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Department of Health and Human Services
Board of Scientific Counselors
National Center for Health Statistics
Centers for Disease Control and Prevention
May 19-20, 2016

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

Meeting Minutes

The Board of Scientific Counselors was convened on May 19-20, 2016 at the National Center for Health Statistics Hyattsville, MD. The meeting was open to the public.

Committee Members

Present

Linette T. Scott, M.D., M.P.H., Chair
Wendy Baldwin, Ph.D.
Timothy J. Beebe, Ph.D.
Virginia S. Cain, Ph.D., Executive Secretary
Michael Davern, Ph.D.
Mark Flotow, M.A.
Sherry A. Glied, Ph.D.
Genevieve M. Kenney, Ph.D.
Virginia M. Lesser, Ph.D.
Wendy D. Manning, Ph.D.
Robert E. McKeown, Ph.D., FACE
Javier Nieto, M.D., M.P.H., Ph.D.
Trivellore E. Raghunathan, Ph.D.
Margo Schwab, Ph.D.
Katherine K. Wallman, Ex-Officio, OMB (by phone)

Not Present

Ana Diez Roux, M.D., Ph.D., M.P.H.
Mary Ellen (Meg) Johantgen, Ph.D., R.N.
Thomas LaVeist, Ph.D.
Robert L. Phillips, Jr., M.D., MSPH

NCHS Leadership

Charlie Rothwell, MS
Nathaniel Schenker, Ph.D.
Jennifer Madans, Ph.D.

General Audience

Yahtyng Sheu, OAZ
Diba Hen, DRM
Cordell Golden, OAE
Peter Mezer, DRM
Makram Talih, OAE
Justin Mezehn, DRM
Van Parsuns, DRM
Donal Malec, DRM
Emily Mitchell, AHRQ
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Anita Bercery, DHCS
Kyhi O'Con, DHCS
Patsy Lloyd, OAE
Laurie Pratt, OAE
Clint Thompson, OAE
Shaleah Levant, DHCS
Deborah Bittner, Social & Scientific Systems
Jim Nowick, Northrop Grumman
Anjel Vahratian, DHIS
Laluren Harris-Kojefin, DHCS
Lisa Mirel, OAE
Meera Khare, DRM
AH Dorfman, DRM
Stephen Blumberg, DHIS
Julia Holmes, OAE
Nat Schenker, OCD/DRM
Irma Arispe, OAE
Jim Crower, OAE
Jennifer Parker, DHANES
Sarah Lessem, DHIS
Susan Queen, OPBL
Holly Hedegaard, OAE
Virginia Freid, OAE
Shelby Taylor, DHCS
Kelly Myrick, DHCS
Robin Pendloy, OAE
Rashmi Tardon, OAE
Ny Arn Bands, OAE

Presenters

May 19, 2016

Naman Ahluwalia, Ph.D., D.Sc.

Irma Arispe, Ph.D

Carol DeFrances, Ph.D.

Alan H. Dorfman, Ph.D.

Jennifer D. Parker, Ph.D.

Donna Pickett, M.P.H.

Paul Scanlon, Ph.D

MEETING SUMMARY

May 19-20, 2016

Thursday, May 19, 2016

Welcome, Introductions and Call to Order

Linette T. Scott, M.D., M.P.H., Chair, BSC and Charles Rothwell, Director, NCHS

The meeting began with introductions and transitioned into the NCHS update.

NCHS Update

Charles Rothwell, M.S., Director, NCHS

Mr. Rothwell provided an NCHS overview to the Committee. The FY2016 budget is operating at \$160M, which includes an increase that is tied to vital statistics to improve timeliness of electronic death reporting. NCHS sent staff, who volunteered, to West Africa for Ebola data collection. Currently, the agency has staff in Puerto Rico to collect data and conduct outreach with regard to the Zika virus. Special recognition was given to Dr. Jennifer Madans on her recent Roger Herriot Innovation Award.

