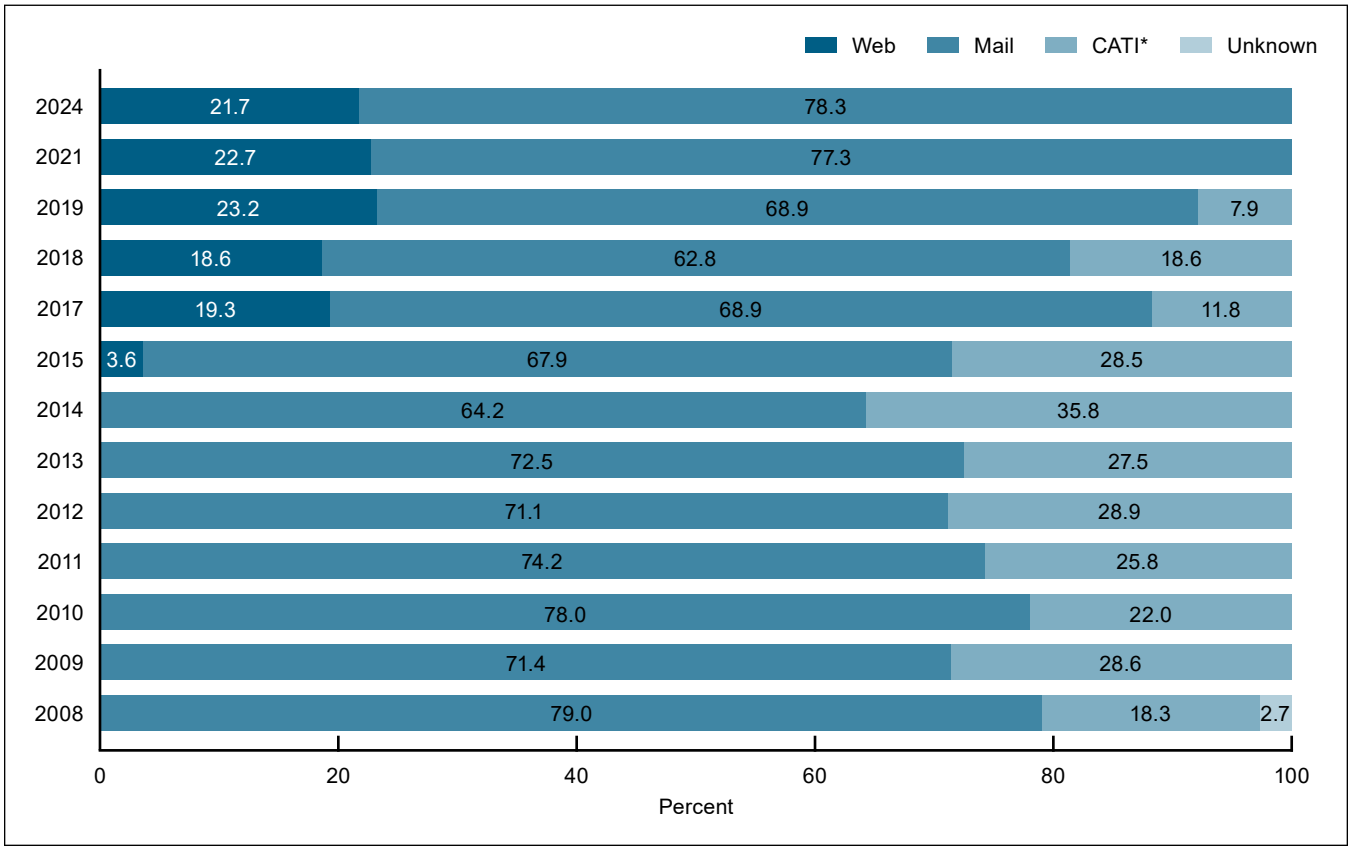
The largest change to data collection procedures during the 2021 and 2024 survey cycles was that the CATI mode of administration was not used. The rationale for omitting this mode was that the percentage of physicians who responded to NEHRS during the CATI mode of administration decreased between 2014 and 2019 (Figure 1, Table A). Over one-third of respondents (35.8%) responded via CATI in 2014, but this declined to 11.8% in 2017 and 7.9% in 2019. As this mode of data collection was the most resource-intensive and the return on investment (that is, number of completed surveys recorded through CATI) was limited, it was determined that those resources could be better used for enhancing the procedures used to locate sampled physicians.

Eligibility, Final Disposition, and Response Rates

For each year during 2008–2024, a sampled physician's eligibility was determined based on three separate criteria. While these criteria were accounted for during the sampling process using information available, this information was not always current (8). Therefore, survey questions were included in each year of NEHRS to ensure that eligibility of physicians could be verified.

The first question used to determine eligibility was: "We have your specialty as: [name of specialty]. Is that correct?"

Figure 1. Percent distribution of mode of response by responding physicians, by year: National Electronic Health Records Survey, 2008–2024



* CATI is computer-assisted telephone interview.
NOTES: Cells shown as 0 indicate the mode was not used during that year. Percent distributions are unweighted. The National Electronic Health Records Survey was not fielded in 2016, 2020, 2022, or 2023. Some changes in question wording and/or eligibility criteria occurred during the 2008–2024 NEHRS and should be considered when comparing across years (see report text for specific details). During 2008–2011, the survey was titled the National Ambulatory Medical Care Survey Electronic Medical Records Supplement.
SOURCE: National Center for Health Statistics, National Electronic Health Records Survey, 2008–2024.

Table A. Percent distribution of mode of response by responding physicians, by year: National Electronic Health Records Survey, 2008–2024

Year	Web	Mail	CATI*	Unknown	Total
2008	…	79.0	18.3	2.7	100.0
2009	…	71.4	28.6	0.0	100.0
2010	…	78.0	22.0	0.0	100.0
2011	…	74.2	25.8	0.0	100.0
2012	…	71.1	28.9	0.0	100.0
2013	…	72.5	27.5	0.0	100.0
2014	…	64.2	35.8	0.0	100.0
2015	3.6	67.9	28.5	0.0	100.0
2017	19.3	68.9	11.8	0.0	100.0
2018	18.6	62.8	18.6	0.0	100.0
2019	23.2	68.9	7.9	0.0	100.0
2021	22.7	77.3	…	0.0	100.0
2024	21.7	78.3	…	0.0	100.0

* CATI is computer-assisted telephone interview.
… Category not applicable; mode not used during that year.

NOTES: Percent distributions are unweighted. The National Electronic Health Records Survey (NEHRS) was not fielded in 2016, 2020, 2022, or 2023. Some changes in question wording and/or eligibility criteria occurred during the 2008–2024 NEHRS and should be considered when comparing across years (see report text for specific details). During 2008–2011, the survey was titled the National Ambulatory Medical Care Survey Electronic Medical Records Supplement.

SOURCE: National Center for Health Statistics, National Electronic Health Records Survey, 2008–2024.

The name of the physician's specialty inserted in the survey question was taken from the sampling frame, and only physicians with an eligible specialty were sampled. Physicians answering "yes" met this eligibility criteria. Those who answered "no" were then asked to write-in their specialty. In many instances, the eligibility of this write-in was apparent. However, in some instances it was a specialty that was not on the specialty list used by NCHS. In these instances, the write-in was reviewed by NCHS staff to determine eligibility for NEHRS. Decisions in such instances were documented and applied to the eligibility determination of physicians in future years to ensure consistency. The most recent list of eligible physician specialties for NEHRS can be found in the documentation accompanying the most recent data release (11).

The second eligibility criterion was a physician must report currently providing ambulatory care to patients, where ambulatory care was defined as care for patients receiving health services without admission to a hospital or other facility. To capture this, for each year from 2008–2019, sampled physicians were asked: "Do you directly care for ambulatory patients in your work?" In 2021 and 2024, the wording of this question differed slightly: "Do you directly provide outpatient, office-based care?" Those who answered "yes" were classified as meeting this eligibility criterion, while those who answered "no" or "I am no longer in practice" were classified as ineligible.

