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OMB#: 0925-0584  
Exp. 2/28/2011

## HCHS/SOL Neurocognitive Assessment Booklet

|            |  |  |  |  |  |  |  |  |  |  |
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| ID NUMBER: |  |  |  |  |  |  |  |  |  |  |
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FORM CODE: NEE  
VERSION: A 3/31/10

Contact Occasion

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SEQ #

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Acrostic: \_\_\_\_\_

### Administrative Information

0a. Completion Date: 

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Month Day Year

0b. Staff ID: 

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**Instructions:** Read and follow instructions given for each section.

**PART A. SIX-ITEM SCREENER**

**“In this part of the exam I will ask you some questions and give you a couple of short tasks that will require memory and concentration.**

**First, I will ask you some questions that ask you to use your memory.**

**I am going to say three words. Please wait until I have said all three words; then repeat them. Remember what they are, because I am going to ask you to name them again in a few minutes.**

**Please repeat these words for me:**

**BLUE - PEAR – SOFA.”**

Interviewer may repeat the words up to 3 times if necessary.

**1. Number of presentations necessary for the participant to repeat the words:**

- 1 Presentation . . . . . 1
- 2 Presentations . . . . . 2
- 3 Presentations . . . . . 3
- Incorrect . . . . . 4
- Not Attempted/Disability . . . . . 5
- Not Attempted/Refusal . . . . . 6

**2. “What year is this?”**

- | Correct                    | Incorrect                  | Not Attempted /Disability  | Not Attempted /Refusal     |
|----------------------------|----------------------------|----------------------------|----------------------------|
| 1 <input type="checkbox"/> | 2 <input type="checkbox"/> | 3 <input type="checkbox"/> | 4 <input type="checkbox"/> |

**3. “What month is this?”**

- | Correct                    | Incorrect                  | Not Attempted /Disability  | Not Attempted /Refusal     |
|----------------------------|----------------------------|----------------------------|----------------------------|
| 1 <input type="checkbox"/> | 2 <input type="checkbox"/> | 3 <input type="checkbox"/> | 4 <input type="checkbox"/> |

**4. “What is the day of the week?”**

- | Correct                    | Incorrect                  | Not Attempted /Disability  | Not Attempted /Refusal     |
|----------------------------|----------------------------|----------------------------|----------------------------|
| 1 <input type="checkbox"/> | 2 <input type="checkbox"/> | 3 <input type="checkbox"/> | 4 <input type="checkbox"/> |

If participant states the date, repeat the question.

**“Now, what were those three words I asked you to remember?”**

**5. Blue**

- | Correct                    | Incorrect                  | Not Attempted /Disability  | Not Attempted /Refusal     |
|----------------------------|----------------------------|----------------------------|----------------------------|
| 1 <input type="checkbox"/> | 2 <input type="checkbox"/> | 3 <input type="checkbox"/> | 4 <input type="checkbox"/> |

**6. Pear**

- | Correct                    | Incorrect                  | Not Attempted /Disability  | Not Attempted /Refusal     |
|----------------------------|----------------------------|----------------------------|----------------------------|
| 1 <input type="checkbox"/> | 2 <input type="checkbox"/> | 3 <input type="checkbox"/> | 4 <input type="checkbox"/> |

**7. Sofa**

- | Correct                    | Incorrect                  | Not Attempted /Disability  | Not Attempted /Refusal     |
|----------------------------|----------------------------|----------------------------|----------------------------|
| 1 <input type="checkbox"/> | 2 <input type="checkbox"/> | 3 <input type="checkbox"/> | 4 <input type="checkbox"/> |

A response of “I don’t know” is scored as “Incorrect.”

A self-corrected response is scored as “Correct.”

If Item 1 is scored as 4 (incorrect) then items 5-7 should not be asked and scored as 4.

If Item 1 is scored as 5 or 6 then items 5-7 should not be asked and scored accordingly as either 3 or 4 (consistent with item 1).

**PART B. SEVLT**

8. "Next, I am going to read a list of words. I want you to listen carefully and try to remember the words as I read them.

When I stop, I would like you to recall as many of the words as you can. You may know some of the words by a different name, but I want you to try to remember the exact words I say.

You will not be able to remember all of the words so just do the best you can. You do not have to recall the words in the same order that I read them.

The words are..."

|                  | 8.<br>(Trial 1)          | 9.<br>(Trial 2)          | 10.<br>(Trial 3)         |
|------------------|--------------------------|--------------------------|--------------------------|
| Cabbage .....    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Ladle .....      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Coffee .....     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Beets.....       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Dictionary ..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Cocoa.....       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Beans.....       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Strainer .....   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Oranges .....    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Corn .....       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Newspaper.....   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Juice .....      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Asparagus .....  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Pan.....         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Tea .....        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Words should be read at a steady pace of 1.5 seconds per word (~ 23 seconds per trial).

After reading the list say:

8.1 "Now tell me all of the words you can remember."

