



Sampling Design Workshop Planning Committee - Update

NCSAC: Bob Michael, Barry Ryan

SDWG: Jonas Ellenberg, Frank Speizer

ICC: Sherry Selevan, Jim Quackenboss

NCS PO: Peter Scheidt (Randy Curtin, NCHS)

NCSAC Meeting – March 5, 2004



The National Children's Study – Sampling Design WS Committee

- Identified documents needed to inform sampling decisions
 - “Background” white papers and Design options
- Papers developed by Battelle under contract to NCS Program Office
- Design options paper reviewed by Planning Committee; revised and sent to Workshop Panel
- **Workshop panel** selected in collaboration with the Panel Chair (David Savitz, UNC)
- Workshop participants
- **Proposed Next Steps**



“White papers” to inform the sampling deliberations – Battelle et al

- Initial Sampling Design Options for the NCS & Criteria for Evaluation
 - Definitions, design elements, and range of design options (Sept. '03)
- Advantages and Limitation of Alternative Sampling Methods for the NCS
 - Internal and external validity: level of detail and generalization
- Recruitment and Retention for the NCS
 - Rates and their impact on design selection
- Measures for NCS Core Hypotheses
 - Design requirements and burden

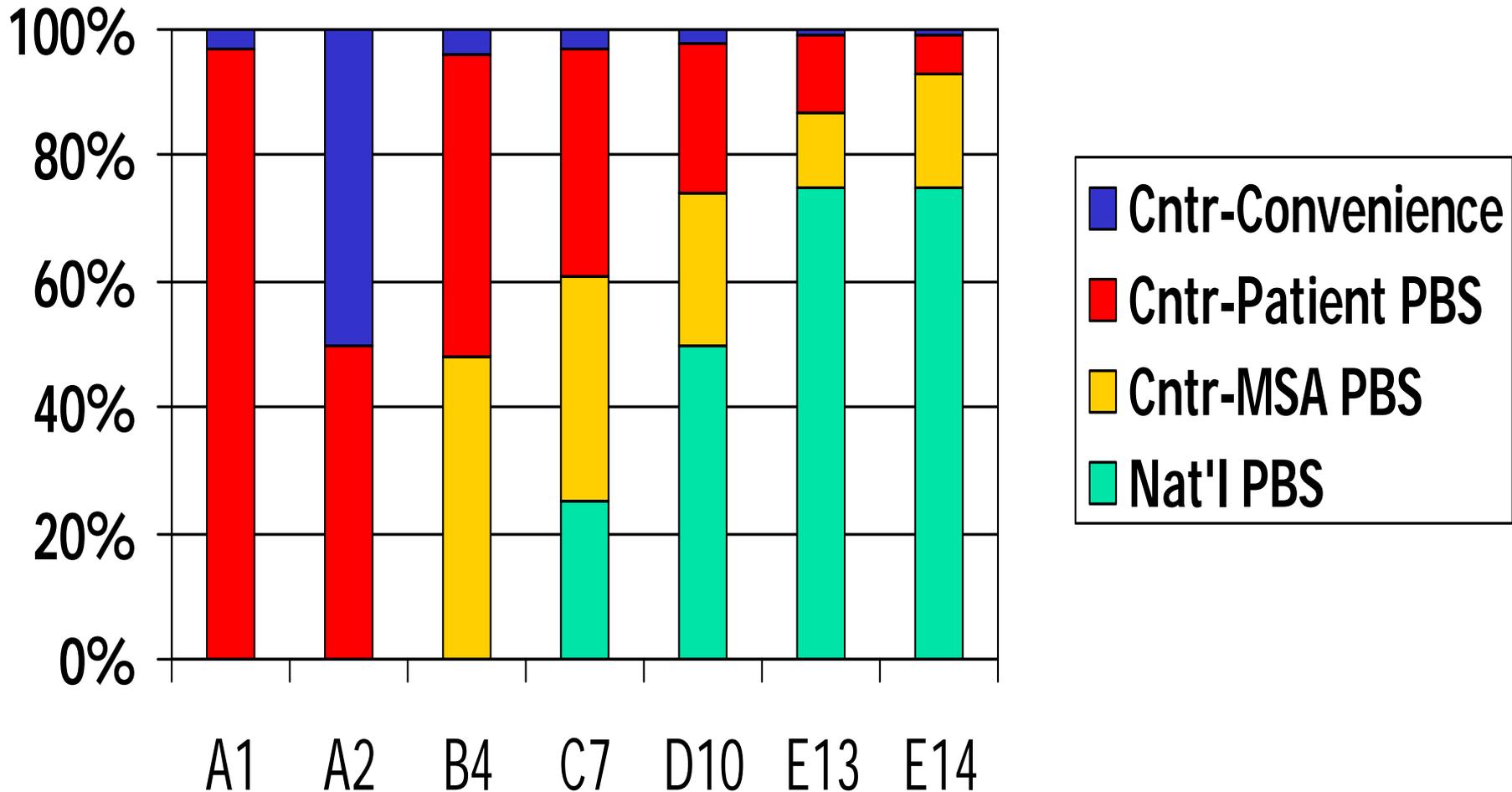


“Family of Designs” (Hybrids) for the NCS – Battelle et al

- Multiple sampling frames to provide coverage of target populations, possibly including
 - National Probability-Based Sample
 - Center-based (Patients and MSA sample)
- Organizational structure(s) and their existing relationships with potential participants
- Selection methods/criteria for both
 - Groupings (e.g., geographic areas, clinics, centers)
 - Individuals



Example Design Options and Sampling Frames





Sampling Design Options

Report – Battelle et al

- Identify critical measures
 - For NCS priority outcomes and current hypotheses
- Assessment of design options for
 - Recruitment and long-term Retention rates
 - Estimated costs for the NCS
 - Power to test selected hypotheses
 - exposure-outcome relationships
 - different life stages
 - given estimated retention rates



Criteria to Evaluate NCS Sampling Design Options

