Synthetic Data Simulation Results

2023-12-04

Simulation Summary

LTMLE generated quite a few errors, reducing results given available time. Below are counts of completed runs and runs with errors for each simulation setting.

data	estimator	learners	completed_1000	error_1000
MC	DGP	glm_true	23	0
MC	DGP	glmnet	4	0
MC	Marginal	MC	23	0
Synthetic	Marginal	glm_true	460	0
Synthetic	Marginal	glmnet	110	0

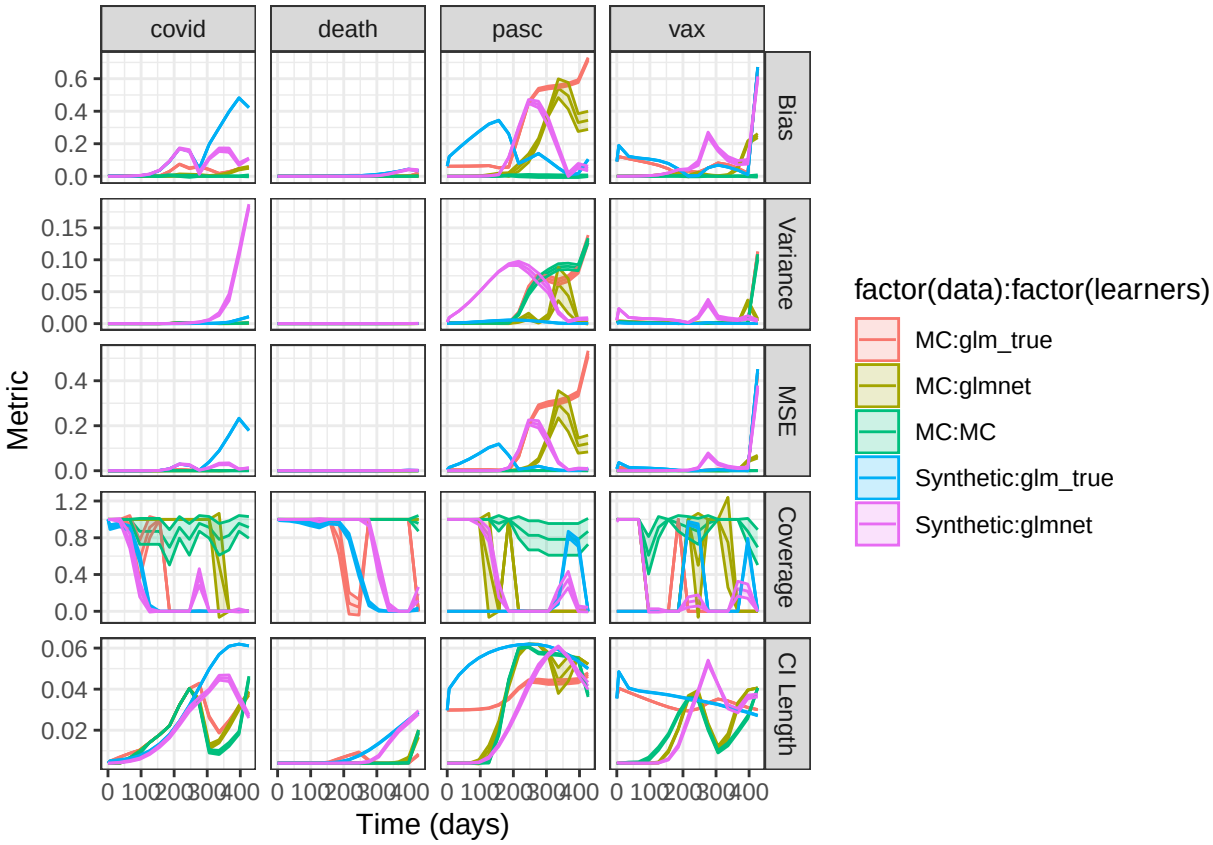
ignore the error counts here (they're for sims we don't expect)

