**Theme 1: Cluster randomised trials**

A cluster randomised trial (CRT) is a randomised controlled trial in which pre-existing groups, called clusters, of individuals are randomly allocated to treatment arms. For example, clusters may be clinical practices or schools where the individuals are patients and school children, respectively. CRTs can be used when individual randomisation to treatment arms is not possible or the intervention is naturally applied to a whole cluster. A cluster randomised design is associated with a loss in statistical power and additional complexity in design, conduct and analysis. Extensions to the cluster randomised design include cluster randomised crossover trials and stepped wedge trials. We provide a course “A Practical Guide to Cluster Randomised Trials” based on a book written by Sandra Eldridge and Sally Kerry. We also organise a meeting “Current Developments in Cluster Randomised and Stepped Wedge Designs” for talks and discussion about new perspectives for the design, analysis and reporting of cluster randomised and stepped wedge trials.

**Specific topics of our work include:**

*Design*

*Sample size calculation*

*Recruitment and consent*

*Use and reporting of covariates*

*Analysis*

*We have also conducted several systematic reviews of CRTs*

**References to our published papers include:**


Sample size calculations for cluster randomised trials, with a focus on ordinal outcomes. (PhD thesis)


Choosing covariates in the analysis of cluster randomised trials. (PhD thesis)


