

January 31, 2012

**Report of the
Ambulatory and Hospital Care Statistics Branch
Review Panel
to the
NCHS Board of Scientific Counselors**

EXECUTIVE SUMMARY (to be prepared after full report is reviewed and finalized)
OVERVIEW

The Board of Scientific Counselors (BSC) of the National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention (CDC) commissioned a panel to review the Ambulatory and Hospital Care Statistics Branch (AHCSB), Division of Health Care Statistics (DHCS), NCHS, and to report its findings to the BSC. The review of the AHCSB is part of an on-going program review process which has previously reviewed many of the NCHS programs over the past several years. This report summarizes the review process; describes the current AHCSB surveys and programs, AHCSB accomplishments and contributions, collaborators and sponsors, data products, and users and uses of the data; examines the issues and challenges facing the AHCSB; and presents a series of recommendations.

REVIEW PROCESS

The AHCSB Review Panel members (Attachment 1) met on July 8, 2011, at NCHS, following an established agenda (Attachment 2). During conference calls on June 28 and June 30, the agenda was finalized and the charge to Panel members and the approach for deliberations discussed. Prior to the Panel meeting, members had received a number of documents including *Ambulatory and Hospital Care Statistics Branch: Report to the Board of Scientific Counselor and Review Panel*.

In its deliberations, the Panel followed the “Procedures for Reviewing NCHS Programs established by the BSC (Attachment 3) which call for the reviewers to examine the current status, scientific quality and responsiveness of each program within the context of its mission. Further the review procedures require that the review take into account future availability of financial and staffing resources, emphasize forward thinking and future plans, as well as assess current operations and conduct an interactive review that obtains information from written materials, presentations and discussion with program staff. During the Panel meeting, there were presentations by Edward Sondik, NCHS Director; Jane Sisk, then Director, DHCS; and Paul Beatty, Chief, AHCSB. Charles Adams, Chief, Technical Services Branch, DHCS; Jill Ashman, Dissemination Team Leader, AHCSB; Carol DeFrances, Hospital Care Team Leader, AHCSB; and David Woodwell, Ambulatory Care Team Leader, AHCSB were available throughout the meeting to answer questions and provide additional information.

In preparation of the final report, the Panel reviewed a detailed outline and first draft of the report based on Panel deliberations. AHCSB and DHCS staff also reviewed for accuracy, particularly in regard to program operations. Panel members provided substantive comments for subsequent versions of the report and agreed upon a final document to be submitted to the BSC.

DESCRIPTION OF THE AHCSB AND THE AHCSB PROGRAMS

- **Organization and staffing**

Organization -- The Ambulatory and Hospital Care Statistics Branch is one of three branches within the Division of Health Care Statistics. The branch has 23 full-time staff members in three teams: Ambulatory Care Team, the Hospital Care Team and the Dissemination Team. Another DHCS branch provides data on long-term care and the third branch provides technical services and systems and data processing support to both survey branches. The DHCS is one of the four data divisions in NCHS. With its focus on health care, the DHCS complements the other divisions which produce data on population health and vital statistics. The mission of NCHS is to monitor the nation's health, providing the data to guide policies and programs to improve the health of the American people.

Staffing -- The AHCSB staff comes from a variety of training backgrounds: public health, statistics, public policy, social science, medicine and pharmacy. The Branch includes a mix of relatively new and seasoned staff. The leadership of both the branch and the teams is somewhat new. The branch has several important vacancies including a medical officer and a coding specialist and is in the process of recruiting some additional staff to help with the work load.

- **Ambulatory Care Surveys**

The AHCSB has fielded two major ambulatory care surveys, one of care provided by office-based physicians (the National Ambulatory Medical Care Survey) and the other of visits to hospital emergency and outpatient departments and ambulatory surgery centers (the National Hospital Ambulatory Medical Care Survey). These surveys have had other components and special supplements or surveys added throughout the years to focus on specific diseases, types of visits or aspects of medical practice.

- National Ambulatory Medical Care Survey (NAMCS) – NAMCS began in 1973 and is now an on-going annual survey. NAMCS gathers data on ambulatory medical practice from a nationally representative sample of visits to office-based physicians. It produces data on patient characteristics, symptoms and diagnoses; physician practice characteristics; and on diagnostic and therapeutic services ordered or provided. Over the course of the survey, other components, supplements, and changes in survey design (described below) have been implemented to expand the scope and content of the survey and to enhance its value in monitoring current issues in health and medical care. A most important change is the expansion of the NAMCS

sample in 2012 to produce state estimates and the resulting computerization of the survey to handle the substantially increased volume of questionnaires, forms and medical records.

