

2011 NATIONAL SURVEY ON DRUG USE AND HEALTH MENTAL HEALTH SURVEILLANCE STUDY DATA COLLECTION

Prepared for the 2011 Methodological Resource Book

Contract No. HHSS283200800004C

RTI Project No. 0211838.212.006

Authors:

Ryan Gordon
Becky Granger
Rhonda Karg
Dan Liao
Bonnie Shook-Sa

Project Director:

Thomas G. Virag

Prepared for:

Substance Abuse and Mental Health Services Administration
Rockville, Maryland 20857

Prepared by:

RTI International
Research Triangle Park, North Carolina 27709

January 2013

DISCLAIMER

SAMHSA provides links to other Internet sites as a service to its users and is not responsible for the availability or content of these external sites. SAMHSA, its employees, and contractors do not endorse, warrant, or guarantee the products, services, or information described or offered at these other Internet sites. Any reference to a commercial product, process, or service is not an endorsement or recommendation by SAMHSA, its employees, or contractors. For documents available from this server, the U.S. Government does not warrant or assume any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed.

2011 NATIONAL SURVEY ON DRUG USE AND HEALTH MENTAL HEALTH SURVEILLANCE STUDY DATA COLLECTION

Prepared for the 2011 Methodological Resource Book

Contract No. HHSS283200800004C

RTI Project No. 0211838.212.006

Authors:

Ryan Gordon
Becky Granger
Rhonda Karg
Dan Liao
Bonnie Shook-Sa

Project Director:

Thomas G. Virag

Prepared for:

Substance Abuse and Mental Health Services Administration
Rockville, Maryland 20857

Prepared by:

RTI International
Research Triangle Park, North Carolina 27709

January 2013

Table of Contents

Chapter	Page
1. Introduction.....	1
2. Response Rates	5
3. Number of Call Attempts.....	7
4. Distressed Respondents	9
5. Short Blessed Scale.....	11
6. References.....	13
 Appendix	
A Distressed Respondent Protocol	15
B Short Blessed Scale.....	25

List of Tables

Table	Page
1. 2011 Mental Health Surveillance Study, Quarters 1 through 4 Summary	5
2. Number of Call Attempts Required to Complete MHSS Interviews in 2011.....	7
3. Number of Call Attempts Made for MHSS Incompletes in 2011	8
4. Distressed Respondent Protocol (DRP) Cases: 2011 MHSS.....	9
5. DRP IRB Violation Cases: 2011 MHSS.....	10
6. Demographic Characteristics of Respondents Failing the Short Blessed Scale (SBS) by Quarter: 2011 MHSS.....	11

1. Introduction

The overarching goal of the Mental Health Surveillance Study (MHSS) of the National Survey on Drug Use and Health (NSDUH) is to provide accurate estimates of the prevalence of serious mental illness (SMI) among adults aged 18 or older at the national and State levels. Public Law No. 102-321, the Alcohol, Drug Abuse, and Mental Health Administration Reorganization Act of 1992, established a block grant for U.S. States to fund community mental health services for adults with SMI. The law required States to include prevalence estimates in their annual applications for block grant funds. This legislation also required the Substance Abuse and Mental Health Services Administration (SAMHSA) to develop an operational definition of SMI and to produce national and State estimates. The MHSS was conducted to establish a method to generate estimates of SMI. However, the MHSS data have the potential to be used for a variety of important analyses beyond this primary purpose. Methods for estimating other categories of mental illness (e.g., "mild," "moderate," or "any" mental illness) have been developed. Furthermore, the MHSS data may be used to evaluate and validate the current model used to produce estimates of mental illness. The MHSS data also could be used to generate estimates of specific disorders.

On May 20, 1993, SAMHSA's Center for Mental Health Services (CMHS) published its definition of SMI in the *Federal Register*:

Pursuant to Section 1912(c) of the Public Health Services Act, as amended by Public Law 102-321, "adults with serious mental illness" are defined as the following:

- Persons aged 18 and over, who currently or at any time during the past year, have had diagnosable mental, behavioral, or emotional disorder of sufficient duration to meet diagnostic criteria specified within DSM-III-R [sic] that has resulted in functional impairment, which substantially interferes with or limits one or more major life activities.
- These disorders include any mental disorders (including those of biological etiology) listed in DSM-III-R or their ICD-9-CM equivalent (and subsequent revisions), with the exception of DSM-III-R "V" codes, substance use disorders, and developmental disorders, which are excluded unless they co-occur with other diagnosable serious mental illness.
- All of these disorders have episodic, recurrent, or persistent features; however, they vary in terms of severity or disabling effects. Functional impairment is defined as difficulties that substantially interfere with or limit role functioning in one or more major life activities, including basic daily living skills (e.g., eating, bathing, dressing); instrumental living skills (e.g., maintaining a household, managing money, getting around the community, taking prescribed medication); and functioning in social, family, and vocational/educational contexts.
- Adults who would have met functional impairment criteria during the referenced year without benefit of treatment or other support services are considered to have serious mental illnesses.

