

Longitudinal Data Analysis

Assignment 2: Discrete Longitudinal Data 2017–2018

1 The Acupuncture data

We will be using the Acupuncture data again. The idea is to analyze the count variable 'frequency'.

2 Assignments

1. Starting from relevant research questions for each, consider marginal, transitional, and random-effects models for these longitudinal profiles.
2. In the case of a random-effects model, consider empirical Bayes prediction. Discuss its use, advantages, disadvantages.
3. The covariates to be considered are: group, chronicity, age, and time.

3 General remarks

- The general remarks, issued for the first homework, also apply here.
- Take care in preparing a nice report. Avoid undigested output. The report does not have to be long, but scientific and to the point.
- Carefully motivate all choices made.
- Discuss advantages and disadvantages.