- Electronic Health Records Supplement – A special mail survey conducted in parallel with NAMCS starting in 2008 to collect data about the adoption of electronic health records.
- Physician Workflow Supplement - A follow-up data collection initiative to the electronic health records supplement to gain a better understanding of the barriers to adopting electronic health records and the experiences of those physicians who are using partial or full electronic health records systems. Respondents will be followed for three years beginning in 2011.
- Cervical Cancer Screening Supplement - A supplement given to all sampled physician in general and family practice, internal medicine, obstetrics and gynecology and those working in Community Health Centers to gather information the use of cervical cancer screening methods, colposcopy and HPV DNA tests, as well as follow-up of abnormal and normal tests results. It began in 2006 and was conducted through 2010.
- Collection of laboratory test results – An additional component of the NAMCS which began in 2010 to supplement to collect laboratory test results, including total cholesterol, high density lipoprotein, low density lipoprotein, triglycerides, glycohemoglobin A1c, and fasting blood glucose to improve the understanding of how physicians manage hyperlipidemia and diabetes.
- Asthma Management Supplement – A supplement to gather information on physicians’ decision making process for the management of asthma, as well as agreement with and adherence to national guidelines for diagnosis and management. It should also provide the data to identify barriers to the implementation of asthma management strategies and point to strategies to eliminate those barriers. It will begin in 2012.
- “Lookback” Module – An effort to collect data that describe physician management of cardiovascular disease and its risk factors. A sample of patients with cardiovascular disease will be selected and then data obtained retrospectively for all visits by those patients. The module would record medications prescribed, changes in medications, family history and contraindications to certain medications. Since the survey already collects selected intermediate outcomes, including blood pressure and cholesterol levels, combining currently collected data with the additional “lookback” items would permit the evaluation and monitoring of appropriateness of clinical management and the relationship to these outcomes. This “lookback” module beginning in 2012 may become the model used for other longitudinal efforts.

- Expansion of 2012 sample – The expansion of the sample from an annual total of 3,000+ physicians to approximately 12,000 in 2012. The purpose of the expansion is to produce state-based estimates to monitor the effects of changes in the health care system brought about by the Affordable Care Act (ACA).
 - Computerization of data collection –The implementation of a computer-assisted data system in 2012 to coincide with the fielding of the expanded sample and the “lookback” module with the multiplicity of records for each sample person.
 - National Hospital Ambulatory Medical Care Survey (NHAMCS) – NHAMCS began in 1991 and has been conducted annually since its start. NHAMCS began as a national probability survey based on a sample of visits to the emergency and outpatients departments of non-federal general and short-stay hospitals. NHAMCS was designed to provide data on the characteristics of hospitals, patients and the services rendered during their visits. Like the NAMCS, the NHAMCS has undergone a number of changes in its design and scope to respond to the need for data to manage and monitor changes in health care delivery in the United States.
 - Hospital-based ambulatory surgery centers -- Added to NHAMCS in 2009 and free-standing ambulatory surgery centers were added in 2010.
 - Collection of laboratory test results -- Collected for the first time in NHAMCS in 2010, this addition to the NHAMCS paralleled the addition to NAMCS. The laboratory values include total cholesterol, high density lipoprotein, low density lipoprotein, triglycerides, glycohemoglobin A1c and fasting blood glucose.
 - Colonoscopy module -- Designed to gather data on the appropriate use and quality of colonoscopy services this module has been developed to be fielded at ambulatory surgery centers. It will be pilot tested in 2012.
 - Supplemental sample of children’s general hospitals -- An additional panel of children’s hospitals added (only in 2006) to the NHAMCS to assess how well hospitals were prepared to provide emergency pediatric services.
 - Supplements using the NHAMCS sample -- have been fielded at various times over the past decade. The supplements include those examining hospital capacity, ED staffing and capacity and ambulance diversion, bioterrorism and mass casualty preparedness, emergency pediatric services and equipment, cervical cancer screening and pandemic and emergency response planning.
- **Hospital Care Surveys**
 - National Hospital Discharge Survey (NHDS) – The NHDS has been conducted continuously from 1965 to 2010 and was designed to gather information on inpatients discharged from non-federal, short-stay hospitals in the United States. It produced

nationally representative estimates of the characteristics of discharges, lengths of stay, diagnoses, surgical and non-surgical procedures and patterns of use of care in hospitals in various regions of the country.