In December 2006, a technical advisory group (TAG) meeting of expert consultants was convened by the Office of Applied Studies (OAS, now the Center for Behavioral Health Statistics and Quality [CBHSQ]) and CMHS to solicit recommendations for mental health surveillance data collection strategies among the U.S. population. The panel recommended that NSDUH should be used to produce estimates of SMI among adults by including short scales in NSDUH's main interview that are strong predictors of SMI and that a "gold standard" clinical psychiatric interview be administered on a subset of respondents to provide the data for estimating a statistical model that predicts SMI. In response, SAMHSA's CBHSQ initiated the MHSS under its NSDUH contract with RTI International¹ to develop and implement a method to estimate SMI. At the time, NSDUH contained a six-item scale (Kessler-6 or K6) with five response options in each item that captured information on psychological distress in the past 12 months (Kessler et al., 2003). However, the K6 scale is not a diagnostic instrument and does not capture information on functional impairment, which is needed to determine whether a respondent can be categorized as having SMI under SAMHSA's definition. In consultation with the TAG, two candidate impairment scales were selected by SAMHSA to be added to the 2008 NSDUH. They were an abridged version of the World Health Organization Disability Assessment Schedule (WHODAS; Rehm et al., 1999) and the Sheehan Disability Scale (SDS; Leon, Olfson, Portera, Farber, & Sheehan, 1997). An initial MHSS step was to modify these scales for use in a general population survey, including changes to question wording and length, which resulted in an abbreviated eight-item version of the WHODAS (Novak, Colpe, Barker, & Gfroerer, 2010).

The MHSS clinical interviews were conducted first in 2008. A split-sample design was used in the 2008 NSDUH, for which all adult respondents received the K6, but a random half of the sample received the WHODAS and the other half received the SDS. In addition, a subsample of approximately 1,500 adult NSDUH participants completed a follow-up clinical interview to provide data for developing models to estimate mental illness using the NSDUH full-sample interview data. The randomization of the impairment scales was maintained within this clinical interview subsample, which is referred to in this report as the MHSS sample, so that about half of the MHSS sample participants were administered the WHODAS and half were administered the SDS (i.e., there were approximately 750 completed interviews from each half sample). Each participant in the 2008 MHSS was administered the Structured Clinical Interview for DSM-IV-TR Axis I Disorders, Research Version, Non-patient Edition (SCID-I/NP or SCID) (First, Spitzer, Gibbon, & Williams, 2002), which was adapted for this study by mental health clinicians for paper-and-pencil interviewing over the telephone approximately 2 to 4 weeks after the NSDUH interview. Functional impairment ratings were assigned by clinical interviewers using the Global Assessment of Functioning (GAF) scale.² A respondent was coded positive for SMI if he or she was determined to have any of the mental disorders (not including developmental or substance use disorders) assessed in the MHSS SCID *and* had a GAF score of

¹ RTI International is a trade name of Research Triangle Institute.

² The GAF is a numeric scale (0 through 100) used to subjectively rate the social, occupational, and psychological functioning of adults, and is presented and described in the DSM-IV-TR (see p. 32 of American Psychiatric Publishing, Inc., 2000; also see Endicott, Spitzer, Fleiss, & Cohen, 1976). Lower scores represent higher levels of functional impairment. Descriptions of impairment are provided at 10-point intervals (e.g., 1 to 10, 11 to 20, and so on up to 91 to 100). For example, a GAF score between 51 and 60 is described as having moderate symptoms of impairment, while a score higher than 60 represents several categories of impairment ranging from none to slight, and a score lower than 51 represents several categories ranging from serious to extreme.

50 or below. The model estimation analyses used gold-standard measures (i.e., the SCID/GAF combination as the indicator of SMI) in evaluating which combination of K6 and impairment scale worked best in the scoring algorithm used to predict SMI status.

Based on an analysis of the 2008 MHSS data, it was determined that the WHODAS would be administered as the sole impairment scale in subsequent NSDUHs (starting in 2009) and that it would be used in combination with the K6 scale to predict SMI. For more details, refer to the 2008 MHSS analysis report by Aldworth et al. (2009).

In 2009, 2010, and 2011, the MHSS was conducted similarly to the 2008 MHSS, except for two major differences: (1) only the WHODAS impairment scale was administered, and (2) the sample size was approximately 500 in 2009 and 2010, and the sample size was approximately 1,500 in 2011.

This report describes several aspects of data collection for the 2011 MHSS, including response rates, number of call attempts, distressed respondents, and short blessed scale results.

2. Response Rates

The 2011 MHSS sample was designed to yield 1,500 clinical follow-up interviews distributed across four calendar quarters with approximately 375 follow-up interviews per quarter. The MHSS respondents were selected and recruited for the follow-up interview at the end of the NSDUH interview. The follow-up interviews were completed within 2 to 4 weeks following the completion of the initial interview. Starting on November 29, 2011, the probability of selection of the NSDUH interview respondents for the clinical follow-up survey was set to zero so that cases would not be sampled without adequate time for completion (by December 20, 2011). Respondents who received a zero probability of selection but would have been selected based on their K6 score, WHODAS score, and age group are referred to as the zero probability cases.

