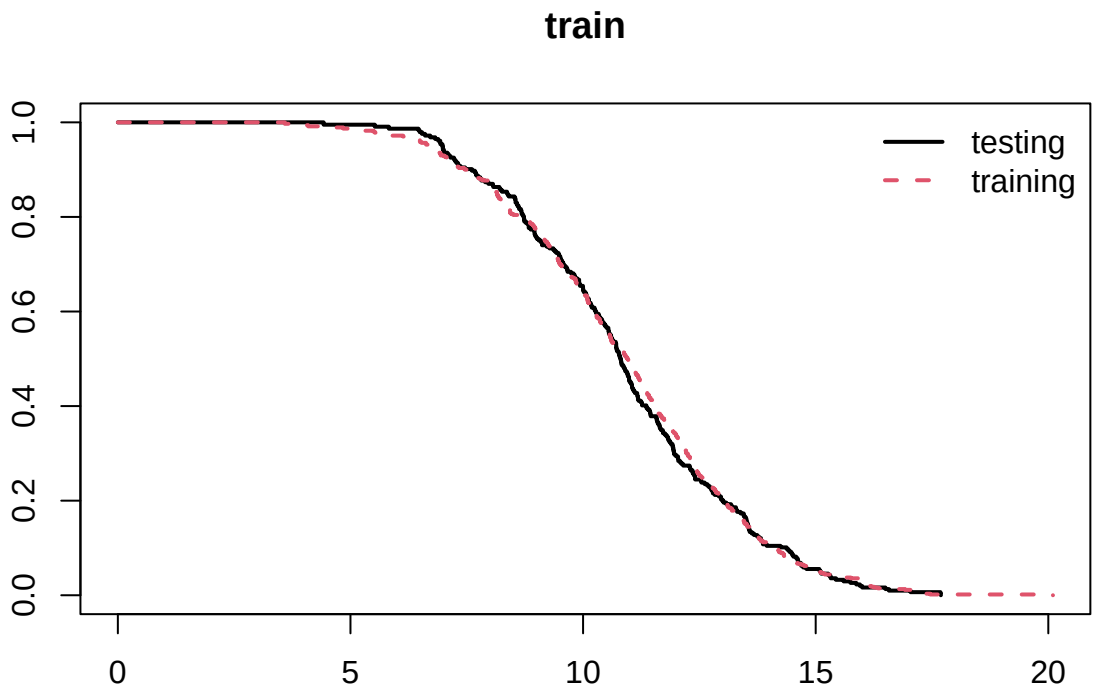
24_checking

2024-09-26

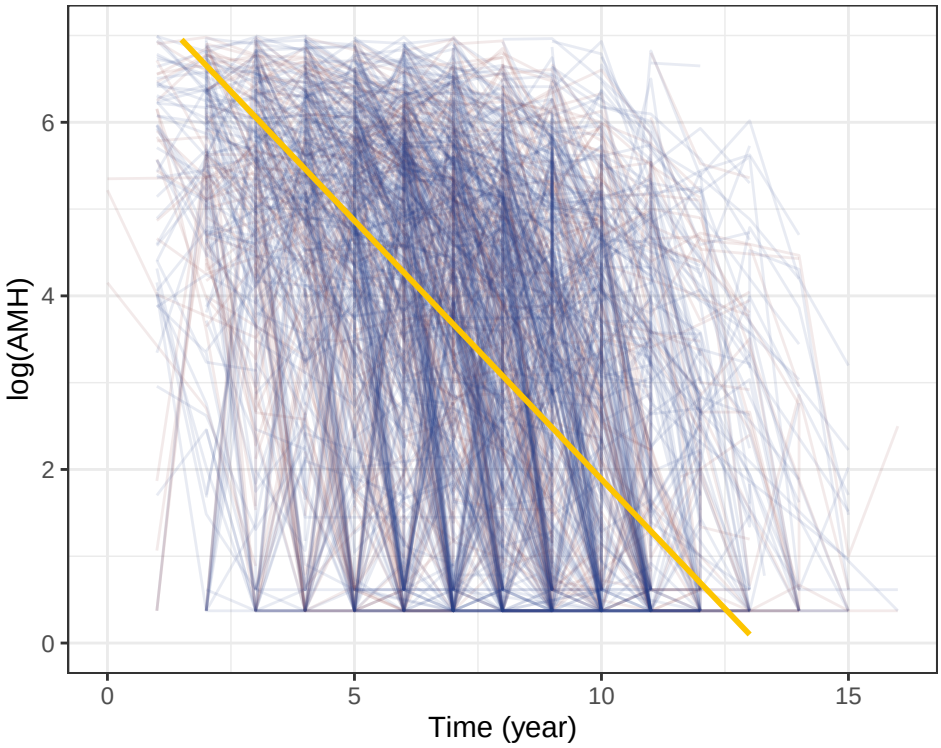
Contents

Kaplan-Meire Curve

