All official NCHS BSC documents are posted on the BSC website
(https://www.cdc.gov/nchs/about/bsc/bsc_meetings.htm)

Board of Scientific Counselors
National Center for Health Statistics
Centers for Disease Control and Prevention
https://www.cdc.gov/nchs/about/bsc/bsc_meetings.htm
September 14, 2023

Meeting Summary

The Board of Scientific Counselors (BSC) convened via Zoom on September 14, 2023. The virtual meeting was open to the public (via Zoom).

Board Members Present

John R. Lumpkin, M.D., M.P.H., Chair, BSC
Mollyann Brodie, Ph.D.
Kennon R. Copeland, Ph.D.
Tara Das, Ph.D., M.P.H., M.L.I.S.
Scott H. Holan, Ph.D.
Bradley A. Malin, Ph.D.
Sally C. Morton, Ph.D.
Lucila Ohno-Machado, M.D., Ph.D.
Andy Peytchev, Ph.D.
Matthew Snipp, Ph.D.
Kelly Hoover Thompson, J.D.
David R. Williams, Ph.D., M.P.H.

CDC/NCHS Panelists

Brian Moyer, Director, National Center for Health Statistics (NCHS)	James Craver	David Huang
	Carol DeFrances	Jen Layden
	Sheila Franco	Kiana Morris
Rebecca Hines, Designated Federal Official, NCHS, BSC	Adena Galinsky	Jennifer Parker
	Renee Gindi	Ben Rogers
	Cordell Golden	Lauren Rossen
Irma Arispe	Carolyn Greene	Manisha Sengupta
Amy Branum	John Halter	Alan Simon
Amy Brown	Travis Hoppe	Paul Sutton

Public Attendees

Joyce Abma	Jill Ashman	Elizabeth Briones
Brian Adams	Shilpa Bengeri	Debra Brody
Dzifa Adjaye-Gbewonyo	Andres Berruti	Lisa Broitman
Naman Ahluwalia	Negasi Beyene	Sherry Brown Scoggins
Farida Ahmad	Gayle Bieler	Christine Caffrey
Mercy Alvarenga	Carter Blakey	Bill Cai
Robert Anderson	Joyce Bleza	David Carranza
Nicholas Ansai	Jonaki Bose	Shirley Castillo
Basilica Arockiaraj	Lauren Bottoms-McClain	Nora Castro

Anjani Chandra
Te-Ching Chen
Rob Chew
Robin Cohen
Beth Connor
Kathy Connor
Traci Cook
Danielle Davis
Orlando Davy
Elizabeth Dee
Tecoye Dinkins
Lesley Dobrzynski
Anne Driscoll
Patricia Dunham
Morgan Earp
Sam Emmerich
Michael Esteban Martinez
Nadia Fawaz
Steven Fink
Diana Fisher
Alicia Frasier
Matthew Garnett
Jessica Graber
Angela Greene
Yelena (Lena) Gorina
Lello Guluma
Heidi Guyer
Jane Gwira Baumblatt
Christy Hagen
Mahogeny Hanks
Althelia Harris
Laurie Harris
Qiming He
Yulei He
Elizabeth Heitz
Al Hildreth
Kelli Hirsch
Jacquie Hogan
Robert Hood-Cree
Brandon Hopkins
Isabelle Horon
Rebecca Hu
Kimberly Hurvitz
Marisol Iniguez
Katherine Irimata
Elizabeth Jackson
Geoff Jackson
Chrissy Jarman
Adrienne Jones
Jessly Joy
Sibeso Joyner

Ashley Kaiser
Jieun Kim
J.M. King
Ellen Kramarow
Nataliya Kravets
Catherine Lamoreaux
Jacqueline Leachman
Jessica Lendon
Sarah Lessem
Yen Lin
Kim Lochner
Jacqueline Lucas
Julian Luke
Ann Macfadyen
Sri Surya Maheedhara
Aaron Maitland
Anne Mamish
Crescent Martin
Gladys Martinez
Meredith Massey
Susan McBroom
Frances McCarty
Juliana McCallister
Shannon McConnell-Lamp
Kenny McFarlane
Grace Medley
Amanuel Melekin
Justin Mezetin
Naomi Michaelis
Leyla Mohadjer
Jennifer Moore
Chris Moriarty
Gwen Mustaf
Kelly Myrick
Carolyn Neal
J. Neil Russell
Zakia Nelson
Duong (Tony) Nelson
Tina Norris
Colleen Nugent
Ada O'Jiaku-Okorie
Emmeline Ochiai
Vera Osidach
Ryne Paulose
Jessie Parker
Sue Pedrazzani
Van Parsons
Priyam Patel
Zachary Peters
Kellina Phan
Steve Pierson

Jon Pleis
Mark Prell
Jenny Rammon
Catherine Rappole
Daniela Relf
Jaylan Richardson
Dorothy Roper
Cheryl Rose
Matt Rowe
Sara Russell
Valerie Ryan
Noor Saeed
Loredana Santo
Jennifer Sayers
Susan Schappert
Susan Schechter
Gia Simon
Erick Soto
Merianne Spencer
Bryan Stierman
Jane Sudol
Yu Sun
Natalie Teaford Belmear
Rashmi Tandon
Chally Tate
Ana Terry
Alexander Tin
Daouda Traore
Allan Uribe
Anjel Vahratian
Thomas Walker
Meagan Walters
Chia-Yih Wang
Xun Wang
Margaret Warner
Julie Weeks
Rong Wei
Steven White
Gilandria Williams
Jean Williams
Sonja Williams
Ashley Woodall
Jianmin Xu
Yeats Ye
Alana Yick
Henry Yin
Benjamin Zablotsky
Cindy Zhang

| Meeting Tech | Mike Kavounis (RLA) |
| Minutes | Bethany Stokes (RLA) |

List of Abbreviations

AI	artificial intelligence
ASPE	HHS Office of the Assistant Secretary for Planning and Evaluation
BSC	Board of Scientific Counselors
CCQDER	Collaborative Center for Questionnaire Design and Evaluation Research
CDC	Centers for Disease Control and Prevention
CMS	Centers for Medicare & Medicaid Services
COMEC	Collaborating Office of Medical Examiners and Coroners
COVID-19	coronavirus 2019
CSELS	Center for Surveillance, Epidemiology, and Lab Science
DAE	Division of Analysis and Epidemiology
DHANES	Division of Health and Nutrition Examination Surveys
DHIS	Division of Health Interview Statistics
DMI	Data Modernization Initiative
DRM	Division of Research Methodology
EHR	electronic health record
FR	field representative
FY	fiscal year
GPU	graphics processing units
HHS	Department of Health and Human Services
HUD	Department of Housing and Urban Development
ICD	International Classification of Diseases
LLaMa	Large Language Model Meta Artificial Intelligence
ML	machine learning
NCHS	National Center for Health Statistics
NDI	National Death Index
NHANES	National Health and Nutrition Examination Survey
NHCS	National Hospital Care Survey
NHIS	National Health Interview Survey
NIST	National Institute of Standards and Technology
NPALS	National Post-Acute and Long-term Care Study
NVSS	National Vital Statistics System
OMB	Office of Management and Budget
OPHDST	Office of Public Health Data, Surveillance, and Technology
PHRDB	Population Health Reporting & Dissemination Branch
PII	personally identifiable information
PSU	primary sampling unit
SANDS	Semi-Automated Non-Response Detection for Surveys
SME	subject matter expert

