## SUPPLEMENT TO THE 1997-1999 FILE DOCUMENTATION FOR THE NATIONAL AMBULATORY MEDICAL CARE SURVEY (NAMCS) AND THE NATIONAL HOSPITAL AMBULATORY MEDICAL CARE SURVEY (NHAMCS)

Since their initial release, NAMCS and NHAMCS public use files have never contained sample design information because of confidentiality concerns. This limited the research potential of the data for users who wished to run statistical analyses using software such as SUDAAN and STATA. SUDAAN and STATA take into account the complex sample designs of surveys and thus require sample design information in order to run properly. They enable the user to compute variances, to perform logistic regressions, and to do other types of sophisticated statistical analysis.

Over the last 5 years, research has been conducted at NCHS in methods to include sample design information in the public use files for the NAMCS and the NHAMCS without creating unacceptable disclosure risks. Different techniques were developed, tested, and compared. The result was the adoption of a methodology that has as its primary component the collapsing of certain sample strata into larger groups that mask their identity.

The solution to the confidentiality problem has made it possible for NCHS to re-release NAMCS and NHAMCS public use files that now contain design information. The file names and file layouts are the same as previously published, but the design variables have been appended to the file according to the layout below. PSU is primary sampling unit.

## SUPPLEMENTAL RECORD LAYOUT FOR DESIGN VARIABLES ADDED TO NAMCS/NHAMCS PUBLIC USE FILES FOR 1997-1999

Item No.	Field Length	File Location	Item Name	Description and Range
1	3	621-623	STRATM	PSU stratum marker (masked) 201-404
2	5	624-628	PSUM	PSU marker (masked) 1-46
3	4	629-632	YEAR	Survey year
4	1	633	SUBFILE	File indicator 1 = NAMCS, 2 = NHAMCS
5	2	634-635	PROSTRAT	Provider stratum marker 1-15 (NAMCS), 1-2 (NHAMCS)

6	4	636-639	PROVIDER	Provider code (assigned by ACSB; does not carry across survey years; does not carry across files for hospitals with both ED and OPD records). See ranges below.
7	1	640	DEPT	Hospital dept. code 1 (NAMCS and ED), 2 (OPD)
8	3	641-643	SU	Hospital sampling unit code See ranges below.
9	3	644-646	CLINIC	Hospital clinic code See ranges below.
10	2	647-648	POPPSUM	Stratum counts of PSUs (masked) -1, 1
11	3	649-651	POPSUM	Number of clinic sampling units within a hospital (masked) -1, 0
12	6	652-657	POPVISM	Estimated provider visit volume (masked) -1, 0
13	6	658-663	POPPROVM	Estimated count of in-scope providers within PSU (masked) See ranges below.

## PROVIDER ranges:

	NAMCS	NHAMCS-OPD	NHAMCS-ED
1997	11-2553	1-236	1-392
1998	7-2506	1-240	1-398
1999	1-2492	1-242	1-376
SU ranges:			
1007	1	1 121	1.70
1997	1	1-131	1-70
1998	1	1-118	1-6
1999	1	1-165	1-8

	NAMCS	NHAMCS-OPD	NHAMCS-ED	
CLINIC ranges:				
1997	1	1-108	1-8	
1998	1	1-80	1-6	
1999	1	1-40	1-5	
POPPROVM ranges:				
1997	0-5210	0-353	0-353	
1998	0-6631	0-348	0-348	
1999	1-22499	0-348	0-348	

Note that the variables STRATM, PSUM, YEAR, SUBFILE, PROSTRAT, PROVIDER, DEPT, SU, and CLINIC are all used in the SUDAAN NEST statement. The variables POPPSUM, POPPROVM, and POPSUM and POPVISM are used in the TOTCNT statement.

An example of the SUDAAN PROC, NEST, and TOTCNT statements is given below:

- 1 PROC CROSSTAB DATA=COMB1 DESIGN=WOR FILETYPE=SAS;
- 2 NEST STRATM PSUM SUBFILE PROSTRAT YEAR PROVIDER DEPT SU CLINIC/MISSUNIT;
- 3 TOTCNT POPPSUM \_ZERO\_ \_ZERO\_ \_ZERO\_ POPPROVM \_ZERO\_ POPSUM \_ZERO\_ POPVISM;

IMPORTANT: In addition to the inclusion of the variance variables, the following revisions were made to the 1997-1999 public use files.

1) An error was discovered in the data processing program for the NHAMCS Emergency Department item, Mode of Arrival, for 1997 and 1998. This item was added to the survey in 1997, and during the first two years of its inclusion, much of the data for that item appeared to be missing. When the error was discovered while processing 1999 survey data, the item was re-edited for the earlier years, and the updated information was used to replace the incorrect data on the re-released public use files.

2) An item has been added to the 1999 NAMCS, OPD, and ED files containing results from the checkbox in item 16.b (NAMCS and OPD) and item 15.b (ED), "Is this Injury Intentional?", on the Patient Record form. The 1999 files that were released initially only included a recoded intentionality item based on the stated cause of injury. The newly added item, INTENT, has a field length of 1 and has been placed in the following file locations:

```
NAMCS file: col. 40
NHAMCS - Outpatient Department file - col. 40
NHAMCS - Emergency Department file - col. 44
```

Item Description = Is this Injury Intentional?

```
1 = Yes (Self-Inflicted)

2 = Yes (Assault)

3 = No, Unintentional

4 = Unknown

5 = Not applicable
```

The item that was previously located in column 40 (NAMCS and OPD) and column 44 (ED) for 1999 was a recoded item based on the stated cause of injury from item 16.d of the NAMCS and OPD Patient Record form and item 15.d of the ED Patient Record form. Some revision has been made to this item on the re-released files based on recent refinements in the data editing process. The item, INTENTR, ("Intentionality of injury - recode") has been moved to the following locations:

```
NAMCS file: col. 620
NHAMCS - Outpatient Department file: col. 604
NHAMCS - Emergency Department file: col. 580
```

We are also pleased to announce that we have created enhanced documentation for SAS users, consisting of new input statements, format statements, label statements, and format assignments. We are also working on providing the same level of documentation for SPSS users. These files can be downloaded from our Ambulatory Health Care Data website at: <a href="http://www.cdc.gov/nchs/about/major/ahcd/ahcd1.htm">http://www.cdc.gov/nchs/about/major/ahcd/ahcd1.htm</a>

For data users who wish to combine ambulatory care settings in a SAS run, an identifier for NAMCS, OPD, and ED records can be created using the variables SUBFILE and DEPT as follows:

```
if subfile=1 then setype=1; /* defines NAMCS records */
if subfile=2 and dept=2 then setype=2; /* defines OPD records */
if subfile=2 and dept=1 then setype=3; /* defines ED records */
```

For questions regarding the NAMCS and NHAMCS public use files, please contact the Ambulatory Statistics Branch at 301-458-4600 during regular working hours.