- National Hospital Care Survey (NHCS) – The NHCS is a new data collection effort that will combine the NHDS and the NHAMCS into one survey to be fully implemented by 2013. The integration of the two hospital-based surveys reflects the changes in health care delivery and the need to monitor care as it is currently provided. In the NHCS, patients can be tracked as they move within the hospital from inpatient to outpatient status. Personal identifiers will be collected to allow patient care episodes to be linked, as well as to link sampled cases to the National Death Index to measure post-discharge mortality. The new survey will collect more information at the hospital level on the hospital's infrastructure for health information technology and value of care provided by the facility. UB-04 claims data will be collected for all patients, which will allow the survey to sample hospital discharges with specific diagnoses and procedures for special studies and to collect more clinically relevant data.
- National Survey of Prison Healthcare (NSPC) – AHSCB will conduct this survey in conjunction with the Bureau of Justice Statistics to provide an overall picture of the global structure of healthcare services in prisons in the United States. It will produce data on the availability, location and the capacity of services provided to inmates and identify the extent to which electronic health records are used. It will also provide data on how many health services are provided in prison facilities directly as opposed to contracted out. The NSPC is a mail survey to gather facility-level data with follow-up calls as necessary.

- **Accomplishments and contributions**

The AHCSB has had many accomplishments over the more than 40 years that the hospital and ambulatory care surveys have been conducted. The NHDS was one of the first surveys to provide nationally representative data on hospital care in the United States. It provided essential data during a period of tremendous change in hospital care financing for the elderly with the implementation of the Medicare program. As other changes in health care organization followed, the NHDS contributed data to track the impact of medical care advances and technological developments, changes in financing and reimbursement for care, and population and demographic shifts. NAMCS has been similarly useful, providing the baseline for monitoring ambulatory care with nationally representative data on care provided in physicians' offices. To complement the NAMCS, NHAMCS added hospital emergency and outpatient departments. Throughout the history of the surveys, efforts were made to expand the scope and the range of the surveys and to fill in key data gaps with specialized surveys and supplements.

The AHCSB surveys produced landmark findings over the past few decades. Some key issues and patterns identified or illuminated by AHCSB data reflect changes in medical practice, advances in diagnosis and treatment or population shifts.

- The shift from inpatient to ambulatory surgery for cataract removal and lens insertion, tonsillectomies, vasectomies, cardiac catheterization, release of carpal tunnel, bronchoscopy, operations on nasal sinuses, myringotomy and many other surgical or diagnostic procedures.
- The reduction in length of stay associated with many standard procedures and conditions, due to less invasive procedures, more effective medications, and greater utilizations of post-acute facilities for rehabilitation and recovery.
- The high volume of inpatient care for HIV/AIDS, followed by a dramatic decline in hospitalization and length of hospital stay for AIDS in the mid- to late 1990s with the introduction of intensive antiretroviral therapies.
- The sharp decline in length of stay for childbirth and delivery and the subsequent increase in hospital stay when problems identified for mothers and babies with the shortened stay. Many states enacted legislation to mandate changes in insurance coverage and allow reimbursement of longer stays after delivery.
- The rise in doctor visits and increased services especially among older patients over the past 20 years.
- A decline in the use and prescribing of antibiotics among children in response to the campaigns to reduce antibiotic use.
- An increase in prescribed drugs, especially statins and other cholesterol-lowering drugs, antidepressants, nonsteroidal anti-inflammatory drugs, and blood glucose/sugar regulators over the past two decades.
- The rise in diagnostic procedures, from MRIs to colonoscopies.

To maintain the ability to provide timely, relevant data on health care in America, the surveys have been redesigned. The hospital care survey was redesigned to include both inpatient and outpatient care and to link patient episodes to other data sources to understand the quality and outcome of health care provided. The ambulatory care survey has been greatly expanded to enable state estimates to be generated. Both surveys have been redesigned in content and operations to meet the needs for data to inform health care policies and direct health care programs. Key to the expansion and redesign of the NAMCS is the move to electronic data collection. Going from a survey of many paper forms to a streamline data collection operation based on the electronic health record will mean that the survey can process the literally thousands of additional data points faster and with greater accuracy than ever before. The move to the electronic system was carefully planned and will be implemented during the next year.

The planning and implementation of the new and expanded surveys is a direct reflection of both the excellent and dynamic leadership that the Division has experienced under Dr. Jane Sisk and the efforts of a hard-working, talented staff whose contributions far exceed their numbers. With only minimal additional staff, and that only recently, the AHCSB has managed to keep the current surveys going and plan innovative, far-reaching data collection systems for the future. To develop plans for the new surveys, the DHCS created a climate to accept and accelerate positive change and innovation throughout the program. Seminars, workshops, and outside

leaders and speakers set the stage for innovation but the Division Director and staff responded and welcomed the opportunity for change.

