

National Ambulatory Medical Care Survey

OMB No. 0920-0234
(expires 8/31/2009)

Request for change (83-C)

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National Ambulatory Medical Care Survey (NAMCS)

This request is three-fold: first, to add additional physicians into the sample to collect electronic health record (EHR) information, second, to remove the sampling stratum of oncologists, and third, to remove the web option for the Cervical Cancer Screening Supplement. These changes are to be made to an approved data collection (OMB No. 0920-0234: Approval expires 8/31/2009), National Ambulatory Medical Care Survey, for 2008. For clarity, they will be discussed separately:

- I. Roman numeral 1 will refer to the addition of 2,080 physicians to the sample.
- II. Roman numeral 2 will refer to the removal of the sampling stratum of oncologists.
- III. Roman numeral 3 will refer to the removal of the web option of the Cervical Cancer Screening Supplement (CCSS).

A. Justification

1. Circumstances making the collection of information necessary

- I. To assist in measuring the progress of meeting the President's goal for most Americans to have access to an interoperable electronic health record (EHR) by 2014, NCHS will add a supplemental sample of 2,080 physicians to the 2008 National Ambulatory Medical Care Survey (NAMCS). The NAMCS is an annual survey of non-federal, office-based physicians in the United States. This supplement would be used to collect information on the use and adoption of electronic medical records. In order to keep costs as low as possible, the questions in this supplemental sample would be conducted using a mail-out/mail back format. A reminder letter will be sent with telephone follow-up for non-respondents. The questions to be asked will be a subset and slightly modified, due to the change in collection method, of those currently asked in the Physician Induction Interview (PII) of the core NAMCS (which is collected via personal interview). The information collected from these additional physicians will be combined with information collected in the core NAMCS to provide reliable estimates when analyzing one year of data. Tracking the adoption of EHR systems on a year-by-year basis is important to the Department so that close monitoring of the adoption rate is possible. No patient level information will be collected from this additional sample of physicians.

NAMCS is the only nationally representative annual source of information on EHRs

This supplement is being funded by the Office of the National Coordinator for Health Information Technology (ONC), DHHS.

This supplement must also be approved by the NCHS Research Ethics Review Board (ERB) before it can be fielded. ERB paperwork will be submitted in the Fall of 2007.

- II. The National Cancer Institute provided funding to collect information from an additional sample of 200 oncologists in 2007. Funding for these additional physicians was not provided and therefore will not be included in the 2008 NAMCS. If funding becomes available in the future we could add this stratum back into the survey.
- III. We will no longer offer the respondent the ability to complete the Cervical Cancer Screening Supplement via the Internet for various reasons. The first and most significant is that the only 5% of the responses were completed via the web-based data entry system. For such a small percentage, the logistics and effort needed to maintain the site, create passwords, deal with discrepancies and then merge the web responses with those who completed the questionnaire via paper and pencil does not make this option cost efficient. The person-hours needed to maintain the system are the same whether 1 respondent completes the survey on the web or whether 100 respondents complete the survey on the web and we no longer can justify the time and effort needed. In 2008, the respondent will only have the paper version to complete. Web-based collection will be reevaluated in a future survey year.

2. Purpose and Use of Information Collection

- I. The addition of a supplementary sample of physicians to the NAMCS will allow more reliable one-year estimates on the use and adoption of EHR systems by private office-based physicians. These data are critical to the ONC as they work toward meeting the President's goal for having most Americans have access to an interoperable EHR by 2014. Some of the questions we hope to answer: 1) what are the predictors of EHR adoption? 2) do physician practice characteristics (e.g., location, organization type, specialty, vulnerable population mix) and EHR functionality explain the gaps currently found in EHR adoption rates? Answers to these questions will help the Department better understand how to better meet the goal and what obstacles they must overcome for those providers reluctant to adopt such a system.
- II. N/A
- III. N/A.

