



Current Developments in Cluster Randomised Trials and Stepped Wedge Designs

15-17 November 2021

Online Conference
(Zoom)

Programme



Current Developments in Cluster Randomised Trials and Stepped Wedge Designs

Time (GMT)	Day 1 – 15 November 2021	
13:00-13.10	Welcome to the 7 th Annual Conference Reverend Professor Sandra Eldridge, Director PCTU, Queen Mary University of London	
	Invited speaker Chair: Clémence Leyrat	
13.10-14.00	Laura Balzer University of Massachusetts Amherst (USA) Machine Learning to Improve the Analysis of Cluster Randomised Trials	
14.00-14.20	Break	
14.20-15.40	Regular presentations 1 Chair: John Preisser	
14:20-14.40	Cluster-randomised trials of individual-level interventions are at high risk of bias Christina Easter Institute of Applied Health Research, University of Birmingham (UK)	
14.40-15.00	Deviations from planned designs are common in stepped wedge trials: results from a methodological review Agnès Caille Université de Tours (France)	
15.00-15.20	CHEETAH Cluster Randomised Controlled Trial: Reducing surgical site infections in low- and middle-income countries Omar Omar University of Birmingham (UK)	
15:20-15.40	Management of non-completers in statistical analysis of Cluster Randomized Trials in Nursing Homes Pierre Poupin CHRU Hôpitaux de Tours, Tours (France)	
15:40-16:00	Break	
16:00-16:30	Rapid talks 1 (4 minutes per talk followed by Q&A) Chair: Monica Taljaard	
Turbo Talks	<ul style="list-style-type: none"> ● Impact of complex, partially nested clustering in individually randomized group treatment trials Guangyu Tong Yale School of Public Health (USA) ● A generalized estimating equations approach for the statistical power and analysis of longitudinal cluster randomized trials John Preisser Department of Biostatistics, University of North Carolina (USA) ● A SAS macro for the analysis of clustered data based on GEE/MAEE paired estimating equations with application to cluster randomized trials Ying Zhang Department of Biostatistics, University of North Carolina (USA) ● A SAS Macro for fast calculation of GEE power for longitudinal cluster randomized trials Paul Rathouz University of Texas at Austin (USA) 	
	Questions (all)	
	16:30-17:00	Rapid talks 2 (4 minutes per talk followed by Q&A) Chair: Karla Hemming
	Turbo Talks	<ul style="list-style-type: none"> ● power swgee: A Stata command for GEE-based power calculations in stepped wedge cluster randomized trials John Gallis Duke University (USA) ● Power considerations for generalized estimating equations analyses of four-level cluster randomized trials Xueqi Wang Duke University (USA) ● A systematic review of the characteristics and objectives of school-based feasibility cluster randomised trials evaluating health outcomes on pupils in the United Kingdom Kitty Parker NIHR Applied Research Collaboration South West Peninsula, University of Exeter (UK)
Questions (All)		



Current Developments in Cluster Randomised Trials and Stepped Wedge Designs

Time (GMT)

Day 2 – 16 November 2021

13:00-13.10 Welcome and CRT website update
Sandra Eldridge and Claire Chan

Invited speaker
Chair: Claire Chan

13.10-14.00 **Fan Li** Department of Biostatistics, Yale School of Public Health (USA)
Designing cluster randomized trials to detect treatment effect heterogeneity

14.00-14.20 Break

14.20-15.20 **Regular presentations 2**
Chair: Agnès Caille

14:20-14.40 **Analysis of time-to-event outcomes using restricted mean survival time in cluster randomised trials**

Floriane Le Vilain-Abraham Université de Tours (France)

14.40-15.00 **Constrained randomisation and statistical inference for multi-arm parallel cluster randomised trials**

Yunji Zhou Duke University (USA)

15.00-15.20 **Two Weights Make a Wrong: Cluster Randomized Trials with Variable Cluster Sizes and Heterogeneous Treatment Effects**
Xueqi Wang Duke University (USA)

15:20-15:40 Break

Invited speaker
Chair: Sandra Eldridge

15:40-16.30 **Sally Kerry** PCTU Queen Mary University of London (UK)
Lighthouses and shipwrecks: a journey through cluster randomised trials

16.30-16.40 Break

16:40-17:00 **Rapid talks 3 (4 minutes per talk followed by Q&A)**
Chair: Bruno Giraudeau

Turbo Talks

- **Characteristics and practices of school-based cluster randomised controlled trials for improving health outcomes in pupils in the United Kingdom: a methodological systematic review**
Kitty Parker NIHR Applied Research Collaboration South West Peninsula, University of Exeter (UK)
- **Risk of bias in cluster randomized-controlled trials: a methodological review of child health trials published in 2007 and 2017**
Alex Aregbesola University of Manitoba, Winnipeg (Canada)
- **Overstating of impact in cluster randomized trials with binary outcomes: Key findings from a systematic review**
Elizabeth Turner Duke University (USA)

Questions (All)



Current Developments in Cluster Randomised Trials and Stepped Wedge Designs

Time (GMT)		Day 3 – 17 November 2021	
		Invited speaker	
		Chair: Obioha Ukoumunne	
09.00-09.50	Professor Richard Hayes London School of Hygiene & Tropical Medicine (UK) The HPTN 071 (PopART) trial of universal testing and treatment for HIV: design, findings and multi-disciplinary contributions		
09.50-10.10	Break		
10.10-11.50	Regular presentations 3		
		Chair: Richard Hooper	
10.10-10.30	When should matching be used in the design of cluster randomized trials? Patty Chondros Department of General Practice, The University of Melbourne (Australia)		
10.30-10.50	Intra-cluster correlations from the CLustered OUTcome Dataset bank to inform the design of longitudinal cluster trials Elizabeth Korevaar Monash University (Australia)		
10.50-11.10	Use of information criteria for selecting a correlation structure for longitudinal cluster randomised trials Rhys Bowden Monash University (Australia)		
11.10-11.30	Stepped wedge trials with a small number of clusters: Bayesian versus frequentist methods Kelsey Grantham Monash University (Australia)		
11.30-11.50	Optimal design of cluster randomized trials with baseline data comparing routine care to a new intervention Andrew Copas MRC Clinical Trials Unit at University College London (UK)		
11.50-12.10	Break		
12.10-12.40	Rapid talks 4 (4 minutes per talk followed by Q&A)		
		Chair: Andrew Copas	
Turbo Talks	Missing continuous outcomes in stepped wedge cluster randomised trials Sorif Hossain Institute of Statistical Research and Training, University of Dhaka (Bangladesh)		
	A hybrid approach to comparing parallel-group and stepped-wedge cluster randomized trials when there is uncertainty in the intra-cluster correlation Samuel Sarkodie Population Health Sciences Institute, Newcastle University (UK)		
	A Bayesian Power Prior approach for incorporating pilot data into Cluster Randomised Controlled Trial analysis and design Ben Jones University of Exeter (UK)		
	Minimisation in parallel cluster randomised trials James Martin University of Birmingham (UK)		
12.40-13.00	Questions (All)		
		Concluding remarks	
		Sandra Eldridge	
		Conference Close	

All times shown are in Greenwich Mean Time (GMT) zone. For obtaining the timing in your region please go to <https://greenwichmeantime.com/time-gadgets/time-zone-converter/>