

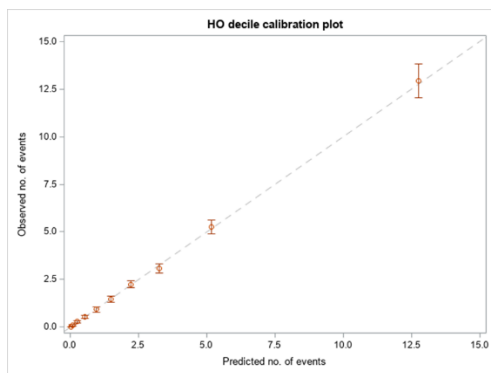
5.4.5 Calibration and Discrimination

Discrimination of risk models were assessed using the Dispersion-based pseudo R-squared, and calibration was visually investigated by dividing the predicted number of events into deciles and plotting the observed number of events. Additionally, the Root Mean Square Error (RMSE) was calculated between observed and predicted events.

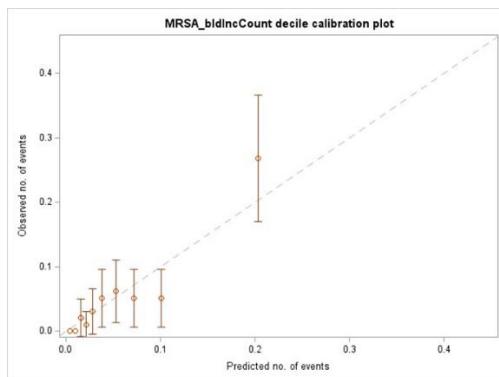
For the acute care hospital model, the dispersion-based pseudo r-square was 40.6%, while it was 4.8% for CAH. The RMSE for ACH was 0.99 and CAH 0.45.

The decile calibration plots are below:

ACH:



CAH:



The ACH model has a good R-square of 40.6% and the calibration plot shows little deviation from the $y=x$ line. The CAH model suffers from a low and sparse event rate as described in section 5.4.4 giving a poor final R-square and non-optimal calibration.