Title: A comprehensive prognosis tool for older adults: Predicting Death, ADL Disability, and walking Disability simultaneously.

Lee AK, Diaz-Ramirez LG, Boscardin WJ, Smith AK, Lee SJ. J Am Geriatr Soc. 2022 July 6. <https://doi.org/10.1111/jgs.17932>

**Description of data and SAS and R codes for reproducing the analyses of this article**

**File name: 1.TCICIndividual\_CompRiskSvy**

File format: .sas

Description: SAS code to perform TCIC backward elimination by Outcome using HRS original dataset with time information and considering Competing-risks. It uses Cox regression for Death, and Competing-risk regression for rest of outcomes.

**File name: 2.baTCIC\_CompRiskSvy**

File format: .sas

Description: SAS code to perform best average TCIC backward elimination using HRS original dataset. It uses Cox regression for Death, and Competing-risk regression for rest of outcomes.

**File name: 3.BS500**

File format: .sas

Description: SAS code to create 500 bootstrap samples.

**File name: 4a.BS100\_TCIC\_ByOutcomeSeladl**

File format: .sas

Description: SAS code to perform TCIC backward elimination for ADL outcome using bootstrap datasets.

**File name: 4b.BS100\_TCIC\_ByOutcomeSelwalk**

File format: .sas

Description: SAS code to perform TCIC backward elimination for Walking outcome using bootstrap datasets.

**File name: 4c.BS100\_TCIC\_ByOutcomeSeldeath**

File format: .sas

Description: SAS code to perform TCIC backward elimination for Mortality outcome using bootstrap datasets.

**File name: 4d.BS100\_TCIC\_ByOutcomeSelAll**

File format: .sas

Description: SAS code to create data with best models for individual selection by outcomes using bootstrap datasets and compute summary statistics.

**File name: 5.BS100\_baTCICsel**

File format: .sas

Description: SAS code to perform best average TCIC backward elimination using bootstrap datasets.

**File name: 6.BS100\_baTCICoptimism**

File format: .sas

Description: SAS code to compute optimism corrected statistics.

**File name: 7a.UnavailPred14baTCIC**

File format: .sas

Description: SAS code to apply one unavailable predictor method to final baTCIC model.

**File name: 7b.UnavailPred14nCr2baTCIC**

File format: .sas

Description: SAS code to apply two unavailable predictor metho to final baTCIC model.

**File name: 7c.UnavailPred\_IAUC**

File format: .sas

Description: SAS code to compute IAUC using IPCW method for best/worst case models missing 1 or 2 predictors.

**File name: 8a.SurvCIFestimates**

File format: .sas

Description: SAS code to compute weighted predicted cumulative incidence for calibration plots.

**File name: 8b.CalibrationPlotsFinalModel**

File format: .R

Description: R script to do calibration plots for final model.

**File name: 8c.CalibrationPlotsUnavaliablePred**

File format: .R

Description: R script to do calibration plots for unavailable predictors models.

**File name: 9a.SurvBaseBetasEstimates**

File format: .sas

Description: SAS code to compute weighted betas and baseline functions for Cox and Competing-risk final and unavailable predictor models.

**File name: Weightbasesurv\_ADL**

File format: .csv

Description: Data for ADL outcome with baseline survival function from time 1 to 19 for final, age-only, and unavailable predictor models.

**File name: Weightbetasurv\_ADL**

File format: .csv

Description: Data for ADL outcome with beta estimates for final, age-only, and unavailable predictor models.

**File name: Weightbasesurv\_WALK**

File format: .csv

Description: Data for Walking outcome with baseline survival function from time 1 to 19 for final, age-only, and unavailable predictor models.

**File name: Weightbetasurv\_WALK**

File format: .csv

Description: Data for Walking outcome with beta estimates for final, age-only, and unavailable predictor models.

**File name: Weightbasesurv\_DEATH**

File format: .csv

Description: Data for Mortality outcome with baseline survival function from time 1 to 19 for final, age-only, and unavailable predictor models.

**File name: Weightbetasurv\_DEATH**

File format: .csv

Description: Data for Mortality outcome with beta estimates for final, age-only, and unavailable predictor models.

**File name: 9b.PredictedRisks**

File format: .R

Description: R script to compute predicted risks at 5, 10, and 14 years for ADL, Walking and Mortality outcomes.

**File name: 10.Subgroups\_IAUC**

File format: .sas

Description: SAS code to compute IAUC of Cox and Competing-risk final and unavailable predictors models for full sample and subgroups.

**File name: 11a.AveragePersonRisks**

File format: .sas

Description: SAS code to compute "average for age" risk and compute Cumulative Incidence for calibration plots.

**File name: 11b.CreateRCsplines\_age\_bmi**

File format: .R

Description: Compute restricted cubic splines for age and BMI.

**File name: 12.CalibrationPlotsAgeOnlyModel**

File format: .R

Description: R script to do calibration plots for model with age only as predictor.