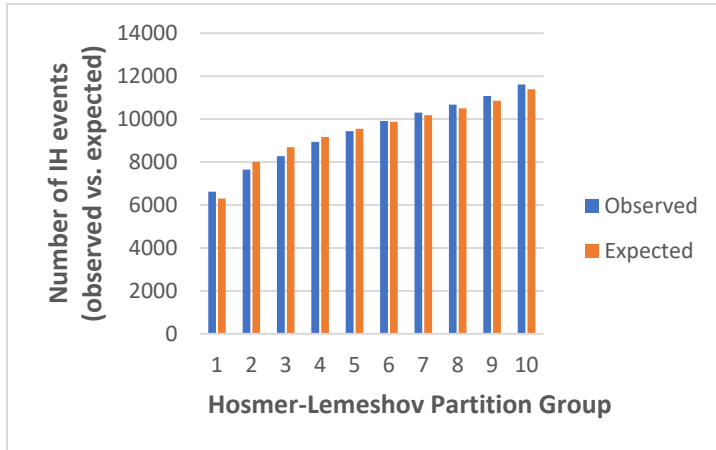**Appendix 3 (as supplied by the authors): Predictive accuracy of the models**

The models were able to predict the number of events (i.e., IHs) for subgroups of patients with a high degree of accuracy according to the plots below. This supports a good fit of the models.

A. Index hospitalization – HCU

B. Index hospitalization – non-HCU