

Stroke Impact Scale

Version 3.0

Guide for Administration

Historical Overview

The Stroke Impact Scale, or SIS, was created to assess changes in impairments, disabilities and handicaps following a stroke. The measure was designed for repeated administration to track change over time, and was created to be used both in clinical and research settings.

The items within the Stroke Impact Scale were derived specifically from the feedback of stroke patients and their caregivers, who identified physical, mental, and emotional changes that were particularly troublesome and contributed to a change in quality of life. We are indebted to these individuals for their willingness to share their experiences so that others with stroke might benefit.

General Instructions

The Stroke Impact Scale (SIS) is an interviewer-administered measure. Ongoing research will determine the validity of the SIS when administered by mail or telephone. Prior to beginning the SIS, basic demographic information on the respondent is gathered, and mental status is determined using the Folstein Mini-Mental (Folstein MF, Folstein SE, McHugh PR: Mini-Mental State. A practical method for grading the cognitive state of patients for the clinician. J Psychiatr Res, 12: 189-198, 1975). The respondent must be able to follow a 3-step command. Analysis is underway to determine an appropriate cutoff in Mini-Mental score below which the SIS should not be administered. Although there is no specific cutoff presently, a score of less than 16 may be used. The value of Proxy response when patient response is inappropriate is currently being evaluated.

The purpose statement must be read prior to administration. It is important to tell the respondent that the information is to be based on his/her point of view.

Response sheets in large print should be provided with the instrument, so that the respondent may see, as well as hear, the choice of responses for each question. The respondent may either answer with the number or the text associated with the number (eg. "5" or "Not difficult at all") for an individual question. If the respondent uses the number, it is important for the interviewer to verify the answer by stating the corresponding text response. The interviewer should display the sheet appropriate for that particular set of questions, and after each question must read all five choices.

Questions are listed in sections, or domains, with a general description of the type of questions that will follow (eg. "These questions are about the physical problems which may have occurred as a result of your stroke"). Each group of questions is then given a statement with a reference to a specific time period (eg. "In the **past week** how would you rate the **strength of your...**"). The statement must be repeated before each individual question. Within the measure the time period changes from one week, to two weeks, to four weeks. It is therefore important to emphasize the change in the time period being assessed for the specific group of questions.

Scoring

The SIS uses the scoring algorithm of the SF-36 (Stuart AL, Ware JE: Measuring functioning and well-being: the Medical Outcomes Study approach. Durham, North Carolina. Duke University Press, 1992: 375-376). The SIS is scored in the following way, for each domain:

$$\text{Transformed Scale} = \left[\frac{(\text{Actual raw score} - \text{lowest possible raw score})}{\text{Possible raw score range}} \right] \times 100$$

There are 3 items that change polarity in the emotion domain, 3f, 3h, and 3i. The SIS scoring database takes this change of direction into account when scoring, however, if you are scoring manually, you must reverse the scores, i.e 1 becomes 5, 2 becomes 4, 3 remains the same, 4 becomes 2, and 5 becomes 1, prior to manual calculation. For these items, use the following equation to compute the individual's score:

$$6 - \text{individual's rating} = \text{item score}$$

Item Clarifications

1. If patient says "I don't have an affected side", then instruct them to score using their perceived weaker side. If they still insist there is no affected, or weaker, side instruct them to score using their dominant side. (6/23/99)
4. If patient says s/he does not do any or all of the items listed, code item(s) as *Extremely Difficult*.
(Item f) If patient does not call but is handed the phone this is OK.
(Item g) If patient cannot hold a phone book, if they can read it this is OK. This item addresses whether the patient is able to initiate a phone call, look up the number, and dial this number correctly.
5. If patient says s/he does not do any or all of the items listed, code item(s) as *Cannot do at all*.
(Item a) If person is on pureed food, even if they feel they could cut the food, code as *Cannot do at All* (1/5/98)
(Item c) Bathing oneself does not include getting into the tub.
(Item e) This question is associated with movement. Does the person have the physical ability to get to the bathroom quickly enough?
(Item f) Losing a little urine/dribbling is considered an accident.
If person has intermittent catheter and is having no leaking problems code them as per report. (1/5/98)
If person has an in-dwelling Foley catheter, code as *Cannot do at all*. (1/5/98)
(Item g) Constipation is not counted here, person has to have an accident.
(Item i) "Shopping" means any type of shopping and does not include driving.

6. If patient hasn't done any of the items in the past two weeks code as *Cannot do at all*.
(Item h) If patient hasn't "climbed several flights of stairs" in two weeks, they may be prompted by saying "have you gone up and down one flight of stairs a couple of times in a row." If they still say they have not done it then they must be coded as *Cannot do at all*.(7/21/99)
(Item i) If the patient wants to know what kind of car say "your car" or "the car you ride in most." (9/99)
7. If patient says "I don't have an affected side", then instruct them to score using their perceived weaker side. If they still insist there is no affected, or weaker, side instruct them to score using their dominant side.
(Item a) If the patient says s/he has not been to the grocery store say "have you carried anything heavy with that hand."
(Item d) This item is to tie a shoelace/bow using both hands.
8. If patient does not do any of the specific items (and has never done), code interference as *None of the time*.