Action Steps

The Board of Scientific Counselors (BSC) voted to approve draft recommendation language regarding the need for the Centers for Disease Control and Prevention (CDC) to broadly disseminate information gathered about generative artificial intelligence (AI) with public health stakeholders. The BSC will include this language in its letter to the CDC Director.

Presenters

John Lumpkin, M.D., M.P.H., Chair, BSC, NCHS
Rebecca Hines, M.H.S., Designated Federal Officer, BSC, NCHS
Brian Moyer, Ph.D., Director, NCHS
Jen Layden, M.D., Ph.D., Director, Office of Public Health Data, Surveillance, and Technology, NCHS
Carolyn Greene, M.D., Principal Deputy Director, NCHS
James Craver, M.A.A., Deputy Director for Management and Operations, NCHS
Kiana Morris, M.B.A., CMCP, Senior Advisor and Chief Strategy Officer, NCHS
John Halter, J.D., Director, Office of Planning, Budget and Legislation, NCHS
Travis Hoppe, Ph.D., Associate Director for Data Science and Analytics, NCHS
Ben Rogers, M.S., Data Scientist, Division of Research Methodology (DRM), NCHS
Irma Arispe, Ph.D., Director, Division of Analysis and Epidemiology, NCHS
Renee Gindi, Ph.D., Chief, Population Health Reporting & Dissemination Branch (PHRDB), NCHS
Sheila Franco, M.S., Health Statistician, PHRDB, NCHS
Cordell Golden, M.P.S., Chief, Data Linkage Methodology, and Analysis Branch, NCHS
Amy Brown, M.P.H., Project Lead, DHIS, NCHS
Adena Galinsky, Ph.D., Senior Health Statistician, DHIS, NCHS
Alan Simon, M.D., Director, DHANES, NCHS
Manisha Sengupta, Ph.D., Acting Chief, Long-Term Care Statistics Branch, Division of Health Care Statistics, NCHS
Lauren Roseen, Ph.D., Senior Scientific Advisor, DRM, NCHS
David Huang, Ph.D., Chief, Health Promotion Statistics Branch, NCHS

Welcome and Call to Order

John Lumpkin, M.D., M.P.H., Chair, BSC, NCHS
Rebecca Hines, M.H.S., Designated Federal Officer, BSC, NCHS

Dr. Lumpkin opened the meeting by welcoming Board of Scientific Counselors (BSC) members, National Center for Health Statistics (NCHS) staff, and all other attendees.

Ms. Hines conducted roll call, asking members to introduce themselves and state conflicts of interest.

Leadership Updates

Director's Updates
Brian Moyer, Ph.D., Director, NCHS

Before beginning the presentation, Dr. Moyer began by sharing that Ms. Donna Pickett, who oversaw coding and classification work at NCHS, passed away on August 24. He acknowledged Ms. Pickett's work in supporting the transition from the International Classification of Diseases, Ninth Revision (ICD-9) to ICD, Tenth Revision (ICD-10), leading the ICD-10 Coordination and Maintenance Committee, and participating in the Morbidity Reference Group.

To begin, Dr. Moyer thanked Drs. Copeland, Holan, and Morton for their service to the NCHS BSC, including an extension to their time on the BSC while we are awaiting approval of new BSC members, and wished them luck on future endeavors. Remaining paperwork must be finalized before the new BSC members can be officially announced. Dr. Moyer encouraged current BSC members to share suggestions for BSC member nominations with him.

In addition, on July 12, the Centers for Disease Control and Prevention (CDC) welcomed its 18th Director, Dr. Mandy Cohen. Dr. Cohen has an extensive public health background, serving in the North Carolina Department of Health and Human Services (HHS) during the COVID-19 pandemic. She has acknowledged a focus on equity, data accountability, and transparent communication and has identified three immediate priorities for CDC: (1) enabling readiness and execution for fall and winter respiratory illnesses, (2) improving mental health and combatting opioid crises, and (3) supporting young families. Dr. Moyer also noted that Dr. Cohen is a major supporter of NCHS activities.

Dr. Moyer continued his presentation by describing a new CDC program, the Moving Forward Initiative. This program focuses on (1) sharing science and data faster, (2) translating science into practical policy, (3) prioritizing public health communications, with a focus on the American public, (4) developing a CDC workforce to respond to future threats, and (5) promoting partnerships. Another component of this program is conducting a comprehensive evaluation of necessary structural changes across CDC to enable the agency to better respond to future public health threats and to promote overall efficiency.

CDC reorganization efforts have also resulted in the establishment of a new office, the Office of Public Health Data, Surveillance, and Technology (OPHDST), which is led by Dr. Jen Layden. Other changes resulting from NCHS reorganization efforts include the establishment of the Office of Deputy Director of Programs, Office of Science, and Collaborating Office of Medical Examiners and Coroners (COMEC).

Office of Deputy Director of Programs
Carolyn Greene, M.D., Principal Deputy Director, NCHS

Dr. Greene joined NCHS in January 2023. She noted that, after training in internal medicine, she worked in the public health field for more than 20 years, first starting as an Epidemic Intelligence Service Officer

at CDC. Since then, she has worked on both infectious diseases and chronic diseases at the local, national, and international levels. Previously, she worked at the New York City Department of Health and Mental Hygiene in the Division of Epidemiology (which includes the department's Bureau of Vital Statistics), the Interagency COVID Response Team, and the Office of the Surgeon General. In her new role at NCHS, she looks forward to enhancing collaborations across agencies and within CDC.

Office of Public Health Data, Surveillance, and Technology
Jen Layden, M.D., Ph.D., Director, OPHDST, CDC

Dr. Layden announced that OPHDST will be officially launched on October 1. Its predecessor, the Center for Surveillance, Epidemiology, and Lab Science (CSELS), has sun-setted. Efforts and objectives held by CSELS have been moved to various offices within HHS. Data-related components, including the Enterprise Data Office, have been moved to OPHDST.