- **Collaborators and sponsors**

The AHCSB works with many public and private agencies in the planning, conduct and support of the ambulatory and hospital care surveys. Government agencies provide expertise and funding. The Centers for Disease Control and Prevention, the National Institutes of Health, the Office of the National Coordinator for Health Information Technology and other HHS agencies have sponsored many of the topical supplements and survey additions. There has been a major new influx of money with the ACA and Health Information Technology for Economic and Clinical Health (HITECH) legislation. Professional organizations provide endorsements to gain the support and participation of various provider and facility groups. Subject matter experts contribute to the development of the content of the surveys. Expert panels have contributed to new projects on correctional health care, physician workflow and monitoring colonoscopy use. There is on-going outreach to potential collaborators and more and new collaborators attest to the value and usefulness of the data.

- **Data products and dissemination**

The AHCSB produces a wide range of data products to match users' needs. Public use data files provide access to microdata and are accessible through the NCHS web site. Richer sociodemographic information (selected variables based on ZIP code) has been added to NAMCS/NHAMCS data files and NAMCS can produce provider level estimates of ambulatory care. NHDS public use files were changed to be compatible with multiyear files to facilitate trend analysis. For researchers who need more detailed data than provided on the public use files, the NCHS Research Data Center offers on-site and remote assistance in gaining access to information which is repressed due to confidentiality concerns on the public use files. The AHCSB produces a number of publications, including annual detailed and summary publications for each survey and newer topical, user-friendly reports. The Branch responds to many requests for specific data and technical support. Journal articles and presentation at scientific and professional meetings expand the dissemination of data and contact with the user community.

- **Data users and uses**

Data users run the gamut of public and private agencies and organizations. Among the most extensive users are government agencies. Academic and research organizations, non-profits, and professional associations are frequent data users and also represented in the user community are health care and related industries, the media and the public. Uses of the data range from the analysis of findings for health care planning, evaluation monitoring and management to tracking changes in utilization and comparing patterns of use by various segments of the population. The data are available to track trends in morbidity and changes in clinical practice. To some extent the ambulatory and hospital surveys provide the data to interpret and measure the impact of various changes in health care delivery and financing. The survey findings are also a valuable component of data used in many marketing efforts. AHCSB data are often in the media, used to describe or explain some recent aspect of health care, from waiting times in physician offices to the number of colonoscopies performed each year to the number of ambulances diverted from emergency departments.

ISSUES AND CHALLENGES FACING THE AHSCB

There are a number of issues—internal and external—facing the AHSCB as it seeks to manage and modernize its surveys and make the data they produce more useful, relevant and timely.

- Staffing
 - Change of leadership – The most immediate challenge that AHCSB and the DHCS faces is the selection of a new Director. With the departure of Dr. Jane Sisk who led the program through a dynamic and difficult period of change, NCHS has focused of recruiting another leader for the program with a similar capacity for innovation and leadership. The recruitment process elicited a large number of candidates and, at present, interviews are taking place with selection expected in the near future. (Note: Subsequent to the Panel’s meeting, a new DHCS Director, Clarice Brown, was appointed in December 2011.)
 - Serious staffing shortages – The AHCSB is facing serious staffing shortages, in terms of numbers and skill sets and expertise. There have been some new hires and other recruitments are on-going to try to address the situation. AHCSB has identified the need for staff with expertise in health care policy, electronic health records, automation, and medical specialties. In addition, with the expanded surveys, more staff members to carry out the day-to-day survey operations, data clean-up and analysis are needed.
 - Staff burnout – Staff have multiple assignments and there has been and still is a serious possibility of staff burnout. Staff has had to maintain current operations while planning and designing future surveys. In addition, program directions have not always been clear and the confusion has led to a number of false starts which have negatively impacted morale and motivation.
 - Lack of personnel in key positions – Some key positions remain vacant. The retirement of the only medical coding specialist in the branch presents a serious problem with many coding decisions to be made in the new surveys as well as implementation of the ICD-10-CM. This expertise may be obtained, at least in part, through a contract. Physicians play a key role in the design of surveys of physician and hospital care and more are needed to provide their expertise in various phases of the survey redesign and implementation.
- Budget
 - Low levels and unstable funding – Low levels of and unstable funding have hampered survey redesign and modernization from the earliest days of the ambulatory and hospital care surveys. The surveys have had to be pulled from the field on occasion and have suffered other setbacks due to lack of funding. Almost as serious a problem has been the unstable nature of funding. Depending upon overall NCHS funding levels, the AHCSB programs have had to take their share of cuts and have felt the impact of overall low NCHS funding periodically over the past several decades. Unstable funding has meant that planning improvements and expanding the programs could not move ahead on a timely basis and delayed funding decisions have impaired the program’s ability to make changes in time to field the surveys. Currently, there are significantly higher levels of funding with ACA and HITECH resources. These substantial increases in the budget have meant that the NAMCS sample could be greatly increased, content could be updated

and expanded and the survey automated. The impact of the current nationwide debate on debt reduction and mandatory budget cuts throughout the Federal government could have a major impact on the AHCSB budget.