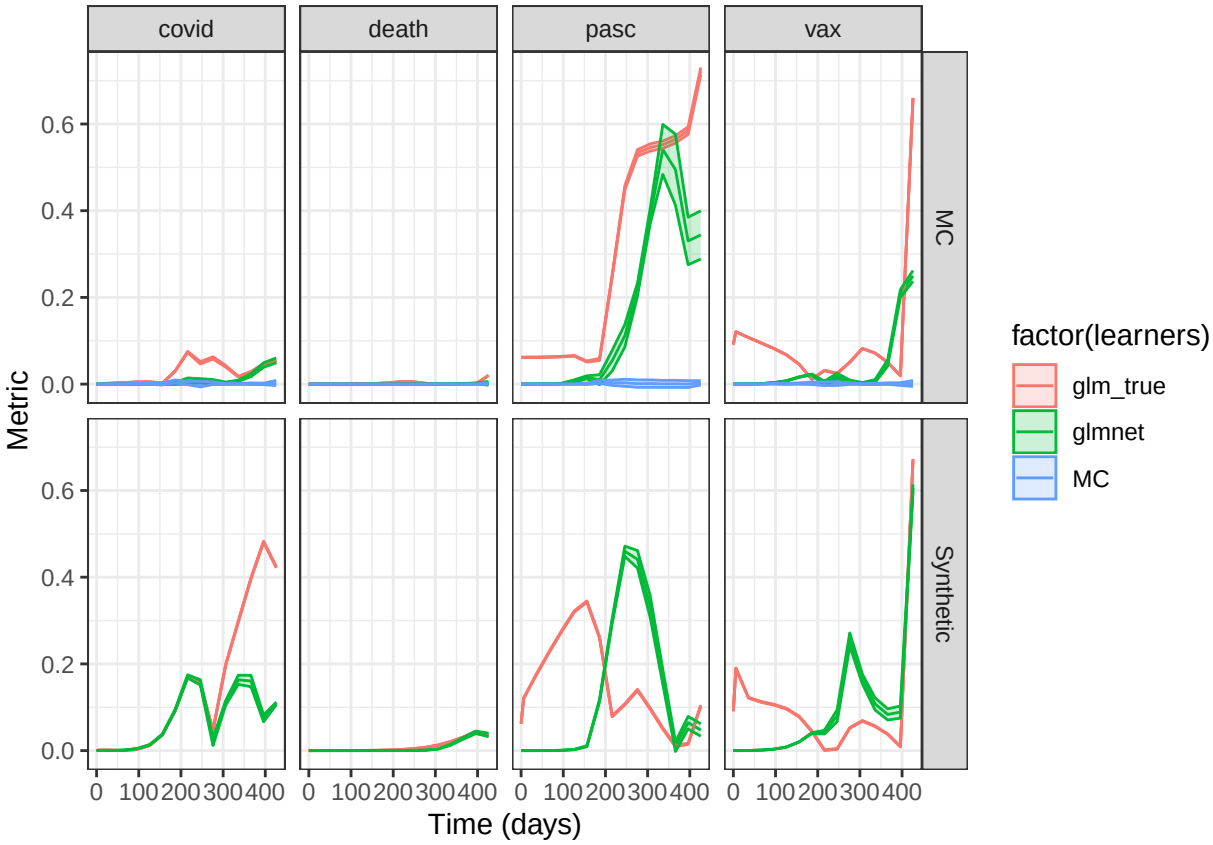
data	estimator	learners	1000
MC	DGP	glm_true	00:00:29
MC	DGP	glmnet	00:08:16
MC	Marginal	MC	00:00:03
Synthetic	Marginal	glm_true	00:00:01
Synthetic	Marginal	glmnet	00:00:02

Point Estimate Performance

Point estimate performance was degraded, improving somewhat at larger sample sizes. This suggests a need for estimation with more data adaptive models.

n = 1000



Bias

$\mathbf{n = 1000}$