

Development and Validation of the HMS-Sepsis Mortality Model

Results from 17,514 community-onset sepsis hospitalizations from 66 hospitals in Michigan (4/2022-9/2023)

Predicting 30-day Mortality

Model Includes:

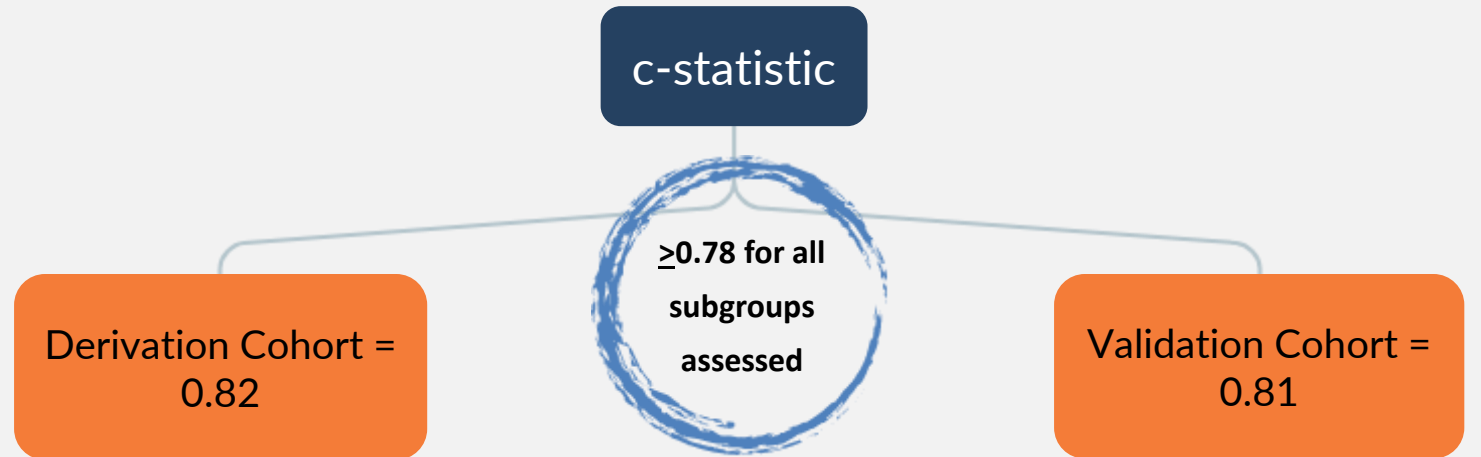
- ✓ 13 physiologic variables
- ✓ two physiologic interactions
- ✓ 16 demographic and chronic health variables

- age
- metastatic solid tumor
- temperature
- altered mental status
- platelet count

Most significant



Overall Performance of the Model



- Overall calibration error = 0.0%
- Mean calibration error = 1.5%

The HMS-Sepsis mortality model can improve hospital benchmarking and causal inference analysis with its strong discrimination and calibration.