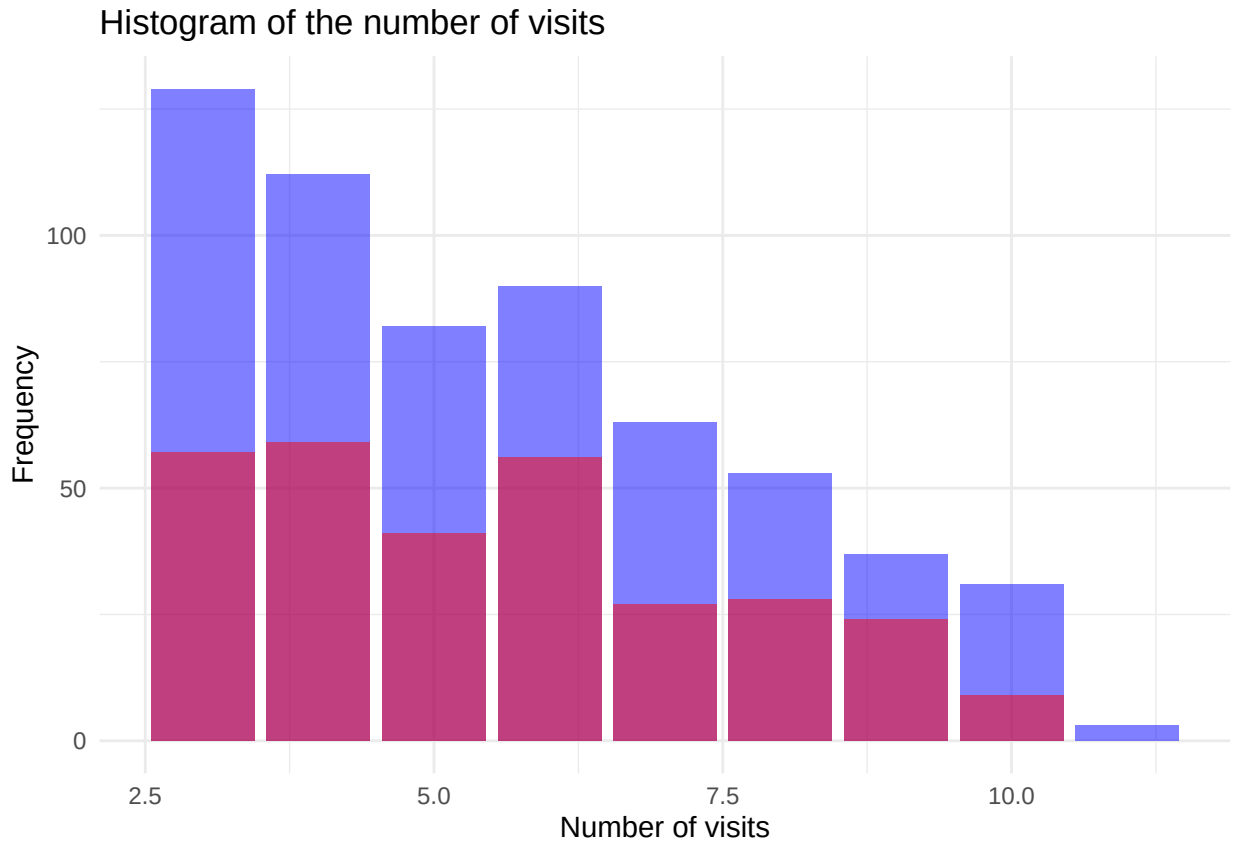
```
#>  Factor w/ 2 levels "testing","training": 2 2 2 2 2 2 2 2 2 2 ...
```