The recently released *Health United States* is a report of the Secretary to Congress that illustrates the health status of the American people. Approximately 50% of the data is derived from NCHS and other agencies throughout the department. Health disparities in the United States was the main theme in this report, as media exposure resulted from partnering with Minority Health and the Office of the Secretary. In order to increase the frequency of such information, a new Health US Spotlights—which is a report containing infographics, will be released on a quarterly basis. A comment was made stating that having the ability to download the links and resources are very useful for teachers.

NHANES 2013-2014 data provided data on diabetes, obesity, and hypertension. Main topics of interest that received press coverage included: electronic cigarettes; health insurance coverage; and access to care for adults with psychological distress, state variation, and healthcare utilization. Suicide rates and monitoring deaths from opioid poisoning also received attention. Most attractive to the media was putting the data in their own data visualization package and having the ability to manipulate the various

outputs that are of interest. From the health care perspective, NCHS published data on long-term care providers including residential, adult day care, and adult day services center information that is essential to examine how adults are being cared for.

Regarding accelerometer data, there was expressed concern as to whether anybody would be able to be identified, or if there could be an instance of inadvertent release of confidential information. However, this is not the case. Additional emphasis in the overview was on the data linkage program. Mr. Rothwell suggested collaboration with training universities on how to utilize linked files. To broaden the perspective, NCHS needs to do more with linkage using a variety of administrative datasets in other departments as well as throughout the government. This will help in providing a better understanding of how other issues may pose significant health consequences. An example given was a linkage with Housing and Urban Development (HUD) data to determine how having housing accessibility impacts health outcomes.

Improved timeliness supported the efforts to remain current in releasing the Provisional Mortality Report through the third quarter of 2015. Timeliness is related to the states providing data using various electronic health systems.

Mr. Rothwell indicated that the Health Statistics day workshop for high school students went well. The Data Detectives summer camp, a week long camp for middle schoolers co-sponsored by NCHS, the University Of Maryland School Of Public Health, the Joint Program on Statistical Methodology, and the American Statistical Association is scheduled for August 2016. In looking ahead, NCHS should continue to affirm their identity as a federal health statistical agency; involve sharing statistical information to the younger staff; and provide transparency in promotions. NCHS is spearheading a mentoring program with federal statistical agencies designed to strengthen the entire federal fiscal system. Future issues to consider include: EHR and how to overcome some of the standards issues; and improve timeliness to improve data quality with being cognizant of preserving quality by allowing records to be updated.

Discussion

A question was raised by a committee member with respect to discussing the kind of priorities in terms of the four dimensions: Innovative intensive data collection activities; data dissemination activities; information dissemination activities; and the educational aspects of the previously listed activities. Mr. Rothwell noted that the greatest challenge from a methodological perspective is response rates. This may be an opportunity to use web-based activities. From a report perspective, graphs can be improved by providing content to explain the data. Mr. Rothwell responded to a question regarding higher response rates and how to assess the tradeoffs. While there is agreement that you can improve response rates, there remains debate around whether the use of incentives allows you to acquire people you may otherwise not get without the incentives.

Additionally, a question was posed about standardizing ways of dealing with bias and reporting bias. Other members noted that some work using adaptive design is being done, however, it is hard to assess any bias. Also, contributing factors affecting response rates was the length of the survey and the need for updated data from a Medicaid agency perspective.

Update on DRM Web Survey Experiment

Alan H. Dorfman, Ph.D.

Paul Scanlon, Ph.D., Division of Research and Methodology

Dr. Scanlon provided an overview of the goals, data collection to date, and preliminary results. The NCHS research and development survey, also called RANDS, is a web panel research. One of their goals is to determine if there is an ability to expand beyond the non-statistical samples to a wider population. Another goal is to determine how to use commercial web panels to supplement the existing surveys. Using the Gallup panel, the surveys used National Health Interview Survey (NHIS) questions with cognitive probe questions added to the second round. The data received included information about the responders, non-responders, and partial responders. Dr. Scanlon mentioned that the survey is using embedded cognitive probes inside an existing questionnaire to be used to: a) determine the extent of a pattern of problematic or non-problematic interpretation; b) look at patterns of interpretation across responding groups to see if these groups have various ways of thinking about questions; and c) compare constructs and determine whether or not the questions function similarly. He also provided examples of each.

