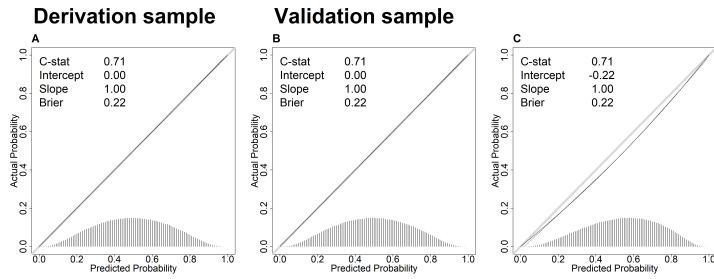## Additive systematic measurement heterogeneity



**FIGURE 6** Predictive performance of a single-predictor binary logistic regression model. The degree of additive error in the validation predictor measurement $W_V$ varies, while the degree of random error is consistent across settings, i.e. while $\sigma^2_{\epsilon(D)} = \sigma^2_{\epsilon(V)}$. The predictor measurement structure corresponds to:

A. $W_D = X + \epsilon_D$, where $X \sim \mathcal{N}(0, 0.5)$ and $\epsilon_D \sim \mathcal{N}(0, 0.5)$.

B. $W_V = \psi_V + X + \epsilon_V$, where $\psi_V = 0$, $X \sim \mathcal{N}(0, 0.5)$ and $\epsilon_V \sim \mathcal{N}(0, 0.5)$. Measurements are equal across settings.

C. $W_V = \psi_V + X + \epsilon_V$, where $\psi_V = 0.25$, $X \sim \mathcal{N}(0, 0.5)$ and $\epsilon_V \sim \mathcal{N}(0, 0.5)$. Measurements are shifted from $X$ by a constant.