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DIAGNOSTIC INTERVIEW FOR GENETIC STUDIES

TRAINING MANUAL

NATIONAL INSTITUTE OF MENTAL HEALTH
MOLECULAR GENETICS INITIATIVE

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CONTENTS

INTRODUCTION TO DIGS TRAINING MANUAL

ADAPTED FROM "INSTRUCTIONS FOR USE OF THE SCHEDULE FOR AFFECTIVE DISORDERS AND SCHIZOPHRENIA, REGULAR VERSION AND LIFE-TIME VERSION* (SADS AND SADS-L), by J. Endicott et al., June 1977

Boxed items reflected coding discussions of the Molecular Genetics of Schizophrenia research group 9-1-99 to 9-21-04.

PURPOSE

The purpose of the Diagnostic Interview for Genetic Studies (DIGS) is to record information regarding a subject's functioning and psychopathology with primary emphasis on information relevant to the study of the affective disorders and schizophrenia. The interview also covers a wide variety of symptoms associated with many other conditions such as alcoholism, drug abuse, and personality disorders. The organization of the interview and the item coverage are designed to elicit information necessary for making diagnoses based on multiple diagnostic criteria. The interview is suitable for use in studies of probands and their relatives. It allows for assessment of current and past episodes of illness. However, it includes only a partial examination of the mental status (e.g., Modified Mini-Mental Status Exam).

PERSONNEL AND TRAINING

The most suitable personnel for administering this instrument are individuals with experience in interviewing and making judgments about manifest psychopathology. Although most of the items are defined to ensure uniform criteria for all raters, the types of judgments called for require more knowledge of psychiatric concepts than do many of the more commonly used observational scales.

The DIGS and the relevant diagnostic criteria[1] should be studied in detail before use so that the interviewer understands the proper procedures for using the instrument and the criteria for judging the items, and knows the information needed for critical diagnostic distinctions. If this is not done, the initial interviews with subjects will be extremely awkward and unnecessarily long because the interviewer will not know when to skip over items or sections, when to interrupt the subject because he already has sufficient information, or whether the subject is providing information that is irrelevant with respect to making the required judgments.

[1] DSM-III-R, DSM-III, RDC, modified RDC (Gershon), Feighner, the symptom list for the OPCRIT 3.0 program, ICD-10 criteria, and DSM-IV proposed guidelines for Somatization and Schizophrenia.

Experience has shown that nothing is more valuable for training than conducting several interviews. Initially this can be done by having interviewers try out the instrument on one another and the person being interviewed assuming the role of a subject. Next, they should try it out on actual subjects, preferably representative of those who will be examined in the research study. If possible, these should be joint interviews with researchers making independent ratings, and there should be discussion of the interviewing technique and of all causes of disagreement in scoring.

Most of the items in the DIGS are scored on the basis of life-time occurrence of symptomatology, although some of them (e.g., current episode ratings) are limited to specific time periods.

DATA SOURCE

If the subject is too disturbed initially, observations should be made and the interview finished later when he is less disturbed. The judgments of items should be based upon contact with the subject.

JUDGMENTS

Particular attention should be given to whether the item refers to subjective symptoms that the subject must acknowledge to someone (e.g., feelings of depression, complaints of memory impairment) or to behavior that is observable by others (e.g., depressed appearance). Each item should be rated independently. For example, both retarded and agitated behavior may have been present during one period of illness. The interviewer should not infer the presence of an item (such as depressed mood), merely because of the presence of other items (such as lack of interest or other items in the depressive syndrome). However, he should probe further if an initial denial of a symptom appears to be invalid. If there is any information available, the interviewer should make his best judgment about the presence of the symptom.

When an interviewer is uncertain how a question should be coded, he should write enough information in the left margin so that a decision can be made after the interview is completed.

INTERVIEW

Even if an interviewer, after many repetitions, has committed the protocol to memory, he should still use the instrument as a guide to ensure coverage of the areas in which judgments are required. The use of the instrument in this way will also increase comparability across subsequent examinations with the same subject, examinations of different subjects, and examinations performed by different interviewers. The instrument contains many open-ended questions to encourage the subject to describe symptoms, rather than to simply answer yes or no as he would to a questionnaire.

It is unnecessary to ask all of the suggested questions if sufficient information is available to score them. To do so makes the interview unnecessarily long. Also, the interviewer should not limit himself to the instrument, but should modify, omit and supplement questions, probe for details, or alter the order of topics whenever necessary. He should be sufficiently familiar with the key

diagnostic distinctions to know when it is necessary to review a section (e.g., returning to major depressive disorder when later inquiry suggests a previous false negative rating), or to consider two or more sections at once in determining the most appropriate rating.

The use of the instrument does not remove the interviewer's responsibility to be certain of the subject's replies. A symptom should not be rated as present simply because the subject says yes. A further description should be elicited, in the subject's own words, to make sure that the subject understands and is describing the symptom being rated. Similarly, if the subject says no, the interviewer must be certain that the symptom or behavior is not actually present. If there is strong evidence that the symptom is present (e.g., alcohol detected on subject's breath after denying current alcohol use), the symptom should be noted as present even if the subject denies its presence.

When there are many symptoms that are likely to be absent, the interview period can be shortened by combining and abbreviating questions, such as "What about..., ..., or ...?"

The interviewer should frequently remind the subject of the time being considered with such questions as "The first time that you were sick, did you...?" "How bad did it get then?" "How long did that last?"

REVIEW OF RATINGS

After the interview is completed, the interviewers should review his ratings and change them wherever appropriate. If necessary, the subject should be questioned further.

CODING

1. While filling in answers, no spaces should be left empty; zeros should be entered instead (e.g., age 7 = 07, four times = 04).

2. Code UU for don't know or can't remember.

3. 00 = Never
   99 = Too many to count
   RF = Refuse to answer

   For the never or none responses (00) or the too many to count (99) responses, please completely fill the boxes. That is, if it is a three-digit item use 000 or 999; a four-digit item, use 0000 or 9999, etc.

4. Leave blank only those questions that were skipped by instruction.

5. A current episode is defined as occurring within the past 30 days.

6. Often - 3 or more times

7. Ever - once or more

8. Frequently - 3 or more times

9. Repeatedly - 3 or more times

10. When coding columns that ask for days and weeks, fill in only one. If more than 7 days, code number of weeks. For example, it is not necessary to code 2 weeks and 3 days.

11. When asking onset and recency questions, use your own judgment about whether to review all the symptoms of a particular episode, e.g., "How old were you the last time you were manic/hypomanic?" (review symptoms).

12. Adolescence is defined as the period from ages 12-18.

13. If the subject is currently ill, prioritize sequence of sections, e.g., if psychotic, go directly to the Psychosis section.

14. ONS AGE - Age of onset of first symptom

    REC AGE - Age of last symptom

15. Whenever uncertain how to code, write enough information in the left margin so that the editor can make a decision.

16. Probe, remember as much as possible, and use good judgment in case of any inconsistencies. The coding system is to be followed strictly, whereas the proposed probing pattern is flexible; sometimes it will require more, sometimes fewer questions to be asked.

17. Site Optional - Each site's Principal Investigator will determine which site optional sections will be used.

18. Averaging can be minimized by interviewer's judgment, e.g., 7-10 beers/night, code 10; 24-26 years old, code 25.

19. Whenever "Specify" appears below a question, obtain and record an example or description of the symptom or phenomenon that is the evidence for a rating. This convention forces the interviewer to ask for a description of the behavior rather than merely accepting "yes" to a question that may have been misunderstood. (SCID)

20. Two issues should be addressed when an organic factor is discovered to have preceded the onset of a syndrome: 1) Is the organic factor one that is known to be likely to cause the syndrome? and 2) Does the syndrome persist only in the presence of the organic factor? For example, a major depressive episode might occur following treatment with antihistamines;

however, since there is no evidence that antihistamines can cause a depressive syndrome, it would be unreasonable to consider this organic factor as etiologic to the depression. On the other hand, while marijuana is known to be etiologically related to panic attacks, an individual who begins having panic attacks after smoking marijuana but continues to have attacks for weeks after discontinuing use could be given a diagnosis of panic disorder (i.e., the organic exclusion criterion would not apply). (SCID)

21. Symptoms should be coded as present or absent without any assumptions about what would be present if the subject were not taking medication. Thus, if the subject is taking 1000 mg of chlorpromazine and no longer hears voices, auditory hallucinations should be coded as currently absent, even if the interviewer suspects that without the medication the hallucinations would probably return. Similarly, if the subject is taking a sedative every night and no longer has any insomnia (initial, middle, or terminal), insomnia should be coded as currently absent. (SCID)

22. If the answer to a question is obtained from information in previous sections, code the answer without asking the question.

23. For items that are re-coded, strike through the original entry and record corrected information in right-hand margin.

DIGS DO'S AND DON'TS

1. **DO** give the subject a brief explanation of the purpose of the interview before beginning. In research studies this will usually be part of obtaining informed consent. (SCID)

2. **DON'T** apologize for using a structured interview. ("I have to read these questions. Most of them won't apply to you. Just bear with me. I have to give this standardized interview.") When the DIGS is properly administered, it is a clinical interview and needs no apology. (SCID)

3. **DON'T** ask in detail in the Overview about specific symptoms that are covered in later sections of the DIGS. (SCID)

4. **DO** stick to the initial questions, as they are written, except for necessary minor changes to account for what the subject has already said, or to request elaboration or clarification. (SCID)

5. **DON'T** make up initial questions because you think it's a better way of obtaining the same information. A lot of care has gone into the exact phrasing of each question. (SCID)

6. **DO** feel free to ask additional clarifying questions such as "Can you tell me about that?" or "Do you mean that...?". (SCID)

7. **DO** use judgment about a symptom, taking into account all of the information available, and gently confront the subject about responses that are at odds with other information. (SCID)

8. **DON'T** necessarily accept the subject's response if it contradicts other information or you have reason to believe it is invalid. (SCID)

9. **DO** make sure that the subject understands the questions. It may be necessary to repeat or rephrase questions or ask subjects if they understand you. In some cases it may be valuable to describe the entire syndrome you are asking about (e.g., a manic episode). (SCID)

10. **DON'T** use words that the subject does not understand. (SCID)

11. **DO** make sure that you and the subject are focusing on the same (and the appropriate) time period for each question. (SCID)

12. **DON'T** assume that the symptoms the subject is describing occurred simultaneously unless you have clarified the time period. For example, the subject may be talking about one symptom that occurred a year ago and another symptom that appeared last week, when you are focusing on symptoms that occurred jointly during a 2-week period of possible major depressive episode. (SCID)

13. **DO** focus on obtaining the information necessary to judge all of the particulars of a criterion under consideration. As noted above, this may require asking additional questions. (SCID)

14. **DO** make sure that each symptom noted as present is diagnostically significant. For example, if the subject says that he has always had trouble sleeping, then that symptom should not be noted as present in the portion of the DIGS dealing with the diagnosis of a major depressive episode (unless the sleep problem was worse during the period under review). This is particularly important when an episodic condition (such as a major depressive episode) is superimposed on a chronic condition (such as dysthymia). (SCID)

15. **DO** make sure your handwriting is legible, especially when recording medications.

16. **DON'T** use fractions or decimals.

When skipping to a new section, clearly circle the word "SKIP" and the page in the "*INTERVIEWER"S NOTE BOX."

When something is a "YES" or "NO" and you must answer it even though it does not apply to the subject, choose "NO" and write "NA" with a marginal note that it does not apply.

Section A

DEMOGRAPHICS

This section was designed to obtain basic demographic information.

Q3 If the subject married into the index family and is adopted, continue. If the subject is a family member and the adoption was familial (adopted from within the family) continue. If the subject is a family member but was adopted from outside the family, skip to FIGS.

Q5 For geographical definitions, see Appendix A, page 113. It is unnecessary to read the entire list to the subject.

> Please refer to this list when coding ethnicity, for example, a person from Spain is coded as Western European and not Hispanic.

Q5a-5h Four possible codes have been allowed for both mother and father.

Q6 The Protestant religious category includes:

Baptist
Presbyterian
Methodist
Episcopalian
Lutheran
Seventh-Day Adventist
Jehovah's Witness

Q7 This question refers to legal marriages only. This question does not apply to common-law marriages.

Q8 Information wanted here concerns living children. Include adopted children. Deceased children will be picked up in pregnancy section for female subjects and in family history section for males.

Q9 Non-lineal - For the purpose of this interview non-lineal is defined as relatives other than parents or children. If the subject is not legally married but has been living with a partner for eleven months or less, code under "Other" and specify. Include same sex partners in 2 if together for at least one year and make a marginal note.

> Residential treatment facility includes transitional living centers etc. make a marginal note to specify.

Q10 Do not count volunteer work. If unemployed, probe to determine if subject is disabled and note whether it is psychiatric or medical.

Q10a Highest level job refers to the job with the highest level of responsibility the subject has ever held. For job classifications, see Appendix B, page 114-117.

Q10b When coding for head of household, code based on most of his working career. Head of household is defined as the individual with the highest level of employment according to the occupational chart on page 3 of the DIGS instrument and Appendix B of the DIGS manual. If the occupational category of both those eligible for head of household is the same, code the occupation of the one with the highest income and note in the margin who is being considered as the head of household.

Q11 Code for number of years

Grades 1-12
1 year of college or any or any number of years of technical school = 13
2 years college = 14
3 years college = 15
4 years college = 16
Masters Degree = 18
Ph.D. = 20+

Code only formal education or technical training. This information should be written in the "Record Response" space. If subject obtained a GED, record number of years of school completed and record GED in available space.

Q12a The intent of this question is to determine why a subject was rejected from the military. There may be several reasons such as being a sole surviving son, a conscientious objector, a cleric, or having an essential occupation.

The test given is not an IQ test and subjects may fail the test for reasons other than low IQ, for example, they may be poor readers. Although this may have been the intent of the question, it may be better to code it as "6 – Rejected for reasons uncertain" and write a marginal note.

Section B

MEDICAL HISTORY

This section assesses whether the subject has had any physical illness or injury.

Q1 Does not include psychiatric problems. The medical records information sheet (page 147) may be used at this point to get detailed information if needed.

Q2 This question may be used to obtain medical records. Therefore, it is essential that the list of nonpsychiatric, nonabuse related hospitalizations be as complete as possible. If the subject has had numerous hospitalizations, the information can be recorded in the margins. Minor surgeries such as tonsillectomies should be recorded in the "Times" box, but it is not necessary to record the details of these hospitalizations.

Q3 Indicate under "Notes" whether the subject was diagnosed by a physician.

Q3a Do not include hormonal imbalance during menopause.

Q3b Probe for a description of headaches. Migraine headaches are usually described as acute, episodic, throbbing, one-sided, and with nausea and visual disturbance.

Q3d Iron deficiency is not included here. Psychiatric symptomatology does not result from iron deficiency. Code "yes," any vitamin deficiency that was confirmed by the subject's physician, and list deficiency.

Q3g Include familial tremors, tics, tardive dyskinesia, and Tourette's syndrome.

Q4 Indicate under Notes why the subject had the test, what the results were, where the tests were completed, and the name of the physician if known.

Q5 Note if the subject is on experimental medication.

> Code the dosage for each medication on day of interview. Write a marginal note that completely captures recent changes in dosage of those medications.

Q6 Ask about birth abnormalities. Probe for specifics if there was a prolonged hospitalization following birth. Probe for early developmental problems such as delayed motor development. Early development is from birth to age 6. Do not code yes for forceps used at birth.

Examples from A and B can be given to clarify the answer to this question.

Q7a Refers to cigarette smokers only.

#PPD = number of packs per day smoked
#YRS = number of years smoking "X" amount of packs (average)
Be sure to subtract years of abstinence if the information is volunteered.
If a subject smoked intermittently, count only years during which he or she actually smoked.

Q8b Include miscarriages, stillbirths, and abortions. Record subject's response. Twins or other multiple births are counted as one pregnancy.

Q9 (Menstruation) Ask about mood changes, either depressed, high, or irritable. Specify direction, duration, and severity of any mood change.

Q10 (Menopause) Code as yes if the subject is currently going through menopause. Menopause could be natural or precipitated by surgery. Ask about hormone replacement therapy here.

Section C

MODIFIED MINI-MENTAL STATUS EXAMINATION (If Applicable)

This examination is to be used when the subject is disoriented, confused, cannot give coherent answers, or appears to have substantial memory deficit.

Q1 Orientation

1) Ask for the date. Then ask specifically for parts omitted. One point for each correct answer. Score 0-5

2) Ask in turn "Can you tell me the name of this hospital (town, county, etc.)?". One point for each correct answer. Score 0-5

Q2 Registration

Ask the subject if you may test his memory. Then say the names of three unrelated objects, clearly and slowly, about one second for each. After you have said all three words, ask the subject to repeat them. This first repetition determines the score (0-3) but keep saying them until all three can be repeated, up to six trials. If the subject does not eventually learn all three, recall cannot be meaningfully tested.

Q3 Attention and Calculation

Ask the subject to begin with 100 and count backwards by 7. Stop after five subtractions (93, 86,79,72,65). Score the total number of correct subtractions. Make a notation if the subject cannot perform any addition or subtraction tasks. Then ask him to spell the word "world" backwards. The score is the number of letters in correct order, e.g., dlrow = 5, dlorw = 3. Score 0-5

Q4 Recall

Ask if the subject can recall the three words you previously asked him to remember. Score 0-3

Q5 Language

Naming. Show the subject a wristwatch and ask him what the object is. Repeat for pencil. Score 0-2

Repetition. Ask the subject to repeat "No ifs, ands, or buts" after you. Allow only one trial. Score 0 or 1

3-Stage command. Give the patient a piece of plain blank paper and repeat the command. Score one point for each part correctly executed. Score 0-3

Q6 Cognitive State

Reading. On a blank piece of paper print the sentence "Close your eyes" in letters large enough for the subject to see clearly. Ask him to read it and do what it says. Score one point only if the subject actually closes his eyes.
Score 0-1

Writing. Using the available space at the bottom of page 11, ask the subject to write a sentence for you. Do not dictate a sentence; it is to be written spontaneously. It must contain a subject and verb and be sensible. Correct grammar and punctuation are not necessary. Score 0-1

Copying. On a clean piece of paper, draw intersecting pentagons, each side about 2.5 cm, and ask the subject to copy it exactly as is. All ten angles must be present and four lines must intersect, as in the example, to score one point. Tremor and rotation are ignored. Score 0-1

Q8 Estimate the subject's level of consciousness and circle the appropriate rating.

1 = Alert
2 = Drowsy
3 = Stupor

Section E

OVERVIEW OF PSYCHIATRIC DISTURBANCE

The overview is an open-ended history of emotional problems that the subject acknowledges. If there are several different ones, do them in order of apparent relevance to the study. For subjects who are able to give a succinct or clear narrative account, this will speed up the interview. For those who don't acknowledge any problems, you may ask additional probing questions and ask the subject to expand on any positive response. Some subjects will offer an overly-detailed litany of complaints. You will need to gently redirect them to a question- and-answer style after giving them about 5 minutes to establish a rapport. The overview is also important in providing information about a subject's premorbid level of functioning. This section will vary in length; for most subjects with pathology, it should take between 10-20 minutes to complete.

Q2a Age of onset: Earliest age at which professional advice was sought for psychiatric reasons or age at which symptoms began to cause subjective distress or impair functioning.

> If the subject was admitted to the infirmary for psychiatric reasons, count as YES. If subject was just dispensed medication, or admitted for medical reasons, it would be NO. Then make a marginal note that subject was given psychiatric medication.

Q2b Unemployment: The subject was not employed at onset of illness as defined above. Circle "yes" for employment if a woman was working full-time at home or if a student was attending classes on a full-time basis. (OPCRIT)

Q4 If the subject has a long history of illness, it may be helpful to read the medications listed after Q4, page 17 of the instrument. A more complete list can be found in Appendix C, page 118-120.

Q5 Courses refers to the number of episodes in which a subject received treatments of ECT. For example, 12 treatments during one hospitalization for depression would equal one course.

Q6a If the subject has been hospitalized and then discharged to another hospital, this is counted as one hospitalization.

In general, new interviewers will want to start by using the Overview of Psychiatric Disturbance to record appropriate information. As the interviewer becomes more experienced, the blank pages preceding the table may be used. Record symptoms, treatment, etc., in the narrative account. Important points to determine:

1. presence/absence of psychosis
2. presence/absence of affective syndromes
3. substance abuse
4. relationship (overlap) of #1 and #2 and #3
5. first/last psychiatric hospitalization
6. medications taken, professionals seen (i.e., type and how many)

The timeline is a valuable tool and can be used to clarify issues, such as organic precipitants, comorbidity and schizoaffective disorder.

> Complicated cases need a very clear timeline to establish mood and/or substance use. After reviewing the DIGS, adjust the timeline to incorporate important information.