Dr. Dorfman discussed the approach as to how the NHIS was divided into two categories: Category 1: Core – general questions; and Category 2: Detail – specific questions with follow-up. The core questions will enable them to predict what the wide variables are and the detailed questions would be on the in-person survey. Using this will provide a variety of estimation methods to determine which of the methods work and

follow up with testing. Dr. Dorfman used a slide presentation providing examples to depict the process in more detail.

Discussion

Dr. Scott mentioned that the Board has discussed the use of the web to supplement on a number of occasions. Changing generations will have to be reflected in how we interact with them.

A question was raised about whether or not the panel was truly probability based or if they provide respondents access to the internet in the same manner as knowledge networks panel does. Dr. Scanlon informed the Committee that the panel is probability-based. Although they have more than web users, for this research, access to the full panel was limited. Therefore only the sub-set from the web-mode was used. Further discussion related to probe questions and bias. Providing variance estimates or something equivalent is needed to address bias. Probe questions (for this research) allows for comparison in frequencies of patterns for interpretation purposes.

One Committee member mentioned a Federal Committee on Statistical Methodology (FCSM) subcommittee was working on a report on question evaluation methods. The subcommittee is developing standards for cognitive interviewing.

EHR and “Big Data” for Health Care

Carol DeFrances, Ph.D., Division of Health Care Statistics

Dr. DeFrances provided an overview of the National Healthcare Surveys, EHRs, and their work to develop operability standards, the outcomes from the CDC meaningful use team efforts, the impact of EHR data and meaningful use and big data for health care. The latest survey, the National Hospital Care Survey is the first of the health care surveys to move to the electronic data collection.

The CMS electronic health record incentive programs have accelerated adoption of EHRs by hospitals and physicians. Although pilot studies have been conducted, continued research and the development of data standards are needed. The HL7 implementation guide was published as a draft standard for trial use in January 2015. Eligible professionals and hospitals that meet meaningful use specific objectives, qualify for the incentive program. To date, there is an increase in registering those entities to participate in the survey. Entities are required to send all patient encounters, inpatient, and ambulatory. While meaningful use helps with the recruitment for sample physicians and hospitals, sampled physicians and hospitals also provide data. This allows for more clinical richness in the information collected. In terms of volume, the 2014 data consisted of 94 hospitals and approximately 1.7 million patients reporting. The effects of big data allow analysis of rare conditions, however grappling questions still prompt a discussion for storage and how to prioritize cleaning efforts.

Discussion

Members had comments and questions regarding the: breakdown by states; interfaces and how to connect to the Health Information Exchanges; challenges with data abstraction from various providers; overlap on the Hospital Ambulatory Care Survey and the Hospital Care Survey; availability of the data not used in the sample; collecting information from clinical notes; and differences in variables from sampled vs. non-sampled hospitals.

ICD 10 Release and Implementation

Donna Pickett, M.P.H., Chief Classifications and Public Health Data Standards

An overview of the regulatory process and the development of ICD-10-CM, which is the clinical modification of the WHO classification ICD-10 were provided. Information regarding implementation is available on the website. All HIPAA covered entities began on October 1, 2015. Though the transition was uneventful, a few challenges presented involved the application of the codes and edits initiated by other payers and insurers. All were fixed immediately. Ms. Pickett elaborated on the process whereby emergency rooms, physicians, etc. prepared for migration to the ICD-10 code sets.

As a result of proposals received from users of the data, clinicians, and providers, the first scheduled update is October 1, 2016. In response to a question raised by a Committee member regarding code consolidation, Ms. Pickett mentioned that deletions were not applied to WHO codes. However, there were applications where adjustments were made. Examples included modification of codes that were no longer clinically relevant, or added codes to better embrace new knowledge. Also, improvements in the coding system benefits were noted as follows: updated terminology; quality measures, processing claims, fraud and abuse detection, tracking public health, and conducting research.