3. Use of Improved Information Technology and Burden Reduction

- I. The additional sample of physicians will not have the ability to complete the questions via the web or other improved information technology. Standard mail-out/ mail-back survey design will be used. The reasons for not offering this ability are based on our experience as it relates to Roman numeral #3 in section A1. The additional work required for what we would anticipate to be the same result as the CCSS web option (5 percent of completed responses), does not make this option cost effective.
- II. N/A
- III. N/A

8. Comments in Response to the Federal Register Notice and Efforts to Consult Outside the Agency

B. Other Consultation

- I. The additional sample of office-based physicians has been funded by the Office of the National Coordinator for Health Information Technology (ONC), DHHS. Both agencies have worked closely on the development of the EHR questions currently used in the core NAMCS and used as the basis of the questions asked in the mail survey. Consultation has also taken place with experts from the Robert Wood Johnson Foundation, Massachusetts General Hospital and The George Washington University.
- II. Collaboration between NCHS and the Division of Cancer Control and Population Sciences, part of the National Institutes of Health's National Cancer Institute continues as part of past data collection. Funding to continue the additional stratum was not possible in 2008.
- III. N/A.

12. Estimates of annualized burden hours and costs

A. Burden Hours

The table below outlines changes within the currently approved burden for 2008. Of the 2,080 physicians sampled, 80 will be for a pilot test of procedures and the remaining 2,000 for the full survey. The “No. of respondents” column is reduced by 25% to account for physicians that are found to be out-of-scope ($2,080 - 25\% = 1,560$). We have further reduced this number by approximately 25% to account for the nonresponse we expect from the mail survey ($1,560 - \sim 25\% = 1,164$). This additional burden is offset by a reduction in burden for 200 oncologists for the whole survey (row II). Roman numeral III (row 3) has no change in burden because the time it would take to complete the survey on the web is not shorter than completing it via paper and pencil.

Annual respondent hours:

Modification number	Type of Respondent	Form name	No. of respondents	No. of responses per respondent	Hours per response	Response burden (in hours)
I	Physician	Physician Induction Interview	1,164	1	20/60	388

II	Office-based physicians (eligible)	Physician Induction Interview	2,362	1	35/60	1,378
		Patient Record form	2,008	30	5/60	5,020
		Pulling and Re-filing Patient Record form	354	30	1/60	177
		Cervical Cancer Screening Supplement	712	1	15/60	178
	Office-based physicians (ineligible)	Physician Induction Interview	788	1	5/60	66
III	---	---	---	---	---	---
					TOTAL	7,207

The burden, in hours, has a net change of zero from the 8,645 already approved.

B. Burden Cost

The burden cost will have a net decrease from \$378,653 to \$376,248 by making the proposed changes. The hourly wage rate was determined by using the Department of Labor Statistics web site (<http://www.bls.gov>). Specifically, we used the "November 2004 National Occupational Employment and Wage Estimates" for (1) healthcare practitioners and technical occupations, and (2) office administrative and support

administrative support occupations. Data were gathered on mean hourly wage in 2004 for (1) physicians, mid-level providers (e.g., registered nurses), and other professionals involved in managing a private office-based practice (e.g., nurses, receptionists, etc) as well as for (2) physicians (MDs & DOs). The following table shows how the additional respondent cost was calculated:

Modification number	Type of Respondent	Form	Response burden hours	Hourly wage rate	Respondent cost
I	Physician	Physician Induction Interview	388	\$85.00	\$32,980
II	Office-based physicians (eligible)	Physician Induction Interview	1,378	\$85	\$117,130
		Patient Record form	5,020	\$30	\$150,600
		Pulling and Re-filing Patient Record form	177	\$30	\$5,310
		Cervical Cancer Screening Supplement	178	\$86	\$15,308
	Office-based physicians (ineligible)	Physician Induction Interview	66	\$85	\$5,610
III	---	---	---	---	---
				TOTAL	\$326,938

15. Explanation for Program Changes or Adjustment

The burden, in hours, has a net change of zero from the 8,645 already approved due to the addition of physicians being surveyed on the use and adoption of electronic health records and due to the removal of a sample of oncologists from the 2008 survey.