Be aware that medical records will need to be requested on all psychiatric hospitalizations and outpatient psychiatric treatments by using the form on page 140 of the DIGS.

Section F

MAJOR DEPRESSION

This section provides diagnostic criteria for major depression using DSM-III-R, DSM-III, RDC, modified RDC (Gershon), ICD-10, and DSM-IV, and records symptoms for the OPCRIT 3.0 program.

The interview assesses both the most severe and the current episodes. A current episode is defined as having occurred within the past 30 days. If the subject has had at least one week of feeling depressed, blue, or irritable, or a period when he does not enjoy his usual activities, the full section will be administered. For DSM-III-R, even if the current episode does not meet the full criteria, but another episode (most severe) meets the criteria, the diagnosis is made for lifetime.

> Boxed Codes: A number of questions are included to cover the full spectrum of potential depressive symptoms. In order to group symptoms into major systems, the response codes are enclosed in boxes by category. Thus, the subject can be coded as positive for sleep disturbance regardless of the variety of ways this was manifested for him. Some response codes, as well as the quantitative measurements of time, weight, etc., are not enclosed in boxes. Data should be accurately recorded there, however, since computer analysis of responses may add weight to symptom categories.

If the subject states that the current episode is the most severe, then symptom questions Q6-16 are coded in the most severe column.

Q1-2 Check on inclusion criteria. To complete section, the subject must answer yes to either Q1 or Q2. A minimum period of 1 week is included in both of these screening questions, and they should be coded no if the subject admits to the feeling but the duration of the symptom(s) is less than 1 week. If both Q1 and Q2 are coded no, the rest of the section is skipped. Write a marginal note if the subject answers yes to Q1 and his only symptom is irritability.

> When probing depression, let the subject describe symptoms and behaviors by using some open-ended questions, "How did your mood affect your ability to..." Try to clarify phrases like, "I can't remember a time when I haven't felt depressed," or "I've always felt like this."

Some subjects claim to have always been depressed (or manic) i.e.—they are unable to give discrete episodes, just one lifetime episode and they also have psychosis.

It is important for the interviewer to explain, to the subject, the difference between Chronic Major Depression, Dysthmia, and true "episodes" of depression where some type of symptom recovery/remission has occurred. The severity and clustering of affective symptoms determines the difference between the various types of mood related disorders. Remember, in depression (and mania/hypomania) a symptom must be: 1) newly present or 2) have clearly worsened compared with the person's pre-episode status. Therefore, only symptoms that meet one of the two criteria listed above AND can be attributed by the subject as being caused by the mood episode under review would be coded as present. This difference is critical to the overall diagnosis of either Major Depression with Psychosis vs. Schizoaffective vs. Schizophrenia because the length of an established affective syndrome in relation to the psychotic syndrome is the determining factor in the subject's overall diagnosis.

Q 3 You want to ask the subject what their overriding mood is. What was most pervasive, depression or loss of interest? If they say both circle depressed mood and add anhedonia as a marginal note.

Q4b This period needs to last at least 1 week.

Q4c If both are present circle depressed mood and write in margin that the subject had both depressed mood and anhedonia.

Q5 If there is no current episode, the question is technically not applicable, code the item "NO." This is consistent with the way the item was coded on the fist initiative.

Q6a If there has been a mixture of weight gain and loss within one episode, code the greatest difference in weight change.

Q6d A weight loss or gain of 5% of body weight within a month, or an increase or decrease in appetite nearly every day is the DSM-III-R guideline for this symptom.

Q7-7f Check for the symptom of a change in sleep pattern. This can be sleeping either too little or too much. If the subject answers yes to Q7, Q7a-7f are used to indicate the change in sleep pattern.

Q8 This symptom must have occurred to the extent that other people could have noticed a difference in the subject's behavior even though they might not have noticed or commented.

Q10 A decrease in the ability to enjoy usual activities during the particular episode being discussed.

Q17 Count the number of symptoms by counting one positive symptom per box, e.g., even if Q12 and Q13 are both coded yes, when counting symptoms they are counted as one positive symptom because they are in the same box. If there are fewer than three positive symptoms in Q6 through Q16 in the current episode, return to Q6 and code the most severe episode.

Q18 Code yes only if five symptoms are present (including Q1 and Q6-16) nearly every day during a 2-week period.

> Do not skip this section if the answer is "NO" because the DIGS is designed to code for RDC and Modified RDC as well as DSM criteria and these additional criteria are imbedded within the remainder of the section.

Q20-21 Specify the content of the delusions or the hallucinations. Q22 will be coded based on information obtained here. Probe for more information necessary and get examples.

> 20a and 21a There is no time frame involved for these questions. A person can for example, experience voices/delusions for years up this depression or following this depression. The intent of the question is to determine if the person had psychotic symptoms when they were not depressed. If the person had psychotic symptoms when they were not depressed, regardless of the duration, code as "YES".

Q20b Do not count duration of psychiatric symptoms during depression.

Q22 Determine if the psychotic symptoms were mood-congruent or mood-incongruent. This is an important distinction. A decision will be made regarding diagnosis based in part on whether the psychotic symptoms are mood-incongruent (schizoaffective disorder) or mood-congruent (major depression) (RDC). Only one example is needed in order to rate an item mood-incongruent (write all examples in margins). According to the DSM-III-R, mood-congruent psychotic features would be "delusions or hallucinations whose content is entirely consistent with a depressed mood." Paranoid delusions related to depressed themes are considered mood-congruent. If the mood is depressed, the content of the delusions or hallucinations would involve themes of either personal inadequacy, guilt, disease, death, nihilism, or deserved punishment. Mood-incongruent psychotic features are described as "delusions or hallucinations whose content is not consistent with a depressed mood...examples of such symptoms are thought insertion, thought broadcasting, and delusions of being

controlled whose content has no apparent relationship to any of the themes listed above."

22a This queston tries to capture the severity of the psychosis in the depressed mood. It may helpful to read this to the subject as a question, "Were you preoccupied with the (psychotic symptoms) to the exclusion of the other (depressive symptoms) and concerns? Remember 22a is only coded when psychotic symptoms are mood incongruent.

This question attempts to satisfy Original RDC criteria C5 in which there is a "preoccupation with a delusion or hallucination to the relative exclusion of other symptoms or concerns (other than typical depressive delusions of guilt, sin, poverty, nihilism, or self-deprecation or hallucinations of similar content). In other words, the concurrent depressive episode under review is not necessarily the most dominant symptom but rather must at least be a major part of the clinical picture (see page 12 of Original RDC criteria – 3rd edition – 2/4/85 update). If a subject's preoccupation with psychotic symptom(s) causes him/her to feel depressed, then this distinct period of dysphoric mood (or loss of pleasure in usual activities) should be fully explored with the subject and the entire depression section administered. However, pay special attention to probing each endorsed depressive symptom in order to establish that it was caused by the mood and NOT the concurrent psychotic experiences (e.g. if a subject claims that their sleep was affected, make sure to probe that it was due to the mood and not the voices telling him/her to stay awake).

Q23-26a These questions ask about what kind of help the subject received for this episode of depression, if any, and are used to determine the level of impairment during the episode. If the subject received ECT (shock treatments) or was hospitalized for 2 days or more, he is considered to have been incapacitated and you can skip to Q29 and code #2 = INCAPAC.

Q23 and Q24 If during the episode under review, the subject is prescribed medication specifically for depression OR if the antidepressant medication that the subject was on is increased, provide the name of the medication and code Q23 as "YES," provide the name of the drug in Q24. For completeness, provide the increase in the dosage of the antidepressant medication as a marginal note. Even if the **primary** reason for seeking help from a professional did not include depression, if the subject mentioned his/her "mood" problems to that professional during a session that fell within the timeframe of the episode under review, it may be coded in Q23 and then a marginal note attached discussing it.

Q24 Ask the question (which specifies "antidepressants") and record if the subject says "yes" or "no," then specify the medication that the subject reports. Some of the newer antipsychotics are being used in novel ways. Record the information so that the diagnostician can use it in making the BEFD

Q27-28b These questions also attempt to determine the subject's level of impairment. If the subject was completely unable to function in his major role for at least 2 days, he is considered to have been incapacitated. If, on the other hand, the major role was continued but there was a decrease in the quality of the subject's performance in this role that was noticeable to others, the subject is considered to have been impaired rather than incapacitated. Major role is defined as what the subject is doing full-time. For example, if going to school full-time and working part-time, the major role is school. Also, if a subject works outside of the home and is also assuming the responsibility of a household and/or children, the major role is considered to be job.

> Historically, since the creation of the first version of the DIGS, the presence of psychosis during any episode of depression under review counted toward the automatic coding of "incapacitation" of a subject's mood episode. However, because many schizophrenics will have continuous, active psychosis that does originate from the severity of the overlapping depressive episode under review, a rethinking of the coding for this question may want to be reviewed with the PIs. If the psychosis experienced by the subject is not a change from "previous functioning" when the depressive episode under review occurred, the interviewer should not skip after this note but rather continue asking questions.

In Q27 a homeless person would be coded 4 = Other.

In Q28 under "Specify" note how functioning was affected and for how long.

Q29 Make marginal notes to justify your coding.

> If a subject has constant auditory hallucinations due to chronic psychosis and also meets the criteria for a mood episode, in which auditory hallucinations are still present, code for incapacitation. The delusions and /or hallucinations coded in either of the two mood disorder sections will be revisited in the psychosis section and will have a direct impact on how questions 80 and 90, in the psychosis section, are coded.
>
> If the subject cannot endorse a change in functioning in question 29, then depression criteria is not met. Get a modified RDC Minor Role in Q 30.

Q30 If there was no incapacitation or impairment, based on ECT, hospitalization for 2 days or more, or inability to function in major role, ask this question about impairment in a minor role.

Q31-35 These questions are used to determine if there was an organic precipitant. The question should not be coded yes based on the subject's initial answer. To be considered a precipitant, a change (e.g., new medication or significant increase in drug or alcohol use) should have occurred during the month prior to the onset of the episode. Also, persistence of symptoms for at least two weeks following the cessation of the possible precipitant generally implies nonorganic etiology. After obtaining more information, code the answer based on your judgment of whether what the subject was talking about was indeed an organic precipitant. Be careful to specify information when asked. These written comments will be used to assist in making a final diagnosis. If you suspect there might have been an organic precipitant, try to determine if there has been at least one "clean" episode, i.e., no organic precipitant.

Q32 Episodes that begin within 6 weeks of childbirth are called postpartum depression by Modified RDC. They are not distinguished from a Major Depressive Episode by DSM-III-R, DSM-IV, or RDC.

Q36 Episodes that begin within 3 months of a death of a relative, spouse, or unusually close friend are called bereavement or grief reaction. This is distinguished from a Major Depressive Episode and is not considered a mental disorder even when associated with the full depressive syndrome. However, marked impairment or prolonged duration suggests that bereavement is complicated by a Major Depressive Episode. For details consult specific criterion systems.

Q37 Code this question for Most Severe Episode only. Subjects may need help understanding these symptoms and that we are asking whether or not they occurred at the same time as the episode being coded.

Note that the questions for a mixed episode precede the questions for the clean episode in this section (in the mania section the order is reversed).
For a mixed episode, the person must meet criteria for both depression and mania for a period of time (at least a week); usually there are rapidly alternating moods, but might be concurrent as well. For the manic portion, if 4 or more of these symptoms are marked "yes" the likelihood is high that portion will be a manic episode, but the mood "quality" must also be present, i.e., elevated, expansive, and/or irritable mood.

- In the DIGS depression section, when referring to clean major depressive episodes, "clean" denotes that the episode does not seem to be due to (better explained by) substance use / medical illness, or bereavement (specifically, the period would have to avoid exclusion criteria D and E, respectively, for a major depressive episode). Of course, to qualify as a major depressive episode per DSM-IV, the episode would have to also avoid exclusion criterion B (i.e., not a mixed episode) and satisfy inclusion criteria A (symptoms and duration) and C (distress / impairment). So, mixed is not the same as unclean: mixed refers to exclusion criterion B, and unclean refers to exclusion criteria D and/or E. So, if all of the depressive periods are either unclean and/or mixed, then the answer to DIGS page 26 question 38 ("INTERVIEWER: "Has there been at least one 'clean' episode?") is the same: "no".

- Recall that mixed episodes contain both a major depressive episode and a manic episode. If any mixed episodes were revealed in the questions in the DIGS depression section, these should (a) not be counted as a major depressive episode in the depression section, and (b) should be included in the mania section of the DIGS. While a mixed episode includes a manic episode (and a major depressive episode), a manic episode cannot contain a mixed episode (a mixed episode is exclusion criterion C for a manic episode) per DSM-IV. Still, the DIGS treats manic and mixed episodes as the same up until page 34 question 34. So, the DIGS has you count (e.g., for page 34 question 33 and before) any episode (manic or mixed) that has a manic episode in it as a manic episode. Then, with page 34 question 34, you are asked how many of the previously enumerated manic episodes were actually mixed episodes.

- The reason why mixed episodes are addressed earlier in the DIGS depression section than in the mania section is that a mixed episode moves one entirely out of the possibility of depressive diagnoses such as major depressive disorder or schizoaffective disorder depressed type, and into diagnoses such as bipolar disorder or schizoaffective disorder bipolar type. Hence, it makes sense to address this earlier in the depression section than the manic section, since in the latter case a manic or a mixed episode will do just as well for bipolar diagnoses and in the former a mixed episode eliminates the possibility of depressive diagnoses. Of course, in our study diagnoses of schizoaffective disorder (either bipolar or depressed types) are common, but diagnoses of major depressive disorder or bipolar disorder are rare (unless you count NOS varieties which take into account mood episodes within schizophrenia that do not rise to the schizoaffective disorder 30% threshold we employ).

Note: If there are no other episodes of depression or other episodes are also "dirty," the Major Depression section items would remain as coded and it would be evident from items 31-36 that it was not a clean episode.

Q38 Answer this question based on information obtained while coding specific episodes or through your unstructured attempts to establish another clean episode.

> The presence of "NO" clean episodes of depression may reduce the certainty of the diagnosis but will not necessarily negate a diagnosis of Major Depression. If it is determined in an overview that all episodes experienced by the subject are unclean, then pick the MSE/CURRENT episode and code that episode. If however, a clean episode(s) is/are uncovered in the overview, always try to code a clean episode in the section. At BEFD, family history and medical records will be used to help in the final determination as to whether the diagnosis should be given or not.
>
> If no clean episodes, continue on. You cannot skip out of this section. A clean episode is one in which no organic precipitant cause the depression (mania). Unclean episodes have organic precipitants (see above for list) up to 30 days before the episode.

Q39 This question and its subparts are used to determine recurrence. At least two episodes of depression are necessary to establish a diagnosis of recurrent major depression. If two episodes, i.e., current and most severe, have already been established, this question can be skipped. The recurrent episode can be severe and/or incapacitating.

> While this item is to reflect a hospitalization for the episode of depression under review, it is reasonable to code "YES" if the subject was hospitalized for psychosis and/or treated with neuroleptics especially since many schizophrenic patients are not able to differentiate the reasons behind their psychiatric in-patient stays. Often they are hospitalized and treated for both the presence of mood problems and active, intrusive psychosis. This information may also be summarized on the "specify" line.
>
> In the BEFD process, the medical records on this inpatient stay will clear up his/her psychiatric treatment at the time. Follow up with the name of the hospital.

Q40 Inform subjects that you are referring to the level of severity as discussed in this section (i.e., five symptoms nearly every day for as long as two weeks).

> Q42 Try to get the duration of theses depressive episodes as well.

Q44 Courses are defined as the number of episodes in which a subject received treatments of ECT. For example, 12 treatments during one hospitalization for depression would equal one course.

Q40 – 45 You can enter "0" or "00" if the VISDIGS will accept this – if not, enter "u". Also enter a marginal note to the effect that there are no "clean" episodes and the reason why that is the case.

Note: If there are other clean episodes of depression uncovered via the checklist (Item 39b) on page 31 or during other probing, write information on clean episode in margins. Do not go back through the Depression section and re-code the items.

Q45 This question is asked because sometimes, in a person with bipolar disorder, medical treatment for depression such as tricyclic antidepressants or ECT will precipitate a manic or hypomanic episode. This information can be useful in making a diagnosis of bipolar disorder.

Note: A timeline may be helpful in this section to establish course of illness.

See Appendix D on page 121 for a list of common causes of depressive syndromes.

Section G

MANIA/HYPOMANIA

This section provides diagnostic criteria for mania/hypomania using DSM-III, DSM-III-R, RDC, modified RDC (Gershon), ICD, and DSM-IV, and records symptoms for the OPCRIT 3.0 program.

In the following sections determine if the subject has ever had an episode, i.e., a relatively discrete period of impaired functioning or psychopathology that can be clearly distinguished from prior or subsequent functioning, which meets the criteria for manic or hypomanic syndrome described below. If the full criteria for a manic or hypomanic syndrome are not met, but there is evidence of some affective disturbance, the disturbance should be noted in the narrative.

Please note that unlike the SADS-L, the DIGS has only one section to elicit manic and hypomanic episodes. The essential differences between manic and hypomanic episodes are in severity of symptoms and in impairment. In fact, it is essentially the case that hypomanias produce no functional impairment.

In this section, based on screening questions (Q1a-1d) and on other information received, make a decision about whether to continue the section. If Q1e is coded no, skip to Q37, page 40.

If manic symptoms have been present during the past 30 days, the current episode will be coded first.

In the probe questions it is essential that the phrase CLEARLY DIFFERENT FROM YOUR NORMAL SELF be emphasized.

> When probing mania, let the subject describe symptoms and behaviors by using some open-ended questions, "How did your mood affect your ability to..." Try to clarify phrases like, "I can't remember a time when I haven't felt like this" or "I've always felt like this."

Q1a This is a criteria-based question. The second question ("Was this more than just feeling good?") can be asked if necessary to ensure that the subject is not talking about a period of time of feeling good that is not atypical.

Q1b Mania can be experienced as feeling angry or irritable as well as feeling good or high. This question is used to cover this possibility.

> If subject cannot determine irritability vs. elation, code as elation and make a marginal note about irritability.

Q1c If it is unclear about whether the subject is responding positively about a true manic episode or if there is reason to believe the subject has had or is currently having a manic episode based on observation or on reports from family members or other informants, this space and the possible probes can be used to gather more information. If you suspect an episode based on something other than the respondent's report, attempt to get him to discuss symptoms without revealing the source of your suspicion. For example, you might be able to refer back to something the subject mentioned in an earlier section. If you suspect the subject had a manic episode in 1987 and he had talked about something going on at that time, refer to it. "What about when you were hospitalized in 1987?" or "What about when you lost your job in 1987?" If you suspect a current manic episode based on the subject's behavior, you could say something like, "It seems like you are really feeling energetic and good today. How long have you been feeling this way? Let's talk about this period."

Q1d In order to meet criteria, symptoms of mania must last <u>persistently</u> throughout the day or intermittently for 2 days or more.

Q1e Use all of the above information to decide whether to continue through this section or skip out. If unsure, go through the section.

Q2 Code without asking the question if information was obtained in Q1c.

Q5-13 Check on manic symptoms necessary for criteria. If the subject's mood is both irritable and elated, circle elated and write in margin that the subject has mixed symptoms of both irritability and elation.

Q10a-10b It is important to quantify hours (both normally and during the manic episode) since minor sleep pattern changes may not meet criteria for this symptom.

Q14 Count the number of "YES" responses in questions 6-12. Question 13 is not a standard symptom of mania.

Q16 a and b Q17 a and b

The intent of the question is to determine whether the endorsed active psychosis occurred OUTSIDE the subject's overlapping mood disorder; therefore, did the symptom(s) start BEFORE the mood episode began and/or did it continue AFTER the mood disorder cleared. This understanding is critical for the diagnosis of Schizoaffective and/or Schizophrenia where symptoms of active psychosis occur outside endorsed mood disorder for 2 weeks or longer. If subjects are chronically actively psychotic before and after the mood episode under review, then the number of weeks in these boxes will reflect that amount of time since the last break in active psychosis.

Q18 Determine if the psychotic symptoms described in Q16-Q17 were mood-congruent or mood-incongruent. According to the DSM-III-R, mood-congruent psychotic features would be "delusions or hallucinations whose content is entirely consistent with the typical manic themes of inflated worth, power, knowledge, identity, or special relationship to a deity or famous person." Paranoid delusions related to manic themes are considered mood-congruent. Mood-incongruent psychotic features are either delusions or hallucinations whose content does not involve the typical manic themes of inflated worth, power, knowledge, identity, or special relationship to a deity or famous person. Included are such symptoms as persecutory delusions (not directly related to grandiose ideas or themes), thought insertion, and delusions of being controlled, thought broadcasting, insertion, or withdrawal.

> 18a It may helpful to read this to the subject as a question, "Were you preoccupied with the (psychotic symptoms) to the exclusion of the other (manic symptoms) and concerns related to mania? Remember 18a is only coded when psychotic symptoms are mood incongruent.

