

**National Health and Nutrition
Examination Survey
Review Panel**

**Observations
and Recommendations**

Panel Members

- William Kalsbeek, Chair
- Paul Coates
- Eileen Crimmins
- Steven Heeringa
- Daniel Kasprzyk
- Javier Nieto
- Irwin Rosenberg
- James Lepkowski, BSC Liaison
- Ronald Angel, BSC Liaison

Review Process

- Panel Chair met with BSC to identify key issues for the review
- Chair met with NCHS and NHANES staff to gain their perspectives and priorities on issues
- Panel members held conference call to discuss issues and set agenda for meeting

Review Process

- Panel met November 11 and 12
 - Presentations by NCHS and DHANES staff
 - Staff available for questions and discussion
- Draft report prepared, circulated and revised; final report prepared and presented to program and BSC.

System Concept and Design

- Objectives -> highly relevant
- Sample design -> sound, justifiable, a key feature; oversampling by disproportionate screening of key population subgroups; larger urban communities as "self-representing PSUs; (but few PSUs)
- Survey content -> broad, deep, and adaptable
- Data collection -> well planned and implemented
- Data dissemination -> easy access; online tutorials
- Methods research -> Extensive (but limited compilation and dissemination)

Accomplishments and Current Value

- Highly regarded
- Major resource of data on:
 - Nutrition and diet; hypertension; serum lipids, folate, and lead; anthropometric measures (obesity and physical development); environmental exposure; immunization
- Findings
 - Health outcomes profiles; predictors of outcomes; health guidelines and policy

Current Status

- Data quality is high
 - Thorough testing of survey questions; high though declining unit response rates; sound data collection methods; low item nonresponse rates; thorough editing
- Staff function and roles
 - Primary: maintaining NHANES
 - Technical service to communities (U.S. and abroad)
- Funding pinch
 - Rising data collection costs; declining revenue

Panel's Key Issues: Vitality in Light of Lower Funding

- Program advisory mechanisms
- Survey design
- Staffing
 - Succession planning
 - Composition and roles of examination staff
- Longitudinal HANES

Panel Recommendations

1. Aggressively market NHANES
2. Create standing external advisory body
3. Conduct retrospective review of statistical benefits of oversampling
4. Examine utility of USPS delivery sequence files for household enumeration

Panel Recommendations

5. Explore possibilities of NHIS-NHANES design integration
6. Pursue opportunities with large states and municipalities to use portions of the NHANES sample for local area data
7. Seek mechanism to add longitudinal follow-up of NHANES

Recommendation #1

The NCHS Director's Office Should Aggressively Market the Expertise and Products of the NHANES Program to Data Users and Potential Funders

- Develop systematic and high-level marketing initiative
- Specific ideas:
 - Create categorized bibliography to illustrate range of data and findings
 - Use examples to show impact and loss if NHANES data not available

Recommendation #2

Create a Standing External Committee to Broadly Advise the Program on Methods, Content and Other Aspects

- Augment current feedback and advisory mechanisms with broad-based input for overall strategic planning
- Source of:
 - Ideas -> methodologists -> improved quality and efficiency
 - Support -> current and potential funders -> advocacy for funding

Recommendation #3

Conduct a Thorough Retrospective Review of the Realized Statistical Benefits of Oversampling Population Subgroups for NHANES Samples since 1999.

- Success in meeting data needs for key subgroups vs. the cost of screening to achieve oversampling goals
- Nominal increase in subgroup sample sizes vs. quality reduction in other estimates due to variable weights

Recommendation #4

With the ASA and Other Scientific Organizations, Co-sponsor Workshop to Examine the Relative Statistical and Operational Utility of USPS Delivery Sequence Files for Household Enumeration

- Co-sponsor workshop to find ways to improve the cost-efficiency and screening efficiency for area probability sample recruitment by using commercial data bases

Recommendation #5

Continue to Explore the Possibilities of NHIS-NHANES Design Integration in a Way that Will be Beneficial to Both Programs

- Conduct analysis of integration of surveys to factor into redesign process for both surveys
- Ensure that scientific integrity of each program is maintained in any integration proposal

Recommendation #6

Continue Pursuing Opportunities with Larger States and Municipalities to Utilize Portions of the NHANES Sample to Also Meet Local Health Information Needs

- Increase efforts to identify state and local partners
- Use opportunity to produce state and local data as well as identify possible new revenue sources

Recommendation #7

Continue to Seek Mechanisms to Add Longitudinal Follow-up of NHANES Cross-Sectional Respondents

- Document relative benefits of a longitudinal component vs. cross sectional surveys
- Explore mechanisms for funding longitudinal components, such as shared funding with other research organizations

The Panel Concludes That:

- NHANES is a critical component of the nation's health information system
- For over 50 years it has produced data that have been used to set policies and direct programs
- NHANES now faces serious challenges in funding, survey design, operations and infrastructure
- NHANES has an opportunity to rethink its program based on external and internal input to ensure its continued viability and exceed past accomplishments