Additional information was presented concerning impacted programs with regards to: mapping issues; IT and data processing issues; analysis and reporting and trending issues. Resources available on the website include: multiple files with detail classification that are downloadable; general equivalence maps; and two separate web pages for ICD-10 and ICD-10-CM PCS.

Discussion

Discussion ensued involving code changing. The health care statistics branch is undertaking a dual-coding study between ICD 9-CM and ICD-10-CM that was funded by ASPE to bridge the double coding. A question was raised concerning a comparison to other countries. Many countries use ICD-10 for mortality. However, the United States uses the diagnostic codes across all healthcare settings. Other countries developed their own national modifications. Since the implementation of ICD-10-CM, other countries are incorporating some of the changes to their national versions.

The dialogue continued with comments and questions specific to double coding comparisons and the impact of future research, the ability to look at population groups, and HEDIS and NCQA measure sets. Further recommendations for resources pointed to the Medicare website resources dedicated to providing a wealth of information relating to the transformation from Medicare DRGs from a 9-CM to 10-CM.

Office of Analysis and Epidemiology Update

Irma Arispe, Ph.D., Director, Office of Analysis and Epidemiology Update

Dr. Arispe presented a recap of the OAE program review that discussed the self-assessment conducted in 2013. There were three interrelated recommendations and four sub-recommendations made by the Board. During the quarterly program review an interest in data visualization was expressed. The presentation continued with highlights of CDC's interest in logic models. Priority was given to hire a new ADS who led OAE in the development of a new concept clearance process. Examples of promoting scientific excellence were provided illustrating participation from cross-cutting groups pursuing a diverse analytic research portfolio; and article distributions through peer-reviewed and NCHS publications.

OAE has conducted high-impact work in the realm of innovations, research, and dissemination. The four examples include the: proposed framework for presenting injury data; data linkage publication release; statistical notes; and focus on the conceptualization of key variables. As a means of keeping pace with the speed in which people want to access data, Fast Stats is a timely, accurate and up to date resource. New tools were described such as infographics, which are used to concisely display a tremendous amount of information, and the disparities tool devised to provide a way to look at concepts and understand health disparities. Additionally, web site re-designs features linked data to make it accessible for the user.

Marketing efforts for brand recognition were measured by the media exposure crediting Healthy People at the rate of 40-50 stories per month. Looking ahead, consideration for maintaining the premier reference publication, *Health US*, is critical. The 2016 special feature focuses on health disparities in recognition of the 30th anniversary of the Heckler report, *the Report of the Secretary's Task Force on Black and Minority Health*, which kicked off the Federal government's activities in health disparities. Moreover, attention needs to be given to programmatic and time-sensitive commitments, focus on niche areas, and establish priorities and align resources.

Discussion

Committee comments and questions pertained to publications by NCHS staff and the impact of social media for greater exposure. Various suggestions from Committee members include: partnering with a funder to hold a symposium for data journalists; tweeting information; and using the report content to create a peer-reviewed publication. One recommendation was to focus on reporting the proper content to the appropriate

audience in a timely manner in order to remain relevant for users. Also noted was OAEs is move toward planned research.

Options for NHANES 2019-2022 Sample Design

Jennifer D. Parker, Ph.D., Division of Health and Nutrition Examination Surveys

NHANES is planning for the 2019 to 2022 sample design. It is a complex survey including stratifications and clustering implemented over four years. The presentation provided a detailed overview of the survey process describing sample collection which is taken around the nation from 15 locations per year with a total target of 5000 examined persons. An effort is made to obtain estimates representative of various race and ethnicity domains. Special focus was given to the design process, sampling method, sample allocation, and targeted population.

