# Sampling Design for the 2011-13 National Hospital Care Survey

## Iris Shimizu, Ph.D.

National Center for Health Statistics, 3311 Toledo Road, Hyattsville, MD 20782

#### Abstract

The National Center for Health Statistics is integrating three hospital surveys into one survey named the National Hospital Care Survey. The new survey will measure the provision and utilization of medical care services provided by non-Federal, non-institutional hospitals with six or more inpatient beds and by freestanding ambulatory surgery centers in the United States. Similar to the prior surveys, data will be collected in national samples of hospital discharges, ambulatory surgeries, and visits to hospital emergency and outpatient departments. Relative to the prior surveys, the new survey covers an expanded hospital population and targets additional estimates. This paper discusses the sampling design for the new survey and selected differences between the old and new survey designs.

Key Words: Sampling design, health care survey

#### 1. Introduction

The National Center for Health Statistics (NCHS) is conducting the National Hospital Care Survey (NHCS) to measure health care delivered in hospital-based settings and freestanding ambulatory surgery centers (ASCs). Data will be collected on the establishments, their patients, and medical care provided to the patients.

This is a new survey which integrates three surveys that were conducted independently of each other in the past. Table 1 outlines the basic features of the combined surveys and the new survey. The first of the surveys is the National Hospital Discharge Survey (NHDS) which was conducted by NCHS continuously from 1965 through 2010. That survey targeted inpatient discharges from a hospital universe consisting of hospitals in the U.S. which are non-federal, non-institutional, have six or more beds set up and staffed for inpatient use, and are either general or children's general hospitals or hospitals whose average length of inpatient stay is less than 30 days [1].

The second survey being integrated into the NHCS is the National Hospital Ambulatory Medical Care Survey (NHAMCS) which has been conducted by NCHS continuously since December of 1991. NHAMCS targets ambulatory health care visits made to hospitals and ASCs. The hospital universe for NHAMCS is the same as that for the former NHDS. Until 2009, the NHAMCS collected data only on visits made to hospital emergency departments (EDs) that are open 24 hours a day and hospital outpatient departments (OPDs) [2]. Starting in 2009, NHAMCS phased in the collection of data on ambulatory surgeries over two years. Surgeries in hospital based ambulatory surgery locations (ASLs) were added in 2009 and surgeries in ASCs were added in 2010. The

data on ambulatory surgeries were formerly collected in the National Survey of Ambulatory Surgeries which was conducted by NCHS in 1994-6 and 2006 [3].

The third survey being included in the NHCS is the Drug Abuse Warning Network (DAWN) which was conducted by the Substance Abuse and Mental Health Services Administration (SAMHSA) from 1972 through 2011. The DAWN sampled ED visits made to non-federal, short-stay, general medical and surgical hospitals in the U.S. which have EDs open 24 hours a day, 7 days a week. The visits targeted in the DAWN are ED visits in which drugs were a contributing factor, either directly or indirectly [4,5].

The new survey is to provide the national general purpose health-care statistics that NHDS and NHAMCS provided and estimates formerly produced by the DAWN. The hospital universe for the new survey consists of non-Federal, non-institutional hospitals with six or more bed staffed for inpatient use. Average length of inpatient stays less than 30 days, which was used to define the NHDS and NHAMCS universe, was dropped from the criteria for the new universe. Eliminating the length of stay from eligibility criteria not only expands the hospital universe but should also stabilize the universe so hospitals will not go in and out of the NHCS universe when the average length of their inpatients' stays change.

Combining the NHDS and NHAMCS will increase the wealth of data on health care utilization across episodes of care. The new survey will also collect personal identifiers to facilitate linkages with other data sources such as the National Death Index and data from the Centers for Medicare and Medicaid Services (CMS). The NHCS will also collect emergency department (ED) data previously collected through the Substance Abuse and Mental Health Services Administration's (SAMHSA) Drug-Abuse Warning Network (DAWN)

The new survey will have some distinct advantages. First, more information at the hospital level will be collected. This includes, but is not limited to, the hospital's infrastructure for health information technology and volume of care provided by facilities. This will facilitate analyses of the effect of the facility characteristics on the quality of care provided.