The third criterion sampled physicians needed to meet to remain eligible was that they must see patients in an office-based setting. This was captured in a question that asked: "Do you see ambulatory patients in any of the following settings? Check all that apply." Sampled physicians who checked any one of the following eight settings were considered eligible for NEHRS: (a) private solo or group practice, (b) freestanding clinic or urgicenter/urgent care center, (c) community health center, (d) mental health center, (e) non-federal government clinic, (f) family planning clinic, (g) health maintenance organization or other prepaid practice, and (h) faculty practice plan. The specific wording of this question changed between 2008 and 2009 but remained the same from 2009 through 2019. In 2021 and 2024, the wording changed slightly to read: "Do you see outpatient, office-based patients in any of the following settings?" Similarly, the response options available changed during the 2008–2012 NEHRS but remained the same from 2013 through 2021. The 2024 NEHRS expanded the eligibility criteria to include three new settings: Indian Health Service, rural health clinic (federally qualified), and hospital outpatient departments.

Using these three criteria, the eligibility of a responding physician was determined. In addition, whether the respondent answered these questions, as well as other specific survey questions (such as, "Does the reporting location use an EHR system?"), were used to determine if a physician's response would be considered fully or partially completed. Both eligibility and completeness were used to determine the final disposition of the NEHRS respondent (Table 4). During 2008–2024, the percentage of surveys completed by eligible physicians was highest in 2009 (52.7%) and lowest in 2024 (10.4%), while partially completed eligible surveys ranged from 0.0% in 2008 to 6.3% in 2015. The percentage of sampled physicians deemed ineligible or out-of-scope ranged between 5.0% in 2024 and 20.7% to 2014. The percentage of physicians out-of-scope based on their survey responses who were not locatable ranged from 5.9% in 2017 to 41.3% in 2019. Furthermore, between 0.0% in 2008 and 54.3% in 2017

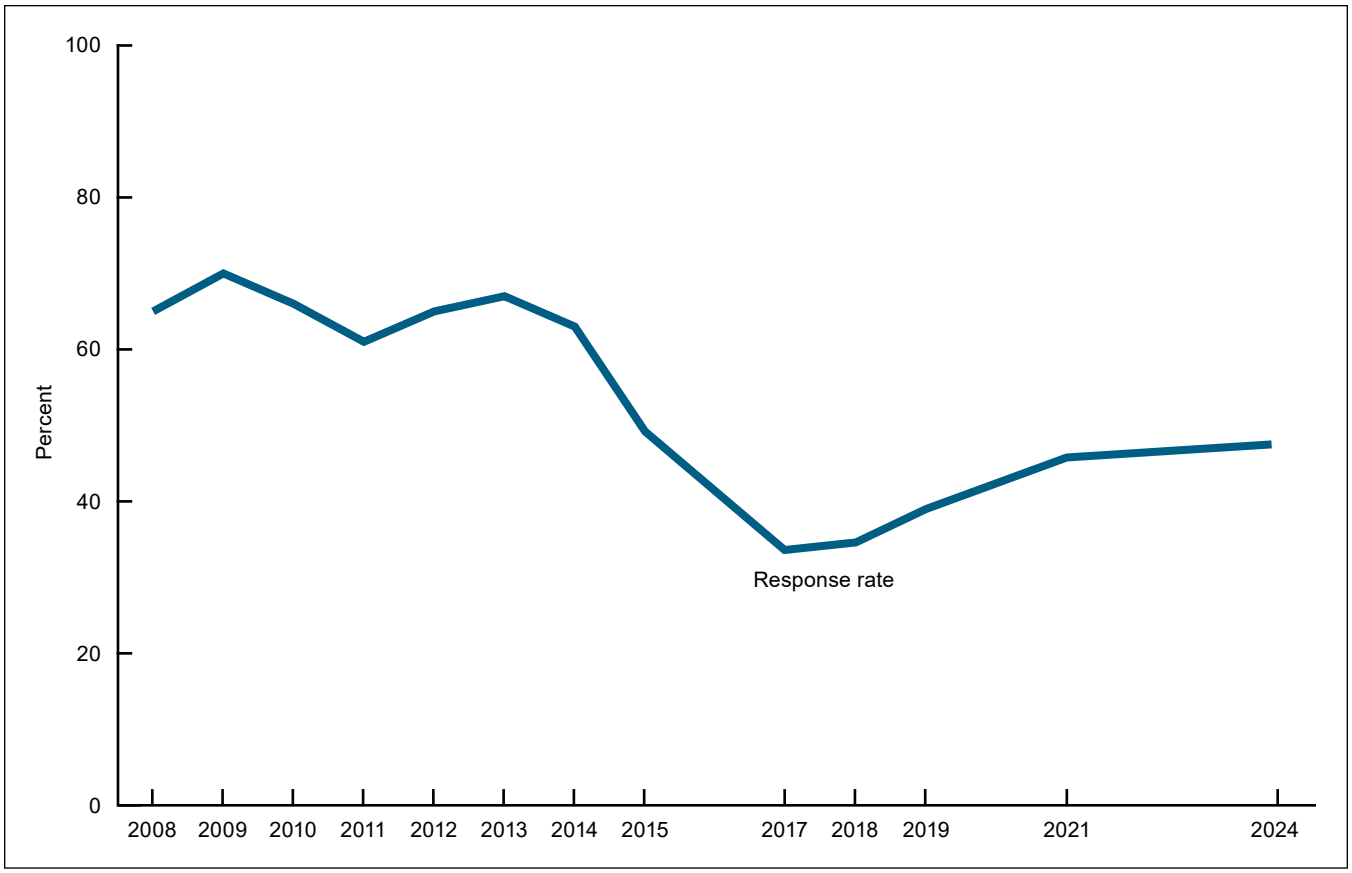
had an unknown eligibility as they either did not respond (refusal) or only provided a response to a limited number of survey questions, so their eligibility could not be determined (partial).

Once the final disposition was determined, response rates were calculated for each year of NEHRS (11, 21–30). Broader literature has shown that survey response among healthcare providers has been declining (31,32). This is seen across all federal surveys (33), and an overall similar pattern was found in NEHRS during its earlier years (2009–2017) (Figure 2, Table B). The highest weighted response rate for the survey was 70.0% in 2009. The largest observed drop in response occurred from 2014 to 2017, when the response rate went from 63.0% to 33.6%. The response rate remained less than 40% through 2019; however, in 2021 and 2024, the rate increased to 45.9% and 47.5%, respectively.

Trends for Any EHR Use and Use of Certified EHR Systems

From its start in 2008, an initial goal of NEHRS was to collect more information about the progress of health information technology—specifically EHR adoption—by office-based physicians. As such, data from this survey have been consistently used to measure the adoption and use of EHRs among office-based physicians in the United States through 2024. Some estimates have been released previously in various web tables and reports (16,25,27,34–39), but the completion of the 2024 NEHRS makes it possible to analyze adoption of any and certified EHR systems by office-based physicians over the complete life cycle of NEHRS. This analysis is presented in Figure 3 and Table C. All estimates in this figure meet NCHS standards for reliability (40) and were generated using SAS version 9.4 (SAS Institute, Cary, N.C.) and SAS-callable SUDAAN version 11.0 (RTI International, Research Triangle Park, N.C.). Given the changes in survey design across the life cycle of NEHRS, Joinpoint software version 4.8.0.1 (National Cancer Institute, Bethesda, M.D.) was used to perform significance tests of trends.

Figure 2. Response rate, by year: National Electronic Health Records Survey, 2008–2024



NOTES: Response rates are weighted. Some changes in question wording and/or eligibility criteria occurred during the 2008–2024 National Electronic Health Records Survey (NEHRS) and should be considered when comparing across years (see report text for specific details). During 2008–2011, the survey was titled the National Ambulatory Medical Care Survey Electronic Medical Records Supplement. NEHRS was not fielded in 2016, 2020, 2022, or 2023.
SOURCE: National Center for Health Statistics, National Electronic Health Records Survey, 2008–2024.

Table B. Response rate, by year: National Electronic Health Records Survey, 2008–2024

Year	Response rate (percent)
2008	65.0
2009	70.0
2010	66.0
2011	61.0
2012	65.0
2013	67.0
2014	63.0
2015	49.2
2017	33.6
2018	34.6
2019	39.0
2021	45.9
2024	47.5

NOTES: Response rates are weighted. Some changes in question wording and/or eligibility criteria occurred during the 2008–2024 National Electronic Health Records Survey (NEHRS) and should be considered when comparing across years (see report text for specific details). During 2008–2011, the survey was titled the National Ambulatory Medical Care Survey Electronic Medical Records Supplement. NEHRS was not fielded in 2016, 2020, 2022, or 2023.