- Scope and relevance of surveys
 - Respond to emerging data needs -- For both the ambulatory and hospital surveys, the ability to respond quickly to emerging data needs was limited in the past. A number of factors have contributed to this lack of responsiveness: the inability to change survey content quickly; the need to work with contractors on a lengthy process to improve survey operations or field new components; the lack of ready and flexible funding to develop, pretest, and add new topics; the cumbersome data collection methodology which precluded a quick turnaround on survey modules; a shortage of staff members to design and manage new surveys while maintaining ongoing data collection and analysis; and a traditional annual survey methodology and orientation. These factors inhibited the surveys' capacity for introducing new topics, rotating topics and content to expand scope and analyzing the survey results on a real time basis with developments and issues in health care delivery. This said, the surveys have added some new components or supplements in recent years (see pages 3-5 of this report) and have expended a great deal of effort to make the surveys as current and responsive as possible.
 - Need for targeted or focused data -- The hospital and ambulatory care surveys are based on visits and have produced data by some patient characteristics, such as race, age, sex, and geographic region and by provider characteristics, such as hospital ownership and size and physician specialty and practice size, for example. There is, however, a need for data to examine the patterns of health care among other groups defined by more detailed geographic areas, disease entities, special characteristics such as disability status, socioeconomic status and by provider characteristics reflecting the new organizational structures.
 - Data on charges, costs, payments and payment mechanisms – The ambulatory and hospital care surveys have been able to provide some information on payment sources. Now, however, much more information is needed on charges, the costs of care, payments and the wide range of mechanisms for payment. New systems for delivery and payment must be reflected in the economic data produced by both the ambulatory and hospital surveys. A major shift in system payment is toward demonstrated value and impact on patient and population outcomes and the surveys need to capture information to measure this impact.
 - Data on patient outcomes and health care quality – Without linkage of patient episodes and followup on patients throughout the system, the ambulatory and hospital care surveys could only provide limited data on the outcome and quality of health care. In order to make decisions on types of care to offer and support, data are needed on the comparative effectiveness as measured by patient outcomes. Recent efforts are moving in this direction. It is also an important concept to integrate health care measures into a broader perspective including social determinants of health.
 - Timeliness – The timeliness of the data from the AHCSB programs has been a concern. With rapid changes in health care, the available data need to reflect the current situation

and point to future developments. Users require and expect the current data to address health policy, programmatic and analytic issues. The small staff involved in both analysis and operations has slowed the processes of data collection, data clean-up and editing and data analysis and release.

- Electronic health records/Electronic data collection – NAMCS is moving to electronic data collection with the 2012 survey year and training has already taking place with field representatives from the survey contractor, the Bureau of the Census. The new National Hospital Care Survey will also utilize electronic health records. Only by moving from a paper data system to electronic medical records and electronic data collection can the surveys hope to cover the greatly expanded samples, manage the required level of data linkage, and produce data on a scheduled and timely basis. Plans are still being developed for this transition and it is not known how smoothly this transition can take place. For a while, mixed data systems (paper and electronic) will be the norm and survey operations will be more complex and time-consuming at least for the initial phase. Additional resources will be needed in the field and at headquarters for reviewing, evaluating and processing data from electronic records. New data elements have not been subjected to systematic, cognitive testing prior to fielding in surveys and there will be new challenges in maintaining and assessing data quality in the transition from paper to electronic medical records. Re-abstraction and other quality assurance measures will be considered and may be implemented. And of course, as with any new venture, there will be unexpected and unknown challenges.
- Changing Health Care Environment – A number of changes in health care delivery and payment for health services have been implemented and more are expected over the next few years as part of the ACA and in reaction to the provisions of that health care reform legislation. Additional changes may come about due to rising health care costs, Federal budget cuts and funding shortfalls at the state level, technological innovations, advances in medicine and science, as well as other factors which may lead in divergent directions and require resolution, adjudication, and negotiation. Legal judgments in courts at the State and Federal levels (even up to the Supreme Court) may terminate or modify provisions of the ACA. Some actions may affect all parts of the health care system, including consumers; providers, payers and the insurance industry; Federal, state and local government agencies with health care oversight responsibilities; and a multitude of related public and private institutions. Some developments or aspects to consider are:
 - Payers – insurance plans are experiencing many changes in terms of coverage, availability, and cost. ACA removes certain limitations on coverage and limits exclusions based on various factors, such as pre-existing conditions. Through public programs, such as Community Health Care Centers, coverage has been expanded to those in lower income groups. To respond to rising costs and state budget shortfalls, State Medicaid programs are being reconfigured and re-financed. Medicare has had to respond to rising health care costs and greater needs with the aging of the population and has adopted changes in Medicare Part D and Medicare Advantage programs. Many other changes are being considered as part of the budget negotiations. Other public insurance programs such as the State Children’s Health Insurance Program is providing care to increasing

