**SIMULATION RESULTS**

**100 REPS, MCAR, MAR AND MNAR, ~10-15% MISSINGNESS EACH, NO IMPUTATION**

**Question:** I think my Sim 2\*SE(trt coef) is calculated incorrectly. Can we check that code?

**MCAR**

**Runtime:** 8.225901 mins

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MAIN A LM LMM

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Avg. treatment coef= 31.5 5.1

Avg. SE(trt coef)= 534.6 440.5

Sim 2\*SE(trt coef)= 51.8 52.4

RMSE treatment coef= 418.5 418.4

Power/Type I error(%)= 3.0 12.0

Coverage of 95% CI(%)= 97.0 88.0

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Tests target 5% significance level

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**MAR**

**Runtime:** 7.103989 mins

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MAIN A LM LMM

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Avg. treatment coef= 75.0 69.8

Avg. SE(trt coef)= 550.4 453.8

Sim 2\*SE(trt coef)= 45.4 49.6

RMSE treatment coef= 353.8 393.7

Power/Type I error(%)= 2.0 7.0

Coverage of 95% CI(%)= 98.0 93.0

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Tests target 5% significance level

**MNAR**

**Runtime**: 7.978973 mins

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MAIN A LM LMM

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Avg. treatment coef= 78.2 113.6

Avg. SE(trt coef)= 537.9 445.4

Sim 2\*SE(trt coef)= 61.0 57.1

RMSE treatment coef= 494.5 456.3

Power/Type I error(%)= 7.0 12.0

Coverage of 95% CI(%)= 93.0 88.0

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Tests target 5% significance level

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NOTE: In the LM model, only 5 people had the final outcome missing (meaning y21-y24 were all missing because we average available data between y21-y24 to calculate the final outcome).

This is why the LM model has a better estimate compared to the LMM.