Hospitals will be asked to provide data from their reimbursement claim form (UB-04) administrative bases on all inpatients, not just a sample of the inpatients. When the ambulatory component is integrated into the survey and visits are sampled from the ED (as well as from the OPD and ASLs and ASCs) the care provided to patients admitted to the hospital through the ED can be examined. The collection of personal identifiers (protected health information) will allow NCHS to link episodes of care provided to the same patient across departments (ED and/or OPD and/or ASLs and/or inpatient) in a hospital, as well as link sampled cases to the National Death Index to measure post-discharge mortality and Medicare and Medicaid data, as available.

The next section discusses objectives which guided the sampling design for the new survey. Section 3 discusses the hospital-based sampling design while Section 4 discusses the design of the ASC-based sample. The last section summarizes the sampling design.

# 2. Objectives that Influenced Sampling Design

The overall objective of the National Health Care Survey is to provide national estimates of the utilization of inpatient hospital care and of ambulatory medical care in hospital emergency departments, outpatient departments, and surgery locations and freestanding ambulatory surgery centers.

Among specific objectives, one is that the new NHCS be able to produce facility-level estimates for selected types of hospitals. The NCHS should also enable samples of inpatient discharges that are stratified by specific demographic or medical characteristics if, and when, resources for targeted data collection on discharges should become available.

Another objective specified that the hospital sample should be divided into representative panels for flexibility to adjust the hospital sample size to changing survey needs and/or funding. For example, the capability of augmenting a core hospital sample was desired in the event a sponsor wanted to fund a targeted data collection. Also, if full funding should not be available some year, the panels would facilitate a reduction in the hospital sample size.

Separate strata for children's and psychiatric hospitals were also desired to address problems of year-to-year variability in estimates about discharges for children and psychiatric (mental) disorders when response status for one of those hospitals changes between years.

Broad representation of hospitals across regions without stratifying the sample by region was also desired to enable release to the public of sampling strata information which will enable the data users to better estimate their own variances from public use data files. Also, for the same reason, no hospital was to be selected with certainty to the sample.

The objectives included production of numerous specific estimates from the new survey. Those objectives about estimates were specified separately for the inpatient component (which is currently underway) and the ambulatory component (planned to start in 2013).

### 2.1. Estimates Targeted from the Survey's Inpatient Component

Estimates from the inpatient component are desired for each of three hospital domains:

- The whole hospital universe for the new NHCS survey, consisting of non-Federal, non-institutional hospitals with at least six beds staffed for inpatient use.
- The universe of hospitals which meet the criteria for the NHDS and NHAMCS, consisting of non-Federal, non-institution hospitals that are general, or children's general or are short stay hospitals. Estimates for this universe are desired to facilitate analysis of trends that transcend the period of change from the old surveys to the new survey [1].
- The universe of general hospitals which includes universe hospitals whose service type is general, medical, and/or surgical. This universe excludes hospitals whose service type is children's, psychiatric, or other.

For each of the three hospital domains, in order of priority, estimates were desired for:

• Discharges and days of care by

- Urbanization level [principal cities of metropolitan statistical areas (MSAs) with populations of a million or more, fringe areas of MSAs with populations of a million or more, MSAs with populations of less than a million, and non-MSAs].
- Bed size categories (6-50 beds, 50-199 beds, 200-499 beds, and 500 beds or more).
- Facility characteristics by
  - Bed size
  - o Urbanization level
  - Type of ownership (nonprofit, proprietary, and government)
  - o Census region (Northeast, Midwest, South, and West)

In addition to the above, estimates were also desired for discharges and days of care in:

- Non-MSA, general hospitals with fewer than 50 beds, and
- o Government-owned general hospitals.

# 2.2. Estimates Targeted from the Survey's Ambulatory Component

Estimates from the ambulatory component are desired for three facility domains:

- The whole hospital universe for the new NHCS survey.
- The universe of hospitals which meet the criteria for NHDS and NHAMCS (for trending purposes)
- The universe of ASCs.

For hospital based ambulatory care, separate estimates are wanted for each department, where for the remainder of this paper, the term department refers to the hospital based ASLs as well as the EDs and OPDs.