numbers of children. The Veteran's Administration health care programs are hard-pressed to respond to the needs of the rising number new veterans and the long-term chronic needs of the existing beneficiaries. New groups, such as insurance exchanges, may bring about better coverage at lower costs.

- Providers – Providers and groups of providers have implemented changes to respond to financial and other challenges in providing care. New arrangements of providers, such as in Accountable Care organizations and medical home initiatives are impacting the availability, cost and quality of health care. There are efforts to increase the primary care workforce and establish new practice settings. New standards for payment, based on productivity, quality initiatives, and reductions in disparities are also affecting how care is provided. Survey data relating to ambulatory healthcare should accommodate to teams and outcomes across teams and populations.
- Management and costs – Some efforts have been directed to increasing access to care in the home and in the community. A major national development is the move to electronic medical records in all phases of health care, permitting linkage to reduce costs and improve the quality of care. Federal law requires that most Americans have electronic medical records by 2014. There are other innovations to improve quality, such as linking payment to quality outcomes and more research and implementation of effectiveness research results. There are numerous initiatives to provide the most effective treatment and to standardize and mandate those practices.

RECOMMENDATIONS

The Panel identified a single, overall recommendation to guide the AHCSB and that recommendation is to maintain and accelerate the progress that the surveys are making in these directions:

- use of electronic medical records
- computerization
- expanded content
- enhanced survey design to include
 - longitudinal studies
 - monitoring of shifts in health care settings
 - more direct measures of quality of and access to care
 - record linkage
 - use of administrative records
- enhanced survey capacity to
 - add survey components
 - change content
 - meet new and emerging data needs

Specific recommendations covered all aspects of the program from strategic and long-term planning, knowledge of and communication with stakeholders and user communities, outreach and marketing, methodological research and quality control, survey operations, data products and data dissemination.

1. **Strategic and long-term planning**. A strategic planning and goal-setting process implemented a few years ago was very successful in moving the DHCS in new directions. That process should be revitalized and become a permanent part of the program and guide future activities of the AHCSB. The Panel proposed the following steps:
 - Review/revise the existing strategic plan.
 - Establish an on-going planning process and identify and put in place metrics to determine if goals have been met.
 - Identify potential collaborators and determine methods to meet their data needs. Develop a systematic process to evaluate and set priorities for new data items.
 - Be aware of existing or planned data collection activities which could be assumed by or merged with AHCSB programs, following the successful integration of Drug Awareness and Warning Network in the NHCS. Revisit the decision of the Agency for Health Care Research and Quality to maintain the Hospital Care Utilization Program as a separate activity and explore higher level support for broader survey integration.

2. **Staffing**. The imminent departure of the DHCS Director, Jane Sisk, will have an immediate and substantial impact on the Division and calls for a far-reaching and effective recruitment to identify a replacement who will be as successful a leader as Dr. Sisk. The overall low level of staffing and key vacancies poses additional challenges for the Division.
 - Recruit and select a dynamic, innovative Division Director to carry on and carry out the progress of the current Director.
 - Overall, the Division has a low level of staffing and the Division should seek higher level support for increasing staff resources, not only to implement an ambitious agenda but also to avoid the potential for staff burnout.
 - The position of medical coding specialist must be filled promptly to deal with issues arising out of conversion to ICD-10.
 - The AHCSB needs more physician expertise and input into its surveys and should identify ways to obtain that expertise, either through direct hires, consultants, contractors, or other mechanisms.

3. **Budget** – The budget for the DHCS surveys has had an infusion of new resources targeted to certain programmatic priorities. However, the duration of this funding is not certain. In the past, the health care surveys have been affected by across-the-board NCHS budget cuts and, in some instances, specific reductions in funds which have postponed or otherwise adversely affected one or more surveys. For future budget decisions, the importance of the AHCSB surveys in evaluating the rapidly changing landscape for health care financing, delivery and organization should be explicitly considered.