Section B. Collection of Information Employing Statistical Methods

1. Respondent Universe and Sampling Methods

- I. We will first conduct a pilot study of 80 physician practices to investigate how the questions were interpreted (given the new format of the mail survey), the quality of the data collected, who completed the survey, the time required to complete the survey, and to test our tracking and data entry software. These measures may indicate flaws in the data collection instrument or methods. These 80 physician locations will be selected in the same proportion as are the physicians in the core NAMCS.

For the “live” data collection, current plans have the remaining 2,000 physicians stratified among the 13 top specialty groups in the same proportions as are the physicians in the core 2008 NAMCS.

The sampling frames, for both the pilot test and “live” data collection, will be the same as ones currently used – the masterfiles of the American Medical Association (AMA) and the American Osteopathic Association (AOA).

II. N/A

III. N/A

2. Procedures for the Collection of Information

- I. As mentioned in section A1, the questions that will be asked of the additional physicians in the pilot as well as those in the “live” data collection will be the same as those in the Physician Induction Interview (PII) of the core NAMCS. Slight changes will be made to account for the different collection method (mail versus personal interview). The mail version is, by design, self administered, where as the core NAMCS questions are asked via a personal interview. As also mentioned before, only a subset of the questions from the PII will be used as they relate to the characteristics of the physician’s practice.

The subgroup of questions from the PII are as follows and may be further modified to account for self-reporting by physicians:

1. Is your specialty _____?
 - 1 Yes – SKIP to item 8
 - 2 No – What is your specialty (including general practice)?

2. Which of the following categories best describes your professional activity?
 - 1 Patient care
 - 2 Research
 - 3 Teaching
 - 4 Administration
 - 5 Other - Specify _____

3. Do you directly care for any ambulatory patients in your work?
 - 1 Yes – SKIP to item 4a
 - 2 No
 - 3 No longer in practice – SKIP to closing

- 3c. Are you employed by the Federal Government or do you work in a hospital emergency or outpatient department?
 - 1 Yes
 - 2 No – SKIP to item 4a

- 3d. In addition to working in any of these settings, do you also see any ambulatory patients?
 - 1 Yes
 - 2 No – SKIP to closing

The following questions are concerned with the private patients.

4a. We have your office address as:

[PRE-PRINTED ADDRESS WILL BE PLACED HERE].

Is this correct?

- 1 Yes – SKIP to item 14
- 2 No, incorrect address – Ask item 4b

4b. What is the (correct) address and telephone number of your office?

Number and Street _____
City _____ State ____ Zip Code _____
Telephone (Area Code and number) _____

5a. Overall, at how many office locations do you see ambulatory patients?

5b. In a typical year, about how many weeks do you **NOT** see any ambulatory patients because of such events as conferences, vacations, etc.? _____

If the number of weeks is greater than 26, go to item 5c.
If the number of weeks is equal to 0, SKIP to item 5d.
If the number of weeks is greater than 1, but less than 26, SKIP to item 6a.

5c. Based on your answer to item 5b, is it true you typically see patients fewer than half of the weeks in each year?

- 1 Yes – SKIP to item 6
2 No – Please explain _____ SKIP to item 6

5d. Based on your answer to item 5b, is it true that you typically see patients all 52 weeks of the year?

- 1 Yes
2 No – Please explain _____

6a. **Of the office types listed below**, please circle the location where you have the most ambulatory care visits,

- If none of your practice locations are one of the types shown below please go to the closing [this will be updated]–
- If the location where you see most ambulatory care visits is not located at the address where this survey was sent, that’s fine, please still report on the location where you see the most ambulatory care visits.
- If you work at only one location, report on that one location.

1. Private solo or group practice
2. Freestanding clinic/urgicenter (not part of a hospital outpatient department)
3. Community health center (e.g., Federally Qualified Health Center (FQHC), federally funded clinic or “look alike” clinic)
4. Mental health center
5. Non-federal government clinic (e.g., state, county, city, material and child health, etc.)
6. Family planning clinic (including Planned Parenthood)
7. Health maintenance organization or other prepaid practice (e.g., Kaiser Permanente)
8. Faculty Practice Plan

INSTRUCTION: For questions 7a through 8f, please answer as it applies to the location where you see the most ambulatory care visits even if it is not the location where this survey was sent.

