Hands-on training session 2

Hui-Walter models for diagnostic test evaluation

Matt Denwood Giles Innocent

2020-02-08

Introduction

Overview

Date/time:

- 19th February 2020
- 16.00 - 17.00

Teachers:

- Matt Denwood (presenter)
- Giles Innocent

Recap

Important points from session 1

Session 2a: Hui-Walter models for 2 tests and 1 population

Model specification

Exercise

Session 2b: Hui-Walter models for 2 tests and N populations

Model specification

Random effect of population vs independent intercepts

Exercise

Session 2 (1 hour: Multiple tests)

2 Tests, 1 Population

What do we mean by "conditionally independent?" Df in the model and in the data Use of informative priors

```
# R code simulating data
# Jags/R code analysing data
# R code to produce appropriate output
```

Experiments

What happens as you reduce the information in the priors?

2 tests, 2+ Populations Hui Walter model

```
# R code simulating data
# Jags/R code analysing data
# R code to produce appropriate output
```