National Survey on Drug Use and Health 2012 Questionnaire Field Test SUPPORTING STATEMENT

B. <u>COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL</u> METHODS

1. Respondent Universe and Sampling Methods

The respondent universe for the 2012 QFT is the civilian, noninstitutionalized population aged 12 years old and older within 48 contiguous states and the District of Columbia. This universe includes residents of noninstitutional group quarters (e.g., shelters, rooming houses, dormitories) and civilians residing on military bases. Persons excluded from the universe include those with no fixed household address, e.g., homeless transients not in shelters, and residents of institutional group quarters such as jails and hospitals. In addition, to control costs, persons residing in Alaska and Hawaii as well as persons who do not speak English will be excluded from the QFT sample.

The annual NSDUH sample is designed to yield 67,500 interviews from 7,200 segments each calendar year (Morton, Hirsch, and Martin, 2011). Thus, an estimated 213 segments will be needed to yield approximately 2,000 completed interviews for the QFT. To achieve national representation of the English-speaking population, a probability proportional to size (PPS) sample of 213 (out of 876) state sampling regions will be selected. This design will maximize the efficiency (i.e., increase precision) of the QFT estimates by reducing variation in the weights. In addition, this design has the benefit of placing the sample in heavily populated areas where a sufficient mix of field interviewers (FIs) with various experience levels would be available to meet the QFT staffing needs.

Within each selected state sampling region, a sample of dwelling units will be drawn from the segment to be retired from use in Quarter 1 of the 2012 NSDUH. If an insufficient number of eligible dwelling units remains in any segment, this segment will be replaced with the Quarter 4, 2011 retired segment in the same state sampling region. The retired segments to be used for the QFT were formed and selected at the same time as the main study NSDUH segments, but randomly assigned to a different survey year and quarter.

Table 1 below shows the expected number of state sampling regions by state.

<u>Table 1. Expected Number of Questionnaire Field Test State</u> <u>Sampling Regions by State</u>

	Populati	Curren t	NSDUH SS	Expected Number of QFT SS Regions/ Segments	Expected QFT Sample
State	on Rank	Design	Regions	(PPS)	Size
CA	1	3600	48	26	244
TX	2	3600	48	17	159
NY	3	3600	48	14	131
FL	4	3600	48	13	122
IL	5	3600	48	9	84
PA	6	3600	48	9	84
ОН	7	3600	48	8	75
MI	8	3600	48	7	66
GA	9	900	12	7	66
NC	10	900	12	6	56
NJ	11	900	12	6	56
VA	12	900	12	6	56
MA	13	900	12	5	47
WA	14	900	12	5	47
IN	15	900	12	5	47
AZ	16	900	12	4	38
TN	17	900	12	4	38
MO	18	900	12	4	38
WI	19	900	12	4	38
MD	20	900	12	4	38
MN	21	900	12	4	38
CO	22	900	12	3	28
AL	23	900	12	3	28
SC	24	900	12	3	28
KY	25	900	12	3	28
LA	26	900	12	3	28
OR	27	900	12	3	28
OK	28	900	12	3	28
СТ	29	900	12	3	28
IA	30	900	12	2	19
MS	31	900	12	2	19
AR	32	900	12	2	19
KS	33	900	12	2	19
NV	34	900	12	2	19
UT	35	900	12	2	19
NM	36	900	12	1	9
WV	37	900	12	1	9
NE	38	900	12	1	9
ID	39	900	12	1	9

<u>Table 1. Expected Number of Questionnaire Field Test State</u>
<u>Sampling Regions by State (continued)</u>

Stat e	Populati on Rank	Curren t Design	NSDUH SS Regions	Expected Number of SS Regions/ Segments (PPS)	Expected QFT Sample Size
ME					
	40	900	12	1	9

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State Sampling; PPS = probability proportional to size; QFT = Questionnaire Field Test.

Dwelling units not selected for the 2011 and 2012 main NSDUH study will be eligible for selection in the QFT. A sufficient number of dwelling units will be drawn to account for the lower sample yield resulting from conducting interviews in English only. After accounting for eligibility, nonresponse, and the person-level sample selection procedures, it is estimated that approximately 4,552 dwelling units will need to be selected in order to yield 2,000 completed interviews for the field test, as shown in Table 2 below. The 2010 NSDUH sample outcomes, adjusted for the planned QFT age distribution, were used to estimate the number of dwelling units needed.