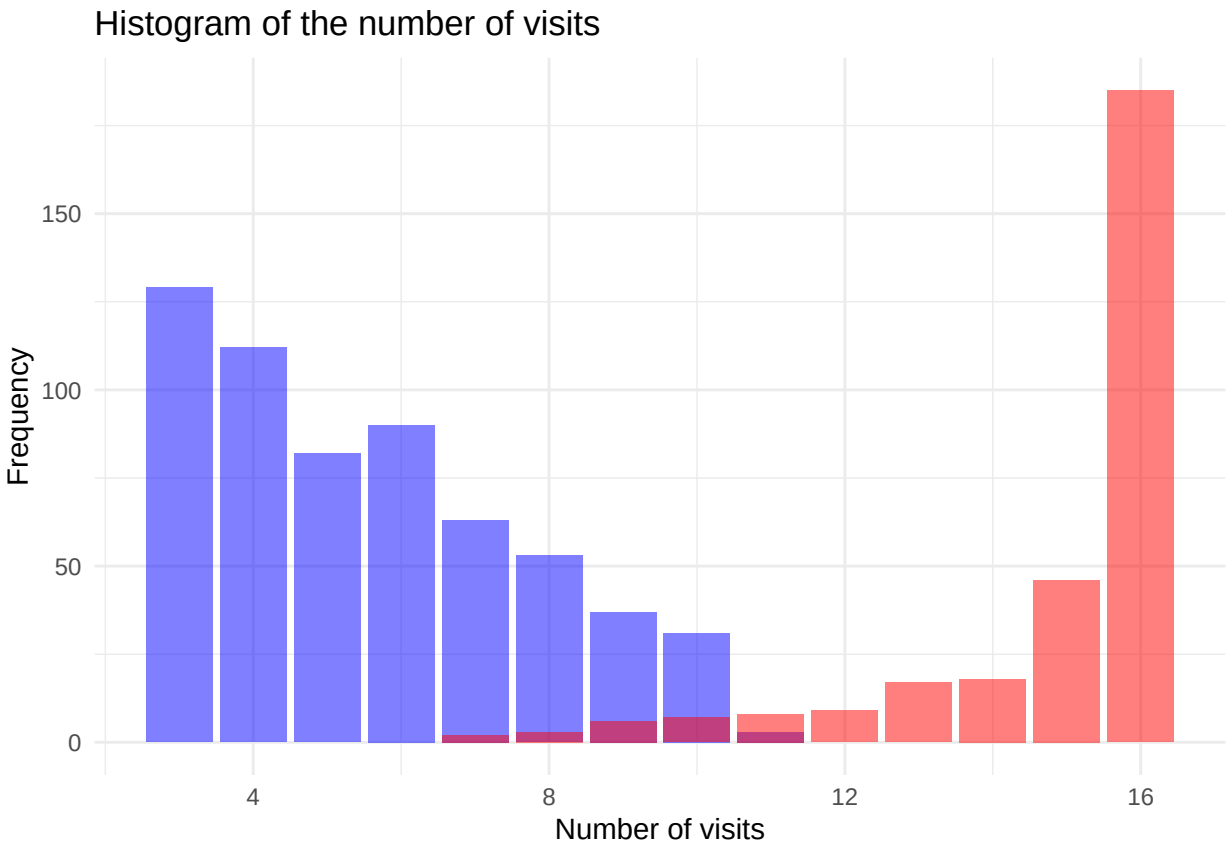


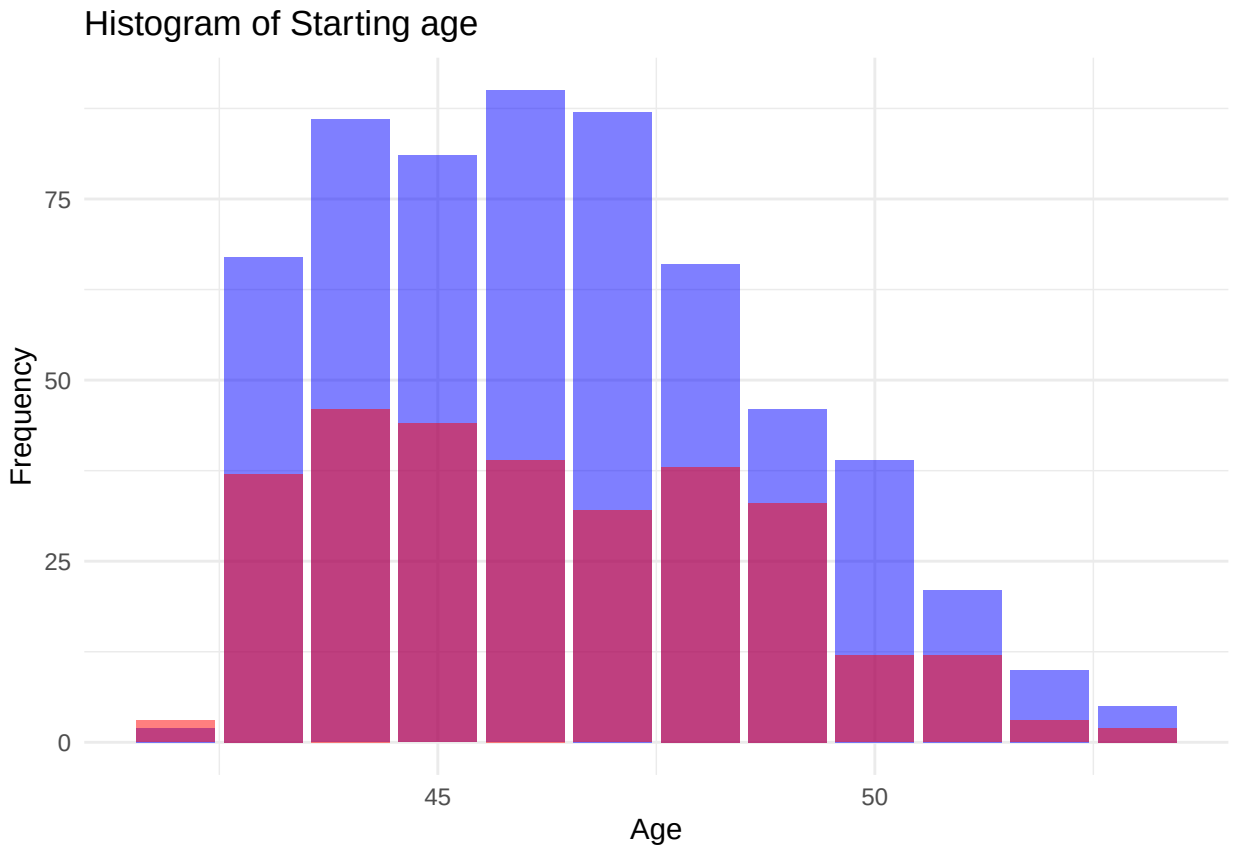
Longitudinal Spaghetti Plot