Allow 60 seconds per trial.

After the participant's response, provide one prompt for additional words before going to the next trial.

Check off all words recalled for Trial 1.

9. "I am going to read the same list of words to you again. I want you to try to remember as many of the words as you can, including those you have recalled before. When I stop I want you to tell me as many of the words as you can remember."

After reading the list say:

9.1 "Now tell me all of the words you can remember."

After the participant's response, provide one prompt for additional words before going to the next trial.

Check off all words recalled for Trial 2.

10. "I will read the same words once more. Listen carefully and when I finish tell me as many of the words as you can remember."

After reading the list say:

10.1 "Now tell me all of the words you can remember."

After the participant's response, provide one prompt for additional words before going to the next trial.

Check off all words recalled for Trial 3.

**Distracter**

11. "I am going to read you a different list of words. This time, I want you to repeat each word out loud after I read it."

Immediately after the participant repeats the last word from the distracter list say:

11.1 "Now, I want you to tell me as many of the words from the first list that I read to you as you can remember."

Do not repeat the first list. After the participant's response, provide one prompt for additional words.

Check off all words recalled for Trial 5.

| <u>Distracter</u> | <u>Words</u> | 11. (Trial 5)                  |
|-------------------|--------------|--------------------------------|
| Eggs              | Cabbage      | ..... <input type="checkbox"/> |
| Bread             | Ladle        | ..... <input type="checkbox"/> |
| Milk              | Coffee       | ..... <input type="checkbox"/> |
| Cherries          | Beets        | ..... <input type="checkbox"/> |
| Bowl              | Dictionary   | ..... <input type="checkbox"/> |
| Cheese            | Cocoa        | ..... <input type="checkbox"/> |
| Lettuce           | Beans        | ..... <input type="checkbox"/> |
| Spoon             | Strainer     | ..... <input type="checkbox"/> |
| Water             | Oranges      | ..... <input type="checkbox"/> |
| Fish              | Corn         | ..... <input type="checkbox"/> |
| Pen               | Newspaper    | ..... <input type="checkbox"/> |
| Peach             | Juice        | ..... <input type="checkbox"/> |
| Cookies           | Asparagus    | ..... <input type="checkbox"/> |
| Notebook          | Pan          | ..... <input type="checkbox"/> |
| Onions            | Tea          | ..... <input type="checkbox"/> |

**PART C. WORD FLUENCY: LETTERS F AND A**

"On this next task, I will say a letter. Then I want you to tell me as many different words as you can think of, as fast as you can, that begin with that letter.

You may tell me words in English or Spanish so long as they are different words. Leave out names of people, names of places, and numbers. So, if I were to say "T," you would not say words like 'Thomas,' 'Texas,' or the number 'Ten.' But you could say words like 'table,' 'take,' or 'turtle.'"

"Also, do not use the same word again with a different ending. For example, if you said 'take,' then you could not say 'takes,' or 'taking.' These would all be considered the same word. Are you ready?"

12. "Tell me as many words as you can that start with the letter F. I will tell you when to stop. Ready, go." Begin timing. Allow 60 seconds.

If the participant pauses for more than 10 seconds, encourage more words and remind him/her that both English and Spanish words are acceptable. Say: "Can you think of any more words that start with the letter F? Remember you can tell me words in English or Spanish."

Record all words produced (use the back of this page if more space is needed). Place a single strike mark through inadmissible words, i.e., proper nouns (names or places), simple variations (adding "ed" or "ly"), plurals, and repetitions.

**Letter F**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_
12. \_\_\_\_\_
13. \_\_\_\_\_
14. \_\_\_\_\_
15. \_\_\_\_\_

**13. "That was great. Now, tell me as many words as you can that start with the letter A. I will tell you when to stop. Ready, go."**

Begin timing. Allow 60 seconds.

If the participant pauses for more than 10 seconds, encourage more words and remind him/her that both English and Spanish words are acceptable. Say: "Can you think of any more words that start with the letter A? Remember you can tell me words in English or Spanish."

Record all words produced (use the back of this page if more space is needed). Place a single strike mark through inadmissible words, i.e., proper nouns (names and places), simple variations (adding "ed" or "ly"), plurals, and repetitions.

### Letter A

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_
12. \_\_\_\_\_
13. \_\_\_\_\_
14. \_\_\_\_\_
15. \_\_\_\_\_

### **PART D. DIGIT-SYMBOL SUBSTITUTION (DSS)**

Place Digit-Symbol form in front of the participant.

**14. "This last task is the digit-symbol task. Look at these boxes across the top of the page. On the top of each box are numbers from one through nine. On the bottom of each box there is a special mark. Each number has its own mark."**

Point to 1 and its mark, then to 2 and its mark.

**"Down here are boxes with numbers in the top part, but the bottom part is empty."** Point to the four rows.

**"I want you to put the correct mark in each box like this."**

**"Here is a 2; the 2 has this mark."** Point to the first sample item, then to the mark below the 2 in the key. **"So I put it in this box, like this."** Write in the symbol.