For each of the three facility domains, in order of priority, estimates were desired for:

- Annual visit volume by
  - Census region
  - Urbanization level
  - Annual ED visit volume (under 20,000, 20,000-49,999, and 50,000 or more)
  - Ownership type
- Facility characteristics by
  - Census region
  - o Urbanization level,
  - Annual Ed visit volume
  - o Ownership type.
- Annual and quarterly visit volumes by unit type within hospital ambulatory departments:
  - Emergency services area types within EDs (general/adult, pediatric, urgent care/fast track, psychiatric, and other),
  - Clinic specialty type within OPDs (general medicine, surgery, pediatrics, obstetrics/gynecology, substance abuse, and other)
  - Surgical specialty of ASLs (general surgery, multiple surgical specialties, gastroenterology, ophthalmology, and other).
- Annual visit volume estimates by unit type named in the prior bullet and:
  - o Census region,
  - o Urbanization level,

- Annual Ed visit volume (for emergency service areas only)
- Ownership type.
- Relative standard errors of 10 percent for estimates of 10 percent among the following key statistics:
  - Patient characteristics [6 age groups, sex, race (White, Black, other) and ethnicity (Hispanic, not Hispanic),
  - Hospital characteristics (Census region, urbanization level, and ownership type).
  - Visit characteristics [payment type (private insurance, Medicare, Medicaid, uninsured, other), triage in ED (5 levels), injury, visit reason (for the top 20 reasons for each of ED & OPD), diagnosis (for the top 20 diagnoses), procedures (for the top 20 ASL procedures), and disposition (for ED visits admitted to hospital), and
- Monthly visit volume estimates to each of the three hospital ambulatory departments.

# 2.3. Priorities Given Objectives in Design

It was decided in advance that if some objective(s) could not be satisfied simultaneously with certain other listed objective(s), the objectives specified for ED visits would be given priority over those for the inpatient component and over the those for the other parts of the ambulatory visit component.

# 3. Hospital Based Sampling Design

The primary goal of the NHCS is to collect data on discharges to hospital inpatients and on visits to hospital emergency departments (EDs) and outpatient departments (OPDs) and ambulatory surgeries in both hospitals and freestanding facilities. The NHCS will use a three-stage probability design based on samples of hospitals, OPD clinics within hospitals, and patient visits within hospital OPD clinics, ASLs, and EDs. The NHCS will also use a two-stage probability design based on samples of ASCs and patient visits within the ASCs. This section discusses the hospital-based sampling design while the Section 4 discusses the ASC-based sampling design.

### **3.1. Design of Hospital Sample**

A stratified list sample of hospitals was designed to satisfy prioritized survey objectives for the NHCS and to obtain a broad representation of hospitals with specific characteristics. The hospital sampling frame includes the universe hospitals listed in a commercial hospital marketing database which is compiled from data provided by (among others) Federal and state agencies that monitor and license hospitals. Strata were defined by hospital service type (general, children's, psychiatric, and other). Within the stratum of general hospitals, hospitals were further stratified by bed size (6-50 beds, 50-199 beds, 200-499 beds, and 500 beds or more) and urbanization level ((Principal cities of MSAs with populations of a million or more, fringe areas of MSAs with populations of a million or more, MSAs with populations of less than a million, non-MSAs). Table 2 shows the distribution of the universe hospitals by sampling strata.

A systematic random sampling scheme was used to select an initial total sample of 1,000 hospitals. Sampling was done with equal probability within each of the general hospital strata but sampling with probability proportional to size was used within each of the strata for the three remaining hospital service types (children's, psychiatric, and other).

To facilitate satisfying targeted objectives for the survey, implicit strata were formed within each sampling stratum by sorting the hospitals according to categories for characteristics related to those objectives. The hospitals were first sorted by whether they met the criteria for being in the former NHDS universe. Within each NHDS universe status category (met or did not meet NHDS universe criteria), hospitals were sorted, in sequence, by ED status (did or did not have a 24/7 ED), Census region, Census division, urbanization level, and ownership type. Finally, within the cells defined by categories of the sorting variables, the hospitals were randomly ordered. The sample in each sampling stratum was then selected from the ordered list of hospitals.

The total initial sample of 1,000 hospitals was split into two samples of 500 each by first arraying the sampled hospitals according to their sampling strata and, within strata, arraying them in the order in which they were selected. The first and every second hospital, thereafter, were put in one sample and the remaining hospitals were put in the other sample. The sample distribution among the strata is the same in the two samples. Table 2 shows that distribution by stratum. One of the two samples of 500 hospitals was randomly selected to be the final core sample while the other sample is being held in reserve for possible use in the future.