OPHDST is actively recruiting employees and has hired more than 40 individuals in the previous 9 months. Dr. Layden highlighted that OPHDST will use a co-leadership model, meaning that experts in public health or epidemiology are paired with individuals with data science and technology experience to co-lead complex work conducted by the office. The OPHDST will lead execution of the Data Modernization Initiative (DMI) and a unified interagency public health data strategy, which is detailed in the NCHS Strategic Plan.

Dr. Layden finished her presentation by noting that OPHDST appreciates Dr. Cohen's highlighted priorities, including the focus on readiness for the fall and winter respiratory illness surges. OPHDST is leading the effort to visualize and disseminate data about the fall surges to the public.

NCHS' Latest Accomplishments
Brian Moyer, Ph.D., Director, NCHS

Dr. Moyer highlighted several of NCHS' latest accomplishments, noting that this list is not exhaustive. First, in March 2023, NCHS launched a new quarterly provisional maternity mortality dashboard. Previously, maternity mortality data were reported annually, but this new dashboard will be updated quarterly—thus enabling better tracking of maternal mortality trends by policymakers and public health staff.

NCHS has also launched a new Rapid Surveys System program, which aims to provide near real-time information on emerging and high-priority topics. Further, the CDC WONDER (Wide-ranging ONline Data for Epidemiologic Research) program enables the release of provisional mortality data on a weekly basis. This program is part of an ongoing effort to provide more timely insights into mortality within the United States. NCHS recently publish the first federal report on COVID-19 mortality, as well.

In addition, NCHS coordinated collaboration across 23 federal agencies to develop the 2023 *America's Children Report*, which will be available on September 27.

NCHS Strategic Plan
Kiana Morris, M.B.A., CMCP, Senior Advisor and Chief Strategy Officer, NCHS

Ms. Morris noted that the NCHS Strategic Plan outlines three major goals to (1) expand NCHS' relevance and external engagement, (2) accelerate NCHS' health and data capabilities, and (3) build on NCHS' workforce and operational excellence. To address the Plan's first goal, NCHS conducted a Health Data User Survey to understand user needs and interests in order to inform strategic; this survey included more

than 2,600 respondents. In addition, Ms. Morris and colleagues has drafted and are finalizing a partnership engagement plan to ensure strengthening of relationships with stakeholders. NCHS also aims to launch a new health equity series in December 2023 to share information with new and current users of CDC data.

For the Plan's second goal, NCHS launched COMEC, which will help train medical examiners and coroners on critical objectives (e.g., coding death certificates correctly). In addition, NCHS released 66 early estimates in fiscal year (FY) 2023, which led to a center-wide cross-cutting meeting focused on evaluating data needs and other gaps to reduce siloed work and improve data linkages. NCHS also finalized the rules of behavior for the Enterprise Data Analytics and Visualization platform.

The Plan's third goal is more internally focused and has resulted in the assessment of the Disclosure Review Board's administrative processes. Ms. Morris and her team reviewed and updated key performance indicators and completed more than 40 trainings for staff and senior leadership. NCHS has also released a new Leadership Development Series that is focused on adapting to change, solving problems, building trust, leveraging teamwork, and integrating Diversity, Equity, Inclusion, Accessibility, & Belonging (DEIAB) concepts into daily work.

Ms. Morris then presented NCHS' FY 2023-2024 priorities that are outlined in the Strategic Plan: releasing data faster, leveraging emerging technology to improve the quality and timeliness of data, modernizing systems to enhance data access, maximizing partnerships and collaborations, and cultivating belonging in the workforce. The Strategic Plan also outlines critical milestones for each year. One major piece of feedback received thus far in response to the Plan is the need to share success stories of Plan implementation since its release.

Data Modernization Efforts
James Craver, M.A.A., Deputy Director for Management and Operations, NCHS

The DMI is a CDC effort to improve the timeliness and accuracy of its data reporting and adopt innovative data systems that transfer data to CDC and the public quickly and accurately. This initiative modernizes core data and surveillance infrastructure across the federal and state public health landscape to shift from siloed and brittle public health data systems to connected, resilient, adaptable and sustainable response-ready systems within and outside of CDC.

NCHS has received generous funds from CDC's annual DMI budget, the Coronavirus Aid, Relief, and Economic Security Act, and the American Rescue Plan. These funds have been allocated to several high-priority projects, such as those to establish the Rapid Survey System and a quarterly web panel's survey program, create a cloud-based data environment to receive and process electronic health record (EHR) data, support the national health care surveys, and implement various efforts to modernize the National Vital Statistics System (NVSS).

In May 2023, the U.S. Congress passed and President Biden signed the Fiscal Responsibility Act, which paused the use of unobligated funding intended for COVID-19 projects. Next steps related to this funding is awaiting direction from CDC's Office of Financial Resources and the Office of Management and Budget (OMB). Mr. Craver and his team have developed scenarios on how to best reallocate funding to build upon the successes of the DMI, as well as executed revised plans for COVID-19-related projects.

The DMI's portfolio remains strong and committed to its goals, the Moving Forward Initiative's goals, and the NCHS Strategic Plan goals.

NCHS Budget Updates
John Halter, J.D., Director, Office of Planning, Budget and Legislation, NCHS

NCHS' budget has increased between $1-5 million each year since FY 2020, for a total of $189 million in the President's FY 2024 Budget Request. These budget increases have allowed NCHS to continue its work in producing high-quality surveys and statistical analyses.

NCHS has received funding specifically to support the DMI; this funding is shared across CDC centers and offices. Mr. Halter noted that funding levels for the DMI in upcoming years are unclear and may impact NCHS activities. Mr. Halter noted that, like most of the federal government at this time, CDC is waiting to observe whether Congress passes the necessary appropriation bills to avert a government shutdown. If some or all of the appropriation bills are not passed by midnight on September 30, agencies that require Congress-appropriated funds will shut down temporarily. In the event of a shutdown, all non-excepted employees, including most of NCHS, will not work until appropriated funds become available.

Role of Artificial Intelligence and Machine Learning in NCHS Programs

Travis Hoppe, Ph.D., Associate Director for Data Science and Analytics, NCHS
Ben Rogers, Data Scientist, M.S., Division of Research Methodology, NCHS

Dr. Hoppe and Mr. Rogers began their presentation by posing two questions for BSC consideration:
- How can NCHS and other statistical agencies benefit from artificial intelligence (AI) and machine learning (ML) approaches?
- What role should federal agencies take in the AI/ML research space given the rapid innovation?

