## **ERHS 642 Logistic Regression Spring 2016**

## **Homework Assignment 2 – New Version**

- 1. In a temporary ICU data set, categorize the AGE variable into 4 categories based on the quartiles of AGE and create design variables for the categorized AGE variable. Then,
  - a. Create a frequency table for the 4-category AGE variable.
  - b. Create a frequency table for each design variable and compare the results to the results in 1a. How do the frequency tables for the design variables relate to the frequency table for the 4-category AGE variable?
  - c. Perform logistic regression with outcome variable STA and the design variables you created as the independent variables.
  - d. Perform logistic regression with outcome variable STA and the 4-category AGE variable as the independent variable using the class statement (i.e. let SAS create the design variables). Compare the results to the results in 1c.
- 2. H-L chapter 2, page 46-47, exercise 2
  - (a)
  - (b)
  - (d)
  - (e) Compare model with all variables (age, can, cpr, inf and race) to model with no variables. You don't have to answer the question about assumptions or the deviance

(f)

Don't do parts c, g, h