If unsure how to code 18, 18a could be asked and coded in margin so all information would be available.

Q19-22a These questions are used to determine the level of impairment during the episode (for modified RDC). If the subject received ECT (shock treatments), was hospitalized, experienced delusions or hallucinations during the episode, was completely unable to function in a principal role for at least 2 days, or was unable to carry on a conversation, he is considered to have been incapacitated. If there was a decrease in functioning but it was not severe enough to incapacitate the subject, he would be considered to have been impaired.

Q20 Score yes if a manic episode was treated with an antipsychotic drug.

> Code the psychiatric medications specifically prescribed for the mood episode under review. This will include drugs that appear within another category but are found to be helpful in the alleviation of mood symptoms. For example, with some refractory depressed patients, Zyprexa (a neuroleptic) has been found to be helpful and therefore would be coded here. If unsure how to code with the medications mentioned, write them all down and consult your PI.

Q24 Under "Specify" note how functioning was affected and for how long.

Q25 Note details of improvement in margin.

Q27-30c These questions are used to determine if there was an organic factor that initiated and maintained the episode being discussed. Be careful to specify information when asked. Interviewer judgment will be necessary in determining if the organic factor mentioned could indeed cause the episode. For example, one time use of cocaine would not likely initiate and maintain a manic episode lasting 6 months. If you suspect an organic precipitant, try to determine if there has been at least one clean episode, i.e., no organic precipitant.

Q28-29 Antidepressants should be coded in Q29 only.

Q31 Answer this question based on information obtained while coding specific episodes or through your attempts to establish another clean episode. Antidepressant associated episodes may be counted as clean (DSM-III-R) or unclean (DSM-IV) depending on which criterion system is given priority. If manic episodes can be distinguished from hypomanic episodes, score this episode as mania and note in margin.

> The presence of "no" clean episodes of mania/hypomania may reduce the certainty of the diagnosis but will not necessarily negate the diagnosis of Bipolar Disorder. If it is determined in overview that all episodes experienced by the subject are unclean, then pick the MOST SEVERE/CURRENT episode and code that episode. If however, a clean episode(s) is/are uncovered in the overview, always try to code a clean episode in the section. At BEFD, family history and medical records will be used to help in the final determination as to whether the diagnosis should be given or not.

Q34 In a mixed affective state there is a combination of manic symptoms, such as high energy, and racing thoughts along with a dysphoric or depressed mood. Mania can occur after a death or loss of a loved one. If this happens, it is considered a pathological reaction. The symptoms elicited here are pertaining specifically to depression and may need clarification for the subject, i.e., sleep difficulty refers to too much or too little but not a need for less sleep. A change in activity level refers to psychomotor retardation or agitation, not excessive purposeful activity such as may be found in mania. It is recognized that some episodes may have symptoms that are extremely difficult to categorize appropriately.

> If a mixed episode is uncovered at the end of either the depression or mania/hypomania sections, you are not required to go to the opposite mood section and code the "mixed" part of what has been uncovered. However, if the subject endorses more symptoms of depression and/or mania/hypomania then s/he did when those specific sections were first administered, then the interviewer should go back and re-administer the appropriate section, taking into account the information endorsed at the "mixed" episode question(s).

Q36a If a subject has had a long period of illness characterized by mixed affective states, this should not be considered one episode. If the number of episodes cannot be identified, code 99.

See Appendix D on page 121 for a list of common causes of mania.

RAPID CYCLING

Q35 According to DSMIV, Rapid Cycling requires that full mood episodes be present (p365 of DSMIV). This can be applied to BIP1 or BIP2 disorders. At least four (4) episodes of a mood disturbance in the previous 12 months that meet criteria for a Major Depressive, Mania, Mixed or partial or Hypomanic Episodes. Episodes are demarcated by full remission for at least 2 months or a switch to an episode of opposite polarity.

Q36 This questions prompts the interviewer to ensure that the Q35 answer was reflecting potential rapid cycling, and not simply a mixed episode with rapid mood fluctuations.

Q35 and 36 These are questions that you want to make sure the subject is consistent with the information they are providing. The interviewer may have to reprobe the subject until they have a clear picture of what is being described. In q35, you can have four episodes of either depression, mania or a combination of both. In order to meet the criteria, the person must have distinct episodes that are separated either by a partial or full remission for at least two months or a switch to a mood state of opposite polarity (e.g., major affective episode to manic episode). DSM-IV Rapid Cycling requires at least four distinct episodes of mood disturbance in one year that meet criteria for a Major Depressive, Manic, Mixed or Hypomanic Episode. It is possible that a subject can answer q35 "NO" and q36 "YES".

Section H

DYSTHYMIA

This section provides diagnostic criteria for dysthymia using DSM-III-R and DSM-IV.

There is a differential diagnosis between Dysthymic Disorder and Major Depressive Disorder. The difference between them is duration, persistence, and especially severity. When Dsythmic Disorder is of many years' duration (2 year is the minimum if the subject has adult onset but duration may be much longer) the mood disturbance may not be easily distinguished for the subject's usual functioning. The important factor to remember in any mood disorder is that the diagnosis is driven by the severity, duration, and number of symptoms episodically endorsed by the subject. In my opinion, it is up to the interviewer to distinguish for the subject, as best they can, the difference between Major Depression and Dysthmia so that the subject has the requisite information to make a decision as to how the depressive symptoms were experienced throughout their life..

Dysthymia is a depressed mood that occurs for most of the day, more days than not, for at least 2 years. In other words, it is a depressed mood that continues over an extended period of time, accompanied by depressive symptoms, but not as severe as a major depressive episode.

Q1b If subject is currently in an episode and it has not ended, put in current age and make a marginal note explaining it is ongoing.

Q2 An episode of major depression during the 2-year period of dysthymia or during the 6 months just prior to the onset of the dysthymic period excludes that 2-year period from consideration.

Q3 Try to determine if organic factors such as street drugs, alcohol, medication, or physical illness precipitated and sustained the episode.

If either Q2 or Q3 are coded yes, attempt to identify another episode that is clean. If a clean episode can be identified, re-code ages given in Q1a and Q1b. If a clean episode cannot be identified, complete the section anyway obtaining information on the period even though it might be ruled out.

Q5 A period of at least 2 months of normal mood during a 2-year period of dysthymia excludes that 2-year period from consideration. Attempt to establish if another 2-year period existed during which the subject's mood did not return to normal for at least 2 months.

Depressive Personality/Hyperthymic Personality

The expected rates in controls are 2-3% for depressive personality or hyperthymic personality and 1% for cyclothymic personality.

The expected rates in affective disorder family members are about 3-4% for depressive personality or hyperthymic personality and 3% for cyclothymic personality.

Depressive Personality

This section provides diagnostic criteria for depressive personality using the Modified RDC (Gershon).

This category is for subjects who characteristically (or chronically) are bothered by dysphoric mood not attributed to any other psychiatric condition described in these criteria. It includes subjects who might be categorized as depressive personality, emotionally unstable, asthenic personality, or chronically anxious (without panic attacks).

Information is to be obtained about the premorbid period. If there is no Axis I diagnosis, consider the subject's functioning since age 18.

Q7 50% = half the number of years between 18 years old and now for those with no major affective disorders. For subjects with affective disorder code yes, if more than 50% of the number of years between age 18 and the age of the first major affective disorder. When calculating 50%, the first episode may be unclean.

For example, if a subject is 40 years old at the time of interview, and had a major depressive episode at age 35, you would ask Q7, page 42, in the following way: "For much of your life, that means at least half (50%) of those years between the ages of 18 and 35, have you had hours, days, or weeks when you felt sad, down, or blue?"

Since at least early adulthood, the younger person (late teens) has been bothered by the following to a noticeably greater degree than most people:

A. Some dysphoric mood for at least 2 days a month (not necessarily 2 consecutive days) four or more times per year (periodic) or most or all of the time (chronic). The dysphoric mood dominates the clinical picture and may contain varying mixtures of or be limited to anxiety, irritability, apathy, or depression (sad, blue, hopeless, down in the dumps). (Includes a subject in his 20s who has been this way for at least 3 years.)

B. The chronic condition (other than a superimposed episode of another condition) has resulted in one of the following:

1. Subject communicated with a close relative or friend on how he felt.

2. Someone has complained about some manifestation of the condition.

C. Dysphoric mood is not attributable to any other psychiatric condition noted here, such as cyclothymic personality, somatization disorder (Briquet's syndrome), or anxiety state, and is unrelated to changes in external circumstances. (If moods recur regularly, this implies that they are unrelated to external circumstances.)

Note: Interviewer Instruction after Q6 on Page 42 of Instrument.

Age of onset of major psychiatric disorder is the earliest age of onset from the Mania and Depressive sections or the Psychosis section.

Hyperthymic Personality

This section provides a diagnostic criteria for hyperthymic personality using the Modified RDC (Gershon).

Information is to be obtained about the premorbid period. If there is no Axis I diagnosis, consider the subject's functioning since age 18.

Since early adulthood, the following have been present to a noticeably greater degree than in most people:

A. Periods of elation or excitement (optimism, ambition, energy, "lucky feeling") lasting at least 2 days four or more times per year (periodic) or most of the time (chronic).

B. This condition resulted in:

1. Subject communicated with a close friend or relative on how he felt (whether it was especially good or especially distressing).

2. Someone complained or commented on some manifestation of this condition.

C. Changes in mood often unrelated to external events or circumstances, or recurs regularly.

Q15 50% = half the number of years between 18 years old and now for those with no major affective disorder. For subjects with affective disorder, code yes if more than 50% of the time between ages 18 and the age of the first major affective disorder. The answer to this question is not determined in a subjective fashion, but based on age of onset.

Section I

ALCOHOL ABUSE AND DEPENDENCE

This section assesses both alcohol consumption (site optional) and a diagnostic criteria for alcohol abuse and dependence using Feighner, DSM-III-R, and DSM-IV. Two additional questions are included to address ICD-10 criteria. A subject is given the opportunity to skip out of this section if he never had one drink of alcohol, never consumed alcohol on a regular basis (drank at least once a week for 6 months or more), had never been drunk (when speech was slurred or unsteady on feet), or had never had more than three drinks during a 24-hour period.

Q2 If the subject has had at least one drink, then he is asked about alcohol consumption within the past week, starting with the previous day. There are three main categories to assess: beer/lite beer, wine, liquor.

Always record the name of the drink if it is not a well-known brand. Ask the subject about each category of alcohol, starting with the previous day, and go through all the categories before starting on the next day of the week. If the subject says that he had some of a particular beverage, ask how much was consumed and how long it took to drink the beverage. The number of drinks is coded in Col. I, the consumption time (minutes) in Col. II.

I: "Yesterday was Friday. How many beers or lite beers did you have on Friday?"

S: "Four'

I: "How long did it take you to drink those four beers?"

S: "Well, I spent about 2 1/2 hours at the bar with my friends, so I would have to say it took that whole time."

Multiply 2 1/2 x 60 to achieve a total of 150 minutes to drink those four beers.

I: "How much wine did you have yesterday (Friday)?"

S: "I split a bottle with my girlfriend when I got home. We finished it off with dinner, so I guess that was about 45 minutes."

Code "half a bottle" as three drinks, which took a total of 45 minutes to consume.

I: "How many drinks of (hard) liquor did you have yesterday?"

S: "None"

Code "0" in the "Drinks" column, and "0" in the "Minutes" column.

I: "Did you have any other alcoholic beverage yesterday?"

S: "No"

I: "How about Thursday? Did you have any beer or lite beer on Thursday?"

Proceed in this fashion to ask the subject day-by-day and drink type-by-drink type habits to get a pattern of use for the previous week.

If the subject cannot remember how much he drank or how long it took, and prompting (i.e., "Was it one drink, two drinks?" or "Did you drink during Happy Hour - that is usually between 5 and 7 pm in the city?") does not help clarify an answer, code the response with an "Unknown" ("UU") code.

Q5a "Regular drinking" is defined by the question as the age when the subject first had a 6-month period of having alcohol once a week. If this period occurred before the age of 10, the single digit number should be coded with a 0 in front.

Q6 This question follows the same form as Q3. If the subject tells you that the past week (Q4) was not a typical drinking week for him, then you must again follow the day-by-day, drink-by-drink pattern for each day, starting with a typical Monday and continuing through the other days. If the week was typical, you ask Q5. Then proceed to Q7. Record the actual time it takes to consume the drink(s). The inquiry about drinking in a "typical" week, refers to a typical week in the past 6 months. Do not ask this question if Q4 is yes.

Q8 The largest number of drinks in a 24-hour period is the total number of combined types of any form of alcohol the subject might have consumed within a 24-hour period. So, if the largest amount of alcohol the subject had was a half case of beer, a bottle of wine, and a 5th of gin, the total number of drinks would be 12+6+20 = 38 drinks. Code 38 in the spaces provided.

You can only skip out if the skips allow you to. If you are in the section, you must continue through the section even though the person may not be a heavy drinker.

Q11 Do not code yes, if guilt is due to strict cultural or religious beliefs that prohibit or condemn drinking.

Q19 Increased tolerance is operationalized as 50% or more. Suggested probe: "Would it take one and a half as many drinks as it did originally for you to get the same effect?"

Q27 Blackouts are periods when the subject was conscious, but cannot remember what happened. This is usually indicated when the subject cannot remember what happened during several hours or even days, or when others have said he did something and the subject cannot remember the incident. Blackout periods may also be recalled by the people who were with the subject.

Q29 This question assesses withdrawal symptoms when the subject stopped or cut down on drinking, not referring to a hangover. If more than one symptom is coded yes, then the subject is asked whether two or more of these symptoms occurred together, and then asked to name these symptoms. You may read the withdrawal symptoms that were identified and coded yes, and the subject may then indicate which of these occurred at the same time.

Q30 This question assesses physical health problems that could have been caused by drinking. If the subject describes another health problem that was the result of drinking, code this in the "cause other problem" line, specify what the problem was, and be certain to determine whether the subject was told this by a health professional.

Q32 This question needs to be asked slowly, breaking it into subparts. If subject denies all subparts, code "no" in a-e. If subject endorses a subpart then ask the corresponding problem in a-e, again coding "no" for anything not endorsed in stem question.

Remember, items are only coded "YES" it the symptom started or became worse.

Q32-32e The specifications of "more than 24 hours" and "interfered with your functioning" have been added to emphasize that these were actual psychological problems, and not just short-term symptoms of withdrawal.

Q33a Professional is defined as a physician, psychologist, social worker, nurse, or clergyman.

Q35 This question is important for DSM-III-R criteria for alcohol dependence. The questions reviewed for positive symptoms are starred (*). Onset and recency age refer only to those questions that are starred and coded yes. Interviewer should note in margin which symptoms were positive for clustering.

Q35a-35b The word "persistently" means continuing for several days.

Q36 First, second, and third times refer to three separate problems. This question refers to any of the problems related to alcohol. The alcohol use card with a list of symptoms may be useful for the subject to review after it has been checked for positive responses.

Note: If you skip site optional questions, and have completed CAGE questions and suspect the subject drinks more than he has stated, go back and ask site optional questions.

Section J

DRUG ABUSE AND DEPENDENCE

This section provides diagnostic criteria for drug abuse and dependence using DSM-III-R. The interview also includes several questions to determine the presence of "high risk behavior."

Marijuana

The Marijuana section has been separated from the general drug section because the use of marijuana is very common, but not necessarily indicative of other drug use. Entrance into this section requires use of the drug more than 21 times in a year. Subjects who currently use marijuana and have not reached this threshold will be excluded from this section.

Q1a Time is defined as a discrete episode of use. It does not refer to quantity of marijuana.

Q2 "almost every day" means more days than not.

Q2a Date is from time of onset.

Q4 This question needs to be asked slowly, breaking it into subparts. If subject denies all subparts, code "no" in a-e. If subject endorses a subpart then ask the corresponding problem in a-e, again coding "no" for anything not endorsed in stem question.

> Remember, items are only coded "YES" it the symptom started or became worse.

Q16a-16b The word "persistently" means continuing for several days. Interviewer should note in margin which symptoms were positive for clustering.

Other Drugs

The interviewer hands the subject a card that lists many prescription and nonprescription drugs. The subject is asked whether he has used any of these when the drugs were not prescribed or to feel good, high, more active, or more alert.

If the subject has never taken drugs except when prescribed, or over- the-counter medications as indicated, skip to the next section. The subject may have experimented with drugs briefly, and the number of times and age when he began to use each drug will be assessed. If the subject has tried several drugs, such as cocaine, stimulants, or hallucinogens, but no drug has been used 11 or more times, skip to the next section. If several drugs have been used 11 or more times, choose the two most frequently used and ask about those in the diagnostic drug section beginning with

Q18. The diagnostic drug section focuses on use of cocaine, stimulants, sedatives, and opiates. Drugs used 11 or more times and not included in these categories will be coded in the miscellaneous column. If more than one drug could be included in the miscellaneous column, ask about the one most frequently used.

If a drug was not used daily, you must continue through the section. You would place "000" in the appropriate boxes as the interviewer notes states. Again, as in the alcohol section, you often have to continue through the section even though the person may not be a heavy drug user.

Q17b If drugs have been taken more than 100 times, code 99.

Q25-25n Note that all withdrawal symptoms do not apply to all drug categories. Do not ask about individual withdrawal symptoms for drug categories in which no coding choices are provided.

Q32 This question needs to be asked slowly, breaking it into subparts. If subject denies all subparts, code "no" in a-e. If subject endorses a subpart then ask the corresponding problem in a-e, again coding "no" for anything not endorsed in stem question.

Remember, items are only coded "YES" it the symptom started or became worse.

Q35a-35b The word "persistently" means continuing for several days. Interviewer should note in margin which symptoms were positive for clustering.

Q36e Record the type of treatment.

Section K

PSYCHOSIS

The section provides diagnostic criteria for psychosis using DSM-III, DSM-III-R, RDC, Modified RDC (Gershon), DSM-IV, ICD-10, and records symptoms for the OPCRIT 3.0 program.

Introduction

Psychotic behavior presents as a symptom of many psychiatric disorders. It is for this reason that the Psychosis section focuses on psychotic behavior independent of any diagnostic category. Here the emphasis is on identifying and describing specific psychotic experiences for subsequent analysis using a variety of diagnostic schemes. The interviewer is required to codify specific psychotic symptoms and their occurrence in isolation as well as within the context of major depression, mania, alcohol use, drug use, medical conditions and/or other psychiatric disturbances such as schizophrenia and schizoaffective disorder.

The Psychosis section combines the SADS-LB and the CASH with modifications of both. The goal of this section is to establish whether or not: 1) the subject has ever experienced any psychotic symptoms; 2) the subject has ever had a psychotic syndrome; and 3) the subject is currently experiencing any psychotic symptoms or a current psychotic syndrome. The time frames established for the interview are: 1) Ever Present, and 2) Current/Most Recently Present. A subject who does not give a history of or describe psychotic symptoms during the initial screening questions will not be administered this portion of the instrument.

Administration

Q1 All screening questions in 1c should be asked. The screening questions assist in determining if the subjects have ever had an episode or period of illness that consisted of psychotic symptoms (here narrowly defined as involving either delusions, hallucinations, marked formal thought disorder, or grossly bizarre behavior that did not occur as part of a shared religious or subcultural belief system). There may or may not have been an identifiable organic causal factor (such as ingestion of a hallucinogen, amphetamine intoxication, fever, arteriosclerosis, alcohol or drug use). Episodes or periods of psychosis will later be categorized as schizophrenia, schizoaffective disorder, delusional disorder, affective psychosis, alcohol-induced psychosis, substance-induced psychosis, organic psychosis, or unspecified functional psychosis. The latter group contains conditions that clinicians might call transient situational psychoses, paranoid states or hysterical psychosis, and schizophrenic-like episodes with durations of less than 2 weeks.

SKIP OUT: If there is no evidence, from any source, of any psychosis or if the experiences reported did not last persistently throughout the day for one day or intermittently for a period of three days, skip to the next section.

If the psychotic symptom only lasted a brief period, you don't count it, as noted above, but make a marginal note about it.

The subject would not be in the study if they have never had any of these symptoms due to the screening we all do, so even if the initial answers here are "no", continue to complete the rest of the psychosis section. As you proceed through the psychosis section, you can go back and re-code this question based on the additional information gathered or you can code this question as "suspected" or "unknown." If you leave 1a, 1b and 1c as "No" and then code something later in the section as positive, it will generate errors. Editing the DIGS here can save time when we clean data.

If you suspect psychotic behavior even though the subject does not endorse any of the screening probes, continue to probe more informally and/or proceed with the section until certain that no psychotic behavior has been experienced.

If the subject denies any screening probes, continue with the section and make a marginal note detailing the obvious psychiatric history.