4. **Survey Content and Scope.** Significant steps have been taken to broaden the scope of the ambulatory and hospital care surveys, and these steps should continue and efforts should expand.
 - Opportunities in the current surveys to learn more about medical practice are under exploited. The surveys should be designed to capture measures of how organizational aspects of medical practice have changed and are affecting health outcomes. The surveys should be able to produce data to analyze outcomes across teams and populations.
 - The AHCSB should consider how the NHCS or other survey vehicles could extend beyond the hospital to post acute settings.
 - The AHCSB should determine if surveys of specific occupational categories, such as nurse practitioners or physician assistants or other organizational units such as team-based entities in managed care can be included in on-going or future data collection efforts.
 - The surveys should consider pilot studies to focus on disabled or vulnerable populations to assess their interaction with the health care system, in terms of utilization and quality of care.
 - Rural communities are another potential focus for special studies of utilization and access.
 - The AHCSB should continue to explore linkages to other data sets (such as the Area Resource File and Census data) which will provide data (like income and educational level of the county or zip code where patients live) to help further examine the social determinants of health.

5. **Survey Operations.** On-going, simultaneous survey planning and operations have had a deleterious effect on other survey functions such as quality control and methodological research.
 - The AHCSB needs to allocate more time to assess the quality of data, including specific measures such as data bias and for testing of items and questions on the surveys.
 - There is a need to assess the impact of electronic health records vs. abstracting on data accuracy and completeness. The transition to electronic health records may generate methodological issues and there will need to be crosswalks to facilitate change.
 - The AHCSB should consider the use of paradata to better monitor, understand and improve the current and future survey operations.
 - Identify benefits to hospitals and physicians to improve survey recruitment. Emphasize that AHCSB can provide information that hospitals can't obtain themselves.

6. **Outreach and Marketing.** The ambulatory and hospital care surveys have a current constituency but could potentially have a much larger group of sponsors and collaborators. More focused and targeted outreach could be helpful in reaching them.
 - AHCSB should establish or expand its capacity for outreach and marketing. A single staff member or team may need to assume these responsibilities to give them appropriate visibility and importance.

- Efforts should be made to reach primary stakeholders and to determine and meet their information needs. Determine what physicians and hospitals want, in terms of data, and work to satisfy those needs. Systematically analyze users' satisfaction with surveys and their data products. Conduct trend analysis of data use.
 - Maintain on-going efforts to determine the agencies and programs which might have information needs related to ACA and health care reform. Include not only HHS but the entire Federal government and external organizations as well.
 - Reach out to new categories of users and expand outreach to professional and academic organizations and associations.
 - As part of marketing efforts, the AHCSB should gather data to analyze and demonstrate the use and importance of the data it produces.
7. **Data Analysis and Dissemination.** DHCS has expanded its product line but needs to continue the process of evaluating the ways data are presented and made available and the methods of reaching audiences.
- Data products need to be better advertised and more widely disseminated.
 - AHCSB reports, especially the new Data Briefs, are on target but the AHCSB should explore other ways of presenting information. For example, reports could begin with the issues which can be addressed with the data. What are the big questions that the AHCSB data could answer? Aggregate and present data not so much by survey or topic as by issue or application, such as risk analysis or infection control. Determine what data can be useful for tracking results of comparative effectiveness research, delivery system changes, etc.
 - Consider workshops at professional meetings, seminars at schools of public health, and other opportunities to make data available for teaching and student and faculty research.
 - Encourage the establishment of extramural funding program to encourage the use of the ambulatory and hospital care data. Establish partnerships with other entities to provide additional funds, especially when that partnership results in new items added to the surveys.
 - Reach out to for potential collaborators in creating and using regional data. Regional data exchanges can be better than state data centers since so much of the US population lives on the borders of states.
 - Consider social media for dissemination.

CONCLUSION

The evaluation of the AHCSB could not come at a more opportune time. The AHCSB has implemented many changes to enable its surveys and data systems to provide the information needed to manage the nation's health care system. It has responded to the need to cover ambulatory surgery, conduct disease-specific studies, track the use of electronic health records, monitor specific types of treatment and diagnostic services, focus on high priority health issues, generate state estimates of ambulatory care, and create an integrated hospital data system which not only will provide more comprehensive, quality data on the health care provided throughout the hospital but will enable the survey to be responsive to changing data needs and priorities. The AHCSB must continue in this direction, focusing more on outcome measures and linking data to have a better understanding of how care is delivered and the

impact on health. More and bigger changes are coming for the health care Americans receive and data to monitor the effects of those changes, the costs for those changes, the comparative value of various options for care and financing must be available. The recommendations in this report are focused on sustaining the progress made and advancing the surveys into the future with both the commitment and the capacity to be a primary tool to guide and improve American health care.