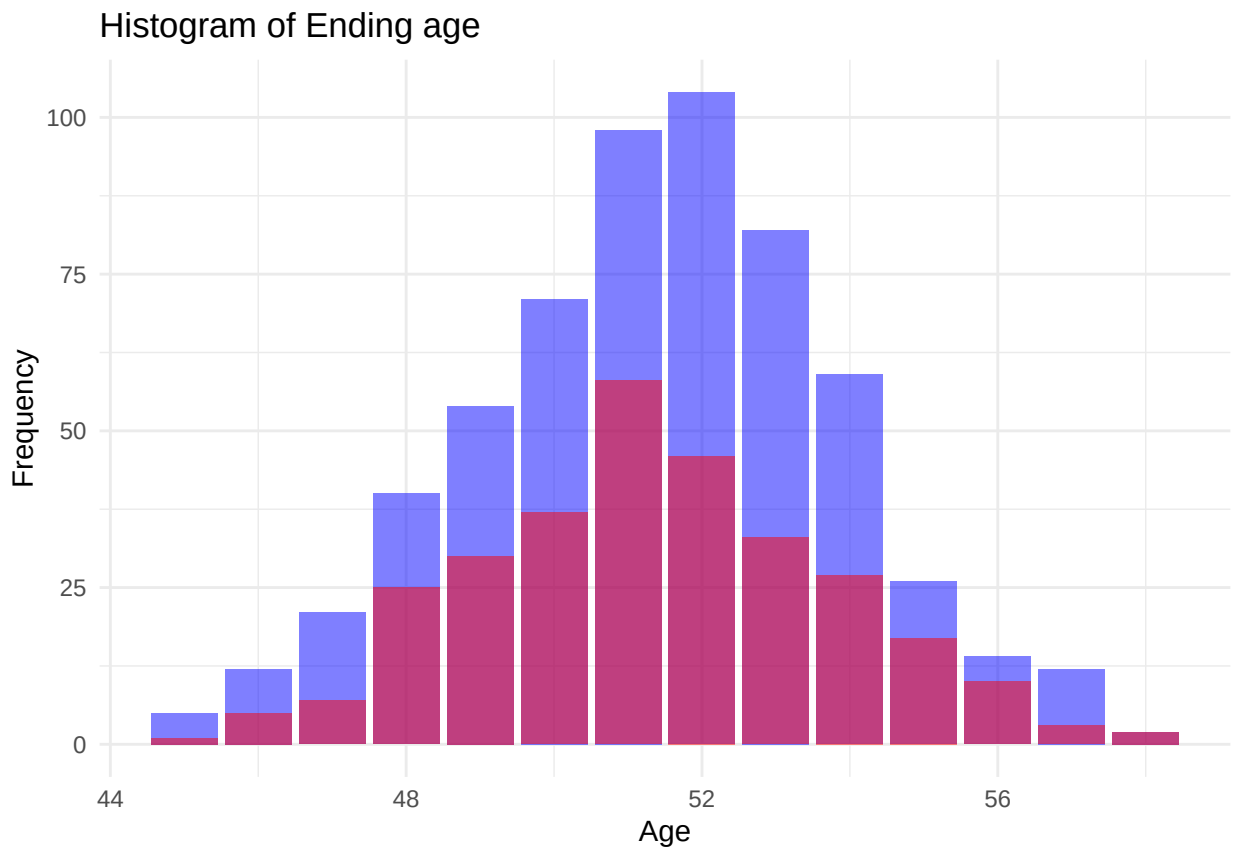


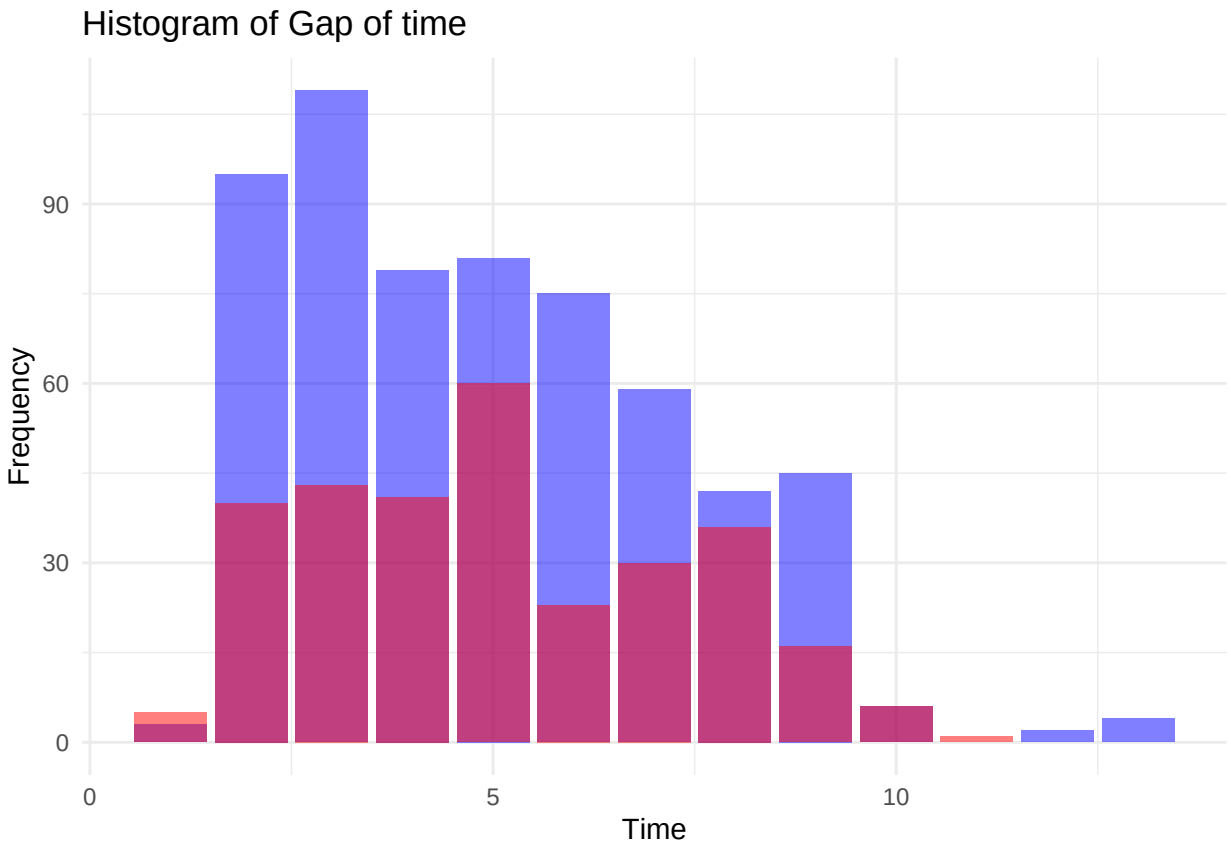
