

Differential measurement heterogeneity at validation

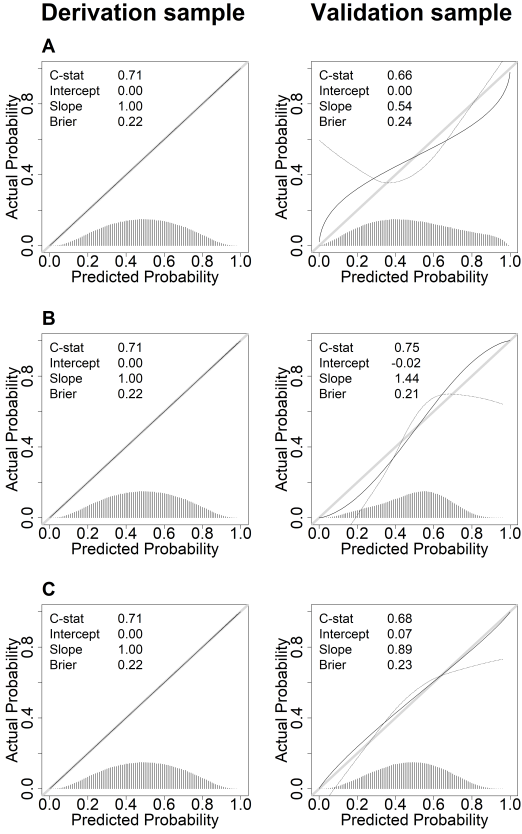


FIGURE 8 Predictive performance of a single-predictor binary logistic regression model. In all three scenarios, $\psi_{D\{0,1\}}$ and $\psi_{V\{0,1\}}$ equal 0, the default value for $\theta_{D\{0,1\}}$ and $\theta_{V\{0,1\}}$ is 1.0, and the default value for $\sigma_{\epsilon(D\{0,1\})}^2$ and $\sigma_{\epsilon(V\{0,1\})}^2$ is 0.5. Otherwise, the predictor measurement structure for the cases at validation (specified by θ_{V1} and $\sigma_{\epsilon(V1)}^2$) corresponds to:

A. $W_V = \theta_V X + \epsilon_V$, where $X \sim N(0, 0.5)$ and $\epsilon_{V1} \sim N(0, 2.0)$.

Measurements of cases are less precise at validation.

B. $W_V = \theta_V X + \epsilon_V$, where $X \sim N(0, 0.5)$ and $\epsilon_{V1} \sim N(0, 0)$.

Measurements of cases are more precise at validation.

C. $W_V = \theta_V X + \epsilon_V$, where $\theta_{V1} = 0.5$, $X \sim N(0, 0.5)$ and $\epsilon_V \sim N(0, 0.5)$.

Associations between X and W in cases are weaker at validation.