For any positive responses on the screening questions, determine whether the symptom is of psychotic proportions by using the standard probes as necessary. Establish duration and frequency for every positive response. Obtain examples and note in the space provided and the margins if necessary.

Establishing Time Frames For The Interview

An important aspect of the interview is to establish whether psychosis occurred outside of mood and substance abuse. Be as clear as possible with the timeline and marginal notes. If the subject has met criteria for mood or has a significant history of substance abuse, probe carefully to see if psychosis occurred free of mood and substance. Double check that symptoms lasted persistently for 1 day or intermittently for 3 days.

If psychotic symptoms are endorsed or suspected based on responses to screening questions, try to determine if the subject is currently symptomatic (within past 30 days). If the subject denies symptoms during the interview, but you observe the subject experiencing symptoms, code yes.

Q2 If the subject responds yes to whether he is currently experiencing psychotic symptoms, it is imperative that you do not skip to Q3 but continue with Q2a.

Psychotic symptoms refers to delusions, hallucinations, disorganized speech, disorganized behavior, and catatonic behavior. Negative symptoms are not coded here as psychotic symptoms.

Q3 If the subject is not actively psychotic, use this item to determine how old the subject was the last time that he was actively psychotic. The age at which the symptoms started for that episode is used.

A critical determination for establishing the time frame for the interview in subsequent psychosis subsections (e.g., delusions, hallucinations) is whether an individual ever returned to a premorbid level of functioning for at least 2 months (Q4). This determination directly affects whether an episode is deemed to be current or not. Some individuals with schizophrenia will have a remission of positive symptoms with antipsychotic medication, but still manifest some negative or residual symptoms. These individuals should be considered to be in episode.

Medication time is counted as psychotic time.

The CURRENT and EVER array generally are the same, but it is possible that they could be different. For example, if a person used drugs from age 15 – 18 and during that period had tactile hallucinations, you would code "yes" under EVER. The episode of schizophrenia began at age 25 – but from age 25 to the time of interview, they never again had tactile hallucinations, so you would code "no" under CURRENT. Another example might be a person who had distinct episodes of psychotic depression or psychotic mania outside (before) of the current episode of psychosis.

If a person has distinct episodes of psychosis separated by times of returning to their premorbid level without medication (medication time is counted as psychotic time) put in any and all (not just the longest) period that the symptoms occurred, and then the longest period the symptom(s) lasted for the duration "EVER". Then, fill in the "CURRENT/MOST RECENT" column for that particular (most recent or current) period. This is another (albeit rare with our subjects) way these arrays could be different. Still, if a symptom is ever positive in the "current/most recent" column, it must also be positive in the "ever" column, even in this scenario.

The CURRENT EPISODE will refer to an episode of psychosis that is present at the time of the interview. This episode may include prodromal and residual symptoms. A subject is considered out of episode if he has had a return to his usual (premorbid) level of functioning for at least 2 months. Thus, some subjects may not be actively psychotic at the time of the interview and yet still be in a psychotic syndrome. It is important to obtain and rate a full description of the subject's active, prodromal, and residual symptoms for the current episode since this will be the only information available for determining some specific diagnoses such as schizophrenia. Thus, a subject who experienced two weeks of grandiose delusions and auditory hallucinations preceded and followed by several months of prodromal symptoms and 2 years of residual symptoms would be described for the entire period of the disorder (starting with the first prodromal symptoms, including the active psychotic symptoms and continuing to the current residual symptoms).

If the subject is not in a current episode but has had previous episodes, the most recent episode is to be described. The most recent episode is the last episode that included active psychosis with or without prodromal and residual symptoms followed by at least 2 months of usual functioning without any symptoms. In making this distinction, the interviewer should utilize information about an individual's course of illness already obtained in the Psychiatric Overview. It may be

necessary to supplement this information with further questions about a subject's return to premorbid functioning.

In summary, if the subject has shown significant signs of psychosis more or less continuously since onset (i.e., no periods of 2 or more months back to premorbid functioning), count it as one period of illness. If the current episode is the only episode, symptoms will be indicated in both the EVER column and the CURRENT EPISODE column.

Use of The Ever Array

In addition to documenting symptoms associated with the current or most recent episode, the EVER column is designed to determine whether the subject has ever had any psychotic symptoms. The array in the EVER column establishes the context for past psychotic symptoms. When a subject reports a specific psychotic experience, establish the context of that symptom based on the previous sections of the interview. You should have already established whether or not the subject has had a history of major depression, mania, alcohol use, drug use or other conditions. For example, if a subject reporting paranoid delusions has already reported a history of major depression and alcohol use but not mania or drug use, ask if the delusions were experienced during a major depression and/or during alcohol use. There would be no need to ask about delusions during mania or drug use since the subject has already denied such experiences. Establish subsequently which symptoms described in this column occurred simultaneously and describe the co-occurrence of symptoms in detail in the narrative. This is the only mechanism available for applying diagnostic criteria to past episodes of psychosis.

Use of The Array to Establish Temporal Relationship of Two or More Psychotic Symptoms

When going through the array, etc., it is important to tie an endorsed symptom to a particular episode. For example, if a subject is judged to have had a persecutory delusion associated with a mania, try to establish the timeframe. The timeline obtained during the overview is especially useful in getting this information.

Using the timeline, probe: "Was this during the '73 episode of mania that you've told me about?" Record dates in margin.

When a second symptom is endorsed, ask: "Was that also during the '73 episode?"
When multiple episodes occur, restrict your inquiry to one or two of the most severe episodes.

<u>Probes For Symptom Array</u>

1. Question (ever)

2. Specify (example)

3. Standard Probes (ask enough to be reasonably certain symptom is of psychotic proportions)

4. Record in margin frequency and duration of symptom.

5. Determine if the symptom ever occurred independently of mood disorder, alcohol or drug abuse, or if it ever occurred in conjunction with any of these listed disorders. Do not ask if the symptoms occurred in conjunction with one of the other disorders unless the subject has a history of these disorders per prior section. If there is a history of major depression, ask:

   "Did this symptom occur when your mood was stable, that is, when you were not having mood problems?"

   "Did it ever occur at the same time you were having mood problems like the depression or mania you described earlier?"

   Repeat the same type of probes about alcohol abuse and drug abuse if appropriate.

With individuals who have only ever experienced one episode of psychosis (prodromal, residual, and active) the "ever" and "most recent" categories are the same because the subject has never returned to normal, premorbid functioning. Therefore, a "YES" in the "EVER" column is an automatic "YES" in the "MOST RECENT" column because the same (and only) episode of psychosis is being coded. When however, you have a subject that has truly experienced more than one episode of psychosis with a 2+ month return to premorbid functioning, the "most recent" column may be more easily administered to a respondent (endorsing the presence of a symptom in the "EVER" column") by using your timeline and saying, "Did you also experience that symptom during the '98' episode?"

When a psychotic symptom has been established as being present, the probing to establish the context in which that symptom occurred is **largely but not completely** based on the previously administered sections of the interview. While the "PSYCHOSIS ONLY" array item should be asked to all subjects (and for each symptom), the rest of the array is only asked for each of the previous DIGS sections in which the subject endorsed symptoms. You should have already established whether or not the subject has had a history of depression, mania/hypomania, alcohol use, drug, or other conditions. For those active, psychotic symptoms that have been experienced, the subject would be asked whether they were also concurrently experienced at any time of depression, mania/hypomania, drug/alcohol abuse.

In the psychosis section, after each symptom category you are asked to give the duration in weeks.
For example, if someone says that they <u>only</u> heard voices during a depressive episode, code the duration and make a marginal note explaining that this particular symptom occurred during drug use, etc. In the case of the person that heard voices only during a depression, the EVER array would all be "NO" except for "depression" which would be coded "YES". The duration would reflect how long the voices occurred during the depression and the marginal note will explain that this only occurred during a depression.
If someone had rigidity due to drugs and also had rigidity at an earlier time due to psychosis, you would code a "YES" in the "PSYCHOSIS ONLY" section, and a "YES" in the "OTHER (med)" row, stating in a marginal note that part of the duration of the rigidity occurred during drug use.

See Appendix E on page 122 for additional organic causes of psychosis.

Delusions

False beliefs or judgments that are out of proportion to actual experience and reality. A delusional belief is held with extraordinary conviction and persists within the face of any evidence to the contrary. Delusions are to be distinguished from illusions and hallucinations, which are perceptual experiences. It is up to the interviewer to distinguish between delusional beliefs and overvalued ideas.

Note: The interviewer must circle the appropriate response in the CURRENT or MOST RECENT EPISODE column in Q5-18.

Q5 Persecutory Delusions (additional probes): "How are they trying to harm you? Is there an organization behind this, like the Mafia? Why are they singling you out? Are they trying to harm you in any other way?" Refers to lifetime.

Q6 Jealousy Delusions (additional probe): "What kind of evidence do you have?"

Q9 Religious Delusions - Do not score beliefs held as part of an organized religion.

Q12 Delusions of Reference - Do not include simple self- consciousness or the feeling that the subject attracts comment even if critical (PSE). They should be distinguished from ideas of reference, which are not firmly held in the face of contrary evidence and are commonly experienced in everyday life.

Q13 Being Controlled - The subject's will is replaced by that of some external agency. Do not include feeling that life is planned and directed by fate, or under God's control.

> The essence of a control delusion is that a person is forced (compelled, impelled) to do something against their will. It is more than just being influenced or following a suggestion (which is often the case with command hallucinations). The person is forced to act against their will. The latter example above would likely qualify, but not just a conversation with voices a subject might have.

> Q14 The question specifies people... "Have you ever had the feeling that people could read your mind or know what you are thinking?"

Q15 Thought Broadcasting - The subject's thoughts are audible to others. Subject felt that thoughts could be heard by others.

Q16-17 These experiences are independent of the subject's will.

> Q 16 Hearing a voice and then thinking about or repeating the content of the voice is not thought insertion.

Q18 This question is the basis for Q5 in the OPCRIT section of the DIGS (section AA), and therefore a full description of delusions should be coded.

> Capgrass syndrome and nihilistic delusions are examples. Any delusion that does not fit into another category can be coded here.

Q19 The longest continuous period of delusions. If delusions are intermittent for days and weeks, the total duration is recorded.

Q20 Was there a time the subject had disorientation or confusion together with a delusion? A change in the level of consciousness that may be due to physical factors, e.g., delirium or other factors (site optional for bipolar groups). A determination needs to be made as to whether or not the change in sensorium was **entirely** due to a drug or other medical condition in order to rate a 2 as opposed to a 3. The goal of this item is to determine if there has ever been a period of psychosis without clouded sensorium. If there has ever been a period of psychosis without clouded sensorium code "0" (none).

Q21 "Delusions not organized into a consistent theme. For example, the subject thinks his room is bugged, believes people doubt his sexual potency, and suspects he may be the son of Paul McCartney." (CASH)

Q23 Bizarre or Fantastic Quality - "Extent to which the content of any of the delusional beliefs have a bizarre or fantastic quality. That is, the delusional belief is not possible and has no base in reality." (CASH) For example, the subject thinks there are Martians walking in the kitchen. To rate a 2 the delusion needs to be truly bizarre; this qualifies a subject for the A criterion for schizophrenia in some diagnostic systems.

> Thought insertion, thought withdrawal, thought broadcasting, and delusions of control are bizarre.

The "bizarreness" of a delusion is reflective of DSM-IV criteria. In fact, it is the basis of a significant change in the criteria for Schizophrenia between DSM-III-R and IV; where DSM-IV now requires only ONE symptom from criteria A if the delusion(s) is/are bizarre (DSM-III-R required two). Bizarreness may be difficult to judge, especially across different cultures. Delusions are deemed to be bizarre if they are totally implausible (DSM-III-R and DSM-IV verbiage) and not understandable and are not derived from ordinary life experiences. An example would be the belief that a stranger has removed his/her internal organs and has replaced them with someone else's organs without leaving any wounds or scars. In the vernacular of the DIGS, this level of implausibility has always best been captured at level "2" of this scale because level "1" represents beliefs that while bizarre, could be seen as somewhat being derived from a subject's ordinary life. In the DIGS, the example given for level "1" (subject being persecuted by witches) could be derived from experiences that might occur whereas the "belief that green men from Mars have been recording a subject's dreams and broadcasting them back home" is not seen as remotely plausible. An updating of the examples may be needed in order to better reflect the intent of the scale and its meaning. Also, remember that, by definition, thought insertion, thought withdrawal, thought broadcasting, and delusions of control are definitely bizarre delusions in the DSM-IV sense. Clarification – actually, DSM-IIIR criterion A for schizophrenia is fulfilled by bizarre delusion(s) even without other criterion A symptoms; in this sense it is the same as DSM-IV.

Hallucinations

"Perceptual experiences without an objective source. These may be auditory, visual, olfactory, tactile or gustatory in nature. Hallucinations differ from illusions in that there is not objective external stimulus for the perception." (CASH)

Note: The interviewer must circle the appropriate response in the CURRENT or MOST RECENT EPISODE column in Q24-Q38c.

Q24 "What is it like? Can you make out the words?"

Q25 Command hallucinations are before the action and spoken to the person, while running commentary is after the action and spoken about the person. Running commentary can be thought of as a play by play commentary.

Q31 Distinguish from somatic delusions.

In an attempt to explain the feeling, the individual may develop a delusion. For example, the woman who feels the baby move may also have a delusion that she is pregnant. In this case, then the person has a somatic hallucination and a somatic delusion.

Q33 Distinguish from illusions for which there is some external stimulus.

Do not score as positive if they occur only when falling asleep.

Q35 Duration of hallucinations includes the longest period of time when the subject had continuous or intermittent hallucinations. If the subject is unsure, estimate the duration.

Q36 Code this as yes even if the subject did not hallucinate the entire day if the hallucinations were present for several days.

Q38 This Questions is only applicable if there has been a major depressive episode or a manic episode. If not, please answer "No" with a marginal note stating that this question is not applicable because there is no mood episode.

Q38 This item asks if there ever was a time when hallucinations and delusions overlapped. For example, "Was there a time when you believed someone was following you and you were also hearing voices? Was there a time you believed any of the ideas we were just discussing and you were experiencing voices and visions at the same time?"

Q38a If there has been an overlap of hallucinations and delusions rate the duration of this overlap. If the two symptoms coincided intermittently and frequently, rate the total duration of this overlap.

Q39 A change in the level of consciousness that may be due to physical factors, e.g., delirium or other factors (site optional for bipolar groups). A determination needs to be made as to whether or not the change in sensorium was **entirely** due to a drug or other medical condition in order to rate a 2 as opposed to a 3. The goal is to determine if there has ever been a period of hallucinations without clouded sensorium. If there has been at least one period of hallucinations with no clouding of sensorium code "0" (none).

Disorganized Behavior

Q40a-40b Bizarre Behavior - Unusual behavior is behavior that is not typical of the culture and would probably call attention to the individual. Two types of behavior are coded: unusual and disorganized/inappropriate.

Care must be taken not to apply this criterion item too broadly. Grossly disorganized behavior must be distinguished from behavior that is merely aimless or generally unpurposeful and from organized behavior that is motivated from delusional beliefs. It might be difficult to determine whether a subject's manic episode drove the reckless behavior of "running naked through the streets, or if this was a deterioration of social behavior which often occurs along with social withdrawal in schizophrenic patients. Do your best in probing and then take the example / answers given to your PI for review and discussion. "Running naked through the streets" is certainly disorganized behavior (perhaps some combination of "dress in an unusual manner" and "clearly inappropriate sexual behavior"), and in this case, one would need to spend one's energy in assessing when this behavior occurred and code "YES" in the appropriate row(s): "MANIA", "PSYCHOSIS ONLY", or whatever row(s) apply.

Examples of disorganized behavior: painting other people, spraying people with roach spray.

Since "aggressive" behavior can be due to paranoia and not disorganization, how do you differentiate it and # 47?
Try to get the person to explain why they became aggressive. #47 is not limited to aggression. In the disorganized behavior section of psychosis, we are after more disorganized aggression, like with PCP psychosis typically. In the catatonic section it is more like an overall increase of activity (i.e., catatonic excitement), some of which might be aggression. Aggression related to paranoia is generally more organized.

Positive Formal Thought Disorder

Must substantially impair communication

Q42 Disorganized Speech - Speech that is impaired by distorted grammar, incomplete sentences, lack of logical connection between phrases or sentences. If the subject is currently thought disordered, code without asking.

Q43 Odd Speech with Content That Is Difficult to Follow - Speech that is excessively vague or extremely over-elaborated. Odd speech is not incoherent but rather the content lacks substance or meaning. If the subject is currently thought disordered, code without asking.

Written examples are crucial to the two formal thought disorder questions at which time, the PI may be consulted as to whether the severity is great enough to code as present. Please use the SAPS questions 26-34 (p. 85).

Catatonic Motor Behavior

This item is to be scored as present if any of the following are reported:

Q45 Rigidity - Maintains a rigid posture.

Q46 Stupor - Marked decrease in reactivity to environment and reduction of spontaneous movements and activity.

Q47 Excitement - Apparently purposeless and stereotyped excited motor activity not influenced by external stimuli.

Q48 Motoric Immobility (Catalepsy): Immobile position maintained over time. Includes waxy flexibility.

Q49 Extreme Negativism: Mutism (i.e., refusal to speak) and/or uncontrollable resistance to instructions.

Q50 Peculiarities of Voluntary Movement: Stereotypies and other unusual repetitive movements, not tardive dyskinesia.

Peculiarities of voluntary movement examples: gesturing, posturing, rocking, and grimacing. – take care to list under "other (med.)" if believed to be extrapyramidal or other motor side effects from antipsychotic medication – also do not put compulsions (as in OCD) here at all since there is some ability to control these sort of movements (albeit with a lot of effort, temporarily, etc.)

Q51 Echolalia: Repetition of verbal communications.
Echopraxia: Repetition of movements.

Avolition/Apathy

Q53 Lack of energy or drive leading to the general difficulty of initiating and engaging in activities. Distinguish between decreased energy and interest that may accompany depression and the difficulty initiating and sustaining activity associated with negative symptoms. Determine if this happened during a period of depression. Do not code as positive if decreased energy or drive is due to depression and not due to negative symptoms.

If they only have avolition during depression – you do not code it here or on on A60g? This says "aside from depression" in the question stem.

Alogia

Q55 Poverty of content of speech as well as increased latency of response. The patient's replies to questions are restricted in amount, tend to be brief, concrete, and unelaborated.

Affect

Q58 Flat or Inappropriate Affect - Virtually no signs of affective expression; the voice is usually monotonous and the face immobile. Distinguish from the affective flattening that may be seen in a major depressive episode. Note that antipsychotic drugs may cause similar effects.

Q58 Inappropriate Affect - Affect is clearly discordant with the content of the subject's speech or ideation. Sudden unpredictable changes in affect involving outbursts of anger or laughter may occur.

Q60e "Odd speech" is a symptom of disorganized speech and therefore its omission from the list of Schizophrenia A criteria items might simply have been a typographical error. Actually, the use of "e.g., ... Q42" under QA60e indicates "for example" and is not necessarily meant to be comprehensive. It would be clearer to just follow the pattern of the other "A60" questions and list all applicable preceding questions, which would include Q42-43 for QA60e. Also, note that for QA60c, hallucinations, includes Q24-34, and not just Q24-33.

Disorganized thinking, which includes "loosening of associations" has been argued by some to be the single most important feature of schizophrenia. Because of the difficulty inherent in developing an objective definition of "thought disorder," and because in a clinical setting interferences about thought are based primarily on the subject's speech, the concept of disorganized speech has been emphasized in the definition of Schizophrenia. However, because mildly disorganized speech is common and nonspecific, the symptom must be severe enough to substantially impair effective communication (DSM-IV). Therefore, for odd speech to code as "YES", three things must be considered 1) type of odd speech experienced, 2) severity, and 3) duration of time experienced.

Q62 a and b If a subject has never met full criteria for depression and/or mania/hypomania but has been psychotic, this question is automatically a "YES". The denotation of "depressed/high or excited" in these questions (and throughout the rest of the section) is meant to reflect the presence of a mood disorder(s) that meets full criteria. If a subject has never had a major depressive, manic, or mixed episode, but has had a psychotic period of over one week, the answers to QA62 and QA62a would be "YES" and QA62b would not be answered.

Q63b If psychotic symptoms only occur during mood disorder, check for mood-incongruent psychotic symptoms during depression. If present, continue Psychosis section. If psychotic symptoms are only present during mania, code no. If you code no on 63b, follow SKIP pattern.

Onset of First Symptoms Episode

Q64-66 Gather information regarding the first episode of active psychosis. Determine whether there was ever a return to premorbid functioning after symptoms started. This distinguishes episodic from chronic illnesses.

If you find out that the episode is chronic (or one long continuous episode), return to Q5 and code symptoms in EVER column into CURRENT/MOST RECENT COLUMN.