Similar to the main study, a small reserve sample of dwelling units from each segment will be selected and the total sample will be partitioned into equal probability subsamples. While the majority of the sample will be released at the beginning of the QFT data collection period, having the additional sample and sample partitions will allow for greater flexibility in controlling the sample size. This procedure will allow us to ensure data collection goals are attained within the field period.

The QFT respondent sample will be allocated to the three major age groups in the following proportions: 25 percent aged 12 to 17, 25 percent aged 18 to 25, and 50 percent aged 26 or older. This sample allocation will match the planned allocation for the 2015 NSDUH redesign. The expected number of selected persons per completed screening interview was roughly approximated by ratio-adjusting the 2010 NSDUH selected persons and completed screeners to the planned QFT age distribution. The expected interview response rate was calculated by averaging the 2010 NSDUH age group response rates and weighting by the planned age distribution.

<u>Table 2. Summary of the Questionnaire Field Test</u>
<u>Sample Design</u>

Statistic	Total	Expected Rate
State Sampling Regions	213	
Segments	213	
Selected Dwelling Units	4,552	
Expected Eligible Dwelling Units	3,751	0.82
Expected Completed Screening Interviews	3,338	0.89
Expected Selected Persons	2,637	
Expected Eligible Persons	2,532	0.96
(English-Speaking) Expected Completed Interviews	2,000	0.79

2. <u>Information Collection Procedures</u>

Prior to the interviewer's arrival at the sample dwelling unit (SDU), a lead letter will be mailed to the resident(s) briefly explaining the QFT and requesting their cooperation. This letter will be printed on Department of Health and Human Services letterhead with the signature of the DHHS National Study Director and the Contractor's National Field Director (see Attachment D).

Upon arrival at the SDU, the interviewer will refer the respondent to this letter and answer any questions. If the respondent has no knowledge of the lead letter, the interviewer will provide another copy, explain that one was previously sent, and then answer any questions. If no one is at home during the initial call at the SDU, the interviewer may leave a Sorry I Missed You card (Attachment E) informing the resident(s) that the interviewer plans to make another callback at a later date/time. Callbacks will be made as soon as possible. Interviewers will attempt to make at least four callbacks (in addition to the initial call) to each SDU in order to complete the screening process and obtain an interview.

If the interviewer is unable to contact anyone at the SDU after repeated attempts, the interviewer's Field Supervisor may send an Unable to Contact (UTC) letter. The UTC letter will re-iterate information contained in the lead letter and presents a plea for the respondent to participate in the study (See Attachment Q for all UTC letters). If after sending that letter an interviewer is still unable to contact anyone at an SDU, another informational letter (See Attachment R) may be sent to the SDU requesting that the resident(s) call the Field Supervisor as soon as possible to set up an appointment for the interviewer to visit the

resident(s).

As necessary and appropriate, the interviewer may make use of the Appointment Card (Attachment F) for scheduled return visits with the respondent. When in-person contact is made with an adult member of the SDU and introductory procedures are completed, the interviewer will present a Study Description (Attachment G) and answer questions if required. Assuming respondent cooperation, a screening of the SDU then will be initiated through administration of the Housing Unit Screening questions for housing units, or the Group Quarters Unit Screening questions for group quarters units. The screening questions will be administered via a hand-held, pen-based computer, which also performs the subsequent sample-selection routines. A paper representation of the housing unit and group quarters unit screening process is shown in Attachment H.

If a potential respondent refuses to be screened, the interviewer will be trained to accept the refusal in a positive manner, thereby avoiding the possibility of creating an adversarial relationship and precluding future opportunities for conversion. A refusal letter may then be sent by the Field Supervisor. The refusal letter sent will be tailored to the specific concerns expressed by the potential respondent and ask him/her to reconsider participation (See Attachment S for all refusal letters). An inperson conversion will then be attempted either by supervisory field staff or specially selected interviewers with successful conversion experience. If the respondent proceeds with the screening process, the interviewer will answer any questions that the screening respondent may have concerning the study. A Question & Answer Brochure (Attachment I) that provides answers to commonly asked questions also will be given to the respondent at this time, or just prior to the start of the interview. In addition, interviewers will be supplied with copies of the NSDUH Highlights (Attachment I) and the NSDUH Newspaper Articles (Attachment K) which can be left with the respondent. Following this introductory exchange, the screening will continue until completion.