In 2011, a total of 2,277 NSDUH respondents were sampled, 41 of whom were zero probability cases and treated as nonrespondents. A total of 1,881 selected respondents agreed to participate for an agreement rate of 82.6 percent³. Excluding the zero probability cases, 2,236 respondents were selected, and 1,881 (84.1 percent) agreed to participate. A total of 1,495 (79.5 percent) of those respondents who agreed to participate completed a usable clinical interview. In addition to the 1,495 usable interviews, 19 completed interviews were removed from the dataset because the corresponding main study case was invalid for 9 interviews and quality issues were identified with 10 interviews during the post-interview editing process. These 19 cases were treated as nonrespondents. The overall completion rate was 65.7 percent and does not incorporate the NSDUH main study nonresponse rates. A summary of the 2011 MHSS respondents by quarter is included in [Table 1](#).

Table 1. 2011 Mental Health Surveillance Study, Quarters 1 through 4 Summary

Design Parameter	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Total
Interview Respondents Aged 18 or Older	10,840	12,481	12,170	11,108	46,599
Eligible for MHSS ¹	10,392	11,974	11,665	10,709	44,740
<i>Eligibility Rate</i>	<i>0.9587</i>	<i>0.9594</i>	<i>0.9585</i>	<i>0.9641</i>	<i>0.9601</i>
Selected for Telephone Clinical Follow-up ²	543	672	531	531	2,277
Zero Probability Cases ³	15	0	0	26	41
Agreed to Clinical Follow-up	450	561	449	421	1,881
<i>Percent Agreeing to Clinical Follow-up (including zero probability cases)</i>	<i>0.8287</i>	<i>0.8348</i>	<i>0.8456</i>	<i>0.7928</i>	<i>0.8261</i>
<i>Percent Agreeing to Clinical Follow-up (excluding zero probability cases)</i>	<i>0.8523</i>	<i>0.8348</i>	<i>0.8456</i>	<i>0.8337</i>	<i>0.8412</i>
Completed Clinical Interviews	363	436	359	337	1,495
<i>Clinical Interview Completion Rate</i>	<i>0.8067</i>	<i>0.7772</i>	<i>0.7996</i>	<i>0.8005</i>	<i>0.7948</i>
<i>Overall Clinical Follow-Up Response Rate⁴</i>	<i>0.6685</i>	<i>0.6488</i>	<i>0.6761</i>	<i>0.6347</i>	<i>0.6566</i>

¹ Respondents 18 or older who completed their main study interview in English are eligible to be selected for the MHSS.

² Includes cases assigned a zero probability of selection that would have been selected based on their K6 and WHODAS scores and age groups.

³ At the beginning of Quarter 1, 15 interview respondents that should have been selected for the MHSS were inadvertently assigned a zero probability of selection.

⁴ Includes zero probability cases and treats them as non-respondents.

³ NSDUH respondents who agreed to clinical follow-up at the time of their main study interview are classified as agreeing to participate.

3. Number of Call Attempts

After a respondent was selected at the end of the NSDUH interview to complete a clinical interview, their case was transmitted back to RTI and assigned to a clinical interviewer (CI). The CIs made the first attempt to contact respondents within 24 hours of receiving the assigned case to schedule an appointment for the interview. If a respondent was not reached on the first call attempt, subsequent calls were made during the respondent’s preferred time frame. After CIs made several attempts during the time period specified by the respondent without success, calls were made at other times outside of the respondents preferred time frame in an attempt to reach the respondent. The data collection managers completed reviews of the record of calls to ensure that call attempts were being made at appropriate times with respondents and provided guidance on the best days and times to re-contact respondents.

Table 2 shows the number of call attempts made to complete the MHSS interviews in 2011. As shown in Table 2, over 25% of the clinical interviews were completed in 1 or 2 call attempts. Up to 6 call attempts were made to complete 75% of the clinical interviews. The CIs made 10 or more call attempts to complete 13% of the clinical interviews.

Table 3 shows the number of call attempts made for the MHSS cases classified as incomplete, i.e., were nonrespondents, in 2011. For the majority of these cases, the CIs were unable to make contact with the respondent. The CIs determined 66% of these cases to be nonrespondents after 20 contacts and almost 88% of interviews were classified as nonrespondents after 25 contacts.

Table 2. Number of Call Attempts Made to Complete MHSS Interviews in 2011

# of Call Attempts	Code 70 (Interview Complete, Audio Recorded)	Code 71 (Interview Complete, No Audio—Refusal)	Code 72 (Interview Complete, No Audio—Technical Problem)	Total Interviews	%	Cumulative %
1	61	3	2	66	4.36	4.36
2	319	13	3	335	22.13	26.49
3	269	12	7	288	19.02	45.51
4	212	6	2	220	14.53	60.04
5	130	5	1	136	8.98	69.02
6	77	4	4	85	5.61	74.64
7	80	1	3	84	5.55	80.13
8	45	4	0	49	3.24	83.42
9	47	1	3	51	3.37	86.79
10-15	133	1	0	134	8.85	95.64
16-20	47	1	0	48	3.17	98.81
21-25	9	2	0	11	0.73	99.54
26-30	5	2	0	7	0.46	100.00
31+	0	0	0	0	0.00	100.00
Totals	1,434	55	25	1,514	100.00	