For the purposes of this presentation, Mr. Rogers emphasized the use of National Institute of Standards and Technology (NIST) definitions of AI (i.e., an interdisciplinary field that deals with models and systems for the performance of functions generally associated with human intelligence, such as reasoning and learning) and ML (i.e., the study of computer algorithms that improve automatically through experience).

Dr. Hoppe then continued with an overview of NCHS AI-relevant activities and tools. Per Executive Order 13960, also known as the Trustworthy AI Act, CDC must report on AI-related activities on a yearly basis. These reports can help CDC as an agency perform intergovernmental coordination. As part of this yearly report, NCHS has shared the development of three in-house AI systems: the Semi-Automated Non-Response Detection for Surveys (SANDS), MedCoder (to code cause of death information to ICD-10), and methods to detect stimulant and opioid misuse and illicit use in EHRs. In addition to developing tools in-house, NCHS also leverages commercial and open-source tools, including the Collaborating Center for Questionnaire Design and Evaluation Research's (CCQDER's) Whisper (a speech-to-text model that processes cognitive interviews and converts them into text) and Private AI (software that detects all personal identifiable information [PII] in free text). In addition to in-house and open-source tools, NCHS developed a white paper on AI as it relates to governance, policy, and strategic planning, particularly the utility and risks of conversational and generative AI (e.g., ChatGPT, Stable Diffusion, Midjourney). NCHS is also helping to lead a new CDC AI Community of Practice. CDC is drafting an AI strategy document, and HHS has published a 2023 AI Inventory. Frameworks that can be used to help guide NCHS through its AI-related activities include HHS' Trustworthy AI Playbook, OMB Guidance on Generative AI, and the NIST AI Risk Management Framework.

NCHS' report on generative AI detailed potential benefits, risks, and malicious uses by external actors associated with the use of these tools. Benefits included saving resources (e.g., drafting a scope of work through automation), increasing efficiency (e.g., accelerating manual tasks, such as editing code, that do

not require substantial expertise), synthesizing and summarizing information, enhancing communication (e.g., adapting and translating text for various audiences), and personalizing responses to public inquires. Potential risks to CDC include a failure to meet ethical and regulatory standards, fabrications of information, biases, discrimination, lack of privacy and data security, and impact on agency credibility. CDC should anticipate that some external actors may seek to use generative AI for malicious intent, such as generating misinformation, impersonating CDC officials, and spamming CDC staff and platforms.

Mr. Rogers then provided an overview of current capabilities in AI and ML as they relate to NCHS. Recent innovations in technology and data have spurred massive growth in the capabilities of AI. AI can augment many existing text-, audio-, and image-based workflows, and advances in AI/ML abilities only continue to evolve and grow. Understanding the progress of AL/ML begins with Moore's Law, which predicted that the number of transistors on microchips doubles every 2 years. Moore's Law was developed in the 1960s but has been proven and has remained true over time. As it relates to AI/ML, this law implies (1) exponential growth in computing power over time, (2) a large availability of affordable data storage, and (3) overall increased data availability (e.g., any text, audio, video, or image on a public domain).

He then described foundational AI models, such as the Large Language Model Meta Artificial Intelligence (LLaMa) 2 family of language models. LlaMa models were trained on Meta's Research SuperCluster, which is a cluster of 2,048 data center–grade graphics processing units (GPUs). The estimated cost of computing with Microsoft Azure, a platform that uses LLaMa 2, is approximately $4.5 million; ChatGPT and other popular conversational AI models are assumed to have similar computational costs. Training foundational AI models, such as LLaMa2, at this scale requires thousands of NVIDIA data center-grade GPUs, which are rare and in high demand internationally. However, Mr. Rogers assured that NCHS does not need to compete with OpenAI or Meta in this space because foundational models are available through open sources or paid access.

Potential AI tasks considered by NCHS staff related to text data include translation, code generation, summarization, and PII detection. Vision-related AI tasks include classification, generation, and segmentation. Audio-related tasks include transcription, translation, generation, and speaker identification. Mr. Rogers then described several CDC and NCHS projects currently leveraging AI tools. First, CDC's National Center for Injury Prevention and Control has used ML and artificial neural networks to integrate several streams of information to estimate weekly suicide fatalities in the United States in real time. This use of a ML framework reduces the error for suicide rate estimation, establishes a novel approach for tracking suicide fatalities, and provides the potential for an effective public health response and interventions to prevent suicide. The second example involves Harnessing ML to Eliminate Tuberculosis (HaMLET), which is a model that leverages chest x-ray and tuberculosis data from immigration visa screening examinations of immigrants and refugees in order to enhance programs to detect tuberculosis and prevent importation. Third, CCQDER transcription software has been used to process cognitive interviews conducted by NCHS staff but has a word error rate of 68.4 percent. In 2020, a state-of-the-art transcription model (Wav2Vec2-large960h) was developed with a word error rate of 14.6 percent, followed by the release of another model (Whisper) with an error rate of 4.4 percent. These developments led to a dramatic decrease in transcription errors over 2 years. Lastly, SANDS, as previously mentioned by Dr. Hoppe, is an AI model designed for use in data cleaning for open-ended survey text in conjunction with human reviews.

Discussion/Reaction by the Board
Dr. Malin asked about plans for evaluation of bias and algorithmic fairness in the context of AI. Dr. Hoppe confirmed that such plans are in development and that they will be created in collaboration with various colleagues within and external to CDC.

Dr. Copeland asked for additional information on the forecasting models, and Dr. Holan asked about the measure of uncertainty reported in relation to SANDS. Dr. Hoppe and Mr. Rogers noted that information about these projects can be found in recent publications.

Dr. Ohno-Machado suggested enhancing workforce development by engaging trainees, who typically do not have access to significant volumes of data, to become involved in AI projects. Inviting trainees to participate in real-world applications of AI will likely excite and inspire the next generation of workers.

Dr. Brodie suggested development of educational resources to help NCHS staff quickly become familiar with recent progress with AI and use within NCHS projects. Dr. Hoppe agreed, noting that he has been in recent discussions with State, Tribal, Local, and Territorial health departments during which similar suggestions were made and endorsed the development of such a recommendation from the BSC. Dr. Hoppe also noted that his team has developed internal white papers and best practices that could be disseminated. Dr. Snipp encouraged Dr. Hoppe and his team to also consider obtaining external expertise and best practices by holding a data competition with research teams from around the country.