Age and Other Distribution

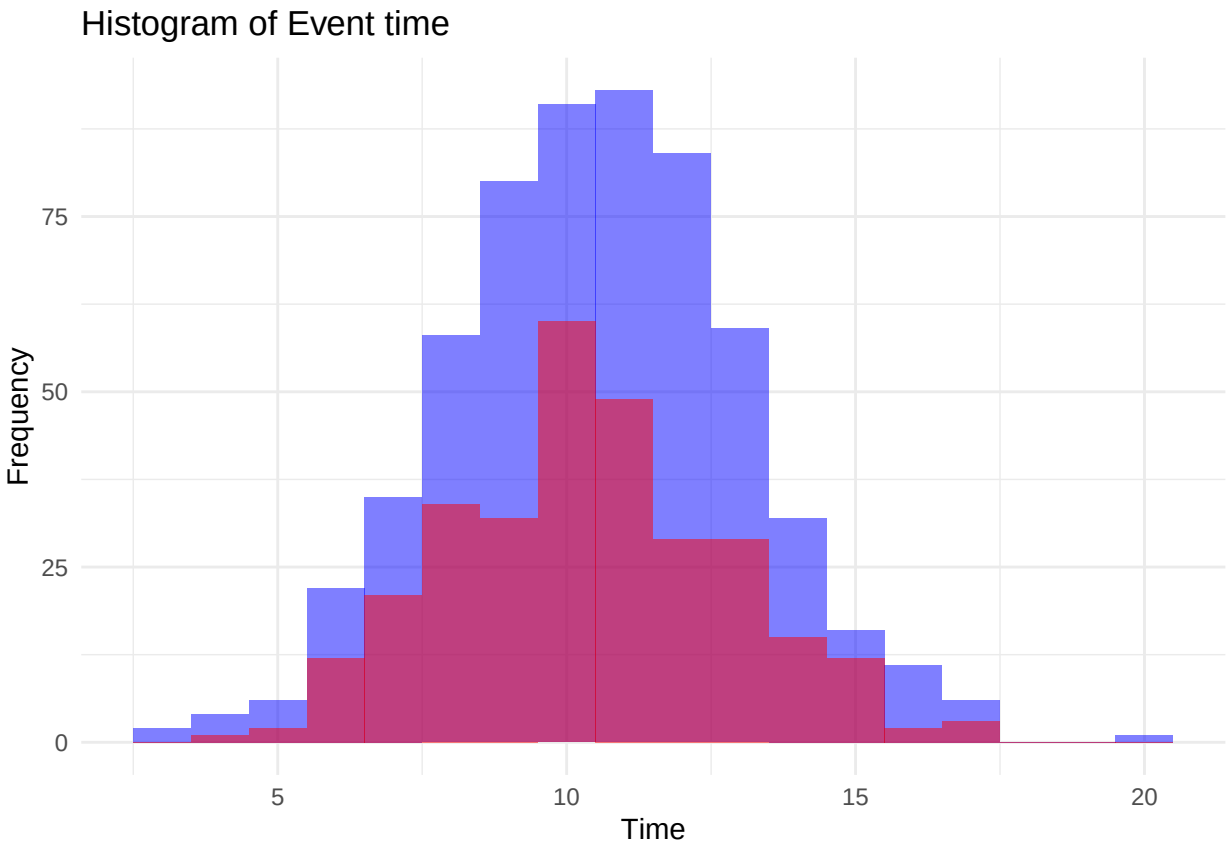


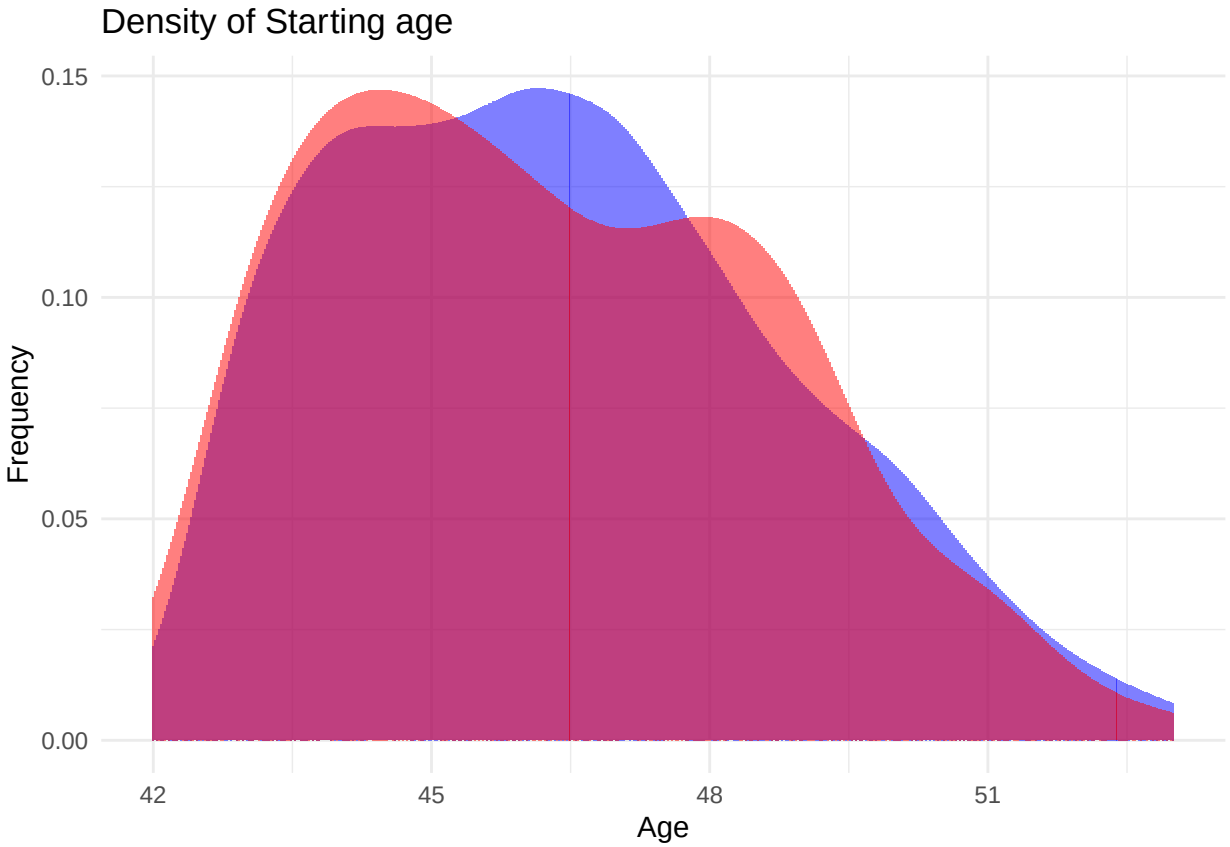

Histogram of the number of visits
Frequency
150
100
50
0
4
8
12
16
Number of visits