7a. During your last normal week of practice, approximately how many office visit encounters did you have at the location where you see the most ambulatory care visits? _____ NOTE: If you are in a group practice, only report on your visits.

8a. Is the location where you see the most ambulatory care visits a solo practice, or are you associated with other physicians in a partnership, in a group practice, or in some other way?

- Solo.....1 SKIP to item 8d

Nonsolo.....2

8b. How many physicians are associated with you at the location where you see the most ambulatory care visits? _____

8c. Is the location where you see the most ambulatory care visits a single- or multi-specialty (group) practice

Multi..... 1

Single..... 2

8d. How many mid-level providers (i.e., nurse practitioners, physician assistants, and nurse midwives) are associated with you at the location where you see the most ambulatory care visits? _____

8e. At the location where you see the most ambulatory care visits, are you a full- or part-owner, employee, or an independent contractor?

Owner.....1

Employee.....2

Contractor.....3

INSTRUCTION: If "Owner" is marked then automatically mark "Physician or physician group" in item 8f.

8f. Who owns the practice at the location where you see the most ambulatory care visits?

Physician or physician group..... 1

HMO..... 2

Community Health Center..... 3

Medical/ Academic health center... 4

Other hospital..... 5

Other health care corp..... 6

Other..... 7

9. During your last normal week of practice, about how many encounters of the following type did you make with patients?

(1) Nursing home visits..... _____

(2) Other home visits..... _____

(3) Hospital visits..... _____

(4) Telephone consults..... _____

(5) Internet/e-mail consults..... _____

10. At the location where you see the most ambulatory care visits, does your practice submit claims electronically (Electronic billing)?

1 Yes, all electronic

2 Yes, part paper and part electronic

3 No

4 Don't know

11a. At the location where you see the most ambulatory care visits, does your practice use electronic MEDICAL RECORDS (not including billing records)?

1 Yes, all electronic

2 Yes, part paper and part electronic

- 3 No
- 4 Don' know

11b. At the location where you see the most ambulatory care visits, does your practice have a computerized system for...

	Yes	No	Unknown	Turned off
1. Patient demographic information? If yes, does this include patient problem list?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Orders for prescriptions? If yes, (a) Are there warnings of drug interactions or contraindications provided? (b) Are prescriptions sent electronically to the pharmacy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Orders for tests? If yes, are orders sent electronically?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Viewing Lab results? If yes, are out range levels highlighted?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Viewing Imaging results? If yes, are electronic images returned?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Clinical notes? If yes, (a) do they include medical history and follow up notes? (b) Reminders for guideline-based interventions and/or screening tests?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Public health reporting? If yes, are notifiable diseases sent electronically?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. Are there any of the above features of your system that you do NOT use or have turned off?

- 1 Yes – Please specify _____
- 2 No
- 3 Unknown

13. At the location where you see the most ambulatory care visits, are there plans for installing a new EMR system or replacing the current system within the next 3 years?

- 1 Yes
- 2 No
- 3 Maybe
- 4 Unknown

14a. At the location where you see the most ambulatory care visits, roughly, what percent of your patient care revenue comes from?

- (1) Medicare? _____ %
- (2) Medicaid? _____ %

- (3) Private insurance? _____ %
- (4) Patient payments? _____ %
- (5) Other (including charity, research, CHAMPUS, VA, etc.) _____ %

14b. At the location where you see the most ambulatory care visits, roughly, how many managed care contracts does this practice have such as HMOs, PPOs, IPAs, and point-of-service plans?

- 1 None
- 2 Less than 3
- 3 3 to 10
- 4 More than 10

14c. At the location where you see the most ambulatory care visits, roughly, what percentage of the patient care revenue received by this practice comes from (these) managed care contracts? _____ %

15a. At the location where you see the most ambulatory care visits, which of the following factors are taken into account for your patient care compensation (e.g., base pay, bonuses, or withholds)?

