EpiData Software for Operations Research in Tuberculosis Control

A course developed by the EpiData Association

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Date last revised: April 26, 2018

Note on versions of EpiData software: Always use the most recent release version of EpiData software which can be obtained freely from the EpiData website http://www.epidata.dk. The course is updated at least whenever a new version requires adaptation or following an in-class course, whichever comes earlier.

Course content

Part A: Quality-assured data capture with EpiData Manager and EpiData EntryClient

Exercise 1   A data documentation sheet for a simple questionnaire

Exercise 2   Create a basic data entry form

Exercise 3   Create a value-label pair from external data

Exercise 4   Create a composite identifier

Exercise 5   Data entry and validation

Exercise 6   Upgrading an EpiData 3.1 REC/CHK file pair to an EPX file

Exercise 7   Relational database

Part B: EpiData Analysis

Exercise 1   An introduction to EpiData Analysis

Exercise 2   More on EpiData Analysis

Exercise 3   Aggregating data and saving the summary data in a file

Exercise 4   From a spreadsheet to an EpiData file

Part C: Operations research

Exercise 1:   Creating a working dataset

Exercise 2:   Variability in serial smears

Exercise 3:   Incremental yield from serial smears

Exercise 4:   Confirmatory results in serial smears

Part D: More on EpiData software

Exercise 1:   Relational database and aggregating vs from "Long-to-wide"

Exercise 2:   A statistical process control chart

Exercise 3:   A simplified survival analysis

Exercise 4:   Creating a menu for standard reports

Exercise 5:   Formatting standardized analysis output in a spreadsheet

Part E: Beyond EpiData Analysis using R

Exercise 1:   Introduction to R software: basics

Exercise 2:   Introduction to R software: data bases and functions

Exercise 3:   Multivariable analysis in R part 1: A logistic regression

Exercise 4:   Multivariable analysis in R part 2: A Cox proportional hazard model