Analysis section

Continuous and binary patient level outcomes in the time periods were aggregated to the ICU average in those periods. Outcomes with a right skewed duration (e.g., coma days) were log transformed before aggregating. For binary outcomes, the period-averages were log-odds transformed, after replacing 0% and 100% to 0,0001% and 99,9999% to avoid infinities in the log-odds transformation. Then, the series of ICU averages before and after intervention were analyzed using linear autoregression to account for correlation between ICU averages. Ordinary least squares regression (no correction for possible correlation), autoregressive regression for each lag orders (estimated with maximum likelihood) and backward autoregression (backward selection based the Yule-Walker estimates) were performed The fits of these models were compared in terms of residuals plots (no indication of alternation or long sequences of only positive or only negatives residuals), fit measure (corrected AIC), and white noise probabilities. The estimates of the level change and the slope change of the best fitting model were reported. For binary outcomes, these effects were back-transformed to odds ratios. For continuous outcomes the effects describe the difference in average (level or slope) if the outcome was not log transformed. For log-transformed outcomes, the effects are given as median ratios after back-transformation.