(1) Your productivity (e.g., number of cases seen per time period)?

- 1 Yes
- 2 No
- 3 Don't know

(2) Patient satisfaction (e.g., results of patient surveys)?

- 1 Yes
- 2 No
- 3 Don't know

(3) Quality of care (e.g., rates of preventive care services)?

- 1 Yes
- 2 No
- 3 Don't know

(4) Practice profiling (patterns of using certain services, e.g., laboratory tests, imaging, referrals, etc.)?

- 1 Yes
- 2 No
- 3 Don't know

15b. At the location where you see the most ambulatory care visits, are performance measures on your practice available to the public?

- 1 Yes
- 2 No
- 3 Don't know

16. At the location where you see the most ambulatory care visits, what percent of your patient care revenue is based on bonuses, returned withholds, or other performance-based payments? _____ %

17. At the location where you see the most ambulatory care visits, roughly, what percent of your patient care revenue comes from each of the following methods of payment?

- (1) Usual, customary and reasonable fee-for-service? _____ %

- (2) Discounted fee for service? _____ %
- (3) Capitation? _____ %
- (4) Case rates (e.g., package pricing/episode of care)? _____ %
- (5) Other? _____ %

The logistical schedule for the mail-out/mail-back is as follows:

Day 0: **Initial survey package** will be mailed. This packet will contain the following items –

Cover letter: The cover letter will be similar to that already approved and will explain the goals of the EMR survey and solicit the recipient's support and response. The cover letter will be signed by the Director of NCHS and will be printed using NCHS letterhead. Cover letters will be individually addressed to physicians' offices ATTN: Practice Manager.

Instruction sheet: This instruction sheet will contain instructions for completing and returning the survey, as well as provide the recipient with a 1-800 number for assistance or questions about the survey.

Survey: An easy-to-complete, well-formatted survey will be provided with clear instructions for completion. A unique identification number will be printed on the survey as a bar code with the numeric digits printed below to facilitate tracking of returned surveys. The OMB clearance statement will be affixed.

Mailing envelope: The outbound mailing envelope will be distinctive and clearly indicate that the survey is contained within and that the recipient's participation in the survey is requested.

Survey return envelope: We will provide pre-addressed, postage-paid, business reply mail envelope for the respondents to return the completed survey. The envelope will be addressed to EMR Study.

Day 7: **Thank you and reminder postcard** – One week after the initial survey mailing, all survey recipients will be sent a colorful postcard thanking them for responding and urging them to complete the survey if they have not yet responded.

Day 21: **Replacement survey material** – If no response from the physician's office has been received a new survey packet is sent. This packet contains the same material as the initial mailing on day 0.

Day 35: **Final mail contact** – Again, if no response has been received from the physician’s practice a third packet is sent.

Day 49: **Reminder/Follow up phone calls** – If after 3 packets and 7 weeks later no response has been received from the physician’s office, up to 6 phone attempts will be made by trained personnel to complete the survey

II. N/A

III. N/A

3. Methods to Maximize Response Rates and Deal with Nonresponse

I. We propose to use Dillman’s method to contact all prospective survey respondents by mail to encourage participation. Anema and Brown (1990) noted that 28 studies using Dillman’s method produced an average response rate of 77%¹. Dillman’s method is a scientifically proven format for conducting surveys².

II. N/A

III. N/A

4. Test of Procedures or Methods to be Undertaken

I. We will first conduct a pilot study of 80 physician practices to investigate how the questions were interpreted (given the new format of the mail survey), the quality of the data collected, who completed the survey, and time required to complete the survey. These measures may indicate flaws in the data collection instrument or methods. These 80 physician locations will be selected in the same proportion as are the physicians in the core NAMCS.

II. N/A

III. N/A

5. Individuals Consulted on Statistical Aspects and Individuals Collecting and/or Analyzing Data

¹ Anema MG, Brown BE. *Increasing survey responses using the total design method*. Journal of Continuing Education in Nursing. 1995; 26(3): 109-114.

² Dillman DA. *Mail and internet surveys: the tailored design method*. New York, NY: Wiley; 1999.

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