Table 3. Number of Call Attempts Made for MHSS Incompletes in 2011

# of Call Attempts	Code 73 (Breakoff, Partial Interview)	Code 74 (Unable to Contact)	Code 75 (Phone Number Problem)	Code 76 (Refusal)	Code 77 (Other)	Total Incomplet es	%	Cumulative %
1-5	10	0	7	4	6	27	7.09	7.09
6-10	12	10	12	4	3	41	10.76	17.85
11-15	14	56	10	0	2	82	21.52	39.37
16-20	14	82	5	0	1	102	26.77	66.14
21-25	8	71	1	0	2	82	21.52	87.66
26-30	2	35	0	0	0	37	9.71	97.38
31+	1	8	1	0	0	10	2.62	100.00
Total	61	262	36	8	14	381	100.00	

4. Distressed Respondents

CI's were trained to fully assess signs and symptoms of emotional distress by the respondent during the administration of the SCID over the telephone. Respondents' distress can include reports of recent suicidal or homicidal thoughts, plans, or actions, or showing strong feelings of sadness, irritability, or agitation during SCID administration. As shown in Appendix A, the MHSS has a detailed Distressed Respondent Protocol (DRP) to handle five different situations according to risk of harm to self or others. As summarized in Table 4, DRP Scenario #1 was for respondents reporting recent passive suicidal ideation, which included vague thoughts of suicide in the absence of a plan (risk of self-harm, no imminent danger). DRP Scenario #2 was for respondents reporting recent active suicidal ideation, which included specific plans for suicide and acting on those thoughts (risk of self-harm, possible/definite imminent danger). DRP Scenario #3 was for respondents reporting recent passive homicidal ideation, which included vague thoughts of homicide in the absence of a plan (risk of harm to others, no imminent danger). DRP Scenario #4 was for respondents who reported recent active homicidal ideation, which included specific plans for homicide and acting on those thoughts (risk of harm to others, possible/definite imminent danger). Lastly, DRP Scenario #5 was for respondents who showed signs of emotional distress during the SCID, such as sadness, irritability, or agitation, in the absence of suicidal or homicidal thoughts (no risk of harm; respondent is agitated or upset).

Table 4. Distressed Respondent Protocol (DRP) Cases: 2011 MHSS

DRP Scenario	Description	Risk of Harm	Imminent Danger	# of Cases
Scenario #1	Passive suicidal ideation	Self	No	50
Scenario #2	Active suicidal ideation	Self	Yes/Maybe	2
Scenario #3	Passive homicidal ideation	Other(s)	No	0
Scenario #4	Active homicidal ideation	Other(s)	Yes/Maybe	0
Scenario #5	Respondent agitated or upset	None	No	10

As described in Table 4, 62 respondents were classified as distressed during the 2011 MHSS data collection. Among these cases, 50 required DRP Scenario #1 (passive suicidal ideation), two required Scenario #2 (active suicidal ideation), and 10 required Scenario #5 (respondent upset or agitated). There were no cases requiring Scenario #3 (passive homicidal ideation) or Scenario #4 (active homicidal ideation).

CI's adherence to the Institutional Review Board (IRB)-approved protocol for handling distressed respondents was 88.7 percent (n=55), with 11.3 percent (n=7) of the cases involving protocol violations. As summarized in Table 5, two cases of protocol violations were Scenario #1 (passive suicidal ideation), two cases were Scenario #2 (active suicidal ideation), and three cases were Scenario #5 (respondent upset or agitated). Four of the protocol violations were due to unforeseen circumstances, such as lost phone connection (n=3) or trouble connecting respondent with Lifeline services (n=1). The remaining three cases resulted from CI's who did not read the DRP script verbatim (n=2) or recontacted the respondent after terminating the interview (n=1).

To ensure that optimal mental health services would be available, modifications were made to the DRP in 2011. First, rather than having the CIs dial 9-1-1 (which routed the call to emergency services in the CI's area only), we began using a national emergency number database so that CIs may directly call emergency care providers nearest to the respondent. Second, rather than connecting respondents with Lifeline using three-way calling (which routed the call to Lifeline services in the CI's area only), we began suggesting that respondents call Lifeline's national hotline directly. These modifications to the DRP not only reduced the likelihood of technical problems, but increased the likelihood of respondents receiving local emergency and/or mental health services.

Table 5. DRP IRB Violation Cases: 2011 MHSS

DRP Scenario	Description	# Violations	# Cases	Percentage of Cases with Violations
Scenario #1	Passive suicidal ideation	2	50	4
Scenario #2	Active suicidal ideation	2	2	100
Scenario #3	Passive homicidal ideation	0	0	0
Scenario #4	Active homicidal ideation	0	0	0
Scenario #5	Respondent agitated or upset	3	10	30

DRP = Distressed Respondent Protocol.

The clinical supervisor (CS) team reviewed all 62 cases of distressed respondents. Project management was notified of all 62 encounters with distressed respondents using electronic incident reports. The IRB and members of the project management team were notified whenever emergency services were contacted as part of Scenario #2 (active suicidal ideation; n=2) or Scenario #4 (active homicidal ideation; n=0), and/or whenever there were DRP violations (n=7, including the two cases involving Scenario #2). In all 7 cases, the IRB was satisfied with the actions taken to protect the safety of the respondents. CIs who violated the DRP received retraining by the CSs.