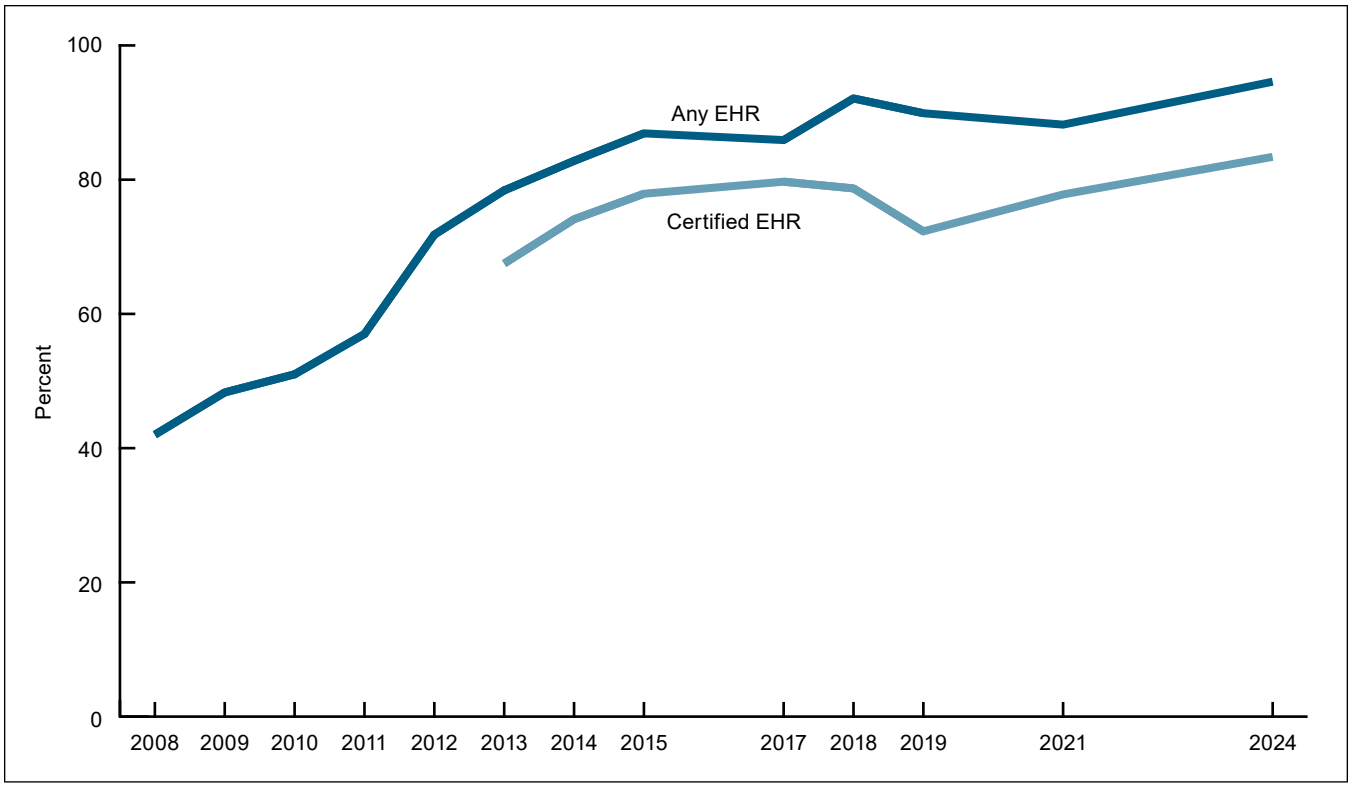
SOURCE: National Center for Health Statistics, National Electronic Health Records Survey, 2008–2024.

In 2008, 42.0% of office-based physicians used an EHR system; however, by 2024, this percentage had more than doubled to 94.6%. During this time, there was a steep statistically significant increase from 2008 to 2014 (42.0% to 82.8%; $p < 0.001$), followed by a less steep—but still statistically significant—increase from 2014 to 2024 (82.8% to 94.6%; $p = 0.024$). From 2013 to 2024, there was also a gradual increase in the percentage of office-based physicians using a certified EHR system, from 67.5% in 2013 to 83.4% in 2024 ($p = 0.021$).

Summary

From 2008 through 2024, NEHRS was conducted by NCHS to gather information and data about the progress of health information technology adoption by office-based physicians. While specific topics on which data were collected may have changed throughout that period, NEHRS consistently collected data on the use of EHR systems. To successfully meet its goal, the survey remained flexible. Its content, design, and fielding procedures were all adapted at various points to enable the survey to collect the data needed to continue to monitor the rapidly evolving health

Figure 3. Percentage of office-based physicians using any electronic health record or a certified electronic health record system, by year: National Electronic Health Records Survey, 2008–2024



NOTES: EHR is electronic health record. Having a certified EHR system was defined as an EHR system meeting U.S. Department of Health and Human Services requirements that are necessary to meet the objectives of the Meaningful Use/Promoting Interoperability Program. The National Electronic Health Records Survey (NEHRS) was not fielded in 2016, 2020, 2022, or 2023. NEHRS data were first collected on certified EHR systems in 2013; before this, the questionnaire asked only about plans to implement a certified system. Some changes in question wording and/or eligibility criteria occurred during the 2008–2024 NEHRS and should be considered when comparing across years (see report text for specific details). For comparability with previous years, the estimates for 2024 excluded physicians in the Indian Health Service, rural health clinics (federally qualified), and hospital outpatient departments. All estimates presented meet National Center for Health Statistics standards for reliability. During 2008–2011, the survey was titled the National Ambulatory Medical Care Survey Electronic Medical Records Supplement.
SOURCE: National Center for Health Statistics, National Electronic Health Records Survey, 2008–2024.

Table C. Percentage of office-based physicians using any electronic health record or certified electronic health record system: National Electronic Health Records Survey, 2008–2024

Year	Any EHR system		Certified EHR system	
	Percent	95% confidence interval	Percent	95% confidence interval
2008	42.0	38.2–45.7	…	…
2009	48.3	45.7–50.9	…	…
2010	51.0	48.8–53.1	…	…
2011	57.0	54.6–59.4	…	…
2012	71.8	69.7–73.8	…	…
2013	78.4	76.4–80.3	67.5	65.3–69.7
2014	82.8	80.8–84.7	74.1	71.9–76.3
2015	86.9	84.8–88.8	77.9	75.4–80.3
2017	85.9	83.2–88.4	79.7	76.7–82.4
2018	92.1	87.7–95.3	78.7	72.4–84.1
2019	89.9	87.3–92.2	72.3	68.7–75.8
2021	88.2	85.4–90.6	77.8	74.5–80.8
2024	94.6	93.0–95.6	83.4	81.1–85.6

… Category not applicable.

NOTES: EHR is electronic health record. Having a certified EHR system was defined as an EHR system meeting U.S. Department of Health and Human Services requirements that are necessary to meet the objectives of the Meaningful Use/Promoting Interoperability Program. The National Electronic Health Records Survey (NEHRS) was not fielded in 2016, 2020, 2022, or 2023. NEHRS data were first collected on certified EHR systems in 2013; before this, the questionnaire asked only about plans to implement a certified system. Some changes in question wording and/or eligibility criteria occurred during the 2008–2024 NEHRS and should be considered when comparing across years (see report text for specific details). For comparability with previous years, the estimates for 2024 excluded physicians in the Indian Health Service, rural health clinics (federally qualified), and hospital outpatient departments. The Korn–Graubard method was used to calculate 95% confidence intervals. All estimates presented meet National Center for Health Statistics standards for reliability. During 2008–2011, the survey was titled the National Ambulatory Medical Care Survey Electronic Medical Records Supplement.

SOURCE: National Center for Health Statistics, National Electronic Health Records Survey, 2008–2024.

information technology field. Estimates presented in this report show that while only 42.0% of office-based physicians used an EHR system when NEHRS was first conducted in 2008, a large majority (94.6%) of physicians used these systems in 2024. Additional results of this survey have been made available in various NCHS reports and products, ASTP products, and by other researchers who have used the data to study this topic.

