**UTILITY OF THE LACE INDEX AT THE BEDSIDE IN PREDICTING 30-DAY READMISSION OR DEATH IN PATIENTS HOSPITALIZED WITH HEART FAILURE**

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*Background*: The LACE index threshold of 10 predicts readmission or death in general medical patients in administrative databases. We assessed whether LACE, computed at the bedside without adjustment for clinical variables, can predict 30-day clinical outcomes in patients hospitalized for heart failure (HF).

*Methods*: We used logistic regression with LACE index as the continuous predictor and 30-day readmissions and 30-day readmission or death as outcomes. We determined an optimal LACE threshold for predicting risk, using logistic regression and the closest-to-(0,1) criterion for dichotomized LACE scores. We assessed model discrimination with c statistic and 95% CI.

Results: Of 378 patients, a majority (91%) had LACE scores >10 making this an impractical threshold for risk prediction. Each increment in LACE score increased the odds of 30-day readmissions (OR 1.13, 95%CI 1.02-1.24) and 30-day readmissions or death (OR 1.11, 95%CI 1.01-1.22). C statistics for 30-day readmissions (0.59, 95%CI 0.52-0.65) and 30-day readmission or death (0.57, 95%CI 0.51-0.64), were comparable to the Centers for Medicare/Medicaid Services endorsed readmission risk score for these outcomes (P=0.598 and P=0.225, respectively). LACE >13 predicted 30-day readmissions (OR 1.92, 95% CI 1.18–3.13) and 30-day readmission or death (OR 1.60, 95% CI 1.00–2.54), and met the closest-to-(0,1) criterion for optimal threshold.

*Conclusions*: The LACE index calculated at the bedside predicts 30-day clinical outcomes in hospitalized HF patients with discrimination that is modest, but comparable to more complex risk prediction models. While there is a continuum of risk, a threshold of >13 is optimal to identify high-risk patients.