5. Short Blessed Scale

A protocol was developed for encounters with respondents suspected of having problems with basic cognitive functions (such as attention, language production, orientation, language comprehension, and memory) which could lead to invalid data. As part of this Cognitive Impairment Protocol, the CIs were instructed to immediately breakoff the contact if the respondent showed signs of cognitive impairment during the introduction and informed consent process; however, if they had started the SCID, the CIs were to stop the interview and administer the Short Blessed Scale (SBS) to respondents. The SBS (Appendix B) is a six-item scale designed to assess cognitive ability according to orientation, memory, and concentration. These questions are provided to CIs in the Cognitive Impairment Protocol Section at the back of the SCID Booklet. SBS scores indicate the number of errors, ranging from 0 to 28. Errors on the SBS can be indicative of temporary mental impairment (e.g., alcohol intoxication, medication side effects) or more long-term cognitive dysfunction (e.g., dementia, head injury).

For 10 or less errors on the SBS, CIs were instructed to resume the interview and to note the situation in the interviewer debriefing questions at the end of the SCID. For more than 10 errors, CIs were instructed to breakoff the interview and to document the situation when they entered the status code. CIs were instructed to attempt to complete the interview at another time if the respondent’s cognitive impairment was deemed temporary. If completing the SCID at another time, CIs were instructed to review the portions of the SCID completed earlier, to verify accuracy, and to include the reason for the breakoff in the debriefing questions.

As reported in [Table 6](#), nine respondents exceeded the SBS cut-off score of 10 in the 2011 MHSS. Their scores ranged from 11 to 25. More than three-quarters of those who exceeded the SBS cut-off score were females (n=7). The average age of respondents who exceeded the SBS cut-off score was 35.44, with nearly half being between the ages of 20 and 29 (n=4). Long-term cognitive dysfunction was suspected in two-thirds of the cases (n=6), to include developmental disabilities (n=4) and self-reported cognitive disorders (n=2). Short-term cognitive dysfunction may have been associated with the remaining third of the cases (n=3) in which substance use (n=2) and fatigue (n=1) were suspected; however, none of these interviews were completed at another time. Data from these nine respondents were considered invalid and not included in the final 2011 MHSS dataset or response rates.

Table 6. Demographic Characteristics of Respondents Who Exceeded the Short Blessed Scale (SBS) Cut-off Score, by Quarter: 2011 MHSS

Quarter	Respondent’s Gender	Respondent’s Age	SBS Score
Q1	Male	26	14
Q2	Female	47	16
Q2	Female	29	25
Q3	Female	30	14
Q3	Male	23	12
Q4	Female	41	14
Q4	Female	36	14
Q4	Female	26	11
Q4	Female	61	21

6. References

- Aldworth, J., Barnett-Walker, K., Chromy, J., Karg, R., Morton, K., Novak, S., & Spagnola, K. (2009, June). *Measuring serious mental illness with the NSDUH: Results of 2008 12-month analysis* (prepared for the Substance Abuse and Mental Health Services Administration under Contract No. 283-2004-00022, Mental Health Surveillance Survey Deliverable No. 5, RTI/0209009.423.006.008). Research Triangle Park, NC: RTI International.
- American Psychiatric Publishing, Inc. (2000). *Diagnostic and statistical manual of mental disorders, 4th ed., text revision* (DSM-IV-TR; doi: 10.1176/appi.books.9780890423349). Retrieved from <http://www.psychiatryonline.com/resourceTOC.aspx?resourceID=1>
- Endicott, J., Spitzer, R. L., Fleiss, J. L., & Cohen, J. (1976). The Global Assessment Scale: A procedure for measuring overall severity of psychiatric disturbance. *Archives of General Psychiatry, 33*, 766-771.
- First, M. B., Spitzer R. L., Gibbon M., & Williams J. B. W. (2002) *Structured Clinical Interview for DSM-IV-TR Axis I Disorders, Research Version, Non-patient Edition. (SCID-I/NP)*. New York, NY: New York State Psychiatric Institute, Biometrics Research Department.
- Kessler, R. C., Barker, P. R., Colpe, L. J., Epstein, J. F., Gfroerer, J. C., Hiripi, E. Howes, M. J, Normand, S-L. T., Manderscheid, R. W., Walters, E. E., & Zaslavsky, A. M. (2003). Screening for serious mental illness in the general population. *Archives of General Psychiatry, 60*(2), 184–189.
- Leon, A. C., Olfson, M., Portera, L., Farber, L., & Sheehan, D. V. (1997). Assessing psychiatric impairment in primary care with the Sheehan Disability Scale. *International Journal of Psychiatry in Medicine, 27*(2), 93-105.
- Novak, S. P., Colpe, L. J., Barker, P. R., & Gfroerer, J. C. (2010). Development of a brief mental health impairment scale using a nationally representative sample in the USA. *International Journal of Methods in Psychiatric Research, 19*(Suppl. 1), 49-60. doi:10.1002/mpr.313
- Rehm, J., Üstün, T. B., Saxena, S., Nelson, C. B., Chatterji, S., Ivis, F., & Adlaf, E. (1999). On the development and psychometric testing of the WHO screening instrument to assess disablement in the general population. *International Journal of Methods in Psychiatric Research, 8*(2), 110-123. doi:10.1002/mpr.61
- Substance Abuse and Mental Health Services Administration, Center for Mental Health Services. (1993, May 20). Final notice [Final definitions for: (1) Children with a serious emotional disturbance, and (2) adults with a serious mental illness]. *Federal Register, 58*(96), 29422-29425.

