

Spitting in Public: Collecting (Physical Measures and) Biomarkers

International Field Directors and
Technologies Conference

Delray Beach, Florida

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Heidi Guyer, MPH

Survey Research Center, University of Michigan

- 16 years experience collecting physical measures & biomarkers on U.S. and international field studies.
- **Current experience:** Health and Retirement Study
- **Measures collected:**
 - Anthropometric (height, weight, waist)
 - Grip strength, Lung strength
 - Walking speed, Balance tests
 - Blood pressure
 - Blood spots
 - Saliva
- **Response rates:**
 - Physical Measures
 - Blood spots
 - Saliva:

Nancy Gebler, MA, PMP

Survey Research Center, University of Michigan

- 10+ years experience collecting physical measures & biomarkers on adults and youth
- **Recent studies:** Moving To Opportunity, African American Health in St. Louis, National Comorbidity Study
- **Measures collected:**
 - Anthropometric (height, weight, waist)
 - Grip strength, Lung strength
 - Walking speed, Balance tests
 - Blood pressure
 - Blood spots
 - Saliva
 - Coordinating with phlebotomists, physical therapists, labs for additional tests after completion of survey instrument

Moving To Opportunity (MTO)

- **Adult height, weight, waist: Avg 2.92 measures completed**
- **Youth height, weight: Avg 1.97 completed**
- **Adult blood pressure: 98.5% eligibility**
 - **95.3% cooperation rate**
- **Adult dried blood spot: 96.4% eligibility**
 - **91.6% cooperation rate**
 - **86.5% storage consent rate**



Kerryann DiLoreto, Project Director

- 10 years of experience in survey research
- 5 years collecting biomarkers and physical measures

Current experience: Wisconsin Longitudinal Study

Measures collected:

- Saliva (using Oragene 250 kit for respondent self-collection and mail back)

Response rates:

- 54% (out of 8,131 respondents)
- 66% for respondents who participated in the 2004 phone and mail surveys

Measures planned for 2010 CAPI effort:

- Anthropometric (height, weight, waist); Grip strength; Lung strength;
- Walking speed; Chair raises;
- Saliva
- Blood spots (under consideration pending funding)



UWSC

University of Wisconsin Survey Center

www.uwsc.wisc.edu



Katie Lundeen

NORC at the University of Chicago

- **Experience:** National Social Life, Health and Aging Project (NSHAP)
- **Measures collected in wave 1:**
 - Anthropometrics (height, weight, waist)
 - Blood pressure
 - Functional measure (Get Up and Go)
 - Sensory measures (touch, smell, distance vision, taste)
 - Laboratory measures (dried blood spots, saliva, self-administered vaginal swabs, and OMT for HIV test)
- **New measures for upcoming wave 2 pretest:**
 - Anthropometric (hip)
 - Functional measures (SPPB, actigraphy)
 - Sensory measure (hearing)
 - Laboratory measures (blood microtainer tube, salivettes, DNA, and urine)

Wave I Cooperation Rates

NSHAP Biomeasure Cooperation Rates

<i>Measure</i>	<i>Cooperation Rate^a (%)</i>	<i>Eligible Respondents</i>
Height	98.6	2,977
Touch	98.4	1,505
Weight	98.4	2,977
Blood pressure	98.4	3,004
Smell	98.3	3,004
Waist	97.2	3,004
Distance vision	96.0	1,505
Taste	95.9	3,004
Get-up-and-go	93.6	1,485
Saliva	90.8	3,004
OMT	89.2	972
Blood spots	85.0	2,494
Self-administered vaginal swabs	67.5	1,550

a. Person-level weights are adjusted for nonresponse by age and urbanicity

Source: Jaszczak, Angela, Katie Lundeen, and Stephen Smith. 2009. "Using Nonmedically Trained Interviewers to Collect Biomeasures in a National In-home Survey." *Field Methods* 21:26-48.

Frank Mierzwa


Survey Research Division, RTI International

- 16 years experience collecting physical measures & biomarkers on field studies.
- **Current experience:** Los Angeles Family and Neighborhood Survey (L.A. FANS-2)
- **Measures collected:**
 - Anthropometric (height, weight, waist, hip)
 - Blood pressure
 - Dried blood spots and venipuncture
 - Lung strength
 - Saliva
 - Urine

Casey Tischner


RTI International

- **National Longitudinal Study of Adolescent Health (Add Health)**
 - Developmental and health trajectories from adolescence through adulthood
 - Nearly 20,000 sample members ages 24-32
 - Wave IV
- **Measures collected:**
 - Anthropometric (height, weight, waist)
 - Blood Spots
 - Saliva




Panel Questions: Blood Collection

- How are you collecting blood?
- What are you analyzing?
- Are you storing blood?
- What are the biggest challenges?
- What future innovations are you planning?




Panel Questions: Saliva Collection

- How are you collecting saliva?
- What are you analyzing?
- Are you storing saliva?
- What are the biggest challenges?
- What future innovations are you planning?




Panel Questions: Interviewer Training

- How do you train interviewers to collect these measures?
- How do you certify interviewers to collect these measures?



Panel Questions: Biomarker Collectors

- What should be taken into account when deciding whether to have respondents, interviewers, phlebotomists or nurses collect these measures?
- Are there differences in response rates or in the actual results due to who collects the biomarkers?



Panel Questions: Response Rates

- What response rates should you expect on these measures?
- Are there subgroups that are higher or lower?
- What can be done to improve biomarker response rates?




Panel Questions: Consent

- How do you obtain consent for the measures?
- What are the biomarker consent rates?
- Are there subgroups that are higher or lower?
- What is the best way to obtain consent?



Panel Questions: Incentives

- Do you provide an incentive for completing these measures?
- If so, how much or what incentives do you provide?
- What seems to work best?
- Does the timing of the incentive matter?



Panel Questions: Mode Effects

- How successful are telephone, web or mail surveys in collecting these measures?



Panel Questions: Quality Control

- What quality control measures should be implemented?
- What do you monitor & how often?



Additional Questions?

Thank You!

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