

Chapter 6

Administration and Scoring

The RAND-36 HSI may be administered by paper and pencil with the Question/Answer Sheet or by computer with the *OPTAIO Provider's Desktop* software (The Psychological Corporation, 1998). Question/Answer Sheets and Hand-Scoring Worksheets for the RAND-36 HSI are available from The Psychological Corporation. When the RAND-36 HSI Question/Answer Sheet is completed by a client, the responses may be hand-scored with the RAND-36 HSI Hand-Scoring Worksheet or entered into the OPTAIO program for computerized scoring and reporting. Instructions to the client are the same for both the paper-and-pencil and computerized methods of administration. With either method, points to stress to clients are to report honestly, to report for the preceding 4-week time period, and to not skip any items.

Hand-Scoring for the RAND-36 HSI

Instructions for scoring item responses and for calculating scale and composite scores for the RAND-36 HSI are provided in Appendixes A and B and on the Hand-Scoring Worksheet. RAND-36 HSI scoring is sequential. The IRT weights for the item responses are determined; the scale raw scores are based on these IRT weights and converted to *T* scores; the composite raw scores are based on the scale *T* scores and are converted to *T* scores. Appendixes A and B reflect this sequence. Although instructions for scoring are provided on the Hand-Scoring Worksheet, hand-scoring requires the use of the tables in Appendixes A and B and those in Appendix C, which provides cumulative percentages for each *T* score by scale and composite.

Hand-Scoring for the RAND-12 HSI

The RAND-12 HSI is a short form of the RAND-36 HSI and employs different scoring rules than those for the 36-item version. Detailed rules and the tables for scoring responses to the RAND-12 HSI are provided in Appendix E, along with a description of the instrument's development and intended use. Instructions for calculating estimated *T* scores for the three composites are also provided on the RAND-12 HSI Hand-Scoring Worksheet (available from The Psychological Corporation). Cumulative percentages for each *T* score are provided in Appendix C, organized by scale and composite.

Computer-Based Administration, Scoring, and Interpretation

Consistent with the increased need for expedient testing, processing, and reporting with the use of computers, the RAND-36 HSI is available on OPTAIO (The Psychological Corporation, 1998). The OPTAIO program provides on-screen administration and scoring and generates narrative interpretive reports for the RAND-36 HSI.

The RAND-36 HSI items are presented on-screen. Using a computer keyboard, the client can enter responses to the items, or the clinician can enter the client's responses from the Question/Answer Sheet. Once a client's item responses have been entered, the OPTAIO program computes the item, scale, and composite scores. The program then displays graphs of the client's *T* scores from the single administration (see Figure 6.1). In addition, longitudinal graphs can be generated for comparing a client's scores on one or more RAND-36 HSI composites over time (see Figure 6.2).

The program also generates an interpretive report that describes the client's scores in a narrative format (see Figures 6.3A and 6.3B). The availability of a computer-based analysis and interpretive report is particularly critical for initial diagnosis, determination of level of care, and priority treatment goals for the client.

Figure 6.1. OPTAIO Session Graph of RAND-36 HSI Composite and Scale Scores

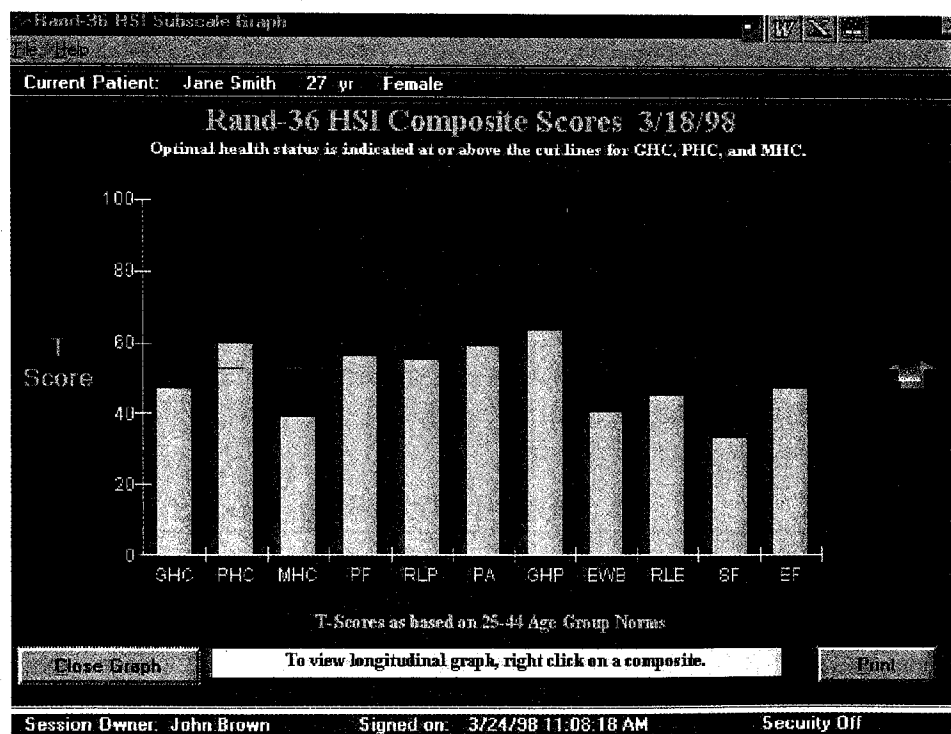
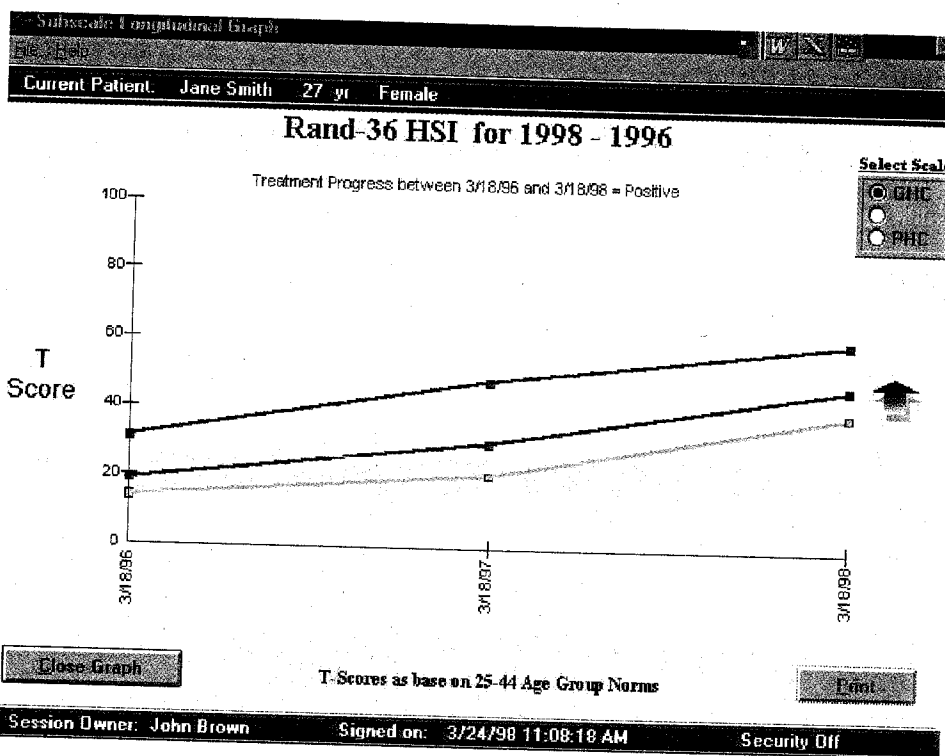