**"Here is a 1; the 1 has this mark."** Point to the second sample item, then to the mark below the 1 in the key.

**"So I put it in this box."** Write in the symbol.

**"Here is a 3; the 3 has this mark."** Point to the third sample item, then to the mark below the 3 in the key. **"So I put it in this box."** Write in the symbol.

**"Now, you fill in all the boxes up to this heavy line."**

If the subject makes an error on a sample item, correct the error immediately and review the use of the key. Continue to help (if necessary) until the seven sample items have been filled in correctly. Do not proceed with the test until the participant clearly understands the task.

Look to see if a left-handed participant blocks the key when filling in the marks. If so, fold a separate template in half, exposing only the key, for the participant to use.

**"Yes, now you know how to do them."**

**"When I tell you to begin, start here** (point to the first test item) **and fill in as many boxes as you can, one after the other, without skipping any. Work as quickly as you can. When you finish one line** (sweep finger across the first row), **go on to the next one** (sweep finger across the second row). **Keep working until I tell you to stop."**

**"Ready, go ahead."** Begin timing.

At the end of 90 seconds, say: **"Stop. That's good, thank you. That completes this set of tasks."**

If the participant omits an item or starts doing only one type (e.g., only the 1's), say, "Do them in order. Don't skip any."

Point to the first item skipped and say, "Do this one next." Note that items done out of sequence should not be counted.

If the participant stops working, encourage him/her to continue until instructed to stop.

ID NUMBER:

FORM CODE: NEE  
VERSION: A 3/31/10

Contact  
Occasion

SEQ #

**DIGIT- SYMBOL**

|   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| - | └ | ┘ | ┌ | ┐ | ○ | ^ | × | = |

SAMPLES

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| 2 | 1 | 3 | 7 | 2 | 4 | 8 | 2 | 1 | 3 | 2 | 1 | 4 | 2 | 3 | 5 | 2 | 3 | 1 | 4 | 5 | 6 | 3 | 1 | 4 |  |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| 1 | 5 | 4 | 2 | 7 | 6 | 3 | 5 | 7 | 2 | 8 | 5 | 4 | 6 | 3 | 7 | 2 | 8 | 1 | 9 | 5 | 8 | 4 | 7 | 3 |  |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| 6 | 2 | 5 | 1 | 9 | 2 | 8 | 3 | 7 | 4 | 6 | 5 | 9 | 4 | 8 | 3 | 7 | 2 | 6 | 1 | 5 | 4 | 6 | 3 | 7 |  |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| 9 | 2 | 8 | 1 | 7 | 9 | 4 | 6 | 8 | 5 | 9 | 7 | 1 | 8 | 5 | 2 | 9 | 4 | 8 | 6 | 3 | 7 | 9 | 8 | 6 |  |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |



# HCHS/SOL Neurocognitive Scoring Summary

ID NUMBER:

FORM CODE: NEE  
VERSION: A 03/31/2010

Contact Occasion

SEQ #

Acrostic: \_\_\_\_\_

## Administrative Information

0a. Completion Date: /

0b. Staff ID:

### PART A: SIX ITEM SCREENER

For Questions 1 – 7 see Page 1, Section A of the Neurocognitive Assessment Booklet. ENTER results as they appear on the form.

### PART B: SEVLT

Record the number of correct words recalled for each trial on Part B. Enter “=” as the score for any trials that were skipped or discontinued.

Words Recalled from Part B:

8. (Trial 1).....

9. (Trial 2).....

10. (Trial 3).....

11. (Trial 5).....

### PART C: WORD FLUENCY

Record the number of acceptable words produced for each letter (F and A) on Part C. Enter “=” as the score for any letters that were skipped or discontinued.

Words Produced on Part C:

12. Letter F.....

13. Letter A.....

### PART D: DIGIT SYMBOL SUBSTITUTION

Apply the DSST scoring template to the responses on Part D and enter the number of **correct** symbols. Enter “=” as the score if the DSST was skipped or discontinued.

14. Total Correct Symbols on Part D:

15. What language were tests administered in?

English.....1      Spanish .....2

16a. Were any of the cognitive function test discontinued (from Parts B, C, or D)?

No.....      → **END FORM**

Yes ..... 1

16b. Which test(s) was discontinued:

No    Yes

16b.1. SEVLT ..... 0    1

16b.2. Word Fluency.....0    1

16b.3. Digit Symbol Substitution...0    1

16c. If yes, test(s) discontinued due to (record the appropriate letter for each test that was discontinued):

Refusal = 1

Task Difficulty  
(i.e., could not understand) = 2

Impairment  
(i.e., Visual, Hearing, Limb/Motor Problem) = 3

16c1. Reason for discontinued SEVLT ..

16c2. Reason for discontinued  
Word Fluency .....

16c3. Reason for discontinued  
Digit Symbol Substitution.....