Once the rostering of all dwelling unit members 12 or older is complete, and assuming the within dwelling unit sampling process selects one or two members to participate in the study by completing the interview, the following procedures will be implemented for QFT interviews:

If the selected individual is 18 or older and currently available, the interviewer will immediately begin to administer the questionnaire in a private setting within the dwelling unit after obtaining informed consent. If the selected individual is 12 to 17 years of age, parental consent will be obtained from the selected individual's parent or legal guardian, using the Introduction and Informed Consent for Sample Members Age 12-17 Years Old found in the Showcard Booklet (Attachment L); the minor is then asked to participate. Once consent is obtained from the parent and

child, the interviewer will begin the interview process.

For all identified/selected eligible potential respondents, the interviewer will administer the interview in a prescribed and uniform manner. The sensitive portions of the interview will be completed via ACASI; that is, the respondent will listen privately to the questions through an audio headset and/or read them on the computer screen, and will enter his/her own responses directly into the computer. This method maximizes respondent privacy and confidentiality.

In order to facilitate the respondent's recollection of prescription type drugs and their proper names, a set of electronic pill images will be provided to the respondent for these questions on the laptop. Showcards are included in the Showcard Booklet (Attachment L) and allow the respondent to refer to information necessary for accurate responses. Each respondent will enter his/her own answers directly into the computer during the ACASI portion of the interview.

After the interview is completed and before the verification procedures are begun, each respondent will be given a \$30.00 incentive payment and a signed Interview Payment Receipt (Attachment O) from the interviewer.

For verification purposes, interview respondents will be asked to complete a Quality Control Form (Attachment C) that requests their address and telephone number for possible follow-up to ensure that the interviewer did his/her job appropriately. QFT respondents will be informed that completing the Quality Control Form is voluntary. This form will be completed and placed in an envelope by the respondent and mailed to the NSDUH Contractor for processing.

Interviewers will be supplied with Certificates of Participation (Attachment P) to distribute to interested respondents, primarily adolescents, after the interview is completed. Respondents may attempt to use these certificates to earn school or community service credit hours. No guarantee of credit will be made by SAMHSA or the Contractor and the certificates clearly state this lack of guarantee.

A random sample of those who complete Quality Control Forms will receive a telephone call expressing appreciation for their participation in the QFT. Each respondent will also be asked to answer a few questions verifying that the interview took place, that proper procedures were followed, and that the amount of time required to administer the interview was within expected parameters. In previous NSDUH surveys, less than 1 percent of the verification sample refused to fill out Quality Control Forms. As in the past, the respondents will be given the opportunity to decline to complete the form.

All interview data are transmitted to the Contractor's offices on a daily basis.

Questionnaire

The version of the questionnaire to be fielded in the 2012 QFT is a computerized (CAPI/ACASI) instrument that will include much of the same content and structure as the computerized instrument fielded in the 2012 NSDUH. The new content and structural changes for the QFT questionnaire mentioned in section A.1 represent the major differences between this revised instrument and the current NSDUH instrument. Otherwise the QFT questionnaire will follow similar design principles as the 2012 NSDUH instrument.

The QFT questionnaire and interview methods will be designed to retain respondent interest, ensure confidentiality, and maximize the validity of response. The questionnaire will be administered in such a way that interviewers will not know respondents' answers to the sensitive questions, including those on illicit drug use. These questions will be self-administered (ACASI), that is, respondents listen to or read the questions and enter their responses directly into the computer. The respondent will listen in private through headphones, so even those who have difficulty seeing or reading will be able to complete the self-administered portion. The only topics that will be administered by the interviewer (i.e., the CAPI section) are an initial section on Demographics and a listing of the residents in the home.