Q67 Try to determine how many episodes the subjects have had during their lifetime. When doing this, remember that subjects are considered out of episode when they have returned to their usual selves for at least 2 months with no active or residual behaviors.

When the most recent episode is being described, onset and duration information for that episode should be coded.

Q68-69 If you suspect autism or another pervasive developmental disorder on the basis of the Medical History section or other information, specify information in the margins and on attached sheets.

In autistic disorder there often are disturbances in communication and in affect that suggest schizophrenia. However, the additional diagnosis of schizophrenia is made only if prominent delusions or hallucinations are also present. For further information on diagnostic criteria for autistic disorder refer to the DSM-III-R section on pervasive developmental disorders - autistic disorders.

Delineation of Current or Most Recent Episode

Refer back to Q2 for onset and duration of this episode.

Q69 Note the overlap between psychosis and mood disorders that have already been assessed (specifically, major depression and mania).

a and b These two questions refer to episodes of mood disorder that meet full criteria. If the subject has only ever "felt sad" or "felt elated" without endorsing the presence of enough accompanying symptoms to code for full criteria of that mood disorder, then these questions would be coded "NO".

Q70-74 Determine if the psychosis <u>follows</u> alcohol use, drug use, medical problems and/or the use of prescription medications. This is critical for the diagnostic process.

Q70-71 Even though no time frame is given, the intent is hours to days from last use, i.e., where there is a good chance the substance use might cause the psychotic symptoms. Also, the substance use would not need to necessarily reach the dependence level to code "yes" here.

Q75a-75b Impairment of functioning is measured and rated. "Much of the time" refers to at least 30% of the time.

Q76	In evaluating the subject's answer to this question, you must take into consideration that the subject has been psychotic. The DSM IV, it describes Brief Reactive Psychosis and the duration (at least 1 day but less than 1 month).

Prodromal and Residual Symptoms

Make a marginal note to establish the time period being described. If a symptom is not present, code "NO" rather than leave it blank. Remember that the symptom must be a change from the subject's "usual self."

Q78-78p This section of the interview explores changes from usual behavior that may precede periods of active psychosis or appear between them. Behaviors described are relatively persistent. Establish the duration of the period during which the subject reported experiencing the behaviors described more or less continuously.

Some items included for prodromal and residual periods may appear to overlap with active symptoms. The distinction between active and prodromal items is the intensity of the subject's conviction that these experiences are true/real.

The prodromal period will refer to the period prior to the onset of the active psychosis. This may be less than 1 year.

The residual period will refer to the period after the active psychotic phase. This also may be less than 1 year.

If there are multiple psychotic episodes with true return to premorbid function (2 months or more) in between, then ask in reference to the most recent episode. Otherwise treat it as a single episode and ask about the year prior to the onset of psychosis.

If there is no specific information on the duration, use the date of current episode. Since these items are for the duration of prodromal and residual phases, be careful not to put down the date of the first psychotic symptom. It is best to have an estimate of the duration.

Schizoaffective Disorder

Q79-98 You will be provided with a step-by-step procedure for determining the history of schizoaffective disorder. If the subject has previously met the criterion for an affective disorder, then the overlap between the affective disorder and the psychotic disturbance must be determined. If the core criterion of affective disturbance (i.e., depressed or elated mood) has not been met, then you may skip to the next section. If the criteria for an affective disorder have been met and the affective episode has been described previously, then you may skip to questions regarding the overlap between syndromes. If, however, the affective episode that overlaps with psychotic symptoms has not been described previously (i.e., it is not the current or worst episode already noted), then you must establish that the affective episode being described meets specific criteria. In actuality, very few subjects will be asked about specific criteria for affective syndromes since they will have been described previously.

For those subjects for whom it has not been established that they met criteria for an affective disorder concurrently with active psychotic symptoms, review the Symptom checklist provided. The probes listed in the Depression and Mania sections may be applied to the checklist to facilitate this.

The essential feature of the schizoaffective sections is an uninterrupted time period during which the individual continues to display active or residual symptoms of psychotic illness and during which, at some time, there has been a Major Depressive, Manic, or Mixed Episode concurrent with symptoms that meet Criterion A for schizophrenia. In addition, during the same period of illness, there are delusions or hallucinations for at least 2 weeks in the absence of prominent mood symptoms. The phase of illness with concurrent mood and psychotic symptoms is characterized by the full criteria being met for both active phase schizophrenia (e.g., Criterion A) and for Major Depressive, Manic or Mixed Episode. The duration of the Major Depressive Episode must be at least 2 weeks; the duration of the Manic or Mixed Episode must be at least 1 week (or any duration if hospitalization occurs). Please refer to the DSM-IV book for further details and discussion. Therefore, if the subject does not meet full criteria for depression the schizoaffective, depressed section would not apply. One should complete the schizoaffective disorder, depressed type section if the patient has had an "otherwise full DSM-IV major depressive episode" lasting one or more weeks, according to the instructions of the DIGS, even though DSM-IV requires 2 weeks.

As was the rule in the first Schizophrenia initiatives, BOTH schizoaffective sections were to be asked to any subject who endorsed the presence of psychosis for 2+ weeks outside their full criteria depressions/mania's. Remember, the presence or mood incongruent psychosis during either depression or mania does not code the subject for Schizoaffective Disorder by DSM-IV but rather by the embedded diagnostic system, Modified RDC. Schizoaffective Disorder by DSM-IV is driven by the presence of psychotic symptoms (regardless of congruency) for 2+ weeks outside a full criteria mood disorder. To clarify, if you have gotten as far as P70 (i.e., have not yet skipped out of the psychosis section) and the patient had a period(s) of mania including psychotic symptoms, proceed with Q79. Similarly, if you have gotten as far as P71 (i.e., have not yet skipped out of the psychosis section) and the patient had a period(s) of depression lasting at least one week including psychotic symptoms, proceed with Q89.

The essential feature of a rapid-cycling Bipolar Disorder is the occurrence of four or more mood episodes during the previous 12 months. These episodes can occur in any combination and order. The episodes must meet both the duration and symptom criteria for a Major Depression, Manic, Mixed, or Hypomanic episode and must be demarcated by either a period of full remission or by a switch to an episode of opposite polarity. The essential decision to make before administering the depressed and manic sub-sections, therefore, is whether the mood episodes contained within the rapid cycling pattern of the subject, met full criteria for depression and/or mania. If one of both polarities did, then proceed through the appropriate schizoaffective sub-section. 5/01)

Do not skip the schizoaffective disorder, depressed type section because you previously completed the schizoaffective disorder, manic type section.

Q 85 Mood Congruent Symptoms
Mania
Delusions/Themes: inflated worth, special knowledge, special power, special relationship with a deity or a famous person, thinking that one is God
Hallucinations: extreme positive nature

Q86-87 The psychosis can occur before or after the affective syndrome. These

Q 94 Mood Congruent Symptoms
Depression
Delusions/Themes: guilt, poverty, personal inadequacy, suicidal ideation, death, paranoia with depressed theme, deserved punishment, nihilism.
Hallucinations: voices that tell someone they are no good, worthless, bad

If there is one instance of mood incongruence (even if the rest are mood congruent) then rate it as mood incongruent.

Q96-97 Questions assess a period of non-overlap.

Q88 Score yes if <30% of the time affective disorder was overlapping with psychosis.

Q98 Brief = <30% (Use as a general guideline and make marginal notes.) This judgment should be based primarily on information gathered over the entire course of the interview (particularly the timeline). You can use this question to help clarify the overlap, "Since you first began experiencing (hallucinations/delusions) what percent of the time were you depressed/ manic?". Or "What percent of the time was your mood normal?"

Patterns of Symptoms and Severity

Q100-102 "Using the information collected previously concerning onset, symptoms, and hospitalization, classify the course of the subject's illness into one of the following patterns. Although the subject may not fit any of these patterns perfectly, select the one that most closely approximates his course. These ratings should be made descriptively, without trying to infer what the course might have been had the subject been untreated." (CASH)

Section N

COMORBIDITY ASSESSMENT

It is difficult to determine the temporal relationship between substance abuse and other psychiatric disorders before those disorders are clearly defined by the interviewer and subject. This section was designed to avoid this problem by referring back to those sections after they have been completed. It asks about which disorder started first, then about the temporal relationship between substance use and psychiatric symptoms in various episodes.

Q1 Mood changes = Defined as the occurrence of major affective disorder or psychosis. If there is no major mood disorder or psychotic symptoms, dysthymia can be used.

Alcohol/Drugs = Use or abuse of alcohol or drugs. Significant use is generally accepted to be two or three symptoms in any one of these sections.

Problem = Defined as two symptoms related to alcohol, marijuana, or any street drug use.

Note in margins when overlap does or does not occur.

Section O

SUICIDAL BEHAVIOR

This is a nondiagnostic section that assesses the frequency and form of suicidal behavior. If the subject states that he never attempted suicide, the rest of the section is skipped. If the subject reports more than one suicide attempt, first he is asked the age of his earliest attempt. Next he is asked to determine which attempt was the most serious and to describe that attempt. Severity may be quite idiosyncratic since lethality and intent have not been shown to be related (i.e., a lethal attempt may not reflect intent to die and a nonlethal attempt may reflect a significant intent to die). After a complete description has been elicited, rate the most severe suicide attempt reported in terms of lethality and intent. Even the most minimally lethal attempt reported is to be recorded and rated. Establish the context for the suicidal behavior by asking if the behavior occurred during a period when the subject was in a period of major depression, mania, alcohol abuse, drug abuse, or activity psychotic.

Section T

GLOBAL ASSESSMENT SCALE

The purpose of this rating is to obtain a general, standardized description of the subject's level of functioning during the month prior to the interview. Apply the rating scale to information and observations obtained during the interview. For subjects who are hospitalized during the interview, functioning at the time of admission will be rated.

Q2 Refers to the subject's functioning at the worst point during the current episode. If a subject is not in a current episode, the "CURRENT EPISODE GAS" score would be 000.

Q3 Refers to GAS score during the past 30 days.

Section U

SCALE FOR THE ASSESSMENT OF NEGATIVE SYMPTOMS (SANS)

SANS and SAPS in the DIGS reflect the symptoms experienced in the last 30 days.

Affective Flattening or Blunting

Affective flattening or blunting manifests itself as a characteristic impoverishment of emotional expression, reactivity, and feeling. Affective flattening can be evaluated by observation of the patients' behavior and responsiveness during a routine interview. The rating of some items may be affected by drugs, since the Parkinsonian side-effect of phenothiazines may lead to mask-like facies and diminished associated movements. Other aspects of affect, such as responsivity or appropriateness, will not be affected, however.

1. Unchanging Facial Expression

Definition of normal - animation in all regions of the face according to the emotional content of the verbal discourse. The regions of the face being the 1) brows/forehead/nasal root, 2) eyes/nose/cheeks, and 3) mouth/lips. In normal expression, each region is used to convey internal emotional states. For example, in the classic expression of anger, the brows are drawn downward and together, the eyes are squinted, the cheeks raised, and the mouth is squarish and tense or wide open and tense. However, it is rare in an adult population to see such pure/unmasked expressions, although there should be some quality and quantity to expression in all regions of the face. Affective flattening or blunting comes about when all regions of the face are not used or used in a mechanical/unanimated fashion. The most common expressions seen in normal discourse are joy, sadness, and interest. In the expression of these emotions, there are varying changes in the tone of the muscles, this is where the concept of flattening comes into play. The less clearly expression is observed, the more flat or blunt a person is judged to be. This is meant to be taken as a holistic approach in that there can be conversation; however, in this type of

interaction with patients, there is also ample opportunity for more discrete/animated expression. So, the SANS/SAPS ratings are meant to be used as a holistic judge of a patient's presentation throughout the interview.

0 - No decrease in animation or labile

1 - Questionable decrease in expressiveness

2 - Mild: Clear demarcation of expression but not pervasive or consistent

3 - Moderate: Expression is mostly limited to changes in muscle tonality, but an occasional clear expression may be seen

4 - Marked: Expression is limited to slight changes in muscle tonality and no animation or clear indication of emotion

5 - Severe: Essentially no expression, even in muscle tonality

U -Unknown/cannot be assessed/not assessed

2. Decreased Spontaneous Movements

0 - No decrease (i.e., patient shifts in the chair, crosses legs, moves hands)

1 - Questionable decrease

2 - Mild: Some decrease (i.e., patient may shift two or three times, may cross/uncross legs twice)

3 - Moderate: Patient may shift once or twice and may cross/uncross legs once, one or very few hand movements

4 - Marked: Patient may shift position once and no hand or leg movements

5 - Severe: Patient sits immobile throughout the interview

U -Unknown/cannot be assessed/not assessed

3. Paucity of Expressive Gestures

0 - No decrease (i.e., patient uses hand gestures, leans forward or backward as an emphasis in conversation)

1 - Questionable decrease

2 - Mild: Patient usually uses gestures but not as frequently as there is opportunity to

3 - Moderate: Patient occasionally gestures but not regularly

4 - Marked: Patient only infrequently uses body gestures (hand gestures once in an hour)

5 - Severe: Patient never uses body gestures to aid in expression

U -Unknown/cannot be assessed/not assessed

4. Poor Eye Contact

Definition of normal - Eye contact is used as an aid in expression between two people and is an intricate part of conversation. Normal eye contact goes unnoticed, but deviant eye contact becomes highly noticeable and perhaps disturbing. There are two different elements to consider when assessing eye contact: quality and quantity. Quality of the contact deals with expressiveness of the gaze. The usual expression seen in interviewing is one of interest. This is when the patient looks attentive and appears to be engaged in the conversation. For example, it is accepted to be normal interaction to look at the interviewer when questioned and maintain rapport with an attentive look while answering. If the patient is just staring through you, this does not count as an expressive gaze and should be rated as poor eye contact. The interviewer should feel connected with the patient while the gaze is exchanged.

The second element to eye contact is quantity. This refers to the amount of time spent sharing a gaze. Since there are so many variables involved with making a quantitative estimate (length of interview, kind of interaction due to topic being discussed, eye contact made by interviewer), the assessment will be made as a function of seized opportunity

rather than the actual number of times the patient takes the opportunity to make contact or avoid it. For example, if within an hour there are many opportunities to make eye contact with the interviewer, but the patient only does so about half the time, the rating would be a 3 according to the SANS. Also, the duration of each gaze should be taken into account. For example, if all the opportunities for eye contact are seized, but they are only 1 second in duration, the rating on the SANS should reflect this.

0 - Normal: Contact is engaging, e.g., patient is attentive and engaged with the interviewer and seizes all opportunity to make contact

1 - Questionable decrease: e.g., the duration of the engaged look is briefer but all opportunities are seized, and gaze is attentive

2 - Mild: e.g., duration of gaze is brief (3-4 seconds), approximately 25% of eye contact opportunity is not seized, and gaze is not always engaging or attentive

3 - Moderate: e.g., duration of gaze is 1-2 seconds, approximately 50% of eye contact opportunity is not seized, and gaze is usually not engaging or attentive

4 - Marked: e.g., duration of gaze is less than 1 second, 75% of eye contact opportunity is not seized, and gaze is rarely or never engaging or attentive

5 - Severe: e.g., gaze is fleeting, never engaging or attentive, and almost never is opportunity seized

U - Unknown/cannot be assessed/not assessed

5. Affective Nonresponsivity

Failure to smile or laugh when prompted may be tested by smiling or joking in a way that would usually elicit a smile from a normal individual. The interviewer may also ask: "Have you forgotten how to smile?" while smiling himself.

0 - Not at all

1 - Questionable decrease

2 - Mild: Slight but definite lack in responsivity

3 - Moderate: Moderate decrease in responsivity

4 - Marked: Marked decrease in responsivity

5 - Severe: Essentially unresponsive, even on prompting

U -Unknown/cannot be assessed/not assessed

6. Inappropriate Affect

Affect expressed is inappropriate or incongruous, not simply flat or blunted. Most typically, this manifestation of affective disturbance takes the form of smiling or assuming a silly facial expression while talking about a serious or sad topic. (Occasionally patients may smile or laugh when talking out a serious matter, which they find uncomfortable or embarrassing. Although their smiling may seem inappropriate, it is due to anxiety and therefore should not be rated as inappropriate affect.) Do not rate affective flattening or blunting as inappropriate.

0 - Not at all: Affect is not inappropriate

1 - Questionable

2 - Mild: At least one instance of inappropriate smiling or other inappropriate affect

3 - Moderate: Occasional instances of inappropriate affect

4 - Marked: Frequent instances of inappropriate affect

5 - Severe: Affect is inappropriate most of the time

U -Unknown/cannot be assessed/not assessed

7. Lack of Vocal Inflections

While speaking the patient fails to show normal vocal emphasis patterns. Speech has a monotonic quality, and important words are not emphasized through changes in pitch or

volume. Patient also may fail to change volume with changes of topic so that he does not drop his voice when discussing private topics or raise it as he discusses things that are exciting or for which louder speech might be appropriate.

0 - Not at all: Normal vocal inflections

1 - Questionable decrease

2 - Mild: Slight decrease in vocal inflections

3 - Moderate: Definite decrease in vocal inflections

4 - Marked: Marked decrease in vocal inflections

5 - Severe: Nearly all speech in a monotone

U -Unknown/cannot be assessed/not assessed

8. Global Rating of Affective Flattening

The global rating should focus on overall severity of affective flattening or blunting. Special emphasis should be given to such core features as unresponsiveness, inappropriateness, and an overall decrease in emotional intensity.

0 - Not at all: Normal affect

1 - Questionable affective flattening

2 - Mild affective flattening

3 - Moderate affective flattening

4 - Marked affective flattening

5 - Severe affective flattening

U -Unknown/cannot be assessed/not assessed

Alogia

9. Poverty of Speech

The patient's replies to questions are restricted in amount, tend to be brief, concrete, unelaborated.

0 - No poverty of speech

1 - Questionable poverty of speech

2 - Mild: Additional prompts needed every 4-5 questions (15-25%)

3 - Moderate: Additional prompts needed every 2-3 questions (25-50%)

4 - Marked: Additional prompts needed every 1-2 questions (50- 75%). Most answers a few words in length

5 - Severe: Additional prompts needed every question (75-100%). Some questions left unanswered.

U -Unknown/cannot be assessed/not assessed

10. Poverty of Content of Speech

The patient's replies are adequate in amount but tend to be vague, abstract, repetitive or stereotyped, concrete or over-generalized, and convey little information.

0 - No poverty of content

1 - Questionable poverty of content

2 - Mild: 1 of 4-5 replies vague, overconcrete, etc. (15-25%).

3 - Moderate: 1 of 2-3 replies vague, overconcrete, etc. (25-50%).

4 - Marked: At least 1 of 2 replies vague, overconcrete, etc., (50-75%).

5 - Severe: Nearly every reply vague, overconcrete, etc., (75-100%).

U -Unknown/cannot be assessed/not assessed

11. Blocking

The patient must indicate either spontaneously or with prompting that his train of thought was interrupted.

0 - No evidence of blocking

1 - Questionable blocking

2 - Mild: 1X during 15 minute interview

3 - Moderate: 2X during 15 minute interview

4 - Marked: 3X during 15 minute interview

5 - Severe: Occurs more than 3X

U -Unknown/cannot be assessed/not assessed

12. Increased Latency of Response

The patient takes a long time to reply to questions; prompting indicates the patient is aware of the questions.

0 - No latency of response

1 - Questionable latency of response

2 - Mild: Pauses before answering every 4-5 questions (mainly brief pauses) (10-25%).

3 - Moderate: Pauses before answering every 2-3 questions (some brief pauses, some long) (25-50%).

4 - Marked: Pauses before answering every 1-2 questions (some brief pauses, mostly long) (50-75%).

5 - Severe: Long pauses before answering nearly every question (75-100%).

U -Unknown/cannot be assessed/not assessed

13. Global Rating of Alogia

The core features of alogia are poverty of speech and poverty of content.

0 - No impoverished thinking

1 - Questionable impoverished thinking

2 - Mild: But definite impoverished thinking. Evidence every 4-5 replies

3 - Moderate: Significant impoverished thinking. Evidence every 2-3 replies

4 - Marked: Much of thinking is impoverished. Evidence every 1-2 replies

5 - Severe: Nearly all thinking is impoverished. Evidence nearly every response

U -Unknown/cannot be assessed/not assessed

Avolition/Apathy

14. Grooming and Hygiene

The patient displays less attention to grooming than normal and may bathe infrequently and not care for hair, nails, or teeth, leading to such manifestations as: greasy or uncombed hair, dirty hands, nicotine stain, unshaven face, body odor, unclean teeth, bad breath, or poor toilet habits (any data from last month).

0 - None

1 - Questionable

2 - Mild: The patient's clothing is sloppy or outdated and/or 1 of the above manifestations of poor hygiene is evident.

