



Online Resource 2: Regression diagnostic plots for the fully adjusted linear regression model (Model 4) with 12-month low back pain visual analog scale (VAS) as the dependent variable, presented as a representative example.

Standard regression diagnostic plots for Model 4, including residuals versus fitted values, normal Q–Q plot of standardized residuals, scale–location plot, and residuals versus leverage with Cook’s distance. Visual inspection did not reveal major deviation from linearity. Standardized residuals were approximately normally distributed, although minor deviation in the upper tail was observed. The scale–location plot suggested mild

heteroscedasticity. Compared with the Δ LBP 6–12M model, the tendency toward heteroscedasticity appeared slightly more pronounced. However, no highly influential observations were identified based on leverage values and Cook's distance.