

**Online Supplement S.3: Model comparisons based on Bayesian DIC**

#	Model name	Value of Bayesian DIC
<b>M1</b>	<b><i>Random intercept without predictors (null model)</i></b>	
M1.1	Single-level logistic model without higher-level effects	72425
M1.2	Two-level model: hospital-patient	71641
M1.3	Two-level model: physician-patient	72424
M1.4	Three-level cross-classified model: hospital-physician-patient	71627
M1.5	Three-level cross-classified model: hospital-physician-patient, with hospital x physician random interaction term	71619
<b>M2</b>	<b><i>Adding patient-level controls (potentially justified determinants of variations in 30-day statin prescribing see Table 1)</i></b>	
M2.1	Single level logistic model without higher level effects	63478
M2.2	Two-level model: hospital-patient	62982
M2.3	Two-level model: physician-patient	63425
M2.4	Three-level cross-classified model: hospital-physician-patient	62332
M2.5	Three-level cross-classified model: hospital-physician-patient, with hospital x physician random interaction term	62307
<b>M3</b>	<b><i>Full model including all predictors (see Table 1)</i></b>	
M3.1	Single level logistic model without higher level effects	62453
M3.2	Two-level model: hospital-patient	61537
M3.3	Two-level model: physician-patient	61821
M3.4	Three-level cross-classified model: hospital-physician-patient	61526
M3.5	Three-level cross-classified model: hospital-physician-patient, with hospital x physician random interaction term	61513