3 - Moderate: The patient shows no attention to the coordination of garments (i.e., color, pattern, appropriateness) or may dress in clothing several sizes too small or large resulting in an untidy appearance, and 1-3 of the above manifestations of poor hygiene are evident

4 - Marked: The patient's clothing is soiled or may be changed and washed a minimum of 1-2X per week, and 2-4 of the above manifestations of poor hygiene are evident

5 - Severe: The patient's clothing is very soiled. The patient may wear the same garment for weeks without changing and washing, and 3-5 of the above manifestations of poor hygiene are evident

U -Unknown/cannot be assessed/not assessed

15. Impersistence at Work or School

Tasks:

Inpatient - Occupational therapy projects, attendance at required meetings/appointments, scheduling of necessary appointments, attendance/performance at work assignments, etc.

Outpatient - Chores such as shopping or cleaning, scheduling and attending necessary appointments, seeking and maintaining employment (seeking employment may be nonapplicable for service connected veterans).

0 - No evidence of impersistence

1 - Questionable

2 - Mild: Patient is unable to persist in completing 25% of tasks

3 - Moderate: Patient is unable to persist in completing 50% of tasks

4 - Marked: Patient is unable to persist in completing 75% of tasks (i.e., may frequently attend work irregularly)

5 - Severe: The patient is unable to persist in completing any task

U -Unknown/cannot be assessed/not assessed

16. Physical Anergia

0 - None

1 - Questionable

2 - Mild: Patient spends 25% of time sitting in a chair, hanging around, or in some relatively mindless and physically inactive task such as watching television

3 - Moderate: Patient spends 50% of time sitting in a chair, hanging around, or in some relatively mindless and physically inactive task such as watching television

4 - Marked: Patient spends 75% of time, etc.

5 - Severe: Patient "sits around" all day and does not initiate or involve himself in any activities

U -Unknown/cannot be assessed/not assessed

17. Global Rating of Avolition/Apathy

The global rating should reflect the overall severity of the avolition symptoms, given expectational norms for the patient's age and social status or origin. In making the global rating, strong weight may be given to only one or two prominent symptoms if they are particularly striking.

0 - No avolition

1 - Questionable

2 - Mild but definitely present

3 - Moderate avolition

4 - Marked avolition

5 - Severe avolition

U -Unknown/cannot be assessed/not assessed

Anhedonia-Asociality

18. Recreational Interests and Activities

The patient may have few or no recreational interests and activities. Both the quality and quantity of interests should be taken into account.

Passive: Watching TV, listening to the radio, being driven around by someone else, playing solitaire, things that require minimal concentration, activities that do not require initiative.

Active: Engaging in activities that do require concentration and initiative (e.g., reading novels, participating in sports, going out to dinner or a movie, entertaining).

0 - No lack of interest or activity

1 - Questionable lack of interest and/or participation

2 - Mild: Enjoys and participates in a few active (not limited to passive) activities

3 - Moderate: Either 1) Some activity (passive & active), minimal enjoyment; 2) Some enjoyment, minimal activity; 3) Occasional, sporadic interest and/or activity

4 - Marked: Involvement in/or enjoyment of only a few passive activities (TV, radio)

5 - Severe: No enjoyment of or involvement in even passive activities

U -Unknown/cannot be assessed/not assessed

19. Sexual Interest and Activity

The patient may show a decrement in sexual interest and activity, as judged by what would be normal for the patient's age and marital status. Individuals who are married may manifest disinterest in sex or may engage in intercourse only at the partner's request. In extreme cases, the patient may not engage in any sex at all.

Single patients may go for long periods of time without sexual involvement and make no effort to satisfy this drive. Whether married or single, they may report that they

subjectively feel only minimal sex drive or that they take little enjoyment in sexual intercourse or in masturbatory activity even when they engage in it.

0 - No inability to enjoy sexual activities

1 - Questionable decrement in sexual interest and activity

2 - Mild decrement in sexual interests

3 - Moderate decrement in sexual interest and activity

4 - Marked decrement in sexual interest and activity

5 - Severe decrement in sexual interest and activity

U -Unknown/cannot be assessed/not assessed

20. Ability to Feel Intimacy and Closeness

The patient may display an inability to form close or intimate relationships, especially with opposite sex and family.

0 - No inability to feel intimacy and closeness

1 - Questionable inability to feel intimacy and closeness

2 - Has some difficulty feeling close to people, but feels affection for some people

3 - Often has difficulty feeling close to people; feels affection for only one person

4 - Has much difficulty feeling close to people; has minimal desire for close relationships/affection

5 - No evidence of feelings of affection, or desire for close relationships/affection, emotionally disinterested in others

U -Unknown/cannot be assessed/not assessed

21. Relationships with Friends and Peers

The patient may have few or no friends and may prefer to spend all his time isolated.

0 - No ability to form friendships

1 - Questionable inability to form friendships

2 - Mild: Has two close friends. Slight decrease in one of three areas: Desire, effort, frequency (less than 1X per week).

3 - Moderate: Most friendships peripheral; desire, but no effort; frequency less than 1X per month

4 - Marked: One or two peripheral friendships, minimal desire, no effort; generally prefers to be alone

5 - Severe: No friends, no desire, no effort; prefers to be alone

U -Unknown/cannot be assessed/not assessed

22. Global Rating of Anhedonia-Asociality

This rating should reflect overall severity, taking into account the patient's age, family status, etc.

0 - No evidence of anhedonia-asociality

1 - Questionable evidence of anhedonia-asociality

2 - Mild evidence of anhedonia-asociality

3 - Moderate evidence of anhedonia-asociality

4 - Marked evidence of anhedonia-asociality

5 - Severe evidence of anhedonia-asociality

U -Unknown/cannot be assessed/not assessed

Attention

Attention is often poor in schizophrenics. The patient may have trouble focusing attention, or may only be able to focus sporadically and erratically. He may ignore others' attempts to converse with him, wander away while in the middle of an activity or task, or appear to be inattentive when engaged in formal testing or interviewing. He may or may not be aware of the difficulty in focusing his attention.

23. Social Inattentiveness

While involved in social situations or activities, the patient appears inattentive. He looks away during conversations, does not participate in discussions, or appears uninvolved or unengaged. He may abruptly terminate a discussion or a task without any apparent reason. He may seem "spacey" or "out of it" and appears to have poor concentration when playing games, reading, or watching TV.

0 - No indication of inattentiveness

1 - Questionable signs

2 - Mild but definite signs of inattentiveness

3 - Moderate signs of inattentiveness

4 - Marked signs of inattentiveness

5 - Severe signs of inattentiveness

U -Unknown/cannot be assessed/not assessed

24. Inattentiveness During Mental Status Testing

The patient performs poorly on simple tests of intellectual functioning in spite of adequate education and intellectual ability. This should be assessed by having patient spell "world" backwards and by serial 7s (at least a tenth grade education) or serial 3s (at least a sixth grade education) for a series of five subtractions. A perfect score is 10.

25. Global Rating of Attention

This rating should assess the patient's overall ability to attend or concentrate, and should include both clinical appearance and performance on tasks.

0 - No indication of inattentiveness

1 - Questionable

2 - Mild but definite inattentiveness

3 - Moderate inattentiveness

4 - Marked inattentiveness

5 - Severe inattentiveness

U -Unknown/cannot be assessed/not assessed

Section V

SCALE FOR THE ASSESSMENT OF POSITIVE SYMPTOMS (SAPS)

SANS and SAPS in the DIGS reflect the symptoms experienced in the last 30 days.

Hallucinations

Hallucinations represent an abnormality in perception. They are false perceptions occurring in the absence of some identifiable external stimulus. They may be experienced in any of the sensory modalities, including hearing, touch, taste, smell, and vision. True hallucinations should be distinguished from illusions (which involve a misperception of an external stimulus), hypnogogic and hypnopompic experiences (which occur when the patient is falling asleep or waking up), or normal thought processes that are exceptionally vivid. If the hallucinations have a religious quality, then they should be judged within the context of what is normal for the patient's social and cultural background. Hallucinations occurring under the immediate influence of alcohol, drugs, or serious physical illness should not be rated as present. The patient should always be requested to describe the hallucination in detail.

1. Auditory Hallucinations

   The patient has reported hearing voices, noises, or sounds. The most common auditory hallucinations involve hearing voices speaking to the patient or calling him names. The voices may be male or female, familiar or unfamiliar, and critical or complimentary. Typically, schizophrenic patients experience the voices as unpleasant and negative. Hallucinations involving sounds other than voices, such as noises or music, should be considered less characteristic and less severe.

   "Have you ever heard voices or other sounds when no one is around?"

   "What did they say?"

0 - None

1 - Questionable

2 - Mild: Patient hears noises or single words that occur only occasionally

3 - Moderate: Clear evidence of voices that occur at least weekly

4 - Marked: Clear evidence of voices that occur frequently

5 - Severe: Voices occur almost every day

2. Voices Commenting

Voices commenting is a particular type of auditory hallucination that phenomenologists such as Kurt Schneider consider to be pathognomonic of schizophrenia, although some recent evidence contradicts this. These hallucinations involve hearing a voice that makes a running commentary on the patient's behavior or thought as it occurs. If this is the only type of auditory hallucination that the patient hears, it should be scored instead of auditory hallucinations (No. 1 above). Usually, however, voices commenting will occur in addition to other types of auditory hallucinations.

"Have you ever heard voices commenting on what you are thinking or doing?"
"What did they say?"

0 - None

1 - Questionable

2 - Mild: Occurred once or twice

3 - Moderate: Occurs at least weekly

4 - Marked: Occurs frequently

5 - Severe: Occurs almost daily

3. Voices Conversing

As with voices commenting, voices conversing is considered a Schneiderian first-rank symptom. It involves hearing two or more voices talking with one another, usually discussing something about the patient. As in the case of voices commenting, it should be scored independently of other auditory hallucinations.

"Have you heard two or more voices talking with each other?"
"What did they say?"

0 - None
1 - Questionable
2 - Mild: Occurred once or twice
3 - Moderate: Occurs at least weekly
4 - Marked: Occurs frequently
5 - Severe: Occurs almost daily

4. Somatic or Tactile Hallucinations

These hallucinations involve experiencing peculiar physical sensations in the body. They include burning sensations, tingling sensations, and perceptions that the body has changed in shape or size.

"Have you ever had burning sensations or other strange feelings in your body?"
"What were they?"
"Did your body ever appear to change in shape or size?"

0 - None
1 - Questionable

2 - Mild: Occurred once or twice

3 - Moderate: Occurs at least weekly

4 - Marked: Occurs frequently

5 - Severe: Occurs almost daily

5. Olfactory Hallucinations

The patient experiences unusual smells that are typically quite unpleasant. Sometimes the patient may believe that he is the one who smells. This belief should be scored if the patient can actually smell the odor himself, but should be scored among delusions if he only believes that others can smell the odor.

"Have you ever experienced any unusual smells or smells that others didn't notice?"
"What were they?"

0 - None

1 - Questionable

2 - Mild: Occurred at least once

3 - Moderate: Occurs at least weekly

4 - Marked: Occurs frequently

5 - Severe: Occurs almost daily

6. Visual Hallucinations

The patient sees shapes or people that are not actually present. Sometimes these are shapes or colors, but most typically they are figures of people or human-like objects. They may also be characters of a religious nature, such as the Devil or Christ. As always, visual hallucinations involving religious themes should be judged within the context of the patient's cultural background. Hypnogogic and hypnopompic visual hallucinations,

which are relatively common, should be excluded, as should visual hallucinations that occur when the patient has been taking hallucinogenic drugs.

"Have you had visions or seen things that other people cannot?"
"What did you see?"
"Did this occur when you were falling asleep or waking up?"

0 - None
1 - Questionable
2 - Mild: Occurred once or twice
3 - Moderate: Occurs at least weekly
4 - Marked: Occurs frequently
5 - Severe: Occurs almost daily

7. Global Rating of Severity of Hallucinations

This global rating should be based on the duration and severity of hallucinations, the extent of the patient's preoccupation with the hallucinations, his degree of conviction, and their effect on his actions. Also consider the extent to which the hallucinations might be considered bizarre or unusual. Hallucinations not mentioned above, such as those involving taste, should be included in this rating.

0 - None
1 - Questionable
2 - Mild: Hallucinations are definitely present but occur very infrequently; at times the patient may question their existence
3 - Moderate: Hallucinations are quite vivid, occur occasionally, and are to some extent bothersome

4 - Marked: Hallucinations are very vivid, occur frequently, and pervade the patient's life

5 - Severe: Hallucinations are very vivid and extremely troubling, occur almost daily, and are sometimes unusual or bizarre

Delusions

Delusions represent an abnormality in content of thought. They are false beliefs that cannot be explained on the basis of the patient's cultural background. Although delusions are sometimes defined as "fixed false beliefs," in their mildest form delusions may persist only for weeks to months, and the patient may question his beliefs or doubt them. The patient's behavior may or may not be influenced by his delusions. The rating of severity of individual delusions and of the global severity of delusional thinking should take into account their persistence, their complexity, the extent to which the patient acts on them, the extent to which the patient doubts them, and the extent to which the beliefs deviate from those that normal people might have. For each positive rating, specific examples should be noted in the margin.

8. Persecutory Delusions

The patient suffering from persecutory delusions believes that he is being conspired against or persecuted in some way. Common manifestations include the belief that he is being followed, that his mail is being opened, this his room or office is bugged, that his telephone is tapped, or that police, government officials, neighbors, or fellow workers are harassing him. Persecutory delusions are sometimes relatively isolated or fragmented, but sometimes the patient has a complex system of delusions involving both a wide range of forms of persecution and a belief that there is a well-designed conspiracy behind them. For example, the patient may believe that his house is bugged and that he is being followed because the government wrongly considers him to be a secret agent for a foreign

government; this delusion may be so complex that it explains almost everything that happens to him. The ratings of severity should be based on duration and complexity.

"Have you had trouble getting along with people?"

"Have you felt that people are against you?"

"Has anyone been trying to harm you in any way?"

"Do you think people have been plotting against you?"

0 - None

1 - Questionable

2 - Mild: Delusional beliefs are simple and may be of several different types; patient may question them occasionally

3 - Moderate: Clear, consistent delusion that is firmly held

4 - Marked: Consistent, firmly-held delusion that the patient acts on

5 - Severe: Complex, well-formed delusion that the patient acts on and that preoccupies him a great deal of the time; some aspects of the delusion or his reaction may seem quite bizarre

9. Delusions of Jealousy

The patient believes that his/her mate is having an affair with someone. Miscellaneous bits of information are construed as "evidence." The person usually goes to great effort to prove the existence of the affair, searching for hair in the bedclothes, the odor of shaving lotion or smoke on clothing, or receipts or checks indicating a gift has been bought for the lover. Elaborate plans are often made in order to trap the two together.

"Have you ever worried that your husband (wife) might be unfaithful to you?"

"What evidence do you have?"

0 - None

1 - Questionable

2 - Mild: Delusion clearly present, but the patient may question it occasionally

3 - Moderate: Clear, consistent delusion that is firmly held

4 - Marked: Consistent, firmly-held delusion that the patient acts on

5 - Severe: Complex, well-formed delusion that the patient acts on and that preoccupies him a great deal of the time; some aspects of the delusion or his reaction may seem quite bizarre

10. Delusions of Guilt or Sin

The patient believes that he has committed some terrible sin or done something unforgivable. Sometimes the patient is excessively or inappropriately preoccupied with the things he did wrong as a child, such as masturbating. Sometimes the patient feels responsible for causing some disastrous event, such as a fire or accident, with which he had no connection. Sometimes these delusions have a religious association involving the belief that the sin is unpardonable and that the patient will suffer eternal punishment from God. Sometimes the patient simply believes that he deserves punishment by society. The patient may spend a good deal of time confessing these sins to whoever will listen.

"Have you ever felt you have done some terrible thing that you deserve to be punished for?"

0 - None

1 - Questionable

2 - Mild: Delusional beliefs may be simple and may be of several

3 - Moderate: Clear, consistent delusion that is firmly held

4 - Marked: Consistent, firmly-held delusion that the patient acts on

5 - Severe: Complex well-formed delusions that the patient acts on and that preoccupies him a great deal of the time; some aspects of the delusion or his reaction may seem quite bizarre

11. Grandiose Delusions

The patient believes that (1) he has special powers or abilities; (2) he is actually some famous personage, such as a rock star, Napoleon, or Christ; and (3) he is writing some definitive book, composing a great piece of music, or developing some wonderful new invention. In addition, he is often suspicious that someone is trying to steal his ideas, and may become quite irritable if his abilities are doubted.

"Are you an unusual person?"

"Do you have any special powers or abilities?"

"Do you feel you are going to achieve great things?"

0 - None

1 - Questionable

2 - Mild: Delusional beliefs are simple and may be of several different types; patient may question them occasionally

3 - Moderate: Clear, consistent delusion that is firmly held

4 - Marked: Consistent, firmly-held delusion that the patient acts on

5 - Severe: Complex, well-formed delusion that the patient acts on and that preoccupies him a great deal of the time; some aspects of the delusion or his reaction may seem quite bizarre

12. Religious Delusions

The patient is preoccupied with false beliefs of a religious nature. Sometimes these exist within the context of a conventional religious system, such as beliefs about the Second Coming, the Anti-Christ, or possession by the Devil. At other times, they may involve an entirely new religious system or a pastiche of beliefs from a variety of religions, particularly Eastern religions, such as ideas about reincarnation or nirvana. Religious delusions may be combined with grandiose delusions (if the patient considers himself a religious leader), delusions of guilt, or delusions of being controlled. Religious delusions must be outside the range considered normal for the patient's cultural and religious background.

"Are you a religious person?"

"Have you had any unusual religious experiences?"

"What was your religious training as a child?"

0 - None

1 - Questionable

2 - Mild: Delusional beliefs are simple and may be of several different types; patient may question them occasionally

3 - Moderate: Clear, consistent delusion that is firmly held

4 - Marked: Consistent, firmly-held delusion that the patient acts on

5 - Severe: Complex, well-formed delusion that the patient acts on and that preoccupies him a great deal of the time; some aspects of the delusion or his reaction may seem quite bizarre

13. Somatic Delusions

The patient believes that somehow his body is diseased, abnormal or changed. For example, he may believe that his stomach or brain is rotting, that his hands or penis have become enlarged, or that his facial features are unusual (dysmorphophobia). Sometimes somatic delusions are accompanied by tactile or other hallucinations, and when this occurs, both should be rated. (For example, the patient believes that he has ball bearings rolling around in his head, placed there by a dentist who filled his teeth, and can actually hear them clanking against one another.)

"Is there anything wrong with your body?"
"Have you noticed any change in your appearance?"

0 - None
1 - Questionable
2 - Mild: Delusional beliefs are simple and may be of several different types; patient may question them occasionally
3 - Moderate: Clear, consistent delusion that is firmly held
4 - Marked: Consistent, firmly-held delusion that the patient acts on
5 - Severe: Complex, well-formed delusion that the patient acts on and that preoccupies him a great deal of the time; some aspects of the delusion or his reaction may seem quite bizarre

14. Ideas and Delusions of Reference

The patient believes that insignificant remarks, statements, or events refer to or have some special meaning for him. For example, the patient walks into a room, sees people laughing, and suspects that they were just talking about and laughing at him. Sometimes items read in the paper, heard on the radio, or seen on TV are considered to be special

messages to the patient. In the case of ideas of reference, the patient is suspicious, but recognizes his idea is erroneous. When the patient actually believes that the statements or events refer to him, then this is considered a delusion of reference.

"Have you ever walked into a room and thought people were talking about you?"
"Have you seen things in magazines or on TV that seem to refer to you or contain a special message for you?"

0 - None
1 - Questionable
2 - Mild: Occasional ideas of reference
3 - Moderate: Occur a few times
4 - Marked: Occur at least weekly
5 - Severe: Occur frequently

15. Delusions of Being Controlled

The patient has a subjective experience that his feelings or actions are controlled by some outside force. The central requirement for this type of delusion is an actual strong subjective experience of being controlled. It does not include simple beliefs or ideas, such as that the patient is acting as an agent of God or that friends or parents are trying to coerce him to do something. Rather, the patient must describe, for example, that his body has been occupied by some alien force that is making it move in peculiar ways, or that messages are being sent to his brain by radio waves causing particular feelings that are recognized as not being his own.

"Have you ever felt that you were being controlled by some outside force?"

0 - None

1 - Questionable

2 - Mild: Patient has experience of being controlled, but doubts it occasionally

3 - Moderate: Clear experience of control that has occurred on two or three occasions

4 - Marked: Clear experience of control that occurs frequently; behavior may be affected

5 - Severe: Clear experience of control that occurs frequently, pervades the patient's life, and often affects his behavior

16 Delusions of Mind Reading

The patient believes that people can read his mind or thoughts. This is different than thought broadcasting (see below), in that it is a belief without a percept. That is, the patient subjectively experiences and recognizes that others know his thoughts, but he does not think they can be heard out loud.