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Review of the NCHS Ambulatory and Hospital Care Statistics Branch

**NCHS
3311 Toledo Road
Room 7407
Hyattsville, Maryland**

**July 8, 2011
Agenda**

8:00-8:15	Executive Planning Session
8:15- 8:30	Ed Sondik, Director, NCHS
8:30- 9:00	Jane Sisk, Director, Division of Health Care Statistics
9:00 -9:15	Questions
9:15-9:45	Paul Beatty, Chief, Ambulatory and Hospital Care Statistics Branch
9:45 -10:30	Questions
10:30-10:45	Break
10:45-12:00	Discussion with program staff
12:00-12:20	Break and Get Lunch
12:20-1:00	Working Lunch and Executive session
1:00-2:30	Executive session continued -- (developing preliminary draft, identifying need for additional information)
2:30-2:45	Wrap Up and Adjourn

**Procedures for Reviewing NCHS Programs:
Ambulatory and Hospital Care Statistics Branch
Board of Scientific Counselors**

A. Overview and Guiding Principles

NCHS intends to periodically review its programs to assure the continuing vitality of the Center's efforts. The specific goals of these reviews are to examine the current status, scientific quality, and responsiveness of each program within the context of its mission.

The review should:

1. take into account future availability of financial and staffing resources focusing on the effectiveness of the program's use of current and expected resources, especially during periods in which prospects for funding increases in the near term are limited;
2. emphasize forward-thinking and future planning rather than current or past program efforts and achievements to ensure that NCHS remains a vital part of the Nation's health information infrastructure;
3. conduct an interactive review that obtains needed information through both written documentation and in person interaction with program staff.

The final report should address the program's strengths, weaknesses, and future threats and opportunities with emphasis on scientific quality and the program's responsiveness to the user community.

This document is intended to provide general guidelines for the review process. It is understood that review teams will have flexibility in how they perform their tasks. Each review team may prioritize some areas for greater emphasis given the purpose and scope of the program under review.

B. Questions to consider in conjunction with nine review criteria

The review criteria outlined below is intended to guide the reviewers in terms of the program's adherence to general principles of sound science and the requirements of federal statistical agencies as set out in the CNSTAT's Principles and Practices, OMB's Data Quality Guidelines, and OMB's Standards for Statistical Surveys.

The Program and Its Process:	Scope of the evaluation		
	<i>Current status/ future plans</i>	<i>Scientific quality</i>	<i>Responsiveness to users' needs</i>
<i>Capacity/Resources</i>	1	4	7
<i>Information Products</i>	2	5	8
<i>Efforts to Improve</i>	3	6	9

The reviewers may use the questions outlined below as a guide for their deliberations. As noted above, each review needs to be tailored to the particular program and its overall mission. Thus some areas may receive greater emphasis than others. However, the review team should not limit their focus too narrowly.

1. Capacity/Resources

- Is the program’s budget being spent efficiently on current activities?
- Are personnel resources being used effectively?
- Are appropriate high quality personnel being recruited and retained?
- Are current staffing levels appropriate?
- Does the program have the right mixture of professional expertise?
- Does program staff collaborate with other federal or state agencies and if so how?
- How does the program fit within NCHS and the Federal statistical system (i.e., CDC, and other federal agencies)?

2. Information Products

- Are the reports generated by the program appropriate for the content of the data collection system and mission of the program?
- Are the program’s products meeting user expectations in terms of quality, timeliness, usability, etc.?
- Are there definable and measurable quality standards set for each program product?
- Is there an ongoing attempt to improve timeliness and relevance of the program’s data products?
- Is there an ongoing effort within the program to assess user satisfaction and user needs for new data products?

3. Efforts to Improve

- Are there existing mechanisms to maintain and improve the scientific quality of program activities?
- Are there existing mechanisms for strategic planning of future activities?
- Are there incentives for staff to conduct long range planning?

- Are there ongoing efforts to evaluate and improve the quality of data and information products produced by the program?

C. Report to the Board of Scientific Counselors (BSC)

A preliminary report of the review should be submitted to the BSC prior to the submission of the final report. This preliminary report will be scheduled for discussion in a meeting of the full BSC. In this meeting, the program staff will have an opportunity to correct any factual errors that may be present in the preliminary report. The final report, which should include a set of prioritized recommendations, will be submitted subsequent to the Board discussion and will reflect the discussion of the preliminary report by the BSC.