

Quiz3

key

1. Provide some intuition about log-odds interpretation of parameters in logistic regression.

a. What value of log-odds represents “no effect” zero

b. Interpret log-odds of 0 No change in the odds

c. Interpret log-odds of 1 For two units that differ by one in x , would expect the log-odds increase by a factor of 1 in favor of the unit with larger x . The odds would increase, by a factor of about 2.7.

d. Interpret log-odds of -3 For two units that differ by one in x , would expect the log-odds to decrease by a factor of -3 for the unit with larger x . The odds would decrease, by a factor of about 0.05.

2. Provide some intuition about odds-ratio interpretation of parameters in logistic regression.

a. What value of odds-ratio represents “no effect” 1

b. Interpret odds ratio of 1 No change in the odds

c. Interpret odds ratio of 2 For two units that differ by one in x , odds of success twice as high for the unit with larger x .

c. Interpret odds ratio of 1/2 For two units that differ by one in x , odds of success half as high for the unit with larger x .