Companion Table A provides the results from the $N = 800$ simulated sample data. Companion Table B provides results from the $N = 1200$ simulated sample data. For $N = 800$, estimates were overall less biased than for $N = 400$ (Table 3 in manuscript) with the exception of the intercept term for latent class 2, $\tilde{\beta}_{02}$, which was underestimated using both methods. However, these estimates also had lower standard errors than the simulation using $N = 400$. The longitudinal model tended to be less biased than the survival model for both methods, and that likely arose from the presence of censoring. Notably, both the Weibull and HARE had similar estimates for the survival parameters. The Weibull model still erroneously estimated an effect for age in the survival model, though these estimates were also closer to 0. The HARE model did not consider age to be an important variable in the survival model for a sample of $N = 800$. Standard errors decreased for each estimate, indicating some asymptotically efficient behavior. For $N = 1200$, the HARE model in general produced the least biased results along with the smallest standard errors among all other HARE simulations. The HARE and Weibull models shared many similarities in the longitudinal and survival parameter estimates for these simulated data. Note that age once again was not considered important by HARE even with a much larger sample size, whereas the Weibull model estimated one non-zero estimate for age, $\tilde{\theta}_{3k}$, in latent class 3 (albeit non-significant). The consistent exclusion of age from the HARE models indicated some evidence that HARE was robust against overfitting its basis functions in the log-hazard function estimation process.

Companion Table A

Results of the Simulation for N = 800

	Weibull			HARE		
Parameters	LC 1	LC 2	LC 3	LC 1	LC 2	LC 3
n	392	307	101	393	306	101
$\tilde{\beta}_0$ (Intercept)	1.494 (0.031)	0.482 (0.032)	3.007 (0.048)	1.493 (0.031)	0.481 (0.032)	3.006 (0.048)
$\tilde{\beta}_1$ (Visit)	0.508 (0.014)	-0.498 (0.016)	1.002 (0.027)	0.507 (0.013)	-0.499 (0.016)	1.002 (0.027)
$\tilde{\beta}_2$ (Age)	0.245 (0.017)	-0.255 (0.019)	0.110 (0.033)	0.245 (0.017)	-0.225 (0.019)	0.110 (0.033)
$\tilde{\beta}_3$ (Treatment)	0.338 (0.030)	0.338 (0.030)	0.338 (0.030)	0.339 (0.030)	0.339 (0.030)	0.339 (0.030)
$\tilde{\beta}_4$ (Sex)	0.568 (0.031)	0.568 (0.031)	0.568 (0.031)	0.569 (0.030)	0.569 (0.030)	0.569 (0.030)
$\tilde{\theta}_1$ (Age)	0.285 (0.047)	0.555 (0.067)	-0.564 (0.101)	0.285 (0.048)	0.570 (0.068)	-0.571 (0.095)
$\tilde{\theta}_2$ (Treatment)	1.119 (0.118)	-0.206 (0.127)	0.500 (0.209)	1.132 (0.122)	-0.223 (0.128)	0.479 (0.210)
$\tilde{\theta}_3$ (Sex)	-0.105 (0.109)	-0.047 (0.126)	-0.054 (0.228)	0*	0*	0*

* = Parameter not estimated

Companion Table B

Results of the Simulation for N = 1200

Parameters	Weibull LC 1	Weibull LC 2	Weibull LC 3	HARE LC 1	HARE LC 2	HARE LC 3
n	596	457	147	596	454	150
$\tilde{\beta}_0$ (Intercept)	1.519 (0.025)	0.531 (0.026)	2.987 (0.041)	1.517 (0.025)	0.531 (0.026)	2.979 (0.041)
$\tilde{\beta}_1$ (Visit)	0.513 (0.012)	-0.492 (0.013)	1.022 (0.024)	0.513 (0.012)	-0.492 (0.013)	1.018 (0.024)
$\tilde{\beta}_2$ (Age)	0.243 (0.021)	-0.237 (0.015)	0.122 (0.027)	0.243 (0.013)	-0.236 (0.015)	0.121 (0.026)
$\tilde{\beta}_3$ (Treatment)	0.359 (0.024)	0.359 (0.024)	0.359 (0.024)	0.357 (0.024)	0.357 (0.024)	0.357 (0.024)
$\tilde{\beta}_4$ (Sex)	0.495 (0.024)	0.495 (0.024)	0.495 (0.024)	0.498 (0.024)	0.498 (0.024)	0.498 (0.024)
$\tilde{\theta}_1$ (Age)	0.283 (0.039)	0.566 (0.054)	-0.318 (0.067)	0.279 (0.039)	0.573 (0.056)	-0.316 (0.068)
$\tilde{\theta}_2$ (Treatment)	1.066 (0.098)	-0.018 (0.104)	0.490 (0.183)	1.066 (0.098)	-0.018 (0.104)	0.489 (0.183)
$\tilde{\theta}_3$ (Sex)	0.091 (0.091)	-0.040 (0.104)	0.214 (0.172)	0*	0*	0*

* = Parameter not estimated