Royal Statistical Society
Meeting of the Social Statistics Section
18th April 2012, 11am-5pm
Royal Statistical Society, 12 Errol Street, London, EC1Y 8LX

Multiple imputation for missing data: State of the art and new developments

Multiple imputation is a general statistical technique for analyzing data with missing observations, which can produce valid estimates and inference in a very wide range of settings. Maturing understanding of its properties in different circumstances and the availability of increasingly flexible software are making multiple imputation an attractive option for many types of statistical analyses. This meeting provides an overview of the field and its applications, and a discussion of recent developments.

James Carpenter (London School of Hygiene and Tropical Medicine)
Multiple imputation: History and overview
- what is multiple imputation, how is it done, and what can it achieve?

Jonathan Bartlett (London School of Hygiene and Tropical Medicine)
Accommodating the model of interest within the fully conditional multiple imputation framework
Multiple imputation of covariates allowing for:
- models of interest which include non-linear terms or interactions
- non-linear models of interest, such as Poisson regression or Cox proportional hazards models

Rachael Hughes (University of Bristol)
Comparison of imputation variance estimators
- Potential pitfalls of multiple imputation when the imputation and analysis models are misspecified and/or incompatible.
- Different approaches to imputation inference in different scenarios of misspecification

Ofer Harel (University of Connecticut)
Multiple imputation in two stages
- strategies for analysis with two types of missing values

Shaun Seaman (MRC Biostatistics Unit, Cambridge)
Combining Multiple Imputation and Inverse Probability Weighting
- Why combine inverse probability weighting with multiple imputation to handle missing data?
- Using multiple imputation in studies with sampling weights

Registration with payment is required. Booking forms can be downloaded from www.rss.org.uk/events or requested by email from conference@rss.org.uk. For a map and directions see www.rss.org.uk/findus. For further information, contact Jouni Kuha (j.kuha@lse.ac.uk)

Registration charges: RSS Student/Retired Fellows - £30; CStats/GradStats - £34;
RSS Fellows - £38; RSS members - £50; none of the above - £75