Next Steps
Dr. Lumpkin invited the BSC to discuss development of a statement or recommendation related to AI. He proposed that BSC encourage CDC to begin outreach efforts and sharing of information related to AI. Many BSC members reiterated the suggestion and the need to develop white papers and other educational materials to educate other stakeholders on the progress and importance of AI in NCHS projects. Hoppe agreed with Dr. Lumpkin's use of "CDC" and not "NCHS" to ensure that the effort is more widespread throughout the agency.

Drs. Brodie, Copeland, Das, Holan, Lumpkin, Malin, Morton, Ohno-Machado, and Peytchev, and Ms. Thompson voted in favor of developing a recommendation to CDC related to AI.

Dr. Lumpkin asked BSC members to vote on whether to approve the following draft recommendation language: BSC recommends that CDC recognize that public health stakeholders would find information the Agency has gathered about generative AI useful and encourages the Agency to share it more broadly. Dr. Brodie proposed a motion to approve this draft recommendation language. Dr. Peytchev seconded the motion. Drs. Brodie, Copeland, Das, Holan, Lumpkin, Malin, Morton, Ohno-Machado, Peytchev, and Williams, and Ms. Thompson unanimously voted to approve this draft recommendation language.

Division of Analysis and Epidemiology Activities

Introduction
Irma Arispe, Ph.D., Director, Division of Analysis and Epidemiology, NCHS

NCHS' Division of Analysis and Epidemiology (DAE) was established in the 1970s by then NCHS Director Dorothy Rice, who recognized the need to (1) work across data systems, (2) enhance the utility of data systems, (3) expand access to those data systems, and (4) extend NCHS' relevance and reach. DAE's efforts are driven by the consistent use of multiple data sources, measures, and methods in order to inform policies and programs that improve the nation's health. In 2016, the NCHS BSC advised a review and reorganization of DAE, which led to the establishment of four branches: Measures Research and Evaluation, Data Linkage Methodology and Analysis, Population Health Reporting and Dissemination, and Health Promotion Statistics. These four branches work together in an interconnected way to promote consistency, communication, and coherence that ensures NCHS' status as a trusted and authoritative source of statistics and how those statistics can be used.

Health, United States Redesign
Renee Gindi, Ph.D., Chief, Population Health Reporting & Dissemination Branch (PHRDB), NCHS
Sheila Franco, M.S., Health Statistician, PHRDB, NCHS

Dr. Gindi and Ms. Franco presented on the redesigned *Health, United States* report, which is a congressionally mandated report from the HHS Secretary to the President and Congress. This report seeks to educate and inform policymakers and the public about key health topics. This redesign has led to the development of a new report website, with 23 topic-specific pages.

The *Health, United States*, 2020-2021: Annual Perspective report is one major product of the redesign. The Annual Perspective integrates analyses across the following health areas: heart disease, cancer, HIV and sexually transmitted diseases, health insurance and access, hospital utilization, oral health, substance use, and risk factors and mortality. Each Annual Perspective evaluates these health topics in the lens of a specific theme, and the theme of the 2020-2021 issue is health disparities, particularly those related to race, sex, and socioeconomic characteristics. Ms. Franco presented how the report can be used to evaluate a specific health topic. For example, the report includes analyses focused on disparities of heart disease in the context of race and Hispanic origin. The report leverages mortality data from NVSS, prevalence and risk factor data from the National Health Interview Survey (NHIS), and risk factor data from NHIS, National Survey on Drug Use and Health, and National Health and Nutrition Examination Survey (NHANES). The Annual Perspective includes a visualization that depicts a decrease in heart disease mortality between 2009 and 2019 across all racial and ethnic groups. In particular, non-Hispanic Black individuals are more likely than individuals of other groups to die of heart disease. Other findings from the report include that non-Hispanic White, non-Hispanic Black, and Hispanic individuals had similar heart disease prevalence in 2019. Associations between heart disease and smoking, binge drinking, and saturated fat consumption are also included in the report. Another product included in the redesign is infographics that present integrated analyses. These graphics will be useful for audiences that prefer a visual depiction of findings.

Future directions of the *Health, United States* report include updating data trend tables, incorporating more topic pages into the website, publishing topic pages and trend tables throughout the year, and developing machine-readable files that will allow users to create customized visualizations.

Update on NCHS Data Linkage Program
Cordell Golden, M.P.S., Chief, Data Linkage Methodology and Analysis Branch, NCHS

Data linkage is a powerful mechanism for efficiently providing policy-relevant information. The NCHS Data Linkage Program links data from several NCHS population-based and health care provider surveys (including NHIS, NHANES, and the National Hospital Care Survey [NHCS]) to health-related administrative data (e.g., National Death Index [NDI], Medicare, Medicaid). However, privacy concerns impact linked data accessibility and utilization. To minimize barriers of access, the NCHS Data Linkage Program is currently engaged in a pilot project funded through the Assistant Secretary for Planning and Evaluation's (ASPE's) Patient Centered Outcomes Research Trust Fund. The goals of this pilot are to create downloadable public use synthetic data files containing linked survey and administrative data and develop processes for users to verify results obtained using the synthetic data compared to results from the true data. Accomplishments of the pilot thus far include the following:

- Established collaborations with subject matter experts (SMEs; Dr. Jerry Reiter of Duke University, and the Georgia Technical Research Institute)
- Conducted interviews with data users and SMEs to identify variables and populations of interest
- Identified and applied appropriate synthetic data generation methodology

- Developed preliminary versions of two synthetic linked files: (1) NHIS data linked to Department of Housing and Urban Development (HUD) and Centers for Medicare & Medicaid Services CMS (NHIS-HUD/CMS) data, and (2) NHCS data linked to NDI (NHCS-NDI) data
- Conducted preliminary utility and disclosure assessments

The NHIS-HUD/CMS synthetic file incorporates survey data (e.g., chronic conditions, smoking status) from the 2018 NHIS, administrative data from HUD (e.g., receipt of housing assistance) and Medicare (e.g., number of hospitalizations), and contextual data (e.g., rates of internet coverage) from the Agency for Health Care Research and Quality Social Determinants of Health database. The NHCS-NDI synthetic file links 2016 NHCS survey data (e.g., presence of specific conditions) and 2016-2017 NDI administrative data (e.g., cause of death, time to death).

