Module C1 – Quantifying Relationships

Overview

Purpose

The course will provide participants with an understanding of regression and introduce participants to the analysis of cross-sectional data. This workshop combines theory and hands-on training using Stata. It will focus on methods for understanding relationships between a response variable and one or more explanatory variables. The module will demonstrate how to look for relationships and associations. The first part of the module will introduce models for the analysis of data when the response is continuous. The second part focuses on statistical methods for the analysis of categorical response variables.

Learning objectives

On completion of the module, participants will have an understanding of:

1. The different types of data and how this affects the choice of analytic method
2. How to look for relationships in data
3. Correlation and association
4. How to define a linear regression model
5. How to use a linear regression model
6. How to make inferences from regression models
7. How to analyse relationships with more than one explanatory variable
8. Logistic regression for categorical data

Who should attend, and module pre-requisites

This module is designed for people who need to have an understanding of the statistical modelling required for the analysis of cross-sectional data. This module will be beneficial to those who use and analysis cross-sectional datasets (including datasets with particular sampling methodology). Participants will need a sound understanding of quantitative data and descriptive analysis and will benefit from having a basic understanding of regression.