Model B : Estimation Results

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# Specification

Estimation results of **Model B**, specified by the following input:

q <- .01  
# transition matrix  
Q <- rbind( c(0, q, 0, q),   
 c(q, 0, q, q),  
 c(0, 0, 0, q),   
 c(0, 0, 0, 0))   
# misclassification matrix  
E <- rbind( c( 0, 0, 0, 0),   
 c( 0, 0, .1, 0),   
 c( 0, 0, 0, 0),  
 c( 0, 0, 0, 0) )  
# transition names  
qnames = c(  
 "Healthy - Mild", # q12  
 # "Healthy - Severe", # q13  
 "Healthy - Dead", # q14  
 "Mild - Healthy", # q21   
 "Mild - Severe", # q23  
 "Mild - Dead", # q24  
 # "Severe - Healthy",# q31  
 # "Severe - Mild", # q32  
 "Severe - Dead" # q34  
)

The model was fitted using the following specification of covariates:

# Forward transitions:  
 "1-2" = "age + male + educat"  
 "2-3" = "age + male + educat"  
# Backward transitions:  
 "2-1" = "age"  
# Death transitions:   
 "1-4" = "age + male"  
 "2-4" = "age + male"  
 "3-4" = "age + male"

# Intensities

State 1 State 2 State 3 State 4  
State 1 0.8199122 0.1325532 0.0128552 0.03467947  
State 2 0.3789549 0.4508690 0.1059806 0.06419544  
State 3 0.0000000 0.0000000 0.8233855 0.17661451  
State 4 0.0000000 0.0000000 0.0000000 1.00000000

# Hazards

$age  
 HR L U  
State 1 - State 2 1.0807976 1.067756 1.0939989  
State 1 - State 4 1.0848992 1.054242 1.1164483  
State 2 - State 1 0.9795556 0.965389 0.9939301  
State 2 - State 3 1.0559593 1.032735 1.0797058  
State 2 - State 4 1.0694018 1.016493 1.1250643  
State 3 - State 4 1.0709105 1.046845 1.0955298  
  
$male  
 HR L U  
State 1 - State 2 1.3369893 1.142543 1.564528  
State 1 - State 4 1.5411873 1.003239 2.367590  
State 2 - State 1 1.0000000 1.000000 1.000000  
State 2 - State 3 0.8428967 0.621253 1.143616  
State 2 - State 4 2.0435875 1.168611 3.573687  
State 3 - State 4 1.4257180 1.086724 1.870459  
  
$educat  
 HR L U  
State 1 - State 2 0.7580798 0.6481048 0.8867161  
State 1 - State 4 1.0000000 1.0000000 1.0000000  
State 2 - State 1 1.0000000 1.0000000 1.0000000  
State 2 - State 3 0.9259175 0.7142378 1.2003330  
State 2 - State 4 1.0000000 1.0000000 1.0000000  
State 3 - State 4 1.0000000 1.0000000 1.0000000

# Session Info

sessionInfo()

R version 3.3.1 (2016-06-21)  
Platform: x86\_64-w64-mingw32/x64 (64-bit)  
Running under: Windows 10 x64 (build 14393)  
  
locale:  
[1] LC\_COLLATE=English\_United States.1252 LC\_CTYPE=English\_United States.1252 LC\_MONETARY=English\_United States.1252  
[4] LC\_NUMERIC=C LC\_TIME=English\_United States.1252   
  
attached base packages:  
[1] stats graphics grDevices utils datasets methods base   
  
other attached packages:  
[1] msm\_1.6.1 magrittr\_1.5 nnet\_7.3-12 knitr\_1.14   
  
loaded via a namespace (and not attached):  
 [1] Rcpp\_0.12.6 formatR\_1.4 nloptr\_1.0.4 plyr\_1.8.4 tools\_3.3.1 digest\_0.6.10   
 [7] lme4\_1.1-12 evaluate\_0.9 tibble\_1.2 gtable\_0.2.0 nlme\_3.1-128 lattice\_0.20-33   
[13] mgcv\_1.8-14 Matrix\_1.2-7.1 DBI\_0.5 yaml\_2.1.13 parallel\_3.3.1 SparseM\_1.7   
[19] mvtnorm\_1.0-5 expm\_0.999-0 dplyr\_0.5.0 stringr\_1.1.0 MatrixModels\_0.4-1 grid\_3.3.1   
[25] R6\_2.1.3 survival\_2.39-5 rmarkdown\_1.0 minqa\_1.2.4 ggplot2\_2.1.0 car\_2.1-3   
[31] scales\_0.4.0 htmltools\_0.3.5 splines\_3.3.1 MASS\_7.3-45 assertthat\_0.1 pbkrtest\_0.4-6   
[37] testit\_0.5 colorspace\_1.2-6 quantreg\_5.26 stringi\_1.1.1 lazyeval\_0.2.0 munsell\_0.4.3