



# *NSDUH Redesign*

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# Overview of NSDUH

- **Annual household survey of civilian, noninstitutionalized population aged 12 and older**
- **Provides national, state, and substate estimates of substance abuse and mental health issues**

# Current NSDUH Sample Design

- **7,200 segments; 140,000 dwelling units (DUs)**
- **68,000 respondents each year, representative nationally and in each State**
  - *n=3,600 in 8 large states, n=900 in other states*
- **Oversampling of young people**
  - *1/3 of sample in each age group: 12-17, 18-25, 26+*

# NSDUH Data Collection

- **12-month data collection period**
- **“Dear Resident” letters mailed to DUs**
- **FI visits DUs, does 5 min. screener**
- **Select 0, 1, or 2 HH members**
- **Face-to-face interview (1 hr., mainly ACASI)**
- **\$30 given to each participant**

# Why Redesign?

- **Update questionnaire and sample design**
- **Implement more efficient data collection and estimation methods**

# Redesign Plan

- **Assess data needs**
  - *Contact States, other data users to determine what data are needed*
- **Methods research and development**
  - *Explore various design alternatives in terms of cost and impact on data quality and analytic capability*
  - *Assess effects on estimates, and whether redesign could be done with a split sample to “bridge” old and new estimates*
  - *Field test promising data collection methods*
- **Present plan to key stakeholders to gain acceptance**
- **Implement new sample design in 2014; Qx in 2015**

# Methods Studies-Sampling

- **USPS Frame Study**
  - *Field test using frame constructed from residential mailing lists*
- **Sample Issues Study**
  - *Determine optimal cluster sizes*
  - *Assess pros and cons of biennial survey*
  - *Assess impact of changing sampling rates for demographic and geographic groups*
  - *Develop more flexible sample design*
  - *Assess feasibility of interviewing children under 12*
- **Investigation of Census/ACS Options**
  - *Assess the use of the ACS for sampling, small area estimation, and weighting activities*

# Methods Studies- Estimation

- **Imputation and Editing Evaluation**
  - *Evaluating different methods to simplify procedures and reduce processing time*
- **Weighting Assessment**
  - *Examining different predictor variables to improve weighting adjustments*
- **Small Area Estimation**
  - *Studying ways to estimate change and trends more efficiently and evaluate the quality of substate estimates*



# Methods Studies-Response Rates

- **Contact Materials Study**
  - *Develop improved informational documents that respondents receive (lead letter, study description, question and answer brochure, etc.)*

# Methods Studies- Questionnaire

- **Electronic Pill Cards/Calendar Study**
  - *Develop on-screen prescription pill photos and reference date calendar; assess usability*
- **Debriefing Questions/Persuasive Statement Study**
  - *Test whether reinforcing confidentiality and requesting honesty improves responses*
  - *Assess usefulness of FI and respondent debriefing questions (e.g., privacy, comprehension, etc.) as indicators of data quality.*

# Methods Studies- Questionnaire

- **Questionnaire Structure Study**
  - *Test “ensemble” vs. “interleafed” format*
  - *Explore moving more questions to core*
- **Clinical Validation Phase II**
  - *Compare Substance Dependence and Abuse module to a structured clinical interview*
- **Prescription Drug Module Redesign**
  - *Update definitions for nonmedical use and therapeutic classes*
  - *Incorporate new drugs*
  - *Move Methamphetamine out of prescription drugs*
  - *Develop better trend measurement method*

# Other Relevant Studies

- **Mode/setting/context effects studies**
  - *Effects can be large for sensitive data*
- **Impact of incentives on reporting**
  - *Significant positive effect found in 2002 along with reduction in overall cost*
- **Interviewer Effects Analysis**
  - *Interviewer experience correlates negatively with respondent reporting of drug use*

# Schedule for NSDUH Redesign

- **November 2007 – November 2008: Develop background materials, plan methods tests, receive input from subject-matter experts & other data users**
- **June 2008 – September 2011: Conduct methods studies, develop and modify questionnaire content**
- **May 2010 - April 2011: Mailing list field test, conduct focus groups, usability testing, and cognitive interviewing**
- **May 2011: SAMHSA approval of redesign plan**
- **August 2011 – January 2012: Cognitive testing of new questionnaire**
- **Sept 2012 - Nov 2012: Questionnaire field test data collection**
- **June 2013 – August 2013: Dress rehearsal data collection**
- **January 2014 - New sample design begins**
- **January 2015: New questionnaire begins**

# Dilemma: Change the Measure or Measure Change?

## We would like to:

- **Maintain valid trend data-high priority**
- **Update questionnaire**
  - *Data priorities change*
  - *New phenomena*
- **Update methodology**
  - *Improve data quality*
  - *Incorporate better methods*
- **Reduce Costs**
  - *Future budgets unknown*

# New NSDUH Design: Sampling

- **Age, state sample reallocation (2014)**
  - *Improve precision, efficiency; reduce cost*
- **Increase cluster size in some states (2014)**
  - *Cost savings with little loss in precision*
- **Continue field counting and listing for now**
  - *Uncertainties about cost and coverage with address list-based*
- **No change in target population**

# New NSDUH Design: Instrumentation

- **No change in data collection methods**
- **Update/improve contact materials (2015)**
- **Maintain \$30 incentive**
- **New questionnaire (2015)**
  - *Nearly identical for cigarettes, alcohol, marijuana, cocaine, inhalants, hallucinogens, heroin*
  - *Major revision for prescription drugs*
  - *A few topics added, deleted, based on new priorities*
  - *No change in dependence/abuse—wait for DSM-V*



# Improvements to Prescription Drug Module

- **Update drugs covered (every year)**
- **Methamphetamine moved to a separate module**
- **On-screen pictures of pills**
- **Probe past year use/misuse of specific drugs**
- **Separate components of “nonmedical” use:**

# Partial NSDUH Redesign

- **Pros**

- *Might fix most egregious problems, e.g., prescription drug use, methamphetamine use*
- *Most likely no break in trends for alcohol, tobacco, marijuana, cocaine*

- **Cons/risks**

- *Will still result in break in trends for some measures*
- *Some questionnaire improvements not made*
- *Possibility of break in trends for all drugs due to context effects, contact materials, or sample design (e.g., impact on field staff)*

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