Researchers can access restricted-use versions of NEHRS data files through the NCHS Research Data Center, and for the years 2018–2024, researchers can access public-use data files on the NCHS website. Those interested in accessing these files can learn how to do so here. Furthermore, examples of software code that researchers can use to properly account for the survey design and weighting of the data in their own statistical analyses have been included in the technical documentation accompanying recent years of NEHRS. For example, the documentation accompanying the 2024 NEHRS public-use data file includes examples of R, SAS, SUDAAN, Stata, and SPSS code (11).

Although NEHRS fielding concluded in 2024, all data files are available for a variety of health information technology topics related to office-based physicians. This report provides an overview of the sample, questionnaire content, survey design, fielding procedures, and response rates, and serves as a reference for those using NEHRS data to conduct their own research.

References

1. Hing E, Shimizu IM, Talwalkar A. Nonresponse bias in estimates from the 2012 National Ambulatory Medical Care Survey. Vital Health Stat. 2016 Feb;2(171):1–42. PMID: 27301078.
2. Simborg DW. Promoting electronic health record adoption. Is it the correct focus? J Am Med Inform Assoc. 2008 Mar–Apr;15(2):127–129. DOI: https://doi.org/10.1197/jamia.m2573.
3. Centers for Medicare & Medicaid Services. Health Information Technology for Economic and Clinical Health (HITECH) audits. Available from: https://www.cms.gov/Medicare/Compliance-and-Audits/Part-A-Cost-Report-Audit-and-Reimbursement/HITECH-Audits.html.
4. Black JR, Hulkower RL, Ramanathan T. Health information blocking: Responses under the 21st Century Cures Act. Public Health Rep. 2018 Sep–Oct;133(5):610–613. DOI: https://doi.org/10.1177/0033354918791544.
5. Bindman AB. Using the National Provider Identifier for health care workforce evaluation. Medicare Medicaid Res Rev. 2013 Jul;3(3):E1–E9. DOI: https://doi.org/10.5600/mmrr.003.03.b03.
6. DiGaetano R. Sample frame and related sample design issues for surveys of physicians and physician practices. Eval Health Prof. 2013 Sep;36(3):296–329. DOI: https://doi.org/10.1177/0163278713496566.

7. Klabunde CN, Willis GB, McLeod CC, Dillman DA, Johnson TP, Greene SM, et al. Improving the quality of surveys of physicians and medical groups: A research agenda. Eval Health Prof. 2012 Dec;35(4):477–506. DOI: https://doi.org/10.1177/0163278712458283.

8. DesRoches CM, Barrett KA, Harvey BE, Kogan R, Reschovsky JD, Landon BE, et al. The results are only as good as the sample: Assessing three national physician sampling frames. J Gen Int Med. 2015 Aug;30(Suppl 3):S595–S601. DOI: https://doi.org/10.1007/s11606-015-3380-9.

9. DesRoches CM, Barrett K. Assessing the accuracy of three national physician sampling frames. J Gen Int Med. 2015 Oct;30(10):1403. DOI: https://doi.org/10.1007/s11606-015-3482-4.

10. Henderson M. Assessing the accuracy of three national physician sampling frames. J Gen Int Med. 2015 Oct;30(10):1402. DOI: https://doi.org/10.1007/s11606-015-3483-3.

11. National Center for Health Statistics. Division of Health Care Statistics. 2024 National Electronic Health Records Survey (NEHRS) technical documentation. 2025 Oct. DOI: https://dx.doi.org/10.15620/cdc/174636.

12. Lou SS, Baratta LR, Lew D, Harford D, Avidan MS, Kannampallil T. Anesthesia clinical workload estimated from electronic health record documentation vs billed relative value units. JAMA Netw Open. 2023 Aug;6(8):e2328514. DOI: https://doi.org/10.1001/jamanetworkopen.2023.28514.

13. National Center for Health Statistics. Division of Health Care Statistics. 2018 National Electronic Health Records Survey (NEHRS) public use file documentation. 2021. Available from: https://ftp.cdc.gov/pub/Health_Statistics/NCHS/Dataset_Documentation/NEHRS/2018/NEHRS-2018Doc-508.pdf.

14. Scanlon P. Evaluation of the 2015 National Electronic Health Records Survey. National Center for Health Statistics; 2016. Available from: https://wwwn.cdc.gov/qbank/report/Scanlon_2016_NCHS_NEHRS.pdf.

15. Birkhead GS, Klompas M, Shah NR. Uses of electronic health records for public health surveillance to advance public health. Annu Rev Public Health. 2015 Mar;36:345–359. DOI: https://doi.org/10.1146/annurev-publhealth-031914-122747.

16. Jamoom E, Yang N. Table of electronic health record adoption and use among office-based physicians in the U.S., by state: National Electronic Health Records Survey, 2015. 2016. Available from: https://archive.cdc.gov/www_cdc_gov/nchs/data/ahcd/nehrs/2015_nehrs_web_table.pdf.

17. Poissant L, Pereira J, Tamblyn R, Kawasumi Y. The impact of electronic health records on time efficiency of physicians and nurses: A systematic review. J Am Med Inform Assoc. 2005 Sep–Oct;12(5):505–516. DOI: https://doi.org/10.1197/jamia.m1700.

18. Arndt BG, Beasley JW, Watkinson MD, Temte JL, Tuan WJ, Sinsky CA, et al. Tethered to the EHR: Primary care physician workload assessment of using EHR event log data and time-motion observations. Ann Fam Med. 2017 Sep;15(5):419–426. DOI: https://doi.org/10.1370/afm.2121.

19. Murad MH, Vaa Stelling BE, West CP, Hasan B, Simha S, Saadi S, et al. Measuring documentation burden in healthcare. J Gen Intern Med. 2024 Nov;39(14):2837–2848. DOI: https://doi.org/10.1007/s11606-024-08956-8.

20. Dillman DA, Smyth JD, Christian LM. Internet, phone, mail, and mixed-mode surveys: The tailored design method. 4th ed. Wiley. Hoboken, NJ; 2014.

21. Hsiao CJ, Beatty PC, Hing ES, Woodwell DA, Rechtsteiner EA, Sisk JE. Electronic medical record/electronic health record use by office-based physicians: United States, 2008 and preliminary 2009. NCHS Health E-Stat. 2009 Dec:1–4.

22. Hsiao CJ, Hing E, Socey TC, Cai B. Electronic medical record/electronic health record systems of office-based physicians: United States, 2009 and preliminary 2010 state estimates. NCHS Health E-Stat. 2010 Dec:1–6.

23. Hsiao CJ, Hing E, Socey TC, Cai B. Electronic health record systems and intent to apply for meaningful use incentives among office-based physician practices: United States, 2001–2011. NCHS Data Brief. 2011 Nov:(79):1–8. PMID: 22617322.

24. Hsiao CJ, Hing E. Use and characteristics of electronic health record systems among office-based physician practices: United States, 2001–2012. NCHS Data Brief. 2012 Dec:(111):1–8. PMID: 23384787.

25. Hsiao CJ, Hing E. Use and characteristics of electronic health record systems among office-based physician practices: United States, 2001–2013. NCHS Data Brief. 2014 Jan:(143):1–8. PMID: 24439138.

26. Jamoom EW, Yang N, Hing E. Adoption of certified electronic health record systems and electronic information sharing in physician offices: United States, 2013 and 2014. NCHS Data Brief. 2016 Jan;(236):1–8. PMID: 26828707.

27. Jamoom EW, Yang N. State variation in electronic sharing of information in physician offices: United States, 2015. NCHS Data Brief. 2016 Oct;(261):1–8. PMID: 27805548.

28. Ogburn DF, Ward BW, Ward A. Computerized capability of office-based physicians to identify patients who need preventive or follow-up care – United States, 2017. MMWR Morb Mortal Wkly Rep. 2020 Nov;69(44):1622–1624. DOI: https://doi.org/10.15585/mmwr.mm6944a2.