The current data dissemination plan involves obtaining NCHS Disclosure Review Board approval to release the synthetic files, along with developing analytic guidance for data users. The plan also includes providing a verification process for data users to confirm the accuracy of results and developing data visualizations to incorporate verification metrics. Verification metrics being considered involve assessments of decision agreement (e.g., Are the signs of the coefficients the same for the true and synthetic data?), estimate agreement (e.g., Does the synthetic data estimate fall within the confidence interval (CI) of the true data?), and percent overlap for CIs. The verification request process will involve the submission of a request, which will require users to specify the type of regression model, select independent and dependent variables, and email the request to the Data Linkage Program. A verification report will then be shared with the user and the user will provide feedback to inform future efforts. The Data Linkage Program aims to disseminate the synthetic linked data files and finalize the verification process by early 2024, collect meaningful user feedback on an ongoing basis, and launch data visualization efforts in late 2024.

Mr. Golden posed two questions to guide discussions with the BSC:

- What are approaches to most effectively communicate information about the synthetic data, including limitations of the synthetic data and verification process?
- Who should we be sure to engage in order to optimize disclosure risk and data release?

Discussion/Reaction by the Board
Dr. Lumpkin praised the *Health, United States* redesign, noting that the new look will improve usability of important data.

Dr. Malin asked for clarification regarding the breakage in the heart disease death rate trend line for non-Hispanic Asian or Pacific Islander individuals in Ms. Franco's presentation. Ms. Franco noted that the OMB 1997 standards divides this population category into (1) non-Hispanic Asian individuals and (2) non-Hispanic Native Hawaiian or Other Pacific Islander individuals. Dr. Malin noted that the Native Hawaiian population size is substantially smaller than the Asian American population, which explains the major difference in the trend lines after the category division.

Dr. Peytchev recommended that the Data Linkage Program develop a report detailing a variety of analyses using original and synthetic data, summary statistics, and methods; Dr. Malin agreed with this suggestion. Dr. Peytchev also recommended providing educational materials and demonstrations to train users on how to use the linked data.

Dr. Malin asked how the Data Linkage Program will handle multiple requests that may be correlated (either independently or dependently) and who will be considered the data custodians of these linked files.

Mr. Golden noted that NCHS becomes the data custodian of these files once the data are linked because the executed agreements are covered by the Confidential Information Protection and Statistical Efficiency Act. Dr. Malin recommended consulting with privacy and disclosure risk experts in addition to Dr. Jerry Reiter, such as Dr. Cynthia Dwork (Harvard University). Dr. Holan recommended engaging with Drs. Claire Bowen (Urban Institute), John Abowd (Cornell University), and Lars Vilhuber (Cornell University).

Dr. Lumpkin asked how AI/ML approaches may impact the efforts of the Data Linkage Program. Mr. Golden agreed to revisit this discussion topic with his colleagues, as well as the recommended experts in privacy and disclosure risk.

Board Discussion: Salient Issues and Topics for NCHS Consideration

Moderator: John Lumpkin, M.D., M.P.H., BSC Chair

Dr. Lumpkin invited BSC members to share recommendations of topics that should be prioritized for future discussion in BSC meetings.

Dr. Das noted that individuals who advocate for vital statistics and public health data collection to legislators and other stakeholders do not have authoritative guidance and standards. Available standard certificates and training handbooks related to this topic are relatively outdated. Dr. Das recommended that the BSC conduct a systematic review of vital statistics data collection guidance and standards to evaluate whether these materials address current data needs.

Dr. Copeland recommended the BSC hear presentations on how NCHS is collecting and providing data to users related to telehealth, particularly in more remote areas with less access. He also recommended inviting survey methodologists and designers to present on how AI will impact future planning and design of surveys in the future.

Dr. Thompson suggested discussing cross-agency or cross-department work within HHS to learn more about CDC's ongoing efforts.

"Round Robin" Updates

Rapid Surveys System Update
Amy Brown, M.P.H., Project Lead, Division of Health Interview Statistics (DHIS), NCHS

The vision of the new Rapid Surveys Program is to produce a data system that emphasizes timeliness and relevance and provides data on emerging and prioritized health topics that are "fit for use" for decision-making. This program will employ a quarterly data collection scheme, with the first round occurring from July to September 2023 and the second round occurring from October to December 2023. Rounds 3 through 6 will occur in 2024. Each round will include at least 4,000 respondents, 2,000 of whom will come from commercial online panels (including Ipsos Public Affairs' KnowledgePanel and the National opinion Research Center at the University of Chicago's AmeriSpeak). Data from Round 1 will be released in late 2023.

The Rapid Surveys Program aims to achieve a faster turnaround time for the release of data, compared to NCHS core surveys. Once all operational processes are in place, the program will take 6 months to release national estimates after the receipt of sponsored data content. Sponsored content must respond to time-sensitive data needs, be relevant to public health attitudes and behaviors, and address developmental work (e.g., areas where concepts are evolving or unclear). Examples of Round 1 content topics include chronic illness, air quality, cancer risk, and exposure to violence. For Round 1, this program has partnered

with OMB's Interagency Technical Working Group on Race and Ethnicity Standards to test the impact of alternative wording for the proposed standard race and ethnicity questions.

<u>*Discussion/Reaction by the Board*</u>
Dr. Lumpkin asked whether any surprises have emerged as the Rapid Surveys Program has started to collect data. Ms. Brown noted that the program has employed three contractors, instead of the proposed two, and coordinating and managing those efforts, in addition to the program's internal team, has been a logistical challenge. She added that the program has received a great level of interest from companies that could provide sponsored content.

NHIS Field Staff Insights and Innovations
Adena Galinsky, Ph.D., Senior Health Statistician, DHIS, NCHS

The NHIS is a multi-purpose gold standard household health survey that collects data from a nationally representative annual sample of approximately 27,000 adults and 9,000 children. More than 800 trained U.S. Census Bureau Field Representatives (FRs) gain cooperation and conduct interviews in person and, when necessary, by phone. The NHIS' unique trusted data are used by policymakers, public health workers, and health care professionals to design cost-effective and evidence-based legislation, programming, policies, and care to keep the U.S. population safe and prevent unnecessary suffering and early mortality.

Over the past year, NHIS has implemented a series of initiatives to foster the success of NHIS field staff. The goals and techniques of these initiatives were informed by insights gathered from NHIS FRs and their supervisors and managers via a variety of rigorous data collection activities.

The motivation for these initiatives is NHIS's deep respect and concern for all NHIS FRs, who are the bedrock of this survey. NHIS is working to identify and implement better support FRs. FR education and support is most effective when it is (1) informed and customized to interviewer needs, (2) enriched by expertise of experienced staff, and (3) informed by supervisor and manager needs and preferences as well.

