

S3 File. Diagnostic of latent class trajectory model and model selection process for patients with two or more admissions. (Sub-analysis)

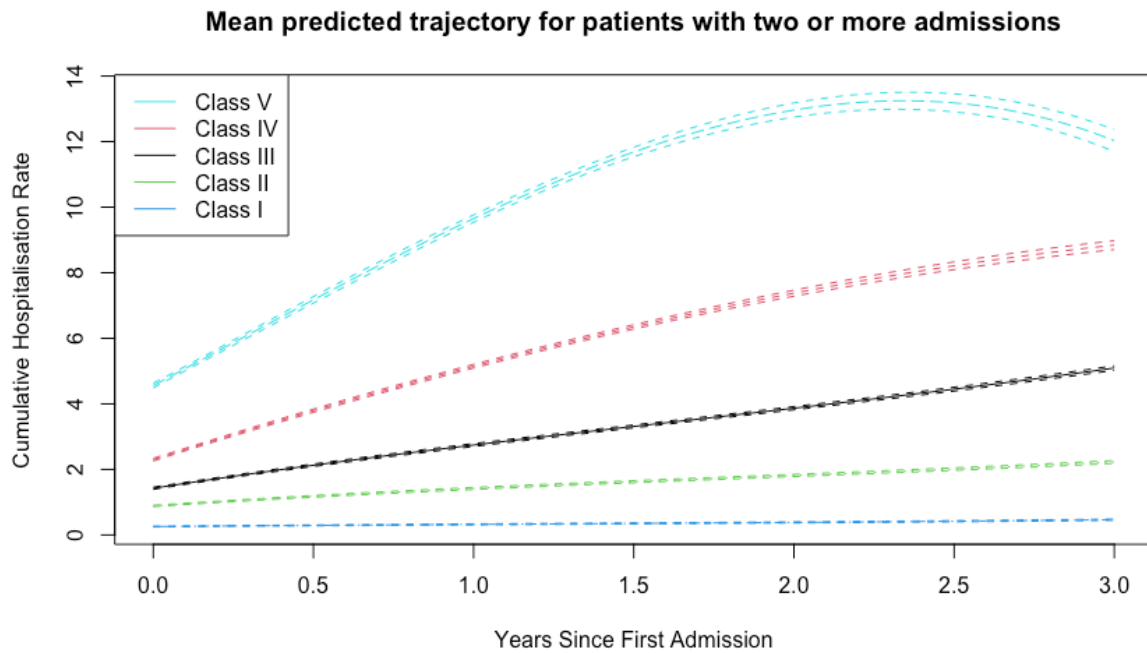


Figure 1 Fitted trajectories for each class for patients with two or more admissions, indicating the trajectory of total hospitalisations that a urology patient may exhibit within 3 years of first hospitalisation, clustered into 5 groups of no (class I), low (class II), medium (class III), medium-high (class IV) and high hospitalisations (class V).

Table 1: Polynomial Degrees with BIC and Residual Standard Error

Model Degree	BIC	Residual Standard Error
1	202253.6	0.00281
2	199343.0	0.00342
3	197896.4	0.00321
4	197296.3	0.00336

* Selected Candidate Model in Bold.

Table 2: Model Diagnostics including entropy, relative entropy and BIC

Number of Classes	2	3	4	5*	6	7
Entropy	5046.73	12024.79	17638.45	23061.66	27059.15	29000.66
Relative Entropy	0.82	0.72	0.68	0.64	0.62	0.62
BIC	217071.09	203738.10	195973.67 7	190299.40	187587.45	185502.60

* Indicates best model selected.

Table 3: Average posterior probability

Number of Classes	APPA						
2	0.96	0.881	NA	NA	NA	NA	NA
3	0.807	0.911	0.688	NA	NA	NA	NA
4	0.836	0.963	0.824	0.688	NA	NA	NA
5*	0.534	0.888	0.754	0.747	0.91	NA	NA
6	0.852	0.874	0.801	0.845	0.558	0.479	NA
7	0.564	0.984	0.827	0.729	0.388	0.696	0.751

* Indicates best model selected.

Table 4: Odds of Correct Classification

Number of Classes	OCC						
2	2.729	64.662	NA	NA	NA	NA	NA
3	101.586	3.173	9.002	NA	NA	NA	NA
4	51.985	1467.681	2.675	6.416	NA	NA	NA
5*	8.939	121.369	8.106	2.527	840.656	NA	NA
6	128.668	640.002	58.886	5.783	3.276	6.757	NA
7	3.321	10918.393	5.729	39.729	11.903	16.865	114.06

* Indicates best model selected.

Table 5: Mismatch

Number of Classes	Mismatch						
2	0.028	-0.028	NA	NA	NA	NA	NA
3	0.003	0.018	-0.021	NA	NA	NA	NA
4	-0.035	-0.002	0.104	-0.066	NA	NA	NA
5*	0.012	-0.024	-0.134	0.145	0.001	NA	NA
6	-0.012	0.001	-0.038	-0.02	0.052	0.015	NA
7	0.047	0	0.002	-0.038	0.051	-0.065	0.004

* Indicates best model selected