Understanding the effect of patient choice: designing a randomised trial to estimate treatment, selection and preference (choice) effects

Speakers: Dr Robin Turner
Venue: Room 305, Samuels building, UNSW upper campus, Randwick
Date: Thursday 13 November 2014
Time: 12-1pm
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Parking: Level 5 of the parking station; enter via Gate 11 Botany St, Randwick

BIOGRAPHY OF THE SPEAKERS
Dr Robin Turner is a Senior Lecturer in Biostatistics at the School of Public Health and Community Medicine, UNSW Australia. Her research interests cover the areas of diagnostic tests, patient follow-up and monitoring, randomised control trials incorporating patient preferences and decision aids, and the statistical methods underpinning these. She has published across a range of clinical and public health areas including cancer research (breast cancer, melanoma and bowel cancer), chronic kidney disease, asthma, patient preferences and decision aids.

ABSTRACT
Randomised trials provide an unbiased estimate of the effect of one treatment compared to another. However, participant preferences for treatment can play an important role in how participants respond to particular treatments, their motivation to take the treatment as prescribed and can influence the reporting of side effects. The method developed by Rucker (1989) for the analysis of a two-stage randomised trial design allows for the estimation of not only the treatment effect but also selection (how patients who prefer treatment A compare to patients who prefer treatment B) and preference effects (the comparison of participants who received their preferred treatment with those who did not).

Patient choice and decision aids are playing an increasing role in health care. Methods that allow the estimation of preference effects (i.e. the effect of choice) will be needed to fully
understand the role of decision aids and patient choice on treatment outcomes. The analysis method by Rucker allows for these effects to be estimated but studies will need to have an appropriate sample size to ensure adequate power to detect treatment, selection and preference effects.

This talk will cover the design issues for such a trial including how to estimate the sample size, which information is crucial in determining the sample size and may be necessary to obtain with pilot data and the situations in which the design and estimation method is most useful. Examples from the patient choice literature will be used to highlight and inform these issues.

Next seminar
12 March 2015, Room 305 of Samuels Building
Speaker: TBA
Topic: TBA