NHIS has conducted several initiatives to gather staff expertise, including the NHIS All-Regional Offices Listening Tour (spring 2022), NHIS Respondent Materials FR Focus Groups (summer 2022 and follow-up spring 2023), the NHIS FR Survey (summer 2022), the NHIS FR Conference (fall 2022), meetings with FRs and Regional Survey Managers (2023). Through these insights, NHIS identified the three types of help desired by the largest percentage of NHIS FRs. These are help convincing reluctant respondents to participate, help overcoming access barriers, and help raising FR morale. Requested morale boosting actions included encouragement, gratitude, and celebration of successes; more paid opportunities to connect with and receive help from other FRs and more NHIS results. NHIS also identified successful strategies developed by some FRs and their supervisors. These included leaving handwritten notes at doors when they could not make contact and a statewide team approach in which FRs share responsibility and credit for cases and their supervisors support the FRs and each other intensively. One element of this model is the structured weekly team meeting.

NHIS leveraged each of the insights gathered from its activities to implement new initiatives, including the innovative 2022 NHIS FR Conference. The goals of this conference were to gather insights from field staff, foster FR connection and provide opportunities for FRs to learn from each other. This conference which featured mainly interactive workshops on topics chosen by the FRs in the FR survey, received high praise and positive reviews in a post-conference survey. Additional initiatives include new resources, such as NHIS in the News, which is a monthly compilation of headlines and quotes from and links to news articles about research that used NHIS data, and the quarterly NHIS FR Newsletter. NHIS has also

developed a FR Note Writing Initiative, designed to motivate and prepare FRs to hand-write notes to help make contacts and gain cooperation. In addition, two FR support programs are in progress: (1) NHIS Team Meeting Pilot Program, which will provide regular structured paid opportunities to connect with and receive and survey-specific support and encouragement from other NHIS FRs, and supervisors, and (2) "30-Second Pitch" Project, which aims to produce communication tools that FRs can use to gain attention and interest of reluctant respondents.

Dr. Galinsky posed three questions for the NCHS BSC to consider for further discussion:

- How would you explain the benefits and value of the NHIS to reluctant respondents?
- How can NHIS FRs address and overcome anti-CDC hostility?
- What system of supports could help FRs attempting to contact survey respondents in gated communities and locked buildings?

Discussion/Reaction by the Board
Dr. Lumpkin recommended that Ms. Hines share questions posed by Dr. Galinsky to the BSC following this meeting to encourage further input and/or discussion.

Dr. Peytchev asked whether any new NHIS FR-focused initiatives are informed by the direct and indirect impacts of the COVID-19 pandemic. Dr. Galinsky noted that the Census Bureau is considering methods to address COVID-19-related impacts.

NHANES Update
Alan Simon, M.D., Director, Division of Health and Nutrition Examination Surveys (DHANES), NCHS

The NHANES recently completed a 10-year contract cycle in August 2023. NHANES aims to return to the field in January 2025 with a new 10-year contract with RTI International. Originally, NHANES sought to reenter the field in 2024, but challenges in finalizing the contract led to delays. The new timeline is aggressive, and NHANES is now submitting its Ethics Review Board application.

NHANES will remain a population-based survey that relies on both in-home interviews and in-person exams in Mobile Examination Centers. A major change to NHANES is the switch from Mobile Examination Centers based on trailers to trucks. The use of trucks will enable the NHANES approach to be nimbler, increase response rates, and enable access to more than one location within a primary sampling unit (PSU). Increasing the number of PSUs accessible from 15 per year to 20 per year and changing from counties to Census Public Use Microdata Areas will help improve the statistical power of the survey, thus enabling the creation of estimates for smaller groups than before. The 2025 NHANES survey will include previously incorporated topics, as well as newer topics: anthropometry, dental exams, labs (e.g., blood, urine, and genetics), blood pressure, vision, hearing, dual energy x-ray absorptiometry), spirometry, nasal microbiome, and dietary recall.

NHANES will host an October 4 webinar with state and local NHANES-like programs, such as the New York City HANES and the Survey of Health of Wisconsin.

Discussion/Reaction by the Board
Dr. Ohno-Machado asked whether NHANES has coordinated with the *All of Us* Nutrition Study. Dr. Simon confirmed that NHANES works with NCI, who coordinates with *All of Us*. He noted that *All of Us* uses the Automated Self-Administered 24-Hour (ASA24) Dietary Assessment Tool, whereas NHANES uses the Automated Multiple-Pass Method (AMPM).

Long-term Care Data Collection Update
Manisha Sengupta, Ph.D., Acting Chief, Long-Term Care Statistics Branch, Division of Health Care Statistics, NCHS

NCHS launched the National Study of Long-Term Care Providers in 2012 with the purpose of monitoring trends in the supply provision and use of major sectors of paid regulated long-term care services. The name of the study was changed to National Post acute and Long term Care Study (NPALS) in 2020. NPALS uses a combination of administrative data from CMS for some sectors (i.e., hospice agencies, nursing homes, home health care agencies, inpatient rehabilitation facilities, and long-term care hospitals) and collects primary survey data for the sectors for which data are not already available (i.e., residential care communities and adult day services centers). NPALS is the only source of national- and state-level data on residential care communities and adult day services centers.

NPALS conducts multi-mode surveys every 2 years, using mail and web-based questionnaires and non-response follow-ups by phone. NPALS also uses an alternating protocol. In one wave, NPALS will sample more than 11,000 residential care communities and include a census of 5,500 adult day services centers. In the next wave, NPALS will employ the provider module and a service user module. Here, to remain within budget, the sample is smaller: 2,100 residential care communities and 1,700 adult day services centers. The most recent wave (2022) used this limited alternative protocol. The response rates were 40 percent for adult day services centers and 36 percent for residential care communities; previous waves resulted in higher response rates. A challenge resulting from the COVID-19 pandemic was staffing shortages, which led to lower response rates in long-term care facilities. In addition, many adult day centers went out of business during the pandemic. Field work for the 2022 survey was completed in March 2023, and NPALS staff are currently reviewing the files to implement weights and necessary edits.

In general, NPALS has worked to release data in a timelier manner through user-friendly dashboards. For example, in August 2021, NPALS released preliminary estimates and final results from the 2020 wave in a new COVID-19 dashboard. NPALS also released a new long-term care-focused dashboard in June 2023 and will soon update it with national data from nursing homes, home health organizations, hospices, in-patient rehabs, and long-term care hospitals.

Long-term care settings, such as adult day and residential care centers, have generally lagged behind acute care settings in the adoption of EHRs. During the 2022 NPALS wave, staff conducted an environmental scan to identify the EHR platforms in use and types of information available on these platforms. In this scan, NPALS staff identified that the use of EHR data to support the survey process offers potential but that (1) commercial EHRs data may require a high level of effort and will not be nationally representative, (2) programming and automating capture would be required, as well as the creation of a database for storage, and (3) since these providers are regulated by the states and states vary in the adoption of EHRs, availability of data may vary by state.

