## Errata - Project 2: Linear regression FMSN30 Lunds Tekniska Högskola

Astrid Dymling Nils Romanus Myrberg Martin Nybleus

 $March\ 2022$ 

## 1 b)

The values in table 6 in the report was unfortunately wrong due to us forgetting to add the family = 'binomial' to the glm function. A corrected version of table 6 is displayed in table 1

	(Intercept)	Age
β	-3.800098	0.032313
$I_{\beta}$	(-4.21502986 : -3.39011203)	(0.02664513:0.03801226)
$\exp \beta$	0.02236858	1.03284070
$I_{\exp \beta}$	(0.01477188, 0.0337049)	(1.02700329, 1.0387440)

Table 1: A logistic regression model using age as predictor for having at least one hospital day. In the table  $\beta$ -estimates, the corresponding odds ratios, as well as and 95 % confidence intervals for the odds ratios, are all presented.

## 1 c)

The same mistake was done in 1 c). A corrected version of table 9 is displayed in table 2 and a corrected version of table 12 is displayed in table 3.

	(Intercept)	age	$I(age^2)$
β	-13.4860366	0.3088325	-0.0019248
$I_{\beta}$	(-16.06847 : -10.9802)	(0.2383:0.38137)	(-0.002427701 : -0.001436039)
$\exp \beta$	1.390237e-06	1.361834	0.998077068312
$I_{\exp \beta}$	(1.050874e-07:1.703467e-05)	(1.269131:1.464300)	(9.975752e-01:9.985650e-01)

Table 2: The beta-estimates, the exponential estimates and their confidence intervals for the quadratic model.

Age	50	75	100
$\%\Delta Odds ratio$	1.121172	1.01829	0.9248488

Table 3: The odds ratio for different choices of age.