The questionnaire will be divided into sections based on specific substances or other main topics. The same questions will be asked for each substance or substance class, ascertaining the respondent's history in terms of age of first use, most recent use, number of times used in lifetime, and frequency of use in past 30 days and past 12 months. These substance use histories allow estimation of the incidence, prevalence, and patterns of use for licit and illicit substances.

A key feature of the questionnaire is a core-supplement structure. Core questions that are critical for basic trend measurement of substance use incidence and prevalence rates remain in the survey every year and comprise the main part of the questionnaire. This will also be the case for the QFT questionnaire. The core is comprised of the initial demographic questions and the Tobacco through Inhalants modules. As noted in section A.1, the QFT questionnaire will include a new Methamphetamine module and new modules for Prescription Drugs (which include Pain Relievers, Tranquilizers, Stimulants, and Sedatives).

The proposed questionnaire content for 2012 QFT is shown in Attachment A. While the actual administration will be electronic, the document

shown is a paper representation of the content that is to be programmed for CAPI/ACASI.

3. <u>Methods to Maximize Response Rates</u>

With a \$30.00 incentive offered for the QFT interview, the Contractor expects to obtain an 89% unweighted screening response rate and a 79% unweighted interview response rate (IRR) among selected respondents. Combined, this represents an overall response rate (ORR) of approximately 70%.

A key feature of the QFT protocol designed to maximize response rates are the redesigned NSDUH Lead Letter and Question & Answer Brochure. CBHSQ and the NSDUH contractor revised the contact materials through review of contact materials used for other government-sponsored surveys, expert review, and feedback from 17 focus groups conducted in five metropolitan areas (OMB No. 0930-0290). The primary focus of redesigning the contact materials was to improve the materials in ways likely to generate positive reactions from members of sampled households and, therefore, maximize participation.

Response rates for the QFT will be tracked on a daily basis. Interviewers will transmit their work each evening and a web-based case management system (CMS) will be used by project management to monitor their area of responsibility. The system will allow managers to identify problems as early as possible and take corrective action. The CMS also has a data quality component that collects information from the interviewers and data processing staff and produces reports for management. Some of the items available in these data quality reports are verification information, time discrepancies, interview length problems, missing data, and form errors.

Procedures to maximize response rates for the QFT will be based on previous studies and recent experience with the NSDUH annual data collection. Each quarter, NSDUH response rate patterns are analyzed by state. States with significant changes are closely scrutinized to uncover possible reasons for the changes. Action plans are put into place for states with significant declines, and any special techniques, such as a particular greeting or use of certain survey materials, used by states with increases are noted. If the technique is generalizable, it may be given to the interviewers as a helpful tip or worked into a future training. Response and nonresponse patterns are also tracked by various demographics on an annual basis in the NSDUH Data Collection Final report. The report provides detailed information about noncontacts vs. refusals, including reasons for refusals. This information is reviewed annually for changes in trends. All of this information will inform procedures for ensuring response rate goals for the QFT data collection

will be attained.

4. Tests of Procedures

The 2012 QFT activities to be conducted under this approval are in themselves tests of NSDUH procedures.

5. Statistical Consultants

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ATTACHMENTS

Attachment A - Federal-Wide Assurance

Attachment B - CAI Questionnaire Content

Attachment C - Quality Control Form

Attachment D - NSDUH Lead Letter

Attachment E - Contact Cards

Attachment F - Introduction and Informed Consent

Attachment G - Study Description

Attachment H - Housing Unit and Group Quarters Unit Screening

Questions

Attachment I - Question & Answer Brochure

Attachment J - NSDUH Highlights and Newspaper Articles

Attachment K - Showcard Booklet

Attachment L - Sample Design

Attachment M - Interview Payment Receipt

Attachment N - Certificate of Participation

Attachment O - Unable to Contact Letters

Attachment P - Refusal Letters

Attachment Q - Telephone Verification Scripts

Attachment R - Confidentiality Agreement

Attachment S - Response to Federal Register Comment

REFERENCES

Morton, K. B., Hirsch, E. L., and Martin, P. C. (2011). 2012 National Survey on Drug Use and Health: Sample Design Plan. Research Triangle Park, NC: RTI International.