"Have you ever had the feeling that people could read your mind?"

0 - None

1 - Questionable

2 - Mild: Patient has experienced mind reading, but doubts it occasionally

3 - Moderate: Clear experience of mind reading that has occurred on two or three occasions

4 - Marked: Clear experience of mind reading that occurs frequently

5 - Severe: Clear experience of mind reading that occurs frequently, pervades the patient's life, and often affects his behavior

17. Thought Broadcasting

The patient believes that his thoughts are broadcast so that he or others can hear them. Sometimes the patient feels the thoughts are being broadcast, although he cannot hear them. Sometimes he believes that the thoughts are picked up by a microphone and broadcast on the radio or TV.

"Have you ever heard your own thoughts out loud, as if they were a voice outside your head?"

"Have you ever felt your thoughts were broadcast so other people could hear them?"

0 - None

1 - Questionable

2 - Mild: Patient has experienced thought broadcasting, but doubts it occasionally

3 - Moderate: Clear experience of thought broadcasting that has occurred on two or three occasions

4 - Marked: Clear experience of thought broadcasting that occurs frequently, pervades the patient's life; and may affect his behavior

5 - Severe: Clear experience of thought broadcasting that occurs frequently, pervades the patient's life, and often affects his behavior

18. Thought Insertion

The patient believes that others' thoughts have been inserted into his mind. For example, the patient may believe that a neighbor is practicing voodoo and planting alien sexual thoughts in his mind. This symptom should not be confused with experiencing unpleasant thoughts that the patient recognizes as his own, such as delusions of persecution or of guilt.

"Have you ever felt that thoughts were being put into your head by some outside force?"

0 - None

1 - Questionable

2 - Mild: Patient has experienced thought insertion, but doubts it occasionally

3 - Moderate: Clear experience of thought insertion that has occurred on two or three occasions

4 - Marked: Clear experience of thought insertion that occurs frequently, and may affect behavior

5 - Severe: Thought insertion that occurs frequently pervades the patient's life, and affects his behavior

19. Thought Withdrawal

The patient believes that thoughts have been taken away from his mind. He is able to describe a subjective experience of beginning a thought and then suddenly having it removed by some outside force. This symptom does not include the mere subjective recognition of alogia.

"Have you ever felt your thoughts were taken away by some outside forces?"

0 - None

1 - Questionable

2 - Mild: Patient has experienced thought withdrawal, but doubts it occasionally

3 - Moderate: Clear experience of thought withdrawal that has occurred on two or three occasions

4 - Marked: Clear experience of thought withdrawal that occurs frequently, and may affect behavior

5 - Severe: Clear experience of thought withdrawal that occurs frequently, pervades the patient's life, and often affects his behavior

20. Global Rating of Severity of Delusions

The global rating should be based on duration and persistence of delusions, the extent of the patient's preoccupation with the delusions, his degree of conviction and their effect on his actions. Also consider the extent to which the delusions might be considered bizarre or unusual. Delusions not mentioned above should be included in this rating.

0 - None

1 - Questionable

2 - Mild: Delusion definitely present but at time the patient questions the belief

3 - Moderate: Patient is convinced of the belief, but it may occur infrequently and have little effect on his behavior

4 - Marked: Delusions are firmly held, occur frequently and affect the patient's behavior

5 - Severe: Delusions are complex, well-formed, and pervasive; they are firmly held and have a major effect on the patient's behavior, and may be somewhat bizarre or unusual

Bizarre Behavior

The patient's behavior is unusual, bizarre, or fantastic. For example, the patient may urinate in a sugar bowl, paint the two halves of his body different colors, or kill a litter of pigs by smashing their heads against a wall. The information for this item will sometimes come from the patient, sometimes from other sources, and sometimes from direct observation. Bizarre behavior due to the immediate effects of alcohol or drugs should be excluded. As always, social and cultural norms must be considered in making the ratings, and detailed examples should be elicited and noted.

21. Clothing and Appearance

The patient dresses in an unusual manner or does other strange things to alter his appearance (e.g., shaving off all his hair or painting parts of his body different colors). His clothing may be quite unusual; for example, he may choose to wear some outfit that appears generally inappropriate and unacceptable, such as a baseball cap backwards with rubber galoshes and long underwear covered by denim overalls, a fantastic costume representing some historical personage or a man from outer space; and heavy wools in summer.

"Have you noticed anything unusual about your appearance?"

0 - None

1 - Questionable

2 - Mild: Occasional oddities of dress or appearance

3 - Moderate: Appearance or apparel is clearly unusual and would attract attention

4 - Marked: Appearance or apparel is markedly odd

5 - Severe: Appearance or apparel is very fantastic or bizarre

22. Social and Sexual Behavior

0 - None

1 - Questionable

2 - Mild: 2-4 instances of somewhat odd/peculiar behavior (i.e., he may walk the street muttering to himself or begin talking about his personal life to strangers, make inappropriate sexual overtures or remarks to strangers, etc.)

3 - Moderate: 4-8 instances of somewhat odd/peculiar behavior or instance of very odd behavior (i.e., may masturbate in public, urinate or defecate in inappropriate receptacle, or exhibit sex organs inappropriately)

4 - Marked: 8-10 instances of odd behavior or 2-3 instances of very odd behavior

5 - Severe: Continuous odd behavior or 3-5 instances of very odd behavior

23. Aggressive and Agitated Behavior

0 - None

1 - Questionable

2 - Mild: 1-2 instances of mild behaviors (i.e., start arguments inappropriately w/friends or members of family

3 - Moderate: 2-4 instances of mild behaviors or 1-2 instances of moderate behaviors (i.e., may write letters of a threatening or angry nature to government officials or others with whom he has some quarrel)

4 - Marked: 3-5 instances of mild behaviors or 2-4 instances of moderate behaviors, or 1 instance of a severe behavior

5 - Severe: 5 repeated instances of moderate behavior or 2 or more severe behaviors (i.e., may perform violent acts such as injuring or tormenting animals, or attempting to injure or kill humans)

24. Repetitive or Stereotyped Behavior

The patient may develop a set of repetitive actions or rituals that must be performed over and over. Frequently he will attribute some symbolic significance to these actions and believe that he is either influencing others or preventing himself from being influenced. For example (e.g., may eat jelly beans every night for dessert, assuming that different consequences will occur depending on the color of the jelly beans; may have to eat foods in a particular order; wear particular clothes or put them on in a certain order; may have to write messages to himself or to others over and over, sometimes in an unusual or occult language).

"Are there any things that you do over and over?"

0 - None

1 - Questionable

2 - Mild: Occasional instances of repetitive or stereotyped behavior

3 - Moderate: e.g., eating or dressing rituals lacking symbolic significance

4 - Marked: e.g., eating or dressing rituals with a symbolic significance

5 - Severe: e.g., keeping a diary in an incomprehensible language

25. Global Rating of Severity of Bizarre Behavior

In making this rating, consider the type of behavior, the extent to which it deviates from social norms, the patient's awareness of the degree to which the behavior is deviant, and the extent to which it is obviously bizarre.

0 - None

1 - Questionable

2 - Mild: Occasional instances of unusual or apparently idiosyncratic behavior; patient usually has some insight

3 - Moderate: Behavior that is clearly deviant from social norms and seems somewhat bizarre; patient may have some insight

4 - Marked: Behavior that is markedly deviant from social norms and clearly bizarre; patient may have some insight

5 - Severe: Behavior that is extremely bizarre or fantastic; may include a single extreme act, e.g., attempting murder; patient usually lacks insight

26. Derailment

A pattern of speech in which ideas slip off track onto ideas obliquely related or unrelated.

Slight = Topic shifts involve plausible, relatively understandable connections and shifts occur over the course of several clauses/sentences

Moderate = Plausible/oblique connections between topic shifts, but shifts occur between sentences/clauses

Severe/Bizarre = Idiosyncratic or completely unrelated connection between topic shifts; shifts occur abruptly

0 - None

1 - Questionable

2 - Mild: 3-4 clear instances, of slight to moderate shifts that do not impair understandability of responses; 1/4 or less of responses involve steady but slight topic shifts with no more than one derailment being severe

3 - Moderate: 2-4 instances of severe or bizarre topic shifts that impair understandability of response and/or approximately 1/2 of responses involve steady but slight to moderate shifts that make subject difficult to follow

4 - Marked: 5-10 instances of severe or bizarre topic shifts, that clearly impair understandability of response, and/or nearly all of responses involve steady but moderate topic shifts which make subject difficult to follow

5 - Severe: Nearly all of responses involve severe or bizarre topic shifts; speech is almost incomprehensible

27. Tangentiality

Replying to a question in an oblique or irrelevant manner

Mild = Plausible connection to question, but only related

Severe = Implausible or idiosyncratic connection to question

0 - None

1 - Questionable

2 - Mild: 2-4 mildly tangential replies

3 - Moderate: 5-10 mildly tangential or 2-4 severely tangential

4 - Marked: 5-10 severely tangential replies or nearly all replies are mildly tangential

5 - Severe: Nearly all replies are severely tangential; interview is extremely difficult to complete as responses are completely idiosyncratic

28. Incoherence

A pattern of speech that is essentially incomprehensible at times

0 - None

1 - Questionable

2 - Mild: During an hour, 2-4 instances in which inappropriate words are joined within same sentence or clause; overall speech is comprehensible

3 - Moderate: During an hour, 5-10 sentences in which inappropriate words are joined within same sentence or clause; overall speech is difficult to follow but relatively comprehensible (25%)

4 - Marked: During an hour, over 1/2 of replies involve inappropriate juxtaposition of words within same sentence or clause; at least 2-4 instances in which multiple combinations of inappropriate words joined within same sentence or clause; overall speech is incomprehensible with a few definite instances of clarity (50%)

5 - Severe: During an hour, nearly all of replies contain inappropriate joined words within the same sentence/clause; more than 4 or 5 instances in which multiple combination of words inappropriately joined; speech completely incomprehensible (100%)

29. Illogicality

A pattern of speech in which conclusions are reached that do not follow logically.

0 - None

1 - Questionable

2 - Mild: During an hour, 1-2 instances of illogicality

3 - Moderate: During an hour, 3-5 instances of illogicality with little overall comprehensibility

4 - Marked: During an hour, 5-10 instances of illogicality that interfere with overall comprehensibility of interview

5 - Severe: During an hour, more than 10 instances or so frequent that interview is nearly incomprehensible

30. Circumstantiality

A pattern of speech that is very indirect and delayed in reaching its goal.

0 - None

1 - Questionable

2 - Mild: During an hour, 2-4 instances of detailed replies that last for at least several minutes but do not require interruption by the interviewer

3 - Moderate: During an hour, 5-10 instances of detailed replies that last for at least several minutes, some of which may require interruption by the interviewer, or 1/4

to 1/2 of responses are circumstantial but in most cases limited by subject without interruption by interviewer (25-50%)

4 - Marked: During an hour, more than 10 instances of detailed replies that last for at least several minutes, most of which require interruption by the interviewer; or at least 1/2 to nearly all responses are circumstantial but in most cases are limited by the subject without interrupting the interviewer (50-75%)

5 - Severe: During an hour, almost all of subject's speech is circumstantial requiring nearly constant interruption by the interviewer (75-100%)

31. Pressure of Speech

An increase in the amount of spontaneous speech as compared with what is considered ordinary or socially customary. The patient talks rapidly and is difficult to interrupt. Some sentences may be left uncompleted because of eagerness to get on to a new idea. Simple questions, which could be answered in only a few words or sentences, are answered at great length so that the answers take minutes rather than seconds and indeed may not stop at all if the patient is not interrupted. Even when interrupted, the patient often continues to talk. Speech tends to be loud and emphatic. Sometimes patients with severe pressure will talk without any social stimulation and talk even though no one is listening. When patients are receiving phenothiazines or lithium, their speech is often judged only on the basis of amount, volume, and social appropriateness. If a quantitative measure is applied to the rate of speech, then a rate greater than 150 words per minute is usually considered rapid or pressured. This disorder may be accompanied by derailment, tangentiality, or incoherence, but it is distinct from them.

0 - None

1 - Questionable

2 - Mild: Slight pressure of speech; some slight increase in amount, speed, or loudness of speech

3 - Moderate: Usually takes several minutes to answer simple questions, may talk when no one is listening, and/or speaks loudly and rapidly

4 - Marked: Frequently takes as much as three minutes to answer simple questions; sometimes begins talking without social stimulation; difficult to interrupt

5 - Severe: Talks almost continually, cannot be interrupted at all, and/or may shout to drown out the speech of others

32. Distractible Speech

During the course of a discussion or interview, the patient stops talking in the middle of a sentence or idea and changes the subject in response to a nearby stimulus, such as an object on a desk, the interviewer's clothing or appearance, etc.

Example: "Then I left San Francisco and moved to...where did you get that tie? It looks like it's left over from the 50s. I like the warm weather in San Diego. Is that a conch shell on your desk? Have you ever gone scuba-diving?"

0 - None

1 - Questionable

2 - Mild: Distracted 1 time during an hour

3 - Moderate: Distracted from 2-4 times during an hour

4 - Marked: Distracted from 5-10 times during an hour

5 - Severe: Distracted more than 10 times during an hour

33. Clanging

A pattern of speech in which sounds rather than meaningful relationships appear to govern word choice, so that the intelligibility of the speech is impaired and redundant words are introduced. In addition to rhyming relationships, this pattern of speech may also include punning associations, so that a word similar in sound brings in a new thought.

Example: "I'm not trying to make a noise. I'm trying to make sense. If you can make sense out of nonsense, well, have fun. I'm trying to make sense out of sense. I'm not making sense (cents) anymore. I have to make dollars."

0 - None

1 - Questionable

2 - Mild: Occurs 1 time during an hour

3 - Moderate: Occurs from 2-4 times during an hour

4 - Marked: Occurs 5-10 times during an hour

5 - Severe: Occurs more than 10 times or so frequently that the interview is incomprehensible

34. Global Rating of Positive Formal Thought Disorder

In making this rating, consider the type of abnormality, the degree to which it affects the patient's ability to communicate, the frequency with which abnormal speech occurs, and its degree of severity.

0 - None

1 - Questionable

2 - Mild: Occasional instances of disorder; patient's speech is understandable

3 - Moderate: Frequent instances of disorder; patient is sometimes hard to understand

4 - Marked: Patient is often difficult to understand

5 - Severe: Patient is incomprehensible

Section X

INTERVIEWER'S RELIABILITY ASSESSMENT

Rate the apparent candor and accuracy of the information obtained in the interview. Use the bottom half of the page to write notes explaining your concerns, if any, about the interview accuracy. If subjects appeared to be candid but had minor difficulty recalling details of symptoms or reluctantly offered information that you think is accurate, rate that section "fair." If you have serious concerns about the integrity/accuracy of the data in any section or for the whole DIGS, rate the section unreliable and explain below.

Code whether you feel that the subject was reliable in his reporting or his descriptions of his symptoms. Reliability can still be high even if the subject said no to the initial probes but was able to give you a clear and descriptive reporting of his symptoms during the more open parts of the interview, i.e. the overview.

Section Y

NARRATIVE SUMMARY

Writing of a detailed narrative summary immediately after the completion of each interview session is a crucial step in the data gathering/recording process. These summaries are essential in the "Best Estimate" diagnostic procedures carried out by senior clinical investigators. Keep the "GAS" in mind for information on current functioning.

The narrative summary should include a description of (1) the interview location and circumstance (e.g., done in a home, a bar, a hospital psychiatric ward); (2) the subject's appearance (e.g., dressed in a suit or in rumpled dirty clothing); and (3) some sense of his/her openness or cooperativeness with the research interview. The summary should describe the current mental status and the outline of the longitudinal history of the psychiatric disorder(s), if any are present. The narrative should give extra detail beyond the ratings and marginal notes for any crucial and/or uncertain points. Explain any difficulties in the conduct of the interview that made some or all ratings difficult. Finally, describe in context and in detail the conflicting data, which may be relevant to the ratings. When appropriate, give your impression about which data is more accurate and why.

Example 1

The patient is a 48-year-old, twice married, white male outpatient who came into the hospital for the interview. He was appropriately dressed in a suit. He was alert, attentive, cooperative with the interview, and had good eye contact. His speech was normal in rate and amount, and there was no evidence of formal thought disorder. His mood appeared euthymic and he laughed at several of the questions. There was no evidence of hallucinations or delusions.

The patient reported that he had had four hospitalizations for mania. His illness began at age 34 with a manic episode that was preceded by a number of psychosocial stressors. He was hospitalized for 90 days and started on lithium. After the discharge, he stopped taking his medications. He became manic again about 1 year later and was "writing my life on the wall," planning to go to the governor's home to confront him on an issue, and fighting with his girlfriend. He had delusions of reference, believing that his life was being guided by the color of cars. He was taken to the hospital by police for treatment that lasted 2 years. He had 10-12 ECTs during that hospitalization but cannot recall feeling depressed at that time.

The third admission was precipitated by a physical confrontation in a government office. He was hospitalized for 4 weeks. He has generally done well since then, holding a steady job as a planner for 10 years. He and his wife stopped taking their medications about 4 years ago (he had been taking lithium) and both became ill about 2 years ago. He believes this was his most severe episode. In addition to increased activity, over talkativeness, racing thoughts, and decreased concentration and sleep, he was extremely grandiose. His behavior led to his arrest and another hospitalization lasting 2 weeks. He was put back on lithium and now takes 600 mg twice a day.

The patient denies ever having hallucinations and has never had delusions when his mood was normal. He reports brief periods of depression but states they never lasted for more than 1 day, although he was treated with Tofranil at one point.

He admits to increased alcohol and marijuana use between his first and second episodes of mania, so his second episode is not a clean one. Regarding alcohol use, the largest number of drinks in a 24-hour period was six, but the CAGE questions were all negative. He had used marijuana more than 21 times in a year (about once each week), but all subsequent questions on marijuana use were negative.

He has a history of one panic attack with at least four associated symptoms.

Imp: Bipolar mood disorder

Example 2

This 29-year-old, divorced, black mother of one now lives with her daughter and works for a telephone sales company. She describes a period of mood disorder at age 24 when she felt depressed for several weeks and received about 3 weeks of antidepressant treatment. After discontinuing the medication, she experienced another 3 weeks of a mood disorder, which appeared to be symptomatic of depression followed by mania (including some violence toward others), that ensued in hospitalization. She was treated at Wishard Hospital for 2 months and then transferred on court order to Carter Hospital for another 2 months. Upon discharge she was administered lithium and states she has done well since. She is now euthymic. During the hospitalization it sounds as if she had additional depressive and manic symptoms, but she is unable to give a clear history of that time.

Her depressive symptoms prior to admission include sleep and appetite loss (including 32-pound weight loss), lose of interest, lack of energy, guilt, restlessness, and difficulty concentrating. Her manic symptoms include increased activity, decreased need for sleep (including 3-4 nights in a row with no sleep), trouble concentrating and getting into trouble by assaulting her husband and a female supervisor at her job. She had the delusion that everyone was against her, both during the depression and the mania, but not before or since.

She denies alcohol or drug use and any antisocial behavior except for using a stick in fights before age 15.

Her chronology is sketchy and her account of the time spent in the hospital is very fragmentary, to some extent because of poor memory problems and denial. Currently, she seems to be getting along reasonably well.

Imp: Bipolar mood disorder

Section Z

MEDICAL RECORDS INFORMATION

Obtain as much information as necessary (and written consent from the subject as well) to send for all psychiatric inpatient and outpatient mental health care records on the subject that may exist. Also obtain similar informtion and consent for any educational or medical records regarding neurological assessments (EEG, Head CT, or MRI Scans), cognitive or neuropsychological assessments (IQ tests, memory testing, and/or educational testing), and other medical records that may pertain to psychiatric symptoms. If physician, hospital, or clinic names are unknown, put down the subject's best recall estimates and make arrangements for the subject to retrieve this information (to the extent possible) and send it to you by mail or by phone.