Figure 6.2. OPTAIO Longitudinal Graph of RAND-36 HSI Composite Scores



**Figure 6.3A. OPTAIO Interpretive Report of RAND-36 HSI
Performance (Page 1)**

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RAND-36 HSI Report

RESULTS

<u>Scale</u>	<u>T Score</u>	<u>Cumulative Percentage</u>
Global Health Composite (GHC)	47	33.0
Physical Health Composite (PHC)	60	99.9
Physical Functioning (PF)	56	99.9
Role Limitations due to Physical Health Problems (RLP)	55	99.9
Pain (PA)	59	99.9
General Health Perceptions (GHP)	63	99.9
Mental Health Composite (MHC)	39	17.0
Emotional Well-Being (EWB)	40	18.0
Role Limitations due to Emotional Problems (RLE)	45	24.0
Social Functioning (SF)	33	10.5
Energy/Fatigue (EF)	47	39.0

Missing Items: No missing items.
Invalid Scales(s): No invalid scales.

Smith, Jane T. a 27 year old Female

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Figure 6.3B. OPTAIO Interpretive Report of RAND-36 HSI Performance (Page 2)

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Created by : *John Brown* Patient Unit : *OutPatient*

RAND-36 HSI Report

INTERPRETATION

The following report presents Ms. Smith's scores on the RAND-36 HSI with respect to other adults 25 to 44 years old.

The Global Health Composite (GHC) measures the individual's perception of her physical and mental health and the extent of any health-imposed limitations in daily functioning. The client's score on the GHC is 47, indicating that 33.0% of adults 25 to 44 years old obtained this score or lower. The physical and mental aspects of the GHC are summarized by the Physical Health Composite (PHC) and the Mental Health Composite (MHC). When interpreting results for individual clients, these three composite scores provide the most reliable source of information.

The PHC measures the individual's self-appraisal of her physical functioning, role limitations due to physical problems, bodily pain, and general health perceptions. The client's score on the PHC is 60. When compared to adults 25 to 44 years old, 99.9% obtained this score or lower. The following scores on Ms. Smith's PHC subscales illustrate her physical health status at this point in time. Her Physical Functioning (PF) score is 56, indicating that 99.9% of adults 25 to 44 years old obtained this score or lower. Her score on the Role Limitations due to Physical Health Problems (RLP) scale is 55. This score or lower was obtained by 99.9% of adults 25 to 44 years old. On the Pain (PA) scale her score is 59, indicating that 99.9% of adults 25 to 44 years old achieved this score or lower. Results on the General Health Perceptions (GHP) scale indicate that her score is 63. This score or lower was obtained by 99.9% of adults 25 to 44 years old.

The MHC assesses the individual's emotional well-being, role limitations due to emotional problems, energy and social functioning. The client's score on the MHC is 39. When compared to adults 25 to 44 years old, 17.0% obtained this score or lower. The following scores on Ms. Smith's MHC subscales illustrate her mental health status at this point in time. Her Emotional Well-Being (EWB) score is 40, indicating that 18.0% of adults 25 to 44 years old obtained this score or lower. Her score on the Role Limitations due to Emotional Problems (RLE) scale is 45. This score or lower was obtained by 24.0% of adults 25 to 44 years old. On the Social Functioning (SF) scale her score is 33, indicating that 10.5% of adults 25 to 44 years old achieved this score or lower. Results on the Energy/Fatigue (EF) scale indicate that her score is 47. This score or lower was obtained by 39.0% of adults 25 to 44 years old.

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