

## ANALYSIS OF DATA SET 2

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The limited scale on which tenderness is assessed nevertheless provides a basis for contrasting the rates of improvement response for the two groups. There is no information provided to indicate whether the first score given for each patient is the initial state assessment prior to treatment, or the first assessment after the commencement of treatment (there then being no information about the relative initial tenderness perceptions). I shall assume the former, since it would be sensible to seek to quantify the initial state before treatment. Note at this stage that between subject perception of the interpretation of "severe", "moderate", "slight" is likely to produce variation in the initial score, regardless of actual variation in initial tenderness.

The rate of improvement can be estimated for each patient but, of course, because of the subjective nature of the assessment, and possible actual variation in recovery rates there will inevitably be considerable variation of improvement rates between patients.

In calculating estimated improvement rates zeros after an initial zero were ignored. Each successive difference was calculated and the patient rate calculated as the average difference. Where observations were missing, all values between the previous and following scores (inclusive) were assumed equally likely and the patient rate calculated as the average of the possible rates. This use of differences minimises the effect of the correlation of successive observations, which correlation must be very poorly estimable.

Each group has one rapid improvement (200, 3000). The results for an initial state 1 are similar for the two groups. Apart from the rapid improvement the results for the initial state 3 are similar for both groups. For initial state 2, ignoring the rapid improvement, there does appear to be greater improvement for group 1 than for group 2:

Group 1, mean 0.85 ; Group 2, mean 0.57 .