# Ian’s suggestions on mimix output 9feb2021

**# Load mimix**

**library(mimix)**

**packageVersion("mimix")**

**library(mice)**

**packageVersion("mice")**

[1] ‘0.0.9’

[1] ‘3.11.0’

**# Open data**

**load("C:/ado/ian/Rmimix/data/asthma.RData")**

**asthma$treat[1:200]<-3 # creates a 3rd arm**

**asthma$base2 <- asthma$base^2 # creates a 2nd covariate**

**asthma$fev<-asthma$fev\*1000**

**head(asthma)**

id time treat base fev base2

1 5001 2 3 2.925 2870 8.555625

2 5001 4 3 2.925 2660 8.555625

3 5001 8 3 2.925 2690 8.555625

4 5001 12 3 2.925 2580 8.555625

5 5003 2 3 2.465 2610 6.076225

6 5003 4 3 2.465 2450 6.076225

**# explore data (using skills learned from Michelle)**

**library(tidyverse)**

**asthma %>% count(treat)**

**asthma %>% filter(!is.na(fev)) %>%**

**group\_by(treat, time) %>%**

**summarise(n=n(), fevmean=mean(fev), fevsd=sd(fev))**

treat n

1 1 272

2 2 260

3 3 200

`summarise()` regrouping output by 'treat' (override with `.groups` argument)

# A tibble: 12 x 5

# Groups: treat [3]

treat time n fevmean fevsd

<dbl> <int> <int> <dbl> <dbl>

1 1 2 67 1891. 629.

2 1 4 55 1933. 578.

3 1 8 39 2007. 606.

4 1 12 29 2027. 592.

5 2 2 65 2064. 702.

6 2 4 63 2111. 744.

7 2 8 57 2059. 743.

8 2 12 51 2044. 745.

9 3 2 49 2328. 778.

10 3 4 45 2306. 752.

11 3 8 35 2470. 870.

12 3 12 30 2517. 732.

**# J2R**

**impJ2R1 <- mimix(data="asthma",**

**covar=c("base","base2"),**

**depvar="fev",**

**treatvar="treat",**

**idvar="id",**

**timevar="time",**

**M=2,**

**reference=1,**

**method="J2R",**

**seed=101,**

**prior="jeffreys",**

**burnin=1000,**

**bbetween=NULL,**

**methodvar=NULL**

**)**

Summary of missing data pattern by treat:

patt treat cases cumcases fev.2.miss fev.4.miss fev.8.miss fev.12.miss

1 0 1 28 28 0 0 0 0

2 7 1 1 29 1 1 1 0

3 8 1 11 40 0 0 0 1

4 12 1 16 56 0 0 1 1

5 14 1 12 68 0 1 1 1

6 0 2 51 119 0 0 0 0

7 8 2 6 125 0 0 0 1

8 12 2 6 131 0 0 1 1

9 14 2 2 133 0 1 1 1

10 0 3 29 162 0 0 0 0

11 4 3 1 163 0 0 1 0

12 8 3 6 169 0 0 0 1

13 12 3 8 177 0 0 1 1

14 13 3 1 178 1 0 1 1

15 14 3 5 183 0 1 1 1

Fitting multivariate normal model by treat:

treat = 1

performing mcmcNorm for m = 1 to 2

mcmcNorm Loop finished

treat = 2

performing mcmcNorm for m = 1 to 2

mcmcNorm Loop finished

treat = 3

performing mcmcNorm for m = 1 to 2

mcmcNorm Loop finished

Nmissing

Imputing interim missing values using MAR:

treat = 1 patt = 0 cases = 28

\* treat = 1 patt = 7 cases = 1

treat = 1 patt = 8 cases = 11

treat = 1 patt = 12 cases = 16

treat = 1 patt = 14 cases = 12

treat = 2 patt = 0 cases = 51

treat = 2 patt = 8 cases = 6

treat = 2 patt = 12 cases = 6

treat = 2 patt = 14 cases = 2

treat = 3 patt = 0 cases = 29

\* treat = 3 patt = 4 cases = 1

treat = 3 patt = 8 cases = 6

treat = 3 patt = 12 cases = 8

\* treat = 3 patt = 13 cases = 1

treat = 3 patt = 14 cases = 5

N

Imputing post-discontinuation missing values using J2R:

treat = 1 patt = 0 number cases = 29

treat = 1 patt = 8 number cases = 11

treat = 1 patt = 12 number cases = 16

treat = 1 patt = 14 number cases = 12

treat = 2 patt = 0 number cases = 51

treat = 2 patt = 8 number cases = 6

treat = 2 patt = 12 number cases = 6

treat = 2 patt = 14 number cases = 2

treat = 3 patt = 0 number cases = 30

treat = 3 patt = 8 number cases = 6

treat = 3 patt = 12 number cases = 9

treat = 3 patt = 14 number cases = 5

Number of final missing values = 0