The core and reserve samples were each divided into 16 nationally representative panels by first arraying the hospitals in the order of their sampling strata and selection within strata and then systematically assigning ever sixteenth hospital to a panel. Random numbers were assigned to those 16 panels to determine the order in which the panels are to be used if fewer than 16 panels from the sample should be needed. The choice for number of panels (16) was influenced by the sampling design for the NHAMCS which currently rotates 16 sample hospital panels over 4-week periods to collect data on visits made to hospitals and ASCs for ambulatory medical care and ambulatory surgery [2].

### **3.2. Design of Hospital Inpatient Component Sample**

All of the hospital inpatient discharges occurring at sample hospitals are targeted in the total discharge sample, making the total sample of inpatients a one stage sample. Data for this component are collected by electronic transmission of reimbursement claim form (UB-04) data from the hospital to NCHS or the survey's contractor. Because multiple UB-04s may be submitted for a single event (hospital stay, discharge, etc.) the UB-04s are de-duplicated to produce a single record containing the information included in the UB-04s for each individual discharge event. From these discharge files, annual data sets will be constructed to include records for only those discharges which occurred during the targeted survey year.

When the survey is fully implemented, the discharge files for the total sample are expected to include millions of records annually. NCHS analysts and patrons of the NCHS Research Data Center may use the total annual samples in their studies. However, to make these NHCS discharge sample data available through public use files, subsamples will be required to minimize hospital identity disclosure risks that could be posed if all of the UB-04 data from individual hospitals were released. Subsampling may also be necessary because of the sheer size expected in the total discharge sample data files and computer limitations.

For public use files, stratified samples of about 500,000 discharges will be selected from the total annual samples. The sampling strata for this purpose will be the individual sample hospitals. Within each hospital, a systematic random sample of discharges will be

selected from discharge records arrayed, in sequence, by patient type [observation cases (length of stay is zero), normal newborns (hospital stay began with birth), and all others], ICD-9-CM chapter for the inpatient's primary diagnosis, age group, sex, discharge month, and discharge day of week. The systematic sampling interval will be such that the overall discharge sampling weights will be constant across hospitals except in hospitals where that interval would cause selection of more than half of the hospital's discharges, in which case the sampling interval will be set to two.

Samples of discharges with specific characteristics can also be selected for special study modules that may involve abstracting from medical records for more clinical detail. The samples for such studies will likely be stratified with strata defined by the discharge characteristics targeted in the special study.

### 3.3. Design of Hospital Ambulatory Care Component Sample

For samples of ambulatory visits to hospital EDs, OPD, and ASLs, the 16 sample hospital panels described above for the core NHCS sample of 500 hospitals will be assigned on a rotating basis to data collection periods that start each month. Thus, each hospital will be included in the sample for the ambulatory component every 16 months and a total of 386 hospitals will be in the annual sample.

Three proposed designs for sampling visits within sample hospitals will be tested in an effort to increase the sample of DAWN cases while limiting data collection costs and response burden. DAWN cases comprise only an estimated two percent of ED visits and are identified primarily via manual inspection of ED medical records. All three of the proposed designs will use systematic random sampling to select visit samples stratified by department. The numbers of sample visits that will be targeted in all three of the proposed designs are:

- 200 OPD visits
- 100 ASL visits
- 100-300 ED visits.

One proposal is designed for sampling visits made to hospitals which permit remote access to their medical records. In this **remote reporting design**, both visit sampling and data abstraction will be done remotely. That is, no field staff visits will be made to the hospital for the purposes of either visit sampling or visit data abstraction. In this design, the records for visits occurring within the data collection period assigned to the hospital will first be assigned to the hospital's ambulatory care departments on the basis of revenue type and/or diagnostic codes found in the records. Prior to sample selection, the visit records from each department will be sorted by visit day of week. One sample will be selected from each non-ED department but two independent samples (DAWN and NHAMCS type) will be selected from each ED. For the DAWN sample, all records for ED visits occurring during the data collection period will be reviewed and all visits identified as DAWN cases will be selected. The NHAMCS type sample will consist of 300 ED visits selected without regard to DAWN case status.

