

```

model{

for (i in 1:10){
  x[1,i]~dnorm(theta[1],prec[1])      #Vaginal Delivery outcome
likelihood
  for (j in 2:9){
    x[j,i]~dnorm(mu[i,j],prec[j]) #Other outcomes likelihood
    mu[i,j]<-x[1,i] + d[j]          # d[j] = mean difference
for outcome j compared to outcome 1, allowing for individual correlations
  }
}

theta[1]~dnorm(0,.001)
for (j in 2:9){
  theta[j]<-theta[1]+d[j]            #Estimated mean utility for outcome j
  d[j]~dnorm(0,.001)                #prior for d's
}

for (j in 1:9){
  prec[j]<-pow(sd[j],-2)
  sd[j]~dunif(0,5)                  #prior for sd's

  utility[j]<-theta[j]/10            #utilities for each outcome
}

#Derive utility scores for health states in model (Table B.1)
VD<-utility[1]+1
VD.TC<-(utility[1]*utility[8]) + utility[9]
VD.HD<-(utility[1]*utility[6]) + utility[7]
VD.IC<-(utility[1]*utility[4]) + utility[5]

CS<-utility[3] + 1
CS.TC<-(utility[3]*utility[8]) + utility[9]
CS.HD<-(utility[3]*utility[6]) + utility[7]
CS.IC<-(utility[3]*utility[4]) + utility[5]

}

#DATA
#Note column=respondent i, row=health outcome, j as defined in Fig. B.1
x[,1] x[,2] x[,3] x[,4] x[,5] x[,7] x[,8] x[,9] x[,10]
8      7.5  5.5  4.5  4.1  9.5  6.1  6.5  7      7.6
5.5    5.5  3.7  3.5  3.1  9.1  4.1  3.85 6      6.5
3.8    3.5  2.5  2.8  2.1  8.6  2.1  2.5  6      5.2
4.8    2.5  0.5  0.5  0.1  4     5.1  5.25 3      8.2
1.2    1.5  0.5  0.5  0.1  2     1.1  2.8  3      1.3
5.2    3.5  2.1  0.5  0.1  6     6.1  5.25 4      8.3
1      1.5  2.1  0.5  1.1  4     2.1  4.8  4      2.4
6.6    7.5  7.5  3.5  2.1  8     7.1  6.8  8      9.6
4.1    5.5  7.6  3.5  2.1  7.5  5.1  5.5  8      6.7
END

#INITIAL VALUES
list(theta=c(5,NA,NA,NA,NA,NA,NA,NA,NA,NA), sd=c(1,1,1,1,1,1,1,1,1),
d=c(NA, 2, 2, 2, 2, 2,2,2,2))

list(theta=c(8,NA,NA,NA,NA,NA,NA,NA,NA,NA), sd=c(2,3,1,0.5,1.5,
2,1.5,2,3), d=c(NA, 5, 4, 2, 3, 1,3,4,5))

```