With additional funding, NPALS can work to align content with data elements and standards for EHRs found in the U.S. Core Data for Interoperability, build on data already collected in EHRs, evolve survey questions on EHRs and health information technology, and test different approaches for data extraction and reporting.

NPALS is conducting a pilot study of 100 direct care workers that builds upon NPALS infrastructure to test a sampling protocol, questionnaires, and contact strategies to be used in a national survey in the future.

In April 2023, a Presidential Executive Order emphasized the need for increasing access to high-quality care and supporting caregivers. Currently, no baseline data are available on these caregivers. In December

2022, in collaboration with ASPE, NPALS assembled a technical expert panel of stakeholders to develop a questionnaire for a pilot focused on direct care workers.

NPALS is currently using a two-stage sampling design and protocol in a pilot. Findings and lessons learned from this pilot can be used to conduct a nationally representative multisector survey of this workforce.

Dr. Sengupta posed one question to the BSC for consideration: Can NPALS eliminate the administrative data component acquired from CMS (nursing homes, home health, hospice, inpatient rehab facilities, and long-term care hospitals) and focus solely on the primary survey components (adult day and residential care). The administrative data require significant staff hours to clean and refine estimates. Without the administrative data component, the NPALS will no longer provide national- and state-level data for nursing homes, home health, hospice, inpatient rehab facilities, and long-term care hospitals in NCHS' Long-term Care dashboard. However, the administrative data will continue to be available from CMS. NPALS will focus on adult day and residential care sectors for which NPALS is the only source of national and state data.

Discussion/Reaction by the Board
BSC members asked questions and discussed the issue but did not provide a clear recommendation.

Model-based Early Estimates
Lauren Rossen, Ph.D., Senior Scientific Advisor, Division of Research Methodology (DRM), NCHS

DRM's Model-Based Early Estimates program, which is part of the DMI-funded initiatives, aims to improve the timeliness and granularity of data and enable data to facilitate action. To accomplish this goal, the program has worked to integrate data from various sources, including NCHS and Census Bureau. The program is also focused on refining and automating specific processes, such as data analysis, small-area estimation, data quality checks, visualization, and dissemination.

The program's first product sought to evaluate methods to produce and disseminate estimates for small subgroups. This goal involves publishing estimates where data are often suppressed and assisting in the measurement and tracking of disparity data. The program updated a small-domain modeling tool developed by RAND Corporation to incorporate additional functionalities, transparencies, and evaluations. Now, this tool can be used to generate model-based estimates for small subpopulations using NCHS data.

During September 2023, the program has focused on the previously described analytical tool, as well as evaluation of estimates. During January 2024, the program will focus on developing county-level estimates of deaths and births, as well as state-level estimates from NHIS. By September 2024, the program will focus more on analytic pipelines for other data systems and the evaluation of methods for combining non-probability and probability data. Other ongoing research and development projects at this time will be related to research on new and emerging data science methods.

Discussion/Reaction by the Board
Dr. Lumpkin asked whether the program reviews the true final estimates to improve the predictive models used. Dr. Rossen confirmed that the program refines models based on final data, as well as revises estimates based on updated information and the area-level models leverage spatial dependencies when estimating death rates at the country-level.

Healthy People 2030 Disparities Tool
David Huang, Ph.D., Chief, Health Promotion Statistics Branch, NCHS

Healthy People was established in 1979 as a science-based 10-year national initiative for improving the health of all Americans based on the latest available scientific evidence. It includes a strategic framework, a national prevention agenda that communicates the vision of improving health and achieving health equity. The foundation of the initiative is science-based measurable objectives with 10-year targets to be achieved at the end of the given decade and tracking of data-driven outcomes to monitor progress. This program offers a model for international, state, and local program planning.

In 1985, then HHS Secretary Margaret Heckler published the HHS *Report of the Secretary's Task Force on Black & Minority Health* (also known as the Heckler Report), which focused on improved health care access by minority groups. This report's findings helped to mobilize some work still ongoing within HHS today and also served as inspiration for the inclusion of the disparity-focused goals of Healthy People (e.g., reduce health disparities in Healthy People 2000; eliminate health disparities, achieve health equity, and attain health literacy to improve health and wellbeing of all in Healthy People 2030).

Dr. Huang then presented the Healthy People 2030 data template, which lists all data analyzed as part of the program (e.g., sex, race/ethnicity, age, educational attainment, marital status, sexual orientation, veteran status, disability status). The capture of disparities-focused data has evolved and grown within the Healthy People program over time. Measurement of disparities in Healthy People 2030 considers absolute disparity (e.g., rate difference, maximal rate difference, summary rate difference) and relative disparity (e.g., rate ratio, maximal rate ratio, summary rate ratio), as well as changes in disparities over time. In previous years, not all of these measures were calculated. In addition, the reference point has changed over time; currently, it is the most favorable group rate.

Dr. Huang then provided a demonstration of the Healthy People 2030 Disparities Tool, which can be found on the Healthy People website. Healthy People provides a tutorial on how users can interact with disparities data, as well as references to additional helpful information. Users can select a Healthy People objective and review data that are associated with that objective (e.g., reduce overall cancer death rate). Once an objective is selected, users can query data for specific demographic groups and then visualize those objective-specific data over time in a table. Users can then view disparities data for specific years or demographic groups.

Dr. Huang concluded by noting that no single gold standard in health disparities measurement exists and thus considering multiple measures can provide a fuller context. A forthcoming report on Healthy People 2030 disparities measures will expand on current gaps and limitations. Healthy People aims to continue to increase the functionality of its assessments—adding new measures and creating new disparities charts to aid in its work.

Discussion/Reaction by the Board
Drs. Peytchev and Holan asked whether Healthy People will suppress any of the reported statistics if they do not meet necessary criteria. Dr. Huang confirmed that data would be suppressed in that case and added that this process may impact the ability to evaluate smaller subpopulations.

Dr. Williams asked whether the program has stratified data by education as an indicator of socioeconomic status. Dr. Huang noted that the program has discussed such an effort.

Public Comment

No public comments were received.

BSC Wrap-up

Drs. Lumpkin and Moyer thanked attendees and speakers for their participation in today's meeting.

The meeting was adjourned.

To the best of my knowledge, the foregoing summary of minutes is accurate and complete.

/s/   November 9, 2023

_____   _____
John R. Lumpkin, M.D., M.P.H.   DATE
Chair, BSC