

Family Satisfaction in the Intensive Care Unit (FS-ICU): Instructions for Recoding and Scoring

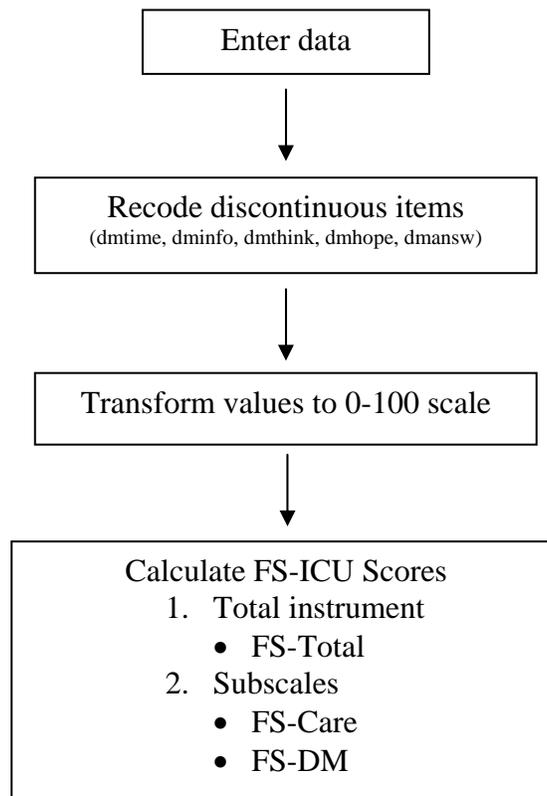
(updated July 2006)

INTRODUCTION

The Family Satisfaction in the Intensive Care Unit (**FS-ICU**) questionnaire measures family satisfaction with care in the intensive care unit. In 2006, a refined and shortened 24-item version of the FS-ICU was released. This newer version has two sections—the first part focuses on satisfaction with overall care (14 items) and the second part assesses satisfaction with decision-making (10 items). The FS-ICU takes 10-15 minutes to complete and was designed to be self-administered. It has also been translated into German, French, and Chinese.

We have developed a validated scoring method for the 24-item FS-ICU that generates a total instrument score and two subscale scores. The original FS-ICU has 34 items, but the scoring method below has only been validated for the shorter 24-item instrument. If you administer the full 34-item survey, we recommend you use this scoring approach only for the 24 applicable items. All questions use Likert-5 response scales, but 5 items have discontinuous response options and must be recoded prior to scoring. Only one of these recoded items was retained in the 24-item version.

STEPS FOR RECODING AND SCORING THE FS-ICU



CODING AND SCORING PROCEDURES

In order to properly code and score the FS-ICU, do the following steps in order. See the *FS-ICU Coding Key Manual* for item variable names.

RECODING PROCEDURES

1. Enter data for all items using the following values:

Code as marked by family member	1,2,3,4,5
Not Applicable	7
Missing/Skipped	8

2. Recode discontinuous items

This is necessary because several items have discontinuous response scales and must be recoded to have the same response scale as the rest of the instrument. Do not recode “Not Applicable” or Missing responses. Note that some recoded items are only found in the 34-item survey.

3. Check coding for errors

Since errors can be made at many points in the data entry and coding processes, we suggest that coding be checked. Run frequencies for all variables, both before and after recoding. Ensure that only legitimate values are present for items (1,2,3,4,5,7,8), and that recodes have been correctly executed by comparing before vs. after frequencies.

TRANSFORM VALUES

This is an important step that transforms item scores to a 0-100 scale, and thereby makes values more meaningful. On this scale, 0 is “least satisfied” and 100 is “most satisfied.”

$$\text{Transformed value} = \frac{\text{actual item value} - \text{lowest possible item value}}{\text{possible item range}} \times 100$$

SCORING PROCEDURES

As mentioned above, this scoring approach is only validated for the 24-item instrument. If you administer the full 34-item survey, this scoring approach will only score the 24 applicable items. Each score is calculated by averaging available items, provided the respondent answers *at least 70%* of the items in the respective scale. For non available items (coded 7, 8) are excluded from scoring analysis. For SPSS users, we provide a recoding/scoring syntax file that performs all of these tasks. [\[link to SPSS syntax file\]](#) If you develop a recoding/scoring algorithm in another software platform, please forward to us and we will post it on this website. When sharing your data with others, consider expressing scores as medians and interquartile ranges (this accounts for the skewness inherent to satisfaction data).

- 1. Calculate score on the total instrument (FS-Total)**
- 2. Calculate scores for the 2 subscales (FS-Care & FS-DM)**
- 3. Check for scoring errors**

We suggest you calculate FS-ICU scores (subscales & total) by hand for several respondents, and compare the results to those produced by your scoring program.