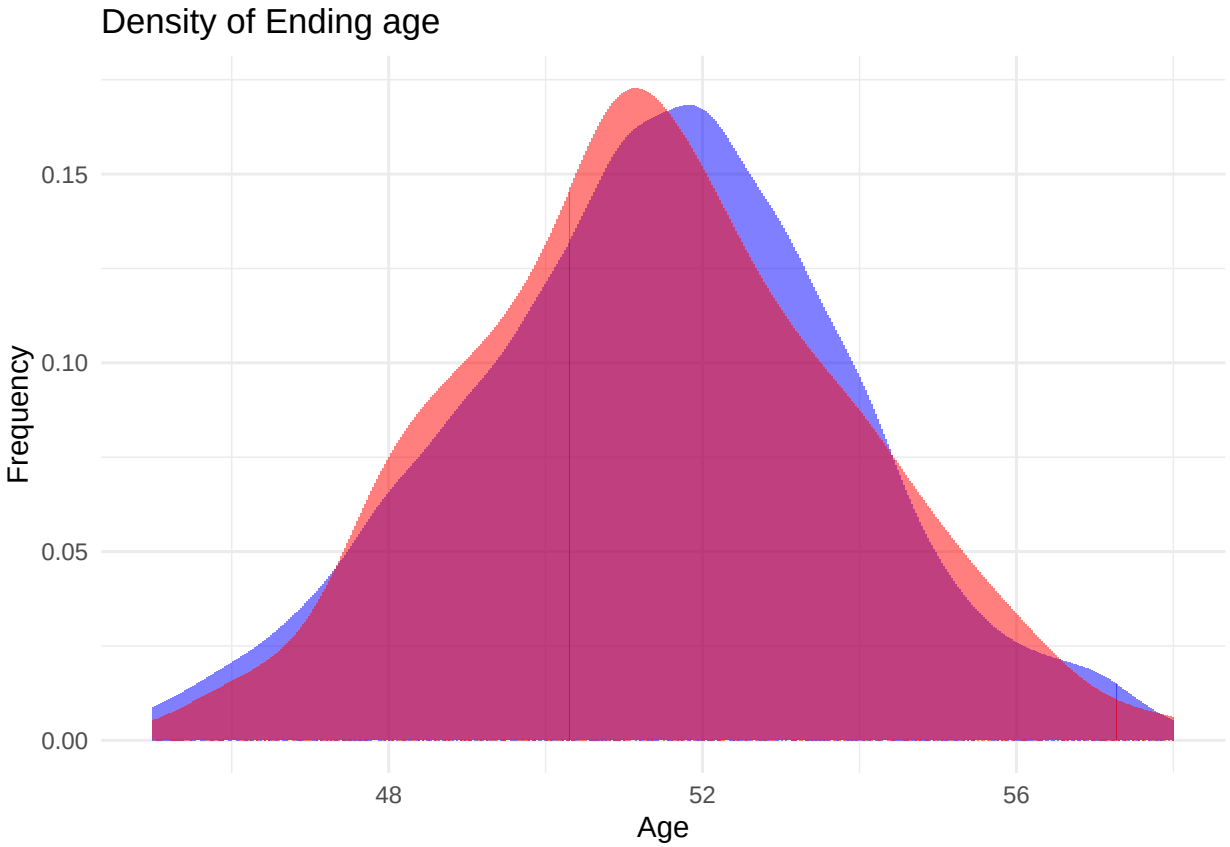

Histogram of Starting age
Frequency
75
50
25
0
45
50
Age

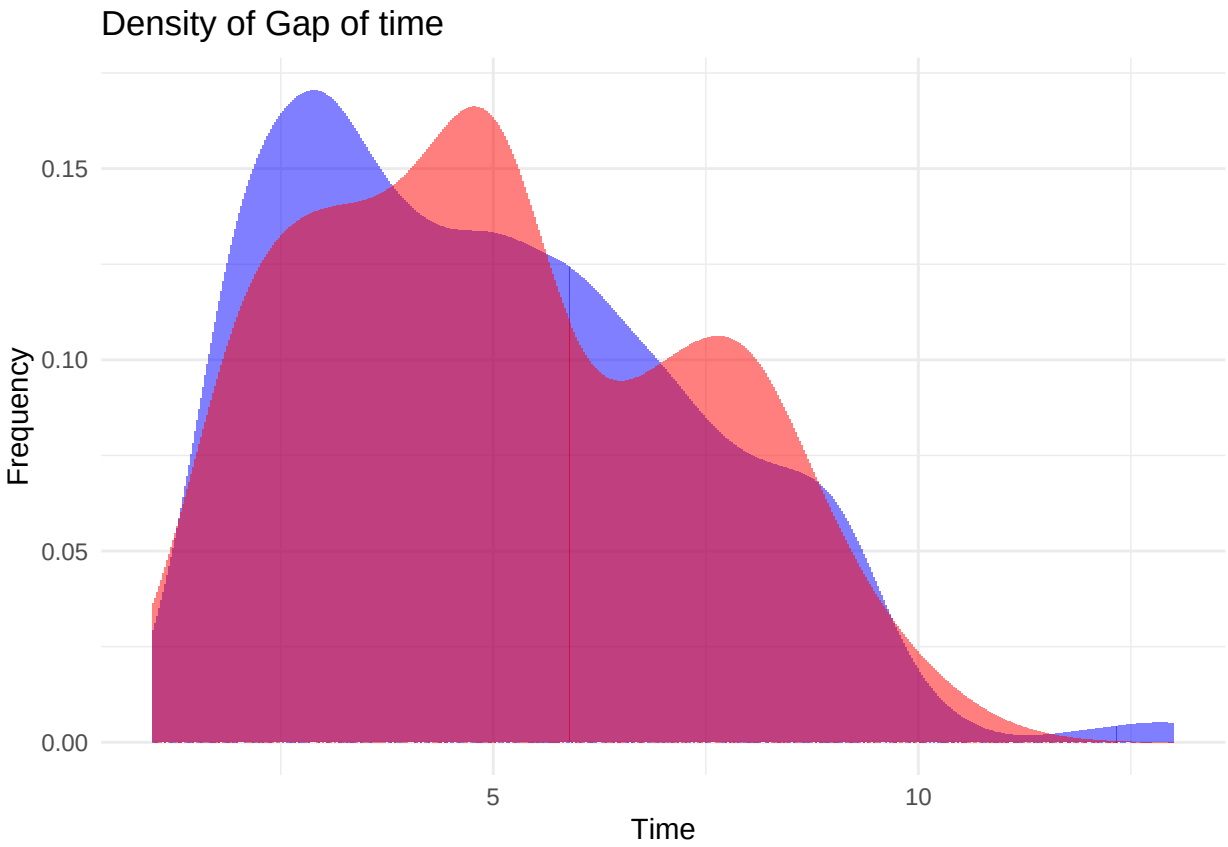

Histogram of Ending age
Frequency
100
75
50
25
0
44
48
52
56
Age

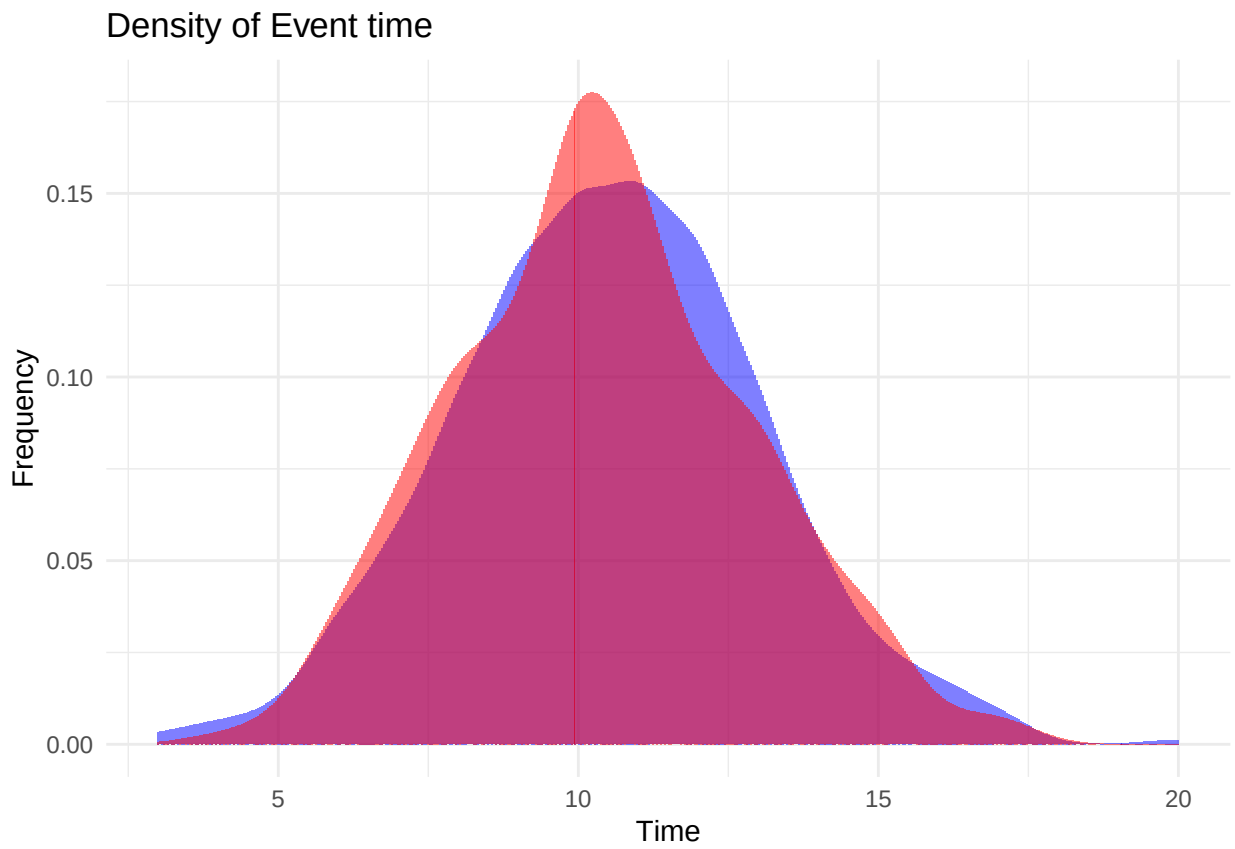

Histogram of Gap of time
Frequency
90
60
30
0
0
5
10
Time


Histogram of Event time
Frequency
75
50
25
0
5
10
15
20
Time


Density of Starting age
0.15
0.10
0.05
0.00
Frequency
42
45
48
51
Age


Density of Ending age
Frequency
0.15
0.10
0.05
0.00
48
52
56
Age


Density of Gap of time
Frequency
0.15
0.10
0.05
0.00
5
10
Time



AUC Rerun

Training AUC

	Dt1	Dt2	Dt3	Dt4	Dt5
Tstart2	NA	0.5000	0.7209	0.7946	0.7535
Tstart3	0.4979	0.6098	0.7113	0.7636	0.7457
Tstart4	0.7188	0.7814	0.7754	0.7447	0.7398
Tstart5	0.7596	0.7543	0.7580	0.7704	0.7762
Tstart6	0.7960	0.7694	0.7805	0.7964	0.7826
Tstart8	0.7856	0.7964	0.7728	0.7750	0.8165

Testing AUC

	Dt1	Dt2	Dt3	Dt4	Dt5
Tstart2_test	NA	NA	0.4647	0.5744	0.7929
Tstart3_test	NA	0.4729	0.9199	0.7841	0.7453
Tstart4_test	0.9524	0.7118	0.8710	0.7970	0.7743
Tstart5_test	0.9495	0.8633	0.8424	0.8058	0.7540
Tstart6_test	0.8134	0.8527	0.8118	0.7641	0.7618