29. National Center for Health Statistics. Division of Health Care Statistics. 2019 National Electronic Health Records Survey (NEHRS) public use file documentation. 2021. Available from: https://ftp.cdc.gov/pub/Health_Statistics/NCHS/Dataset_Documentation/NEHRS/2019/NEHRS2019Doc-508.pdf.

30. National Center for Health Statistics. Division of Health Care Statistics. 2021 National Electronic Health Records Survey (NEHRS) public use file documentation. 2022. Available from: https://ftp.cdc.gov/pub/Health_Statistics/NCHS/Dataset_Documentation/NEHRS/2021/NEHRS2021Doc-508.pdf.

31. Cho YI, Johnson TP, VanGeest JB. Enhancing surveys of health care professionals: A meta-analysis of techniques to improve response. Eval Health Prof. 2013 Sep;36(3):382–407. DOI: https://doi.org/10.1177/0163278713496425.

32. Young WJ, Manderski MTB, Singh B, Delnevo CD. The impact of varying incentives on physician survey response rates: An experiment in the context of COVID-19. Surv Pract. 2022 Oct;15(1). DOI: https://doi.org/10.29115/sp-2022-0012.

33. Czajka JL, Beyler A. Declining response rates in federal surveys: Trends and implications (background paper). Mathematica Policy Research. 2016.

34. Hsiao CJ, Hing E, Ashman J. Trends in electronic health record system use among office-based physicians: United States, 2007–2012. Natl Health Stat Report. 2014 May;(75):1–18. PMID: 24844589.

35. Jamoom E, Yang N, Hing E. Percentage of office-based physicians using any electronic health records or electronic medical records, physicians that have a basic system, and physicians that have a certified system, by state: United States, 2014 (Table). 2015. Available from: https://archive.cdc.gov/www_cdc_gov/nchs/data/ahcd/nehrs/2014_NEHRS_web_table.pdf.

36. Myrick KL, Ogburn DF. Table. Percentage of office-based physicians using any electronic health record (EHR)/electronic medical record (EMR) system and physicians that have a certified EHR/EMR system, by selected characteristics: National Electronic Health Records Survey, 2017. 2019. Available from: https://archive.cdc.gov/#/details?url=https://www.cdc.gov/nchs/data/nehrs/2017_NEHRS_web_table_EHR_Variation.pdf.

37. National Center for Health Statistics. Division of Health Care Statistics. 2018 National Electronic Health Records Survey public use file national weighted estimates. 2018. Available from: https://www.cdc.gov/nchs/data/nehrs/2018NEHRS-PUF-weighted-estimates-508.pdf.

38. Myrick KL, McNeal M, Yin X. Table 1. Percentage of office-based physicians using any electronic health record (EHR) system and physicians that have a certified EHR system, by selected specialty: National Electronic Health Records Survey, 2019. 2022. Available from: https://www.cdc.gov/nchs/data/nehrs/2019NEHRS-EHR-selected-specialty-508.pdf.

39. National Center for Health Statistics. 2021 National Electronic Health Records Survey public use file national weighted estimates. 2021. Available from: https://www.cdc.gov/nchs/data/nehrs/2021NEHRS-PUF-weighted-estimates-508.pdf.

40. Parker JD, Talih M, Malec DJ, Beresovsky V, Carroll M, Gonzalez Jr. JF, et al. National Center for Health Statistics data presentation standards for proportions. Vital Health Stat. 2017 Aug:(175):1–22. PMID: 30248016.

Table 1. Overview of sample size, survey length, survey mode of administration, and design information: National Electronic Health Records Survey, 2008–2024

Year	Sample size	Survey length		Survey mode of administration			State-level design	NAMCS supplement
		Number of questions*	Number of pages (paper questionnaire)	Web	Mail	CATI		
2008	2,000	23	4	No	Yes	Yes	No	Yes
2009	2,000	25	4	No	Yes	Yes	No	Yes
2010	10,302	25	4	No	Yes	Yes	Yes	Yes
2011	10,302	27	4	No	Yes	Yes	Yes	Yes
2012	10,302	26	4	No	Yes	Yes	Yes	No
2013	10,302	27	4	No	Yes	Yes	Yes	No
2014†	10,302	24 or 41	4 or 8	No	Yes	Yes	Yes	No
2015	10,302	42	8	Yes	Yes	Yes	Yes	No
2016	…	…	…	…	…	…	…	…
2017	10,302	41	8	Yes	Yes	Yes	Yes	No
2018	2,000	50	8	Yes	Yes	Yes	No	No
2019	10,302	50	8	Yes	Yes	Yes	Yes	No
2020	…	…	…	…	…	…	…	…
2021	10,302	32	4	Yes	Yes	No	Yes	No
2022	…	…	…	…	…	…	…	…
2023	…	…	…	…	…	…	…	…
2024	16,633	33	4	Yes	Yes	No	No	No

… Category not applicable.
* Some survey questions may include subquestions, which are not counted as separate questions in this column.
† A split ballot design was used where one-half of the sampled physicians (n = 5,151) received a short questionnaire and one-half (n = 5,151) received an expanded version of the questionnaire. While these questionnaires contained the same common questions, the expanded questionnaire had 17 additional questions.

NOTES: CATI is computer-assisted telephone interview. NAMCS is National Ambulatory Medical Care Survey. The National Electronic Health Records Survey (NEHRS) was not fielded in 2016, 2020, 2022, or 2023. Some changes in question wording and/or eligibility criteria occurred during the 2008–2024 NEHRS and should be considered when comparing across years (see report text for specific details). During 2008–2011, the survey was titled the NAMCS Electronic Medical Records Supplement.

SOURCE: National Center for Health Statistics, National Electronic Health Records Survey, 2008–2024.

Table 2. Survey question topic/module, by year: National Electronic Health Records Survey, 2008–2024

Survey question topic/module*	2008	2009	2010	2011	2012	2013	2014† (short form)	2014† (long form)	2015	2017	2018	2019	2021	2024
Adoption/use of EHRs§ and computerized capabilities	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Availability/use of electronic health information	No	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes
Benefits/burden of exchanging electronic health information	No	No	No	No	No	No	No	No	No	No	Yes	Yes	No	No
Documentation burden associated with medical record systems	No	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes	No
Incentive programs/certified EHR systems	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Interoperability/patient health information sharing¶	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Views on electronic exchange of clinical information with other providers	No	No	No	No	No	No	No	Yes	Yes	No	Yes	Yes	No	Yes
Participation in PCMH**, P4P††, and ACO§§	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No
Patient access to online medical records/systems	No	No	No	No	No	No	No	Yes	No	No	No	No	No	No
Physician and practice characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Prescriptions for controlled substances	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	No
Public health reporting/exchange	Yes	Yes	Yes	Yes	No	No	No	No	Yes	No	Yes	Yes	No	Yes
Revenue	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Self or proxy respondent	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Telemedicine	No	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes

* Listed in alphabetical order. Topics are broad, may not be exhaustive, and may not have the same individual survey questions appearing year to year.
† A split ballot design was used where one-half of the sampled physicians (n = 5,151) received a short questionnaire and one-half (n = 5,151) received an expanded version of the questionnaire. While these questionnaires contained the same common questions, the expanded questionnaire had 17 additional questions.
§ EHR is electronic health record.
¶ Questions on patient health information sharing first appeared in the 2009 National Electronic Health Records Survey; however, it was not until 2015 that questions were asked that captured full interoperability of electronic health record systems (sending, receiving, integrating, and searching for patient health information).
** PCMH is patient-centered medical home.
†† P4P is pay-for-performance.
§§ ACO is accountable care organization.

NOTES: Some changes in question wording and/or eligibility criteria occurred during the 2008–2024 National Electronic Health Records Survey (NEHRS) and should be considered when comparing across years (see report text for specific details). During 2008–2011, the survey was titled the National Ambulatory Medical Care Survey Electronic Medical Records Supplement. NEHRS was not fielded in 2016, 2020, 2022, or 2023.

SOURCE: National Center for Health Statistics, National Electronic Health Records Survey, 2008–2024.

Table 3. Survey mode of administration, by year: National Electronic Health Records Survey, 2008–2024

Mode of administration	2008	2009	2010	2011	2012	2013	2014*	2015	2017	2018	2019	2021	2024
Self-administered web questionnaire													
Web invitation letter	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Web survey	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Self-administered mail questionnaire													
First mailing	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Reminder/thank you postcard mailed	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Second mailing	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Third mailing	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Telephone interview													
Computer-assisted telephone interview	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No

* Both the short- and long-form questionnaires used the same data collection procedures and modes of administration.