The purpose for oversampling various groups, past use of information, and suggestions for the upcoming sample design was highlighted. Questions regarding the decision to target groups such as teenagers, birth to 24, and pregnant women should be considered in the conversation. Changes in sampling parameters also have to be determined based on the target population. Additional information regarding response rates, statistical evaluations, and producing model-based estimate for smaller groups was presented.

Discussion

Dr. Davern noted that the response rates should be included in the redesign of the sample with concentration given to oversampling groups with low response rates. Other members had questions and comments about: modeling framework for subdomain estimates; exploring the use of dual-frame design to increase the efficiency in the survey design; the use of electronic records in the upcoming design; and how to encourage sub-groups to respond to surveys.

Dietary Guidelines for Americans 2015 and Related Updates from NHANES

Naman Ahluwalia, PhD, DSc, FACN – Nutrition Monitoring Advisor, DHANES, NCHS, CDC

Dr. Ahluwalia provided an update on the dietary guidelines 2015-2020 that were released electronically in January. Public feedback was in excess of 10,000 comments that had to be examined. As a result, consolidation delayed the normal timing for translating the public report into the dietary guidelines 2015 booklet. PDF and hardcopy formats are not yet available.

The goal of the information is for disease prevention. There are three dominant healthy eating patterns: Healthy American diet; Healthy Mediterranean-style; and Healthy vegetarian diet.

Highlighted in the presentation was the shift in focus from being food-specific or nutrient-specific to following healthy dietary patterns. Shifts in diet modeling exercises focuses on changing from burgers to lean burgers, adding salad, drinking more water and exercising portion control. The most significant alteration is the recommendation to eat whole grains and eliminate processed grains. Moreover, getting everybody together to achieve this such as restaurants, schools, and stores is important.

Dr. Ahluwalia noted the use of NHANES data and its impact on the changes to the dietary guidelines. Analysis of what food patterns people follow provides the strongest evidence on nutrition and health. The Committee looked at the amount of sugar and hidden sources. As a result, it has been scientifically evident showing the connection between added sugar and health issues such as obesity. Other features included consuming a healthy eating pattern across lifespans, and eating variety, nutrient density, and specific foods. Major accomplishments discussed were: caffeine recommendations; P/B-24, which had been excluded previously; and participation in the first NHANES symposium to inform the audience on the types of data collected by the agency, its strengths and limitations.

Friday, May 20, 2016

Committee Members

Present

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Wendy Baldwin, Ph.D.
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Michael Davern, Ph.D.
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Katherine K. Wallman, Ex-Officio, OMB (by phone)

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Robert L. Phillips, Jr., M.D., MSPH

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Jennifer Madans, Ph.D.

General Audience

Suresh Srinivasan, DHIS
Pei-Lu Chin, DHIS
Emily Zammutti, DHIS
Makran Talh, OAE
Anjel Vahratian, DHIS
Casey Coper, DVS
Kim Geaghan, Census Bureau
Susan Quan, OPBL
Hashini Khjuna, OAE/ASB
Verita Bhic, OPBL
Jenif Paul, DHNES
John Hough, CPHDSS
Nat Schenker, DRM
Yahtyng Shlu, OAE
Jim Dhlhamer, DHIS
Chesley Richards, CDC
Pefar Meyer, DRM
Deborah Bittner, Social Scientific Systems
Te-Ching Chen, DHANES
Andrea Piani, Census Bureau
Jim Nowicki, Northrop Grumman
Emily Mitchell, AHRQ
Michael Martinez, DHIS
Mona Villarroel, DHIS
Brian Word, DHIS
Lisa Mirel, OAE
Van Parsons, DRM
Anne Fuonia, Census
Alain Nohih, NCHS
Sarah Lessen, DHIS
Catherine Simile, DHCS
Holly Hedegaard, OAE
Lindsey Black, DHIS

Presenters

May 20, 2016

Stephen Blumberg, Ph.D.
Virginia Cain, Ph.D.
Marcie Cynamon, M.A.,
Renee Gindi, Ph. D.

Linette Scott, M.D.