Tstart8_test	0.7853	0.7364	0.7576	0.7799	0.8223

Brier Score Rerun

Training Brier Score

	Dt1	Dt2	Dt3	Dt4	Dt5
Tstart2	NA	0.0130	0.0346	0.0653	0.1233
Tstart3	0.0089	0.0249	0.0489	0.1176	0.1640
Tstart4	0.0097	0.0232	0.0756	0.1259	0.1794
Tstart5	0.0159	0.0602	0.1143	0.1670	0.1802
Tstart6	0.0455	0.0941	0.1449	0.1679	0.1812
Tstart8	0.1020	0.1550	0.1937	0.1898	0.1371

Testing Brier Score

	Dt1	Dt2	Dt3	Dt4	Dt5
Tstart2_test	NA	NA	0.0126	0.0267	0.1247
Tstart3_test	NA	0.0045	0.0185	0.0751	0.1517
Tstart4_test	0.0054	0.0172	0.0678	0.1322	0.1852
Tstart5_test	0.0089	0.0524	0.1166	0.1741	0.2109
Tstart6_test	0.0436	0.0951	0.1475	0.2006	0.1898
Tstart8_test	0.0992	0.1771	0.1988	0.1804	0.1354

Joint model random intercept SD

Hence, we have the final results for the variability of the intercept term.

- The mean value for both intercept : -0.0010564 + 7.8494324 = 7.848376;
- The random effect intercept term based on MCMC is $\sigma_{\beta_0} = 0.5383564$;
- The fixed effect intercept term $\sigma_{b_0} = 0.0959121$;
- We have the pooled $\sigma_{b0+\beta 0} = 0.5468333$.
- The 95% CI for the intercept term is (6.7873691, 8.9309558)