The resulting transcripts become:

unbiased case

```
> shifts<-c(8,2,7,28)
> nurse<-as.factor(c('yes','yes','no','no'))
> morning<-as.factor(c('yes','no','yes','no'))
> deaths<-c(7,1,4,4)
> data<-data.frame(shifts,morning,nurse,deaths)
> print(data)
  shifts morning nurse deaths
1      8     yes   yes      7
2      2      no   yes      1
3      7     yes    no      4
4     28      no    no      4
>
> fitN<-glm(deaths~nurse+offset(log(shifts)),
+ family=poisson(),data)
> print(anova(fitN,test='Chisq'))
Analysis of Deviance Table

Model: poisson, link: log

Response: deaths

Terms added sequentially (first to last)


      Df Deviance Resid. Df Resid. Dev Pr(>Chi)
NULL                     3     9.7904
nurse  1   5.9056         2     3.8849  0.01509 *
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1
> print(fitted(fitN))
  1   2   3   4
6.4 1.6 1.6 6.4
> fitMN<-glm(deaths~morning+nurse+offset(log(shifts)),
+ family=poisson(),data)
> print(anova(fitMN,test='Chisq'))
Analysis of Deviance Table

Model: poisson, link: log

Response: deaths

Terms added sequentially (first to last)


        Df Deviance Resid. Df Resid. Dev Pr(>Chi)
NULL                        3     9.7904
morning  1   8.3494         2     1.4411 0.003858 **
nurse    1   1.0678         1     0.3733 0.301449
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1
> print(fitted(fitMN))
        1         2         3         4
7.4254393 0.5745607 3.5745607 4.4254393
```

biased case:

```
> shifts<-c(8,2,7,28)
> nurse<-as.factor(c('yes','yes','no','no'))
> morning<-as.factor(c('yes','no','yes','no'))
> deaths<-c(8,2,3,3)
> data<-data.frame(shifts,morning,nurse,deaths)
```

```
> print(data)
  shifts morning nurse deaths
1      8     yes   yes      8
2      2      no   yes      2
3      7     yes    no      3
4     28      no    no      3
>
> fitN<-glm(deaths~nurse+offset(log(shifts)),
+ family=poisson(),data)
> print(anova(fitN,test='Chisq'))
Analysis of Deviance Table

Model: poisson, link: log

Response: deaths

Terms added sequentially (first to last)


      Df Deviance Resid. Df Resid. Dev  Pr(>Chi)
NULL                     3    14.6050
nurse  1   11.927         2     2.6777 0.0005532 ***
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1
> fitMN<-glm(deaths~morning+nurse+offset(log(shifts)),
+ family=poisson(),data)
> print(anova(fitMN,test='Chisq'))
Analysis of Deviance Table

Model: poisson, link: log

Response: deaths

Terms added sequentially (first to last)


        Df Deviance Resid. Df Resid. Dev Pr(>Chi)
NULL                       3    14.6050
morning  1   8.3494         2     6.2557 0.003858 **
nurse    1   4.8889         1     1.3667 0.027030 *
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘
```