Appendix A: Distressed Respondent Protocol

Specific Guidelines

If respondents report any of the issues listed below during any interactions with the recruiter or clinical interviewer, including before, during, or after a telephone screening or interview, the staff member will immediately refer to the scenario chart below and follow the instructions provided. Details of all incidents will be documented on the case management system and reported to project management staff immediately.

- Has had **any suicidal thoughts in the past two weeks (p. A.3)**, including
 - passive suicidal thoughts (i.e., thoughts or wishes about his/her death **in the absence of** thoughts about specific ways s/he could die or attempt suicide, plans for how s/he could die or attempt suicide, or intention of dying or attempting suicide) **[SCENARIO 1]** or
 - active suicidal thoughts (i.e., thoughts or wishes about his/her death **combined with** thoughts about specific ways s/he could die or attempt suicide, plans for how s/he could die or attempt suicide, the intention of dying or attempting suicide, the means to carry out that plan, and will not promise you that s/he will not hurt him/herself) **[SCENARIO 2]**

- Has had **any homicidal thoughts in the past two weeks**, including
 - passive homicidal thoughts (i.e., thoughts or wishes about seriously harming someone else **in the absence of** thoughts about specific ways in which s/he could seriously harm another person, plans for how s/he could seriously harm another person, intentions of seriously harming another person) **[SCENARIO 3]** or
 - active homicidal thoughts (i.e., thoughts or wishes about seriously harming someone else **combined with** thoughts about specific ways s/he could seriously harm another person, plans for how s/he could seriously harm another person, the intention of seriously harming another person, and the means to carry out that plan) **[SCENARIO 4]**

Scenario Chart		
Scenario Number	Individual at Risk of Harm	Imminent Danger?
1	Self	No
2	Self	Possible / Yes
3	Other(s)	No
4	Other(s)	Possible / Yes
5	No risk of harm; respondent is agitated or upset	No

Scenario Number	Individual at Risk of Harm	Imminent Danger?
1	Self	No
STEPS		
<p>A. COMPLETE SCREENING/INTERVIEW AND THEN READ TO R: When you agreed to participate in this interview, I promised that I would not tell anyone what you have told me unless it was necessary to protect you or other people. You told me earlier that you have recently had thoughts or wishes about your death or dying.</p> <p>B. Do you have a doctor, counselor, or someone you can talk to about how you are feeling now?</p> <p>IF YES: I strongly suggest that you contact this person immediately so you can talk to him or her about how you have been feeling, especially about the thoughts you've been having about death and dying. Would you be willing to do that?</p> <p style="padding-left: 40px;">IF YES: Okay. There is also a national Lifeline hotline you can call where counselors are available to talk at any time of the day or night. Their toll-free number is 1-800-273-8255. THANK R FOR THEIR PARTICIPATION IN THE STUDY AND END CALL.</p> <p>IF NO: I strongly suggest that you contact the national Lifeline hotline at 1-800-273-8255. Lifeline has counselors available 24-hours a day to talk to you about how you are feeling. They may also help you locate (additional) mental health services in your area. If you feel that this is an emergency now or later, you should go to a hospital emergency room right away. If you are not able to get to an emergency room immediately, you should call 911 for assistance. THANK R FOR THEIR PARTICIPATION IN THE STUDY AND END CALL.</p> <p>C. WHEN CALL IS COMPLETED, CALL DR. BLAZEI OR DR. PANZER IF YOU HAVE QUESTIONS OR WOULD LIKE TO DEBRIEF. FILL OUT ONLINE INCIDENT REPORT.</p>		

Scenario Number	Individual at Risk of Harm	Imminent Danger?
2	Self	Possible / Yes

STEPS

A. END SCREENING/INTERVIEW AND THEN READ TO R: When you agreed to participate in this interview, I promised that I would not tell anyone what you have told me unless it was necessary to protect you or other people. You told me earlier that you are thinking about harming yourself. Can you promise me that you will not harm yourself today?

IF NO: GO TO STEP B.

IF YES: Do you have a doctor, counselor, or other professional you can talk to about how you are feeling?

IF YES: I strongly suggest that you contact this person so you can talk to him or her about how you have been feeling, especially about the thoughts you've been having about death and dying. Would you be willing to do that?

IF YES: Okay. There is also a national Lifeline hotline you can call where counselors are available to talk at any time of the day or night. Their toll-free number is 1-800-273-8255. Lifeline has counselors available 24-hours a day to talk to you about how you are feeling. They may also help you locate (additional) mental health services in your area. I strongly suggest you contact counselors at Lifeline. If you feel that this is an emergency now or later, you should go to a hospital emergency room right away. If you are not able to get to an emergency room immediately, you should call 911 for assistance. **THANK R FOR THEIR PARTICIPATION IN THE STUDY AND END CALL.**

IF NO: I strongly suggest that you contact the national Lifeline hotline at 1-800-273-8255. Lifeline has counselors available 24-hours a day to talk to you about how you are feeling. They may also help you locate (additional) mental health services in your area. If you feel that this is an emergency now or later, you should go to a hospital emergency room right away. If you are not able to get to an emergency room immediately, you should call 911 for assistance. **THANK R FOR THEIR PARTICIPATION IN THE STUDY AND END CALL.**

B. I strongly suggest that we contact emergency care services in your area, such as a crisis center or nearby hospital. I am going to look-up that number. Can you remain on the line while I do that? It may take a few minutes.