NOTES: Some changes in question wording and/or eligibility criteria occurred during the 2008–2024 National Electronic Health Records Survey (NEHRS) and should be considered when comparing across years (see report text for specific details). During 2008–2011, the survey was titled the National Ambulatory Medical Care Survey Electronic Medical Records Supplement. NEHRS was not fielded in 2016, 2020, 2022, or 2023.

SOURCE: National Center for Health Statistics, National Electronic Health Records Survey, 2008–2024.

Table 4. Percent distribution of eligibility and final disposition of physicians: National Electronic Health Records Survey, 2008–2024

	Eligible, complete		Eligible, partial complete		Eligible, refused		Ineligible (out-of-scope)		Not locatable		Unknown eligibility (refusal and partial)		Total	
Year	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
2008	897	44.9	0	0.0	445	22.3	312	15.6	346	17.3	0	0.0	2,000	100.0
2009	1,054	52.7	26	1.3	81	4.1	376	18.8	120	6.0	343	17.2	2,000	100.0
2010	4,666	45.3	228	2.2	744	7.2	1,631	15.8	1,263	12.3	1,770	17.2	10,302	100.0
2011	4,326	42.0	238	2.3	710	6.9	1,675	16.3	1,248	12.1	2,105	20.4	10,302	100.0
2012	4,545	44.1	228	2.2	166	1.6	1,591	15.4	914	8.9	2,858	27.7	10,302	100.0
2013	4,631	45.0	298	2.9	93	0.9	1,765	17.1	1,042	10.1	2,473	24.0	10,302	100.0
2014	3,944	38.3	510	5.0	168	1.6	2,136	20.7	947	9.2	2,597	25.2	10,302	100.0
2015	3,094	30.0	644	6.3	221	2.1	1,736	16.9	1,534	14.9	3,073	29.8	10,302	100.0
2017	2,362	22.9	234	2.3	436	4.2	1,066	10.3	612	5.9	5,592	54.3	10,302	100.0
2018	393	19.7	91	4.6	114	5.7	265	13.3	428	21.4	709	35.5	2,000	100.0
2019	1,524	14.8	390	3.8	366	3.6	1,432	13.9	4,252	41.3	2,338	22.7	10,302	100.0
2021	1,875	18.2	127	1.2	35	0.3	913	8.9	2,264	22.0	5,088	49.4	10,302	100.0
2024	1,725	10.4	99	0.6	38	0.2	835	5.0	5,822	35.0	8,114	48.8	16,633	100.0

NOTES: Percent distribution is unweighted. In this table, physicians with a missing value for final disposition were placed in the unknown eligibility category. Some changes in question wording and/or eligibility criteria occurred during the 2008–2024 National Electronic Health Records Survey (NEHRS) and should be considered when comparing across years (see report text for specific details). During 2008–2011, the survey was titled the National Ambulatory Medical Care Survey Electronic Medical Records Supplement. NEHRS was not fielded in 2016, 2020, 2022, or 2023.

SOURCE: National Center for Health Statistics, National Electronic Health Records Survey, 2008–2024.

Appendix A. Definitions and Supplemental Information

Definition of Interoperability

In the 21st Century Cures Act (PL.114–255), interoperability is defined in section 4003(a) as health information technology that "(A) enables the secure exchange of electronic health information with, and use of electronic health information from, other health information technology without special effort on the part of the user; (B) allows for complete access, exchange, and use of all electronically accessible health information for authorized use under applicable state or federal law; and (C) does not constitute information blocking as defined in section 3022(a) [of PL.114–255]."

2017 Physician Experiences with Electronic Health Records Survey (PEEHRS)

Although not detailed in the main text of this report, a supplemental survey to the 2017 National Electronic Health Record Survey (NEHRS) was conducted to gain more information on physicians' experiences with electronically sharing health information and electronic health records (EHRs). This survey was called the Physician Experiences with Electronic Health Records Survey (PEEHRS). Although a follow-up to the 2017 NEHRS, PEEHRS was fielded during the 2018 calendar year and consisted of three separate questionnaires. The first was a Health Information Exchange (HIE) questionnaire, which collected data on physician experiences with electronically sharing patient health information and EHRs more generally. It included 22 survey questions and was sent to the 1,226 respondents from the 2017 NEHRS who reported having sent and/or received data electronically using an EHR system. The second was the Non-Health Information Exchange (Non-HIE) questionnaire, which collected data on physician perceptions about electronically sharing patient health information. This questionnaire had 17 questions and was sent to the 1,159 respondents of the 2017 NEHRS who reported not having sent and/or received data electronically using an EHR system. The third and final questionnaire was sent to nonrespondents to the 2017 NEHRS, or any remaining respondents who did not fit into the HIE and Non-HIE groups. An abbreviated version of the 2017 NEHRS, it collected data on the use and adoption of EHRs. This nonrespondent questionnaire had 26 questions and was sent to 6,275 physicians who were part of the 2017 NEHRS sample. The questionnaires used for the 2017 PEEHRS can be found here.

Regardless of which of the three questionnaires was administered, the 2017 PEEHRS followed a similar mixed-mode administration as the 2017 NEHRS, consisting of self-administered web, self-administered mail, and computer-assisted telephone interviewing (CATI) modes. For anyone interested in the 2017 PEEHRS, these data (as well as the accompanying 2017 NEHRS data) can be accessed through the NCHS and Federal Research Data Centers.

Appendix B. 2024 National Electronic Health Records Survey Questionnaire

NOTICE – CDC estimates the average public reporting burden for this collection of information as 20 minutes per response, including the time for reviewing instructions, searching existing data/information sources, gathering and maintaining the data/information needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: CDC/ATSDR Information Collection Review Office; 1600 Clifton Road, MS H21 -8, Atlanta, GA 30333, ATTN: PRA (0920-1015).

Assurance of Confidentiality – We take your privacy very seriously. All information that relates to or describes identifiable characteristics of individuals, a practice, or an establishment will be used only for statistical purposes. NCHS staff, contractors, and agents will not disclose or release responses in identifiable form without the consent of the individual or establishment in accordance with section 308(d) of the Public Health Service Act (42 U.S.C. 242m(d)) and the Confidential Information Protection and Statistical Efficiency Act (44 U.S.C 3561-3583). In accordance with CIPSEA, every NCHS employee, contractor, and agent has taken an oath and is subject to a jail term of up to five years, a fine of up to $250,000, or both if he or she willfully discloses ANY identifiable information about you. In addition to the above cited laws, NCHS complies with the Federal Cybersecurity Enhancement Act of 2015 (6 U.S.C. §§ 151 and 151 note) which protects Federal information systems from cybersecurity risks by screening their networks.

National Electronic Health Records Survey 2024

The purpose of the survey is to collect information about the adoption and use of electronic health records (EHRs) and electronic exchange of health information in outpatient or office-based care settings. Your participation is greatly appreciated. Your answers are completely confidential. Participation in this survey is voluntary. There are no penalties for nonparticipation. If you have questions or comments about this survey, please call 877-254-1951.

1. We have your specialty as:
Is that correct?

☐ 1 Yes
☐ 2 No → What is your specialty?

_____

*This survey asks about **outpatient or office-based care**, that is, care for patients receiving health services without admission to a hospital or other facility.*

2. Do you directly provide outpatient or office-based care?

☐ 1 Yes → **Go to Question 3**
☐ 2 No
☐ 3 I am no longer in practice.

Please stop here and return the questionnaire in the envelope provided. Thank you for your time.

*The next question asks about a **normal week**.*
We define a normal week as a week with a normal caseload, with no holidays, vacations, or conferences.

3. Overall, at how many office locations (excluding hospital emergency departments) do you see outpatient or office-based patients in a normal week?

