

Week Eight

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model adequacy

Model Adequacy

Last week we learnt how to assess the goodness of fit of a model using various methods. This week we will learn about various measures of model adequacy.

We will introduce some of the problems that you can encounter while fitting a logistic regression model and its impact on the estimates. You will also learn how to arrive at a decision about a single subject based on the logistic regression model that you have fit. This will be illustrated with the aid of ICU case study.

Lectures

Please click on the links below to access the video lectures for this eighth week

- **Undefined control sequence \boldsymbol - type measures**
- **Illustrating Numerical Problems Using Statistical Software Packages**
- **The ICU Study**
- **Using Logistic Regression for Individual Patient Decision Making: Part 1**
- **Using Logistic Regression for Individual Patient Decision Making: Part 2 and Week Eight Homework**

Lecture Material

Please click on the link below to download the slides of the eighth week

Week Eight: "Model Adequacy"

Conversations

Please join in the conversations around regression analysis in our [community forums](#) area. You can ask and answer questions and discover insights and help for yourself and others as we come together to encourage each other in our exploration.

Key Terms

Below are definitions of some important terms covered this week:

- **Undefined control sequence \boldsymbol**: R^2 is also known as the coefficient of determination. It provides a measure of how well observed outcomes are replicated by the model, as the proportion of total variation of outcomes explained by the model.
- **Colinearity**: Colinearity in regression refers to the linear relationship between the predictors, i.e. there is very high correlation among the independent variables. This causes the estimates to have poor numerical accuracy.

Homework

Please watch the following video, [Homework Highlights from Week Seven](#), to review the homework from last week.

Navigate to the [Week Eight Homework](#) page to view and download the homework for this week.

After you complete the Week Eight Homework, please watch the [Homework Highlights from Week Eight](#) video to review the homework.

Quiz

After you've gone through the materials for this week please be sure to visit the [quizzes area](#) to complete this week's quiz.

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