- Ability to Satisfy “Givens”
 - Engage communities
 - Specialized measures
 - Prenatal recruitment (with some pre-conception)
- Scientific Merit
 - External validity (probability basis)
 - Population Diversity; Range of Exposures
 - Internal validity (measures, confounders, covariates)
 - Power (in unweighted, weighted analyses)
 - Resource for future (Standardization, Data Access)
- Costs (relative to sample sizes, power, and measures)



NCS Sampling Design Workshop

- Format similar to an NIH Consensus Conference
 - Impartial panel of experts to deliberate on issues and trade-offs
 - Debate informed by documents and presentations from different viewpoints
- Two-Day Workshop (March 21-22, 2004)
 - Day 1: Discussion of Battelle, et al designs (and white papers); additional speakers
 - Day 2: Panel deliberations, reporting



NCS Sampling Design Workshop – Expert Panel

- David Savitz, University of North Carolina (Chair)
- Scott Zeger, Johns Hopkins (co-Chair)
- Jean Golding, University of Bristol
- Barry Graubard, NCI
- Graham Kalton, Westat
- Michael Kramer, McGill University
- Anne Pebley, UCLA
- John Spengler, Harvard
- Clare Weinberg, NIEHS



NCS Sampling Design Workshop – Speakers

- **Battelle Design Team**
 - Warren Strauss, John Menkedick, Jeff Lehman (Battelle)
 - Louise Ryan (Harvard)
 - Colm O'Muircheartaigh (Univ. Chicago & NORC)
 - Alan Zaslavsky (Harvard)
- **Alternative Perspectives on NCS Sampling Needs**
 - Mark Klebanoff (NICHD; ICC)
 - Bob Michael (Univ. Chicago; NCSAC)
 - Chris Bachrach (NICHD; Social Environ. WG)
 - Germaine Buck (NICHD; Fertility & Early Pregnancy WG)
 - Nigel Paneth (Michigan State; Study Design WG)



NCS Sampling Design

Proposed Next Steps

Workshop Reports to ICC and NCSAC <ul style="list-style-type: none">• to SDWG (and other interested WGs)	End of: April
NCSAC receives findings from WGs <ul style="list-style-type: none">• AC members assigned to review and discuss key questions and issues	May
NCSAC – Prepares written advice for ICC and NICHD Director	June
ICC and NICHD Director – Make decisions on sampling design and pilots	July
Program Office – Implement feasibility/pilot studies	Aug.