Welcome, Introductions and Call to Order

Linette T. Scott, M.D., M.P.H., Chair, BSC and Charles Rothwell, Director, NCHS

The morning was dedicated to discussions regarding the National Health Interview Survey and the Questionnaire redesign.

National Health Interview Survey Content Redesign

Marcie Cynamon, M.A., Director

Stephen Blumberg, Ph.D.

Renee Gindi, Ph.D., Division of Health Interview Statistics

Presentations began with a roadmap for redesigning the National Health Interview Survey (NHIS); a survey that monitors the health of the U.S. population. Although restructuring the NHIS has not taken place since 1997, launching the new survey is scheduled for January 2018.

NHIS is an in-person survey with some telephone follow-up. Data collection is conducted by the U.S. Census Bureau. An address-based sample that covers the entire U.S. was launched in 2016. Redesign topics of interest are as follows: the need to make the questionnaire more relevant; focus on causes of morbidity and mortality; aligning the major federal health surveys to be more inclusive of similar content in order to reduce redundancies; addressing declining response rates.

Time was dedicated to discuss the quality and length of the survey, which now takes 90 minutes to an hour to complete. Redesigning is taking place in order to engage in long-term planning to have the ability to cover as many topics as possible. Additionally, there is a need to have the support of other agencies to fund the survey. NHIS is often cited as the “gold standard,” to the extent that others benchmark to the estimates as a means of assessing the quality. Large sample sizes are necessary in order to make estimates for major and sub-population groups.

Key content for NHIS are: functioning and disability, health status and conditions, health insurance coverage, healthcare access and utilization, health risk behaviors, demographics and social and economic determinants of health. Redesigning will also focus on balancing the demand from the user community such as academia, private industry, and other federal agencies. A series of detailed examples were provided depicting the general structure of the questionnaire. Reconceptualization about the approach to specific sponsor content, the redesign proposal demographic content shift, fixed periodicity, the child questionnaire, and restructuring the family interview were also reviewed.

Dr. Gindi’s presentation covered understanding and evaluating the uses of the NHIS data. Main points of the redesign process involved looking for the most policy-relevant information and reviewing published research. Surprisingly, the family section is not

used as frequently as others. Outreach has expanded to identifying and talking to stakeholders.

The ongoing revision process encompasses sending some of the initial content to the OMB Desk Office; engaging other agencies to determine how they will use the data; continuing work on child content drafts; preparing for the third call for public content; planning for the first Federal Register and reviewing responses from the technical expert panels.

Dr. Blumberg recapped the discussion reiterating that the crucial content areas remain covered. Additionally, the family unit will capture employment information as well as income data regarding income transfer programs such as WIC, education level, and housing.

Discussion

Committee and panel members engaged in discussion regarding survey response and survey termination. Commendations were given to the thorough approach to re-design. Rich discussion relating to cost of the survey, and insufficient partial responses due to lengthy survey, as well as metrics. Discussion ensued with regards to the sociodemographic context. The expert panel responses and public comments indicated an interest in social determinants of health. Other subjects deliberated involved the selected survey response rates, funding needs to complete the survey, improving outreach by exploring various ways to contact people, and removal of the cancer supplement.

In response to Board members' questions the NHIS staff clarified several points:

- 1) The concept of core content refers to that content supported by NCHS;
- 2) There will be some content asked at each interview but other content will be rotated on and off the questionnaire;
- 3) Much of the content of the family questionnaire will be shifted to the adult and child sections of the interview;
- 4) Current plans for information to be collect of all household residents include age, sex, race/ethnicity, and armed forces status;
- 5) Education is planned to be asked about the person with the highest level of education in the household;
- 6) Some of the information about household relationships that people are concerned about losing is not currently available in the survey;
- 7) Family is difficult to define because other parts of the government use different definitions, e.g. unmarried partners may be viewed as family for resources available to the household but are not considered family for program participation.

Dr. Blumberg mentioned that comments from the expert panel proposed a different approach to income statistics for the survey by developing a measure of income that