IF NO: Okay, if I don't connect you with the local emergency care provider, then I will need to call the provider myself to see if they can send someone to you who can provide the care you need in order to keep you safe. I'll call you back to let you know what I find out.

C. FIND THE NEAREST EMERGENCY PSYCHIATRIC SERVICES USING THE SAMHSA WEBSITE (<http://mentalhealth.samhsa.gov/databases/>). SEARCH FOR INPATIENT MH TREATMENT USING THE R'S CURRENT ZIP CODE.

D. CALL THEIR LOCAL INPATIENT PSYCHIATRIC CARE FACILITY OR CRISIS CENTER

AND READ THIS STATEMENT: I work for RTI International, a research company in North Carolina, and we are conducting a research study. During an interview with a respondent, the respondent told me that (he/she) is thinking about killing or harming (himself/herself) and I am concerned about (his/her) safety. I can give you additional information about the research study, if you would like. I can also provide you with the respondent's contact information.

IF ASKED FOR NSDUH OVERVIEW: This study, part of the National Survey on Drug Use and Health sponsored by the United States Public Health Service, is designed to test procedures for use in future NSDUH surveys. Questions ask about various mental health issues such as depression, anxiety, post traumatic stress disorder, and substance dependence. Please note that this information was obtained through the respondent's participation in a research study. We went through appropriate informed consent procedures, during which I told the respondent that if (he/she) told me something that caused me to be concerned about (his/her) well-being, I would report that to someone else who could help or intervene. Given the context in which the information was obtained, however, we cannot guarantee that the participant understood the questions nor that (he/she) provided truthful responses. Do you have any questions about the study?

ANSWER QUESTIONS.

E. GIVE R FIRST NAME, TELEPHONE NUMBER, AND ADDRESS (IF KNOWN) TO LOCAL EMERGENCY CARE REPRESENTATIVE. IF THEY ARE UNABLE TO PROVIDE SERVICES THAT ENSURE THE R'S SAFETY, SEARCH FOR THE R'S LOCAL EMERGENCY NUMBER USING THE NATIONAL 911 DATABASE.

F. IF R NOT ON THE OTHER LINE, END CALL WITH THE EMERGENCY CARE PROVIDER OR LOCAL 911 DISPATCHER AND ATTEMPT TO CONTACT R AGAIN WITH AN UPDATE.

IF R ON THE OTHER LINE, CONNECT R TO EMERGENCY CARE REPRESENTATIVE OR LOCAL 911 DISPATCHER AND STAY ON THE LINE; IF YOU HANG-UP, THEIR CONNECTION WILL ALSO END.

G. YOU MAY STAY ON THE LINE TO WAIT FOR THE RESCUE TEAM TO ARRIVE. IF SO, DO NOT CONTINUE THE INTERVIEW. KEEP THE DISCUSSION LIGHT AND AVOID EMOTIONAL TOPICS. DEMONSTRATE EMPATHIC LISTENING BUT REFRAIN FROM COUNSELING OR PRACTICING PSYCHOLOGY.

H. WHEN CALL IS COMPLETED, CALL DR. KARG TO DEBRIEF. IF SHE DOES NOT RETURN CALL WITHIN 15 MINUTES, CALL DR. BLAZEI OR DR. PANZER TO DEBRIEF. IF NEITHER ONE OF THEM IS AVAILABLE, CONTACT MS. GRANGER OR MR. CUNNINGHAM TO NOTIFY ONE OF THEM ABOUT THE INCIDENT. FILL OUT ONLINE INCIDENT REPORT.

Scenario Number	Individual at Risk of Harm	Imminent Danger?
3	Other(s)	No
STEPS		
<p>A. COMPLETE SCREENING/INTERVIEW AND THEN READ TO R: When you agreed to participate in this interview, I promised that I would not tell anyone what you have told me unless it was necessary to protect you or other people. You told me earlier that you have recently had thoughts or wishes about seriously harming someone else. Do you have a doctor, counselor, or someone you can talk to about how you are feeling now?</p> <p>IF YES: I strongly suggest that you contact this person immediately so you can talk to him or her about how you have been feeling, especially about the thoughts you've been having about seriously harming someone else. Would you be willing to do that?</p> <p>IF YES: Okay. There is also a national Lifeline hotline you can call where counselors are available to talk at any time of the day or night. Their toll-free number is 1-800-273-8255. THANK R FOR THEIR PARTICIPATION IN THE STUDY AND END CALL.</p> <p>IF NO: I strongly suggest that you contact the national Lifeline hotline at 1-800-273-8255. Lifeline has counselors available 24-hours a day to talk to you about how you are feeling. They may also help you locate (additional) mental health services in your area. If you feel that this is an emergency now or later, you should go to a hospital emergency room right away. If you are not able to get to an emergency room immediately, you should call 911 for assistance. THANK R FOR THEIR PARTICIPATION IN THE STUDY AND END CALL.</p> <p>B. WHEN CALL IS COMPLETED, CALL DR. PANZER OR DR. BLAZEI TO DEBRIEF. IF DIRECTED BY ONE OF THEM, FOLLOW SCENARIO 4 FOR POSSIBLE IMMINENT DANGER TO OTHERS. FILL OUT ONLINE INCIDENT REPORT.</p>		

