



NHANES Request for Board of Scientific Counselors Workgroup on Models for the Future of NHANES

Alan E. Simon, MD

Director, Division of Health and Nutrition Examination Surveys

Board of Scientific Counselors

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Question for the Board

- Would the Board endorse a Workgroup to consider the future of NHANES?

Where is NHANES now?

- Processing August 2021 – August 2023 data
- August 2023 ended the 10-year contract cycle
- New 10-year contract began Feb 2023
- Return to the field Jan 2025
 - Rebuilding with a new contractor
 - Extremely fast pace
 - ERB package submitted
 - OMB 60-day notice being reviewed

What will be the same?

- Population-based survey
- 5000 participants per year
- 2-year data cycles
 - 2025/2026
 - 2027/2028
 - 2029/2030
 - 2030/2031
- In-home interviews
- In-person exams in Mobile Examination Centers

What will be different?



Trucks vs. Trailers



Trucks will allow us to be more nimble

- >1 location per PSU
- Increase response rates
- Three truck set will form a Mobile Examination Center

Methodologic Improvements

- Improve statistical power by:
 - Increasing the number of PSUs from 15 to 20 each year
 - 25% increase in effective sample size
 - Requires 5 teams in the field
 - Changing PSUs from Counties to Census' Public Use Microdata Areas (PUMAs)
 - Areas of approximately 100,000 people
 - Logistically easier
- Return to oversampling by age and race/ethnicity

Streamlined processes

- New participant portal to improve return of laboratory and exam results
- Address based sampling frame rather than listing households
- Shorter screener
- Improved Survey Information Technology Architecture (SITA)

Challenges

- Response rates have declined
- Prices have increased
- Budgets have declined elsewhere
 - NHANES receives substantial critical funding from collaborators

More challenges

- Aim was 30 PSUs
 - To make single year data files and estimates
 - To make estimates for smaller groups
- Current funding not sufficient for 30 PSUs
 - We will have the needed MECs to increase to 30 PSUs if funding ever allows
- Cannot guarantee single year estimates
 - We will explore whether this is possible either directly or through modelling.

The future comes fast

- Current focus is 2025
- Already thinking about 2027 and beyond
 - NHANES requires substantial lead time
- Our current model of data collection and financing is stable through 2028
- Given our resources and those of our collaborators, the current model may not be sustainable past the 2027/2028 cycle

What happens in a few years?

- Now is the time to consider whether our current approach will work in 2029 and beyond

The data are still critical!

- For much of what we collect....nobody else collects these data
- Electronic health records and administrative records do not capture
 - Environmental exposures (Arsenic, Cadmium, Uranium levels, etc.....)
 - Detailed dietary intake data, dietary supplements
 - DXA scans to measure body fat and bone density
 - Audiometry to measure hearing
- Population based-- we include people irrespective of health care use
- More journal articles are based on NHANES data than any single clinical or epidemiologic biomedical study
- Many examples of federal policy and clinical guidelines based on NHANES

Recent calls to rethink NHANES model

The American Journal of Clinical Nutrition 117 (2023) 847–858



 The American Journal of
CLINICAL NUTRITION

journal homepage: www.journals.elsevier.com/the-american-journal-of-clinical-nutrition



From the Society

Critical data at the crossroads: the National Health and Nutrition Examination Survey faces growing challenges

Christine L. Taylor^{1,*}, Jennifer H. Madans², Nancy N. Chapman³, Catherine E. Woteki⁴,
Ronette R. Briefel⁵, Johanna T. Dwyer⁶, Joyce M. Merkel⁷, Charles J. Rothwell⁸, David M. Klurfeld⁹,
David S. Seres¹⁰, Paul M. Coates¹¹

From Taylor, et. Al.

- “Finally, the single most effective action at this time would be an overall and integrated examination of NHANES in the context of its future. ...Such a study would need to not only carry the gravitas of diverse experts with experience and knowledge related to health surveys and to health and nutrition data collection but also provide an independent and consensus-driven report. The NASEM* offers a strategic platform for such work...”

*NASEM = National Academies of Sciences, Engineering, and Medicine

NASEM Review

- Considering this approach --- also looking at alternatives
- NASEM is expensive
- NASEM may make sense for the longer term
- Need for more timely advice

Board of Scientific Counselors Workgroup

- Can move more quickly as recently demonstrated
 - Recommendations on Measures of Discrimination for Use in NCHS Surveys
 - Recommendations on Use of Panel Survey Data by NCHS
- Can work closely with NHANES to better understand our challenges and constraints
- Can bring in a range of needed expertise
- Can help to answer:
 - What is the ideal model for NHANES in the future?

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Discussion

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