Another proposal is designed for use with hospitals which do not permit remote access to their medical records but which do transmit electronic billing records for ambulatory care visits to the survey contractor. In this (**non-remote reporting with sampling from billing data**) design, the ambulatory visit samples will be selected remotely from electronic UB-04 records and then field staff will visit the hospitals to abstract data from

medical records for the sampled visits. After the transmitted UB-04 records for individual visits are deduplicated, the resulting records for visits occurring during the hospital's assigned reporting period will be assigned to the hospital's departments by using revenue and diagnostic codes. The visits in the ED stratum will be further stratified by DAWN likelihood status (likely a DAWN case versus all other visits) where "likely a DAWN case" is defined by whether any of the ICD9 codes for the ED visit either definitely denotes a DAWN case or was one of 14 ICD9 codes found to be linked with the greatest number of DAWN cases when a random sample of 1,000 DAWN cases was selected for ICD9 coding. Each sampling stratum's visit records will be sorted prior to sample selection, in sequence, by age group, ICD9 chapter for the visit's primary diagnosis, and visit day of week. Such sequencing will be done to assure sample representation from different types of ambulatory units, if any, which may exist within each department. The ED sample under this design is currently proposed to include about 300 visits per hospital.

The third proposal is designed for sampling visits at hospitals which neither permit remote access to medical records nor transmit electronic billing records for their ambulatory care visits to the survey contractor. This is the **traditional design** used in the current NHAMCS for years [2]. Under this design, field staff will visit the sample hospitals to both select the sample visits from sign-in sheets and abstract data about those visits from hospital records. Neither sampling nor data abstracting will be done remotely for these hospitals. Under this design, visits are stratified by department. Within OPDs which have more than five eligible clinics, a stratified sample of up to two clinics or groups of clinics are selected from each stratum where strata are defined by clinic specialty (general medicine, surgery, pediatrics, obstetrics/gynecology, substance abuse, and other). In OPDs with fewer than six eligible clinics, all eligible clinics in the OPD are included in the sample. At the final sampling stage, systematic random sampling is used to select sample visits from sign-in sheets for each sampled unit. Under this design, a sample of 100 ED visits will be targeted. No attempt will be made to oversample DAWN cases from EDs under this design.

# 4. Freestanding Ambulatory Surgery Center Based Sample Design

Ambulatory surgery centers (ASCs) which are not affiliated with hospitals are deemed to be freestanding. In this component, a two stage sample of ambulatory surgeries will be selected with freestanding ASCs selected at the first stage and ambulatory surgeries selected at the second stage. The universe of ASCs consists of ASCs in the United States which are regulated by the states and/or certified for Medicare participation by the Centers for Medicare and Medicaid Services (CMS). The universe includes pain block (pain treatment) facilities but excludes facilities dedicated to dentistry, podiatry, abortion, family planning, and/or birthing.

The ASC sampling frame will be compiled from the most recently available releases of two databases. One is a commercially available ASC database and the other is the ASC "provider of service" file maintained by the CMS. A stratified list sample of about 267 ASCs will be selected with strata defined by Census region and five surgery specialty groups (ophthalmic, gastrointestinal, multi-specialty, general, and other). As was done with the hospital sample, the ASC sample will be systematically divided into 16 representative panels which, in turn, will be randomly ordered for rotating assignments to reporting periods of one month each. The result will be a total sample of 200 ASCs annually with each ASC included in the sample only every 16 months.

A systematic random sample of 100 surgeries will be targeted in each reporting period from each sampled ASC. This sample will be selected from sign-in sheets maintained at the ASCs. Both the surgery sampling and the data abstraction will be done on site within the sampled ASCs.

# 5. Summary

This paper discusses the sampling designs planned for the new National Hospital Care Survey (NHCS). The NHCS will use a single sample of hospitals and freestanding ambulatory surgery centers (ASCs) to produce estimates previously produced in three independent federal hospital sample surveys. Those three surveys are:

- The National Hospital Discharge Survey which produced estimates about hospital inpatient discharges and days of care,
- The National Hospital Ambulatory Medical Care Survey which produces estimates about ambulatory visits for medical care to hospital emergency and outpatient departments and about ambulatory surgeries performed in hospitals and ASCs, and
- The Drug Abuse Warning Network which produced estimates about ED visits caused or influenced by a drug.

The NHCS will use stratified multi-stage samples in both hospital-based and ASC-based settings. The hospital-based sample will have a three stage sample in which a stratified list sample of hospitals is selected at the first stage. Outpatient department clinics will be selected at the second stage and inpatient discharges, ambulatory visits, and ambulatory surgeries will be selected at the final stage. The ASC-based sample will use a two stage sample with ASCs selected at the first stage and surgeries selected at the second stage.