Scenario Number	Individual at Risk of Harm	Imminent Danger?
4	Other(s)	Possible / Yes
STEPS		
<p>A. END SCREENING/INTERVIEW AND END CALL.</p> <p>B. SEARCH FOR THE R'S LOCAL EMERGENCY NUMBER USING THE NATIONAL 911 DATABASE.</p> <p>C. CALL THEIR LOCAL 911, AND READ THIS STATEMENT: I work for RTI International, a research company in North Carolina, and we are conducting a research study. During an interview with a respondent, the respondent told me that (he/she) is thinking about killing or harming another individual. I am concerned about this individual's safety. I can give you additional information about the research study, if you would like. I can also provide you with the respondent's contact information.</p> <p>IF ASKED FOR NSDUH OVERVIEW: This study, part of the National Survey on Drug Use and Health sponsored by the United States Public Health Service, is designed to test procedures for use in future NSDUH surveys. Questions ask about various mental health issues such as depression, anxiety, post traumatic stress disorder, and substance dependence. Please note that this information was obtained through the respondent's participation in a research study. We went through appropriate informed consent procedures, during which I told the respondent that if (he/she) told me something that caused me to be concerned about (him/her) harming someone else, I would report that to someone else who could help or intervene. Given the context in which the information was obtained, however, we cannot guarantee that the participant understood the questions nor that (he/she) provided truthful responses. Do you have any questions about the study?</p> <p>ANSWER QUESTIONS.</p> <p>D. GIVE R FIRST NAME, TELEPHONE NUMBER, ADDRESS (IF KNOWN), AND VICTIM'S IDENTIFYING INFORMATION TO LOCAL 911 DISPATCHER. END CALL.</p> <p>E. WHEN CALL IS COMPLETED, CALL DR. KARG TO DEBRIEF. IF SHE DOES NOT RETURN CALL WITHIN 15 MINUTES, CALL DR. PANZER OR DR. BLAZEI TO DEBRIEF. IF NEITHER ONE OF THEM IS AVAILABLE, CONTACT MS. GRANGER OR MR. CUNNINGHAM TO NOTIFY ONE OF THEM ABOUT THE INCIDENT. FILL OUT ONLINE INCIDENT REPORT.</p>		

Scenario Number	Individual at Risk of Harm	Imminent Danger?
5	No risk of harm; respondent is agitated or upset	No
STEPS		
<p>A. END SCREENING/INTERVIEW AND THEN READ TO R: I know these questions are very personal, and they seem to be upsetting you. Do you have a doctor or someone you can talk to about how you are feeling?</p> <p>IF YES: I suggest that you call that individual immediately so that she or he can help you talk about and work through how you are feeling. There is also a national Lifeline hotline you can call where counselors are available to talk at any time of the day or night. Their toll-free number is 1-800-273-8255. THANK R FOR THEIR PARTICIPATION IN THE STUDY AND END CALL.</p> <p>IF NO: I suggest that you contact the national Lifeline hotline at 1-800-273-8255. Lifeline is a 24-hour hotline that you could call to discuss this with a counselor. They may also help you locate (additional) mental health services in your area. If you feel that this is an emergency now or later, you should go to a hospital emergency room right away or call 911 for assistance. THANK R FOR THEIR PARTICIPATION IN THE STUDY AND END CALL.</p> <p>B. WHEN CALL IS COMPLETED, CALL DR. BLAZEI OR DR. PANZER IF YOU HAVE ANY QUESTIONS OR NEED TO DEBRIEF. FILL OUT ONLINE INCIDENT REPORT.</p>		

Appendix B: Short Blessed Scale

SHORT BLESSED SCALE EXAM

THE SHORT BLESSED SCALE IS TO BE COMPLETED AT ANY POINT DURING THE INTERVIEW IF THE RESPONDENT APPEARS TO BE COGNITIVELY IMPAIRED.

ERROR SCORES

- SB-1. What year is it now? _____
CIRCLE 4 FOR ANY ERROR..... 0 4
- SB-2. What month is it now? _____
CIRCLE 3 FOR ANY ERROR..... 0 3
- Please repeat this phrase after me: John Brown, 42 Market Street, Chicago.
- NO SCORE – FOR ITEM SB-6.
- SB-3. About what time is it? _____
CIRCLE 3 FOR ANY ERROR..... 0 3
- SB-4. Please count backwards from 20 to 1.
[20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1]
2 PER ERROR 0 2 4
- SB-5. Please say the months of the year in reverse order.
[DEC, NOV, OCT, SEP, AUG, JUL, JUN, MAY, APR, MAR, FEB, JAN]
2 PER ERROR 0 2 4
- SB-6. Please repeat the phrase I asked you to repeat before.
[JOHN BROWN / 42 MARKET STREET / CHICAGO]
2 PER ERROR 0 2 4 6 8 10

TOTAL NUMBER OF ERRORS IN SB-1 TO SB-6: _____

IF THE TOTAL NUMBER OF ERRORS IS GREATER THAN 10, TERMINATE THE INTERVIEW.