☐☐ Locations

4. Do you see outpatient or office-based patients in any of the following settings? CHECK ALL THAT APPLY.

☐ 1 Private solo or group practice
☐ 2 Freestanding clinic or Urgent Care Cent
☐ 3 Community Health Center (e.g., Federally Qualified Health Center [FQHC], federally funded clinics or "look-alike" clinics)
☐ 4 Mental health center
☐ 5 Government clinic that is not federally funded (e.g., state, county, city, maternal and child health, etc.)
☐ 6 Family planning clinic (including Planned Parenthood)
☐ 7 Integrated Delivery System, Health maintenance organization, health system or other prepaid practice (e.g., Kaiser Permanente)
☐ 8 Faculty practice plan (an organized group of physicians that treats patients referred to an academic medical center)
☐ 9 Indian Health Service
☐ 10 Rural Health Clinic (Federally Qualified)
☐ 11 Hospital outpatient departments
☐ 12 Hospital emergency departments
☐ 13 None of the above

*If you see patients in **any** of these settings, go to Question 5*

*If you select **only** 12 or 13, go to Question 33*

5. At which of the outpatient or office-based settings (1-11) in Question 4 do you see the most patients?

WRITE THE NUMBER LOCATED NEXT TO THE BOX YOU CHECKED.

☐☐ (For the rest of the survey, we will refer to this as the "reporting location.")

For the remaining questions, please answer regarding the reporting location indicated in Question 5 even if it is not the location where this survey was sent.

6. What are the county, state, and zip code of the *reporting location*? What is the email address of the physician to whom this survey was mailed?

Country USA County _____ State _____

Zip Code _____ Email address _____

7. How many physicians, including you, work at this practice (including physicians at the reporting location, and physicians at any other locations of the practice)?

- ☐ 1 1 physician
- ☐ 2 2-3 physicians
- ☐ 3 4-10 physicians
- ☐ 4 11-50 physicians
- ☐ 5 51-100 physicians
- ☐ 6 More than 100 physicians

8. Is this medical organization affiliated with an Independent Practice Association (IPA) or Physician Hospital Organization (PHO)?

☐ 1 Yes ☐ 2 No ☐ 3 Don't know

9. Do you treat patients insured by Medicaid?

☐ 1 Yes ☐ 2 No (Skip to 10) ☐ 3 Don't know (Skip to 10)

9a. Do you accept Medicaid insurance for new patients?

☐ 1 Yes ☐ 2 No ☐ 3 Don't know

10. Do you treat patients insured by Medicare?

☐ 1 Yes ☐ 2 No (Skip to 11) ☐ 3 Don't know (Skip to 11)

10a. Do you accept Medicare insurance for new patients?

☐ 1 Yes ☐ 2 No ☐ 3 Don't know

11. Who owns the reporting location? CHECK ONE.

- ☐ 1 Physician or physician group
- ☐ 2 Insurance company, health plan, or HMO
- ☐ 3 Community health center
- ☐ 4 Medical/academic health center
- ☐ 5 Other hospital
- ☐ 6 Other health care corporation
- ☐ 7 Other

12. Does the reporting location use an EHR system? Do not include billing record systems.

☐ 1 Yes ☐ 2 No (Skip to 19) ☐ 3 Don't know (Skip to 19)

13. Is your EHR system certified to meet U.S. Department of Health and Human Services requirements? *Certified EHRs are necessary to meet the objectives of Meaningful Use/Promoting Interoperability Program. If unsure, see if your system is listed here: https://chpl.healthit.gov/#/search*

☐ 1 Yes ☐ 2 No ☐ 3 Don't know

14. What is the name of your PRIMARY EHR system? CHECK ONLY ONE BOX. IF OTHER IS CHECKED, PLEASE SPECIFY THE NAME.

- ☐ 1 Allscripts
- ☐ 2 athenahealth
- ☐ 3 Cerner
- ☐ 4 eClinical Works
- ☐ 5 Epic
- ☐ 6 Meditech
- ☐ 7 Modernizing Medicine
- ☐ 8 NextGen
- ☐ 9 Practice Fusion
- ☐ 10 Greenway
- ☐ 11 Other, specify:_____
- ☐ 12 Unknown

15. Overall, how satisfied or dissatisfied are you with your EHR system?

- ☐ 1 Very satisfied
- ☐ 2 Somewhat satisfied
- ☐ 3 Neither satisfied nor dissatisfied
- ☐ 4 Somewhat dissatisfied
- ☐ 5 Very dissatisfied
- ☐ 6 Not applicable

16. Does your reporting location routinely collect data on individual patients' health-related social needs (often referred to as social determinants of health) such as transportation access, housing instability, or food insecurity?

☐ 1 Yes, routinely ☐ 2 Yes, but not routinely ☐ 3 No (Skip to 19) ☐ 4 Don't know (Skip to 19)

17. How often do you or designated staff document individual patients' health-related social needs using…	Often	Sometimes	Rarely	Never	Don't Know
A screening tool in your EHR (e.g., that is entered from a paper form or by checking a box/button)?	☐	☐	☐	☐	☐
Free text note written in EHR?	☐	☐	☐	☐	☐
Diagnosis codes entered in EHR (i.e. ICD-10-CM Z codes)?	☐	☐	☐	☐	☐
Non-electronic methods (including paper forms scanned into the EHR)?	☐	☐	☐	☐	☐

18. How often do you or designated staff use individual patients' health-related social needs data at your reporting location for…	Often	Sometimes	Rarely	Never	Don't Know
Referrals to services (e.g., social service organizations)?	☐	☐	☐	☐	☐
Clinical decision making?	☐	☐	☐	☐	☐

Telemedicine

19. Does your practice use telemedicine technology (e.g., audio, audio with video, web videoconference) for patient visits?

☐ 1 Yes (Go to 19a) ☐ 2 No (Skip to 20) ☐ 3 Don't know (Skip to 20)

19a. What type(s) of telemedicine tools did you use for patient visits? CHECK ALL THAT APPLY.

☐ 1 Telephone audio
☐ 2 Videoconference software with audio (e.g., Zoom, WebEx, FaceTime)
☐ 3 Telemedicine platform NOT integrated with EHR (e.g., Doxy.me)
☐ 4 Telemedicine platform integrated with EHR (e.g., update clinical documentation during telemedicine visit)
☐ 5 Other tools _____

Electronic Exchange of Patient Health Information

20. How often do you electronically send patient health information to other providers outside your medical organization using an EHR (not eFax) or a Web Portal (separate from EHR)?

☐ 1 Often ☐ 2 Sometimes ☐ 3 Rarely ☐ 4 Never ☐ 5 Don't know

21. How often do you electronically receive patient health information from other providers outside your medical organization using an EHR system (not eFax) or a Web Portal (separate from EHR)?

☐ 1 Often ☐ 2 Sometimes ☐ 3 Rarely ☐ 4 Never ☐ 5 Don't know

22. Does your reporting location electronically send or receive patient health information with public health agencies?

Public health agencies can include the CDC, state or local public health authorities.

☐ 1 Yes (Go to 22a) ☐ 2 No (Skip to 23) ☐ 3 Don't know (Skip to 23) ☐ 4 Not applicable (Skip to 23)

22a. What types of information do you electronically send or receive? CHECK ALL THAT APPLY.

☐ 1 Syndromic surveillance data
☐ 2 Case reporting of reportable conditions
☐ 3 Immunization data
☐ 4 Public health registry data (e.g., cancer)

23. When seeing a new patient or a patient who has previously seen another provider, how often do you electronically search or query for your patient's health information from sources outside of your medical organization?

This could include via remote or view only access to other facilities' EHR or health information exchange organization.

☐ 1 Often ☐ 2 Sometimes ☐ 3 Rarely ☐ 4 Never ☐ 5 Don't know

24. Does your EHR system integrate any type of patient health information received electronically (not eFax) without special effort like manual entry or scanning?

☐ 1 Yes ☐ 2 No ☐ 3 Don't know ☐ 4 Not applicable

25. When treating patients seen by providers outside your medical organization, how often do you or your staff have clinical information from those outside encounters electronically available at the point of care?

Electronically available does not include scanned or PDF documents.

☐ 1 Often ☐ 2 Sometimes ☐ 3 Rarely ☐ 4 Never ☐ 5 Don't know
☐ 6 I do not see patients outside my medical organization.

26. How frequently do you use patient health information electronically (not eFax) received from providers or sources outside your organization when treating a patient?