Appendix A

GEOGRAPHICAL INFORMATION

01 Anglo-Saxon
- Britain
- England
- Northern Ireland
- Scotland
- Wales

02 Northern European
- Denmark
- Finland
- Norway
- Sweden

03 Western European
- Belgium
- France
- Germany
- Ireland
- Netherlands
- Portugal
- Spain

04 Eastern European (Slavic)
- Albania
- Austria
- Bulgaria
- Czechoslovakia
- Hungary
- Poland
- Romania
- Serbo-Croatia
- Ukraine
- Yugoslavia

05 Russian

06 Mediterranean
- Albania
- Algeria
- Egypt
- Greece
- Italy
- Libya
- Morocco
- Sicily
- Tunisia
- Turkey

07 Ashkenazi Jew
- European ancestry except Bulgaria, Italy, Spain

08 Sephardic Jew
- from Northern Africa or of Mid-East ancestry

09 Hispanic (not Puerto Rican)
- Bahamas
- Cuba
- Dominican Republic
- Haiti

10 Puerto Rican-Hispanic

11 Mexican-Hispanic

12 Asian
- China
- India
- Indonesia
- Japan
- Korea
- Philippines
- Thailand
- Vietnam

13 Arab

14 Native American/Alaskan Native

15 African-American
- not of Hispanic origin

16 Other (Genetic Isolate)

17 Unknown

Appendix B

MANAGERIAL AND PROFESSIONAL SPECIALITY OCCUPATIONS

Executive, Administrative, and Managerial Occupations

- Legislators
- Chief executives and general administrators, public administration
- Administrators and officials, public administration
- Administrators, protective services
- Financial managers
- Personnel and labor relations managers
- Purchasing managers
- Managers, marketing, advertising, and public relations
- Administrators, education and related fields
- Managers, medicine and health
- Managers, properties and real estate
- Postmasters and mail superintendents
- Funeral directors
- Managers and administrators
- Management related occupations
  - Accountants and auditors
  - Underwriters
  - Other financial officers
  - Management analysts
  - Personnel training and labor relations specialists
  - Purchasing agents and buyers, farm products
  - Buyers, wholesale and retail trade, except farm products
  - Purchasing agents and buyers
  - Business and promotion agents
  - Construction inspectors
  - Inspectors and compliance officers, exec. construction

Professional Specialty Occupations

- Architects
- Engineers, surveyors, and mapping scientists
  - Aerospace engineers
  - Metallurgical and materials engineers
  - Mining engineers
  - Petroleum engineers
  - Chemical engineers
  - Nuclear engineers
  - Civil engineers
  - Agricultural engineers
  - Electrical and electronic engineers
  - Industrial engineers
  - Mechanical engineers
  - Marine engineers and naval architects
  - Engineers
  - Surveyors and mapping scientists
- Mathematical and computer scientists
  - Computer systems analysts and scientists
  - Operations and systems researchers and analysts
  - Actuaries
  - Statisticians
- Natural scientists
  - Physicists and astronomers
  - Chemists, except biochemists
  - Atmospheric and space scientists
  - Geologists and geodesists
  - Physical scientists
  - Agricultural and food scientists
  - Biological and life scientists
  - Forestry and conservation scientists
  - Medical scientists
- Health diagnosing occupations
  - Physicians
  - Dentists
  - Veterinarians
  - Optometrists
  - Podiatrists
  - Health diagnosing practitioners
- Health assessment and treating occupations
  - Registered nurses
  - Pharmacists
  - Dietitians
  - Therapists
    - Inhalation therapists
    - Occupational therapists
    - Physical therapists
    - Speech therapists
  - Physicians' assistants
- Teachers, postsecondary
  - Earth, environmental, and marina science teachers
  - Biological science teachers
  - Chemistry teachers
  - Physics teachers
  - Natural science teachers
  - Psychology teachers
  - Economical teachers
  - History teachers
  - Political science teachers
  - Sociology teachers
  - Social science teachers
  - Engineering teachers
  - Mathematical science teachers
  - Computer science teachers
  - Medical science teachers
  - Health specialties teachers
  - Business, commerce, and marketing teachers
  - Agricultural and forestry teachers
  - Art, drama, and music teachers
  - Physical education teachers
  - Education teachers
  - English teachers
  - Foreign language teachers
  - Law teachers
  - Social work teachers
  - Theology teachers
  - Trade and industrial teachers
  - Home economics teachers
- Teachers, except postsecondary
  - Prekindergarten and kindergarten teachers
  - Elementary school teachers
  - Secondary school teachers
  - Special education teachers
- Counselors, educational and vocational
- Librarians, archivists, and curators
- Social scientists and urban planners
  - Economists

- Psychologists
- Sociologists

Social, recreation, and religious workers
- Clergy

Lawyers and judges

Writers, artists, entertainers, and athletes
- Authors
- Technical writers
- Designers
- Musicians and composers
- Actors and directors
- Painters, sculptors, draft artists, printmakers
- Photographers
- Dancers
- Performers and related workers
- Editors and reporters
- Public relations specialists
- Announcers

TECHNICAL, SALES, AND ADMINISTRATIVE SUPPORT OCCUPATIONS

Technicians and Related Support Occupations

Health technologists and technicians
- Clinical laboratory technologists and technicians
- Dental hygienists
- Health record technologists and technicians
- Radiologic technicians
- Licensed practical nurses
- Technologists and technicians, except health

Engineering and related technologists and technicians
- Electrical and electronic technicians
- Industrial engineering technicians
- Mechanical engineering technicians
- Drafting occupations
- Surveying and mapping technicians

Science technicians
- Biological technicians
- Chemical technicians

Technicians, except health, engineering, and science
- Airplane pilots and navigators
- Air traffic controllers
- Broadcast equipment operators
- Computer programmers
- Tool programmers, numerical control
- Legal assistants

Sales Occupations

Supervisors and proprietors, sales occupations

Financial records processing occupations
- Bookkeepers, accounting and auditing clerks
- Payroll and timekeeping clerks
- Billing, posting, and calculating machine operators

Duplicating, mail and other office machine operators
- Mail preparing and paper handling machine operators
- Communications equipment operators
  - Telephone operators
  - Telegraphers
- Mail and message distributing occupations
  - Postal clerks, exec. mail carriers
  - Mail carriers, postal service
  - Mail clerks, exec. Postal service
  - Messengers

Sales occupations, business goods and services
- Insurance sales occupations
- Real estate sales occupations
- Securities and financial services sales occupations
- Advertising and related sales occupations
- Sales occupations, other business services
- Sales engineers
- Sales representatives, mining, manufacturing, and wholesale
- Sales occupations, personal goods and services
  - Sales workers, motor vehicles and boats
  - Sales workers, apparel
  - Sales workers, shoes
  - Sales workers, furniture and home furnishings
  - Sales workers, radio, television, hi-fi, and appliances
  - Sales workers, hardware and building supplies
  - Sales workers, parts
  - Sales workers, other commodities
  - Sales counter, clerks
  - Cashiers
  - Street and door-to-door sales workers
  - News vendors
- Sales related occupations
  - Demonstrators, promoters and models, sales
  - Auctioneers
  - Sales support occupations

Administrative Support Occupations, Including Clerical

Supervisors, administrative support occupations
- Supervisors, general office
- Supervisors, computer equipment operators
- Supervisors, financial records processing
- Chief communications operators
- Supervisors, distribution, scheduling, and adjusting clerks
- Computer equipment operators
- Computer operators
- Peripheral equipment operators
- Secretaries, stenographers, and typists
- Information clerks
  - Interviewers
  - Hotel clerks
  - Transportation ticket and reservation agents
  - Receptionists

Records, processing occupations, except financial
- Classified ad clerks
- Correspondence clerks
- Order clerks
- Personnel clerks, except payroll and timekeeping
- Library clerks
- File clerks
- Records clerks

Material recording, scheduling, and distributing clerks
- Dispatchers
- Production coordinators

FARMING, FORESTRY, AND FISHING OCCUPATIONS

Other agricultural and related occupations
- Farm occupations, except managerial
  - Supervisors, farm workers
  - Farm workers
  - Marine life cultivation workers
  - Nursery workers

- Related agricultural occupations
  - Supervisors, related agricultural occupations
  - Groundskeepers and gardeners, except farm
  - Animal caretakers, except farm
  - Graders and sorters, agricultural products
  - Inspectors, agricultural products
- Forestry and logging occupations
  - Supervisors, forestry and logging workers
  - Forestry workers, except logging
  - Timber cutting
- Fishers, hunters, and trappers
  - Captains and other officers, fishing vessels

Precision Production, Craft, and Repair Occupations

- Mechanics and repairers
  - Supervisors, mechanics and repairers
- Mechanics and repairers, except supervisors
  - Vehicles and mobile equipment mechanics and repairers
    - Automobile mechanics
    - Automobile mechanic apprentices
    - Bus, truck, and stationary engine mechanics
    - Aircraft engine mechanics
    - Small engine repairers
    - Automobile body and related repairers
    - Heavy equipment mechanics
    - Farm equipment mechanics
    - Industrial machinery repairers
    - Machinery maintenance occupations
    - Electrical and electronic equipment repairers
    - Electronic repairers, communications and industrial equipment
    - Data processing equipment repairers
    - Household appliance and power tool repairers
    - Telephone line installers and repairers
    - Telephone installers and repairers
    - Miscellaneous electrical and electronic equipment repairers
    - Heating, air conditioning, and refrigeration mechanics
  - Miscellaneous mechanics and repairers
    - Cameras, watch, and musical instrument repairers
    - Locksmiths and safe repairers
    - Office machine repairers
    - Mechanical controls and valve repairers
    - Elevator installers and repairers
    - Wheelwrights
- Construction trades
  - Supervisors, construction occupations
  - Supervisors, brickmasons, stonemasons, and tile setters
  - Supervisors, carpenters and related workers
  - Supervisors, electricians and power transmission installers
  - Supervisors, painters, paperhangers, and plasterers
  - Supervisors; plumbers, pipefitters, and steamfitters
  - Construction trades, except supervisors
    - Brickmasons and stonemasons
    - Brickmason and stonemason apprentices
    - Tile setters, hard and soft
    - Carpet installers
    - Carpenters
    - Carpenter apprentices
    - Drywall installers
    - Electricians
    - Electrician apprentices
    - Electrical power installers and repairers
    - Painters, construction and maintenance
    - Paperhangers
    - Plasterers
    - Plumbers, pipefitters, and steamfitters
    - Plumber, pipefitter, and steamfitter apprentices
    - Concrete and terrazzo finishers
    - Glaziers
    - Insulation workers
    - Paving, surfacing, and tamping equipment operators
    - Roofers
    - Sheetmetal duct installers
    - Structural metal workers
    - Drillers, earth
- Extractive occupations
  - Supervisors, extractive occupations
  - Drillers, oil well
  - Explosive workers
  - Mining machine operators
  - Mining occupations
- Precision production occupations
  - Supervisors, production occupations
  - Precision metal working occupations
    - Tool and die makers
    - Tool and die maker apprentices
    - Precision assemblers, metal
    - Machinists
    - Machinist apprentices
    - Boilermakers
    - Precision grinders, fitters, and tool sharpeners
    - Patternmakers and model makers, metal
    - Lay-out workers
    - Precious stones and metals workers (jewelers)
    - Engravers, metal
    - Sheetmetal workers
    - Sheetmetal worker apprentices
    - Miscellaneous precision metal workers
  - Precision woodworking occupations
    - Patternmaker and model makers
    - Cabinetmakers and bench carpenters
    - Furniture and wood finishers
    - Miscellaneous precision woodworkers
  - Precision textile, apparel, and furnishings machine workers
    - Dressmakers
    - Tailors
    - Upholsterers
    - Shoe repairers
    - Apparel and fabric patternmakers
    - Miscellaneous precision apparel and fabric workers
  - Precision workers, assorted materials
    - Hand molders and shapers, except jewelry
    - Patternmakers, lay-out workers, and cutters
    - Optical goods workers
    - Dental laboratory and medical appliance technicians
    - Bookbinders
    - Electrical and electronic equipment assemblers
    - Miscellaneous precision workers
  - Precision food production occupations
    - Butchers and meat cutters
    - Bakers
    - Food batchmakers
  - Precision inspectors, testers, and related workers
    - Inspectors, tasters, and graders
    - Adjusters and calibrators
  - Plant and system operators
    - Water and sewage treatment plant operators
    - Power plant operators
    - Stationary engineers
    - Miscellaneous plant and system operators

OPERATORS, FABRICATORS, AND LABORERS

Machine Operators, Assemblers, and Inspectors

- Machine operators and tenders, except precision
  - Lathe and turning machine setup operators
  - Lathe and turning machine operators
  - Milling and planing machine operators
  - Punching and stamping press machine operators
  - Rolling machine operators
  - Drilling and boring machine operators
  - Grinding, abrading, buffing, and polishing machine operators
  - Forging machine operators
  - Numerical control machine operators
  - Miscellaneous metal plastic, stone, and glass working machine operators
- Fabricating machine operators
- Metal and plastic processing machine operators
  - Molding and casting machine operators
  - Metal plating machine operators
  - Heat treating equipment operators
  - Miscellaneous metal and plastic processing machine operators
  - Woodworking machine operators
    - Wood lathe, routing, and planing machine operators
    - Sewing machine operators
    - Shaping and joining machine operators
    - Mailing and tacking machine operators
    - Miscellaneous woodworking machine operators
  - Printing machine operators
    - Printing machine operators
    - Photoengravers and lithographers
    - Typesetters and compositors
    - Miscellaneous printing machine operators
  - Textile, apparel, and furnishings machine operators
    - Winding and twisting machine operators
    - Knitting, looping, taping, and weaving machine operators
    - Textile cutting machine operators
    - Textile sewing machine operators
    - Shoe machine operators
    - Pressing machine operators
    - Laundering and dry cleaning machine operators
    - Miscellaneous textile machine operators
  - Machine operators, assorted materials
    - Cementing and gluing machine operators
    - Packaging and filling machine operators
    - Extruding and forming machine operators
    - Mixing and blending machine operators
    - Separating, filtering, and clarifying machine operators
    - Compressing and compacting machine operators
    - Painting and paint spraying machine operators
    - Roasting and baking machine operators, food
    - Washing, cleaning, and pickling machine operators
    - Folding machine operators
    - Furnace, kiln, and oven operators, exec. food
    - Crushing and grinding machine operators
    - Slicing and cutting machine operators
    - Motion picture projectionists
    - Photographic process machine operators
    - Miscellaneous machine operators, assorted materials
- Fabricators, assemblers, and hand working occupations
  - Welders and cutters
  - Solderers and brasers
  - Assemblers
  - Hand cutting and trimming occupations
  - Hand molding, casting, and forming occupations
  - Hand painting, coating, and decorating occupations
  - Hand engraving and printing occupations
  - Hand grinding and polishing occupations
  - Miscellaneous hand working occupations
- Production inspectors, testers, samplers, and weighers
  - Production inspectors, checkers, and examiners
  - Production testers
  - Production samplers and weighers
  - Graders and sorters, except agricultural

TRANSPORTATION AND MATERIAL MOVING OCCUPATION

- Motor vehicle operators
  - Supervisors, motor vehicle operators
  - Truck drivers, heavy
  - Truck drivers, light
  - Driver-Sales workers
  - Bus drivers
  - Taxi cab drivers and chauffeurs
  - Parking lot attendants
  - Motor transportation occupations
- Transportation occupations, except motor vehicles
  - Rail transportation occupations
    - Railroad conductors and yardmasters
    - Locomotive operating occupations
    - Railroad brake, signal, and switch operators
    - Rail vehicle operators
  - Water transportation occupations
    - Ship captains and mates, except fishing boats
    - Sailors and deckhands
    - Marine engineers
    - Bridge, lock and lighthouse tenders
  - Material moving equipment operators
    - Supervisors, material moving equipment operators
    - Operating engineers
    - Longshore equipment operators
    - Hoist and winch operators
    - Crane and tower operators
    - Excavating and loading machine operators
    - Grader, dozer, and scraper operators
    - Industrial truck and tractor equipment operators
    - Miscellaneous material moving equipment operators

HANDLERS, EQUIPMENT CLEANERS, HELPERS, AND LABORERS

- Supervisors, handlers, equipment cleaners, and laborers
- Helpers, mechanics and repairers
- Helpers, construction and extractive occupations
  - Helpers, surveyor
  - Construction laborers
  - Production helpers
  - Freight, stock, and material movers, hand
    - Garbage collectors
    - Stevedores
    - Stock handlers and baggers
    - Machine feeders and offbearers
  - Garage and service station related occupations
  - Vehicle washers and equipment cleaners
  - Hand packers and packagers
  - Laborers, except construction

Occupation Not Reported

Appendix C

The following list of medications is separated by class, trade and generic names:

Antidepressants

	Trade Name	Generic
	Anafranil	
	Asendin	amoxapine
	Desyrel	trazodone
	Effexor	venlafaxine
	Elavil	amitriptyline
	Ludiomil	maprotiline
	Luvox	fluvoxamine
	Norpramin	desipramine
	Aventyl	nortriptyline
	Paxil	paroxetine
	Prozac	fluoxetine
	Apapin	doxepin
	Remeron	mirtazapine
	Serzone	nefazodone
	Surmontil	trimipramine
	Tofranil	imipramine
	Vivactil	protriptyline
	Wellbutrin	bupropion
	Zoloft	sertraline
	Marplan	isocarboxazid
MAOI's	Nardil	phenelzine sulfate
	Parnate	tranylcypromine

Sedatives/Hypnotics/Minor Tranquilizers

Trade Name	Generic
Ambien	zolpidem
	midzolam
Atarax	hydroxyzine
Ativan	lorazepam
Benadryl	diphenhydramine
Buspar	buspirone
Dalmane	flurzazepam
Halcion	triazolam
Librium	chlordiazepoxide
Equanil	meprobamatae
Somnos	chloral hydrate
Placidyl	ethchlorvynol
Restoril	temazepam
Seconal	secobarbital
Serax	oxazepam
Tranzene	chlorazepate
Valium	diazepam
Xanax	alprazolam

Antipsychotics

Trade Name	Generic
Clozaril	clozapine
Haldol	haloperidol
Loxitane	loxapine
Mellaril	thioridazine
Moban	molindone
Navane	thiothixene
Prolixin	fluphenazine
Risperdal	risperidone
Serentil	mesoridazine
Seroquel	sertindole
Stelazine	trifluoperazine
Thorazine	chlorpromazine
Trilafon	perphenazine
Zyprexa	olanzapine

Stimulants

Trade Name	Generic
Cylert	pemoline
Dexedrine	dextroamphetamine
Ritalin	methylphenidate

Antimanic Agents

Trade Name	Generic
Klonopin	clonazepam
Lamictal	lamotrigine
Lithium	
Neurontin	gabapentin
Tegretol	carbamezepine
Valproic Acid	depakene, depakote

Appendix D

Common Causes of Depressive Syndromes

Drugs:
- Cimetidine
- Beta Blockers (central vs. peripheral)
- Other Antihypertensive
  - Reserpine
  - Aldomet
  - Guanethidine
- Tranquilizers
- Steroids

Diseases:
- Alcoholism
- Cancer (esp. pancreatic)
- Endocrine
  - Thyroid (hypo or hyper)
  - Cushings

Infections:
- Mononucleosis
- Hepatitis
- Influenza

Neurologic:
- Parkinson's
- Huntington's (early)

CVA's (esp. left anterior)

MS

Tumors of CNS (rarely)

Hematologic:
- Folate Deficiency
- B Deficiency

Metabolic:
- Hypercalcemia

Common Causes of Mania

Drugs:
- Steroids
- L-Dopa
- Cocaine and Amphetamine
- Antidepressants
- Sympathomimetics (esp. decongestants)

Diseases:
- Hyperthyroidism
- MS

Appendix E

Organic Causes of Psychosis

Extrapyramidal:
- Huntington's Disease
- Wilson's Disease
- Parkinson's Disease

Infections:
- Encephalitis
- Syphilis

Demyelinating Disorders:
- MS
- Adrenoleukodystrophy

Epilepsy

Neoplasms (especially temporal)

Cerebrovascular

Trauma

Degenerative (Alzheimer's)

Systemic illnesses (renal, hepatic)
- Porphyria
- Lupus

Endocrine (adrenal, thyroid, parathyroid)

Vitamin B_{12}, folate deficiency

Metabolic (sodium, calcium, blood sugar)

Drugs:
- DOPA
- Birth control pills
- Anticholinergic
- Anticonvulsants
- Antidepressants
- Antihypertensives (propranolol)
- Hallucinogens (PCP)
- Steroids
- Stimulants
- NSAIDs
- Antiobesity
- Cardiac (digitalis)
- Pulmonary (ephedrine)
- Drug withdrawal
- Miscellaneous (cimetidine, disulfiram)

Adapted from Cummings, 1986

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03/01/2005 02:51 PM

To: Caroline Drain <drainc@msnotes.wustl.edu>
cc:
Subject: SANS, part 3

Per conversation with Dr. Robinson on March 1, 2005, involving scoring of SANS item: Avolition/Apathy.

Avoilition (inpersistence at work):

If a subject is on SSI or SSD but are still able to do their daily routines/responsiblities (i.e., taking medications, going to the doctor, cleaning room) for the 30 days prior to the interview then the score can be "3".

If a subject is on SSI or SSD, but unable to do any daily routine/responsibilities (i.e., not taking medications, not going to the doctor, not cleaning room), for the 30 days prior to the interview, then the score would be "5".

If a subject has a desire to work and/or engage in other activities but they are unable to so due to active symptoms only, then this item should be scored at a lower level than it would otherwise have been scored. A score of "2" would be reasonable in this case. The active symptoms would then be coded accordingly in the psychosis section of the SANS.