

Table, Supplemental Digital Content 12: Multilevel model performance characteristics using RSI and HCC patient scores

| Inpatient Population | C-Statistic | | Akaike Information Criteria | | Bayesian Information Criteria | |
|-------------------------------------|-------------|------|-----------------------------|---------|-------------------------------|---------|
| | RSI | HCC | RSI | HCC | RSI | HCC |
| All Inpatient (3,504 hospitals) | 0.85 | 0.8 | 677307 | 744478 | 677363 | 744528 |
| Surgical Stays (3,478 hospitals) | 0.86 | 0.81 | 905673 | 1006763 | 905728 | 1006819 |
| Non-surgical (3,502 hospitals) | 0.84 | 0.79 | 251868 | 726706 | 251923 | 726756 |

Legend: Comparative model performance only using patient scores derived from full regressions, applied to holdout samples of 1.5 million (All Inpatients) 2 million (Surgical) and 1.5 million (Non-surgical) patients. AIC = Akaike Information Criteria, BIC = Bayesian Information Criteria, RSI = Risk Stratification Index, HCC = Hierarchical Conditions Categories