☐ 1 Often ☐ 2 Sometimes ☐ 3 Rarely ☐ 4 Never ☐ 5 Don't know

27. When you access clinical information from outside your organization (e.g. referrals, consult notes, discharge summaries, patient records) through any means (e.g. fax, phone, EHR, etc.), how easy is it to use the information to effectively care for your patients?

☐ 1 Very ☐ 2 Somewhat ☐ 3 Not at all ☐ 4 Not applicable ☐ 5 Don't know

28. When you access clinical information about your patients from outside your organization (e.g. referrals, consult notes, discharge summaries, patient records), how often is it…	Often	Some times	Rarely	Never	Don't Know
available as a scanned document?	☐	☐	☐	☐	☐
in an electronic portal (e.g. to a health information exchange) separate from your EHR?	☐	☐	☐	☐	☐
integrated within your EHR (as opposed to a PDF)?	☐	☐	☐	☐	☐

29. When looking for or using clinical information from outside your organization, to what extent do the following occur:	To a Great Extent	To Some Extent	Not at All	Not Applicable
Entire record is not available	☐	☐	☐	☐
Key information within record is missing/not available	☐	☐	☐	☐
Difficulty finding important information due to a large amount of low-value information	☐	☐	☐	☐
Difficulty finding necessary information within the record for other reasons	☐	☐	☐	☐

30. Electronically exchanging clinical information with other providers outside my medical organization____.	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree	Not Applicable
"…improves my practice's quality of care."	☐	☐	☐	☐	☐
"…increases my practice's efficiency."	☐	☐	☐	☐	☐
"…prevents medication errors."	☐	☐	☐	☐	☐
"…enhances care coordination."	☐	☐	☐	☐	☐
"…reduces duplicate test ordering."	☐	☐	☐	☐	☐

31. Please indicate whether these issues are barriers to electronic information exchange <u>with providers outside your medical organization.</u>	Yes	No	Don't Know	Not Applicable
Providers in our referral network lack the capability to electronically exchange (e.g., no EHR system or health information exchange connection).	☐	☐	☐	☐
We have limited or no IT staff.	☐	☐	☐	☐
Electronic exchange involves incurring additional costs.	☐	☐	☐	☐
Electronic exchange involves using multiple systems or portals.	☐	☐	☐	☐

Public Health Exchange

32. For each type of public health reporting, please indicate whether your reporting location uses automated, manual or a mix of both types of processes to transmit the data. *Automated refers to EHR generated data sent electronically or automatically to the public health agency. Manual refers to chart abstraction with data faxed or re-input into a portal. A mix of both types of processes refers to files electronically generated from the EHR but manual steps required to transmit to public health agency.*

	Fully or primarily automated	Mix of automated and manual process	Fully or primarily manual	We do not report this type of information	Don't Know
Syndromic surveillance reporting	☐	☐	☐	☐	☐
Case reporting of reportable conditions	☐	☐	☐	☐	☐
Immunization registry reporting	☐	☐	☐	☐	☐
Public health registry reporting (e.g., birth defects registries,chronic disease registries or traumatic injury registries)	☐	☐	☐	☐	☐

33. Who completed this survey? CHECK ALL THAT APPLY

☐ 1 The physician to whom it was addressed ☐ 2 Office staff ☐ 3 Other

Thank you for your participation. Please return your survey in the envelope provided.
If you have misplaced the envelope, please send the survey to:

RTI International, Cox Building – FDC (0219308.002.001.004)
PO Box 12194

Box for Admin Use

Vital and Health Statistics Series Descriptions

Active Series

Series 1. **Programs and Collection Procedures**
Reports describe the programs and data systems of the National Center for Health Statistics, and the data collection and survey methods used. Series 1 reports also include definitions, survey design, estimation, and other material necessary for understanding and analyzing the data.

Series 2. **Data Evaluation and Methods Research**
Reports present new statistical methodology including experimental tests of new survey methods, studies of vital and health statistics collection methods, new analytical techniques, objective evaluations of reliability of collected data, and contributions to statistical theory. Reports also include comparison of U.S. methodology with those of other countries.

Series 3. **Analytical and Epidemiological Studies**
Reports present data analyses, epidemiological studies, and descriptive statistics based on national surveys and data systems. As of 2015, Series 3 includes reports that would have previously been published in Series 5, 10–15, and 20–23.

Discontinued Series

Series 4. **Documents and Committee Reports**
Reports contain findings of major committees concerned with vital and health statistics and documents. The last Series 4 report was published in 2002; these are now included in Series 2 or another appropriate series.

Series 5. **International Vital and Health Statistics Reports**
Reports present analytical and descriptive comparisons of U.S. vital and health statistics with those of other countries. The last Series 5 report was published in 2003; these are now included in Series 3 or another appropriate series.

Series 6. **Cognition and Survey Measurement**
Reports use methods of cognitive science to design, evaluate, and test survey instruments. The last Series 6 report was published in 1999; these are now included in Series 2.

Series 10. **Data From the National Health Interview Survey**
Reports present statistics on illness; accidental injuries; disability; use of hospital, medical, dental, and other services; and other health-related topics. As of 2015, these are included in Series 3.

Series 11. **Data From the National Health Examination Survey, the National Health and Nutrition Examination Surveys, and the Hispanic Health and Nutrition Examination Survey**
Reports present 1) estimates of the medically defined prevalence of specific diseases in the United States and the distribution of the population with respect to physical, physiological, and psychological characteristics and 2) analysis of relationships among the various measurements. As of 2015, these are included in Series 3.

Series 12. **Data From the Institutionalized Population Surveys**
The last Series 12 report was published in 1974; these reports were included in Series 13, and as of 2015 are in Series 3.

Series 13. **Data From the National Health Care Survey**
Reports present statistics on health resources and use of health care resources based on data collected from health care providers and provider records. As of 2015, these reports are included in Series 3.

Series 14. **Data on Health Resources: Manpower and Facilities**
The last Series 14 report was published in 1989; these reports were included in Series 13, and are now included in Series 3.

Series 15. **Data From Special Surveys**
Reports contain statistics on health and health-related topics from surveys that are not a part of the continuing data systems of the National Center for Health Statistics. The last Series 15 report was published in 2002; these reports are now included in Series 3.

Series 16. **Compilations of Advance Data From Vital and Health Statistics**
The last Series 16 report was published in 1996. All reports are available online; compilations are no longer needed.

Series 20. **Data on Mortality**
Reports include analyses by cause of death and demographic variables, and geographic and trend analyses. The last Series 20 report was published in 2007; these reports are now included in Series 3.

Series 21. **Data on Natality, Marriage, and Divorce**
Reports include analyses by health and demographic variables, and geographic and trend analyses. The last Series 21 report was published in 2006; these reports are now included in Series 3.

Series 22. **Data From the National Mortality and Natality Surveys**
The last Series 22 report was published in 1973. Reports from sample surveys of vital records were included in Series 20 or 21, and are now included in Series 3.

Series 23. **Data From the National Survey of Family Growth**
Reports contain statistics on factors that affect birth rates, factors affecting the formation and dissolution of families, and behavior related to the risk of HIV and other sexually transmitted diseases. The last Series 23 report was published in 2011; these reports are now included in Series 3.

Series 24. **Compilations of Data on Natality, Mortality, Marriage, and Divorce**
The last Series 24 report was published in 1996. All reports are available online; compilations are no longer needed.

For answers to questions about this report or for a list of reports published in these series, contact:

Information Dissemination Staff
National Center for Health Statistics
Centers for Disease Control and Prevention
3311 Toledo Road, Room 4551, MS P08
Hyattsville, MD 20782

Tel: 1–800–CDC–INFO (1–800–232–4636)
TTY: 1–888–232–6348
Internet: www.cdc.gov/nchs
Online request form: www.cdc.gov/info
For e-mail updates on NCHS publication releases, subscribe online at: www.cdc.gov/nchs/updates.

U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES

Centers for Disease Control and Prevention
National Center for Health Statistics
3311 Toledo Road, Room 4551, MS P08
Hyattsville, MD 20782–2064

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, $300

FIRST CLASS MAIL
POSTAGE & FEES PAID
CDC/NCHS
PERMIT NO. G-284



For more NCHS Series Reports, visit:
www.cdc.gov/nchs/products/series.htm

Series 1, No. 68
CS367568