Data for hospital inpatient discharges are being collected from electronic billing records. When sample hospitals have them and make them available for survey purposes, electronic medical and billing records are proposed for use as the within hospital sampling frames for ambulatory surgeries and ambulatory visits for medical care. Data about the sampled surgeries and ambulatory medical care visits will be collected via either access to electronic medical records or visits by field staff to the sample facilities.

The sampling design is subject to some tweaking to improve the survey as more experience is gained with the electronic modes of sampling and/or data collection. The design is also subject to funding.

### References

- [1] Dennison C and Pokras R (2000). Design and operation of the National Hospital Discharge Survey: 1988 redesign. Vital Health Stat 1(39). Available at <u>http://www.cdc.gov/nchs/data/series/sr\_01/sr01\_039.pdf</u>.
- [2] McCaig LF and McLemore T (1994). Plan and operation of the National Hospital Ambulatory Medical Care Survey National Center for Health Statistics Vital Health Stat 1(34). Available at <u>http://www.cdc.gov/nchs/data/series/sr\_01/sr01\_034acc.pdf</u> on 8/23/2012.

- [3] McLemore T and Lawrence L (1997). Plan and Operation of the National Survey of Ambulatory Surgery. National Center for Health Statistics. Vital Health Stat 1(37). 1997. Available at <u>http://www.cdc.gov/nchs/data/series/sr\_01/sr01\_037.pdf</u>.
- [4] United States Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, and Center for Behavioral Health Statistics and Quality (2008). Drug Abuse Warning Network (DAWN). ICPSR31264-v3. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2012-01-24. doi:10.3886/ICPSR31264.v3. Available at http://www.icpsr.umich.edu/icpsrweb/SAMHDA/studies/31264.
- [5] Substance Abuse and Mental Health Services Administration (2011). Drug Abuse Warning Network, 2009: Methodology Report. Rockville, MD: Substance Abuse and Mental Health Services Administration. Available at <u>http://www.samhsa.gov/data/2k11/DAWN/2009Methods/DAWN2k9\_MethodologyReport.htm</u>.

Table 1: Information about Combined Surveys and New Survey									
Survey	Years conducted	First stage universes	Ultimate sampling units						
Old Surveys									
NHDS	1965-2010	Hospitals that were non- federal, non-institutional, with 6 or more beds which were general or children's general hospitals or short stay	Discharges of hospital inpatients						
NHAMCS	1992-2012 Starting in 2009	(average <30 days stays) Hospitals in NHDS universe	Visits to hospital emergency and outpatient departments Hospital-based ambulatory surgeries						
	Starting in 2010	Freestanding ambulatory surgery clinics	Ambulatory surgeries						
DAWN	1972-2011	Hospitals that were non- federal, short stay general hospitals with emergency departments which operate 24/7	Emergency department visits caused directly or indirectly by drugs.						
New Survey									
NHCS	Start 2011	<ul> <li>Hospitals that are non- federal, non-institution and have 6 or more inpatient beds</li> <li>Freestanding Ambulatory Surgery Centers</li> </ul>	<ul> <li>Discharges of hospital inpatients</li> <li>Visits to hospital emergency and outpatient departments</li> <li>Ambulatory surgeries</li> </ul>						

Table 1: Information about Combined Surveys and New Survey

			Urbanization level				
			MSA of 1 m	illion plus			
Service type	Bed size	All	In Principal City	In Fringe area	Small MSA	Non MSA	
				Universe			
Total		6622					
General		5049	906	747	1338	2058	
	6-50	1948	99	137	344	1368	
	50-99	798	78	139	188	393	
	100-199	1014	233	221	327	233	
	200-499	1067	381	220	402	64	
	500+	222	115	30	77		
Children's		103					
Psychiatric		677					
Other		793					
			Core				
				sample			
Total		500		-			
General		425	116	102	113	94	
	6- 50	81	23	14	13	31	
	50-99	46	15	8	8	15	
	100-199	86	13	27	23	23	
	200-499	131	23	43	40	25	
	500+	81	42	10	29		
Children's		25					
Psychiatric		25					
Other		25					

# **Table 2:** Hospitals in the NHCS Sampling Frame and Core Sample by Sampling Strata:2011-2013

The hospital universe includes non-Federal, non-institutional hospitals in the United States which have six or more beds staffed for inpatient use.