



RACP Foundation Research Awards

FINAL REPORT

Project / Program Title		AuTOMATIC: Adaptive Trial of Messaging to Improve Vaccine Coverage
Name		Associate Professor Thomas Snelling
Award Received		2018 RACP Fellows Research Establishment Fellowship
Report Date		19 December 2018
Chief Investigator / Supervisor		Associate Professor Thomas Snelling
Administering Institution		Telethon Kids Institute
Funding Period	Start Date:	1 January 2018
	Finish Date:	1 December 2018

PROJECT SUMMARY

New and modern strategies are needed to improve childhood vaccination rates and encourage parents to vaccinate their children on time. The rapid increase of mobile phone ownership in Australia has created a promising means of communication to notify parents of due or overdue vaccines. This trial is the first of its kind in Australia and will assess whether simple strategies, such as SMS reminders, are an effective way of improving vaccine coverage in WA. This adaptive clinical trial will use sophisticated IT systems to automate interim analyses and decision making for adaptive sample size and response-adaptive randomisation features.

PROJECT AIMS / OBJECTIVES

Primary aim: To determine the effectiveness of SMS vaccine reminders for improving the timeliness of routine vaccination among Australian children.

Secondary aim/s: If SMS reminders are more effective than standard care, we aim to determine the optimal SMS vaccine reminder to send to parents (message content and timing).

SIGNIFICANCE AND OUTCOMES

Vaccination is one of the most important and successful public health interventions to date. Despite the well-known benefits of vaccination, many Australian children remain under-vaccinated every year. Given the consequences of vaccine preventable diseases, strategies to improve coverage and reduce the delay to vaccination are needed.

Our previous research has shown that most parents are supportive of vaccination, though some parents may not be aware of their child's vaccination status. In our survey of 589 parents, nearly 2/3 of parents whose children were not up to date on the Australian Immunisation Register, believed that their children were. Simple reminder strategies, such as text message reminders, may be useful to improve coverage and timeliness.

Progress to date:

We have finished developing the module that will integrate the SMS reminder module (SmartVax), randomisation service and clinical trial database. We plan to commence end-to-end testing in Feb-March 2019. We have almost completed the randomisation service code that will provide response adaptive randomisation and automated interim analyses.

We anticipate that we will begin enrolling parents into the trial by April-May 2019.

PUBLICATIONS / PRESENTATIONS

We submitted and were successful with a presentation abstract submitted to the NHMRC symposium in November 2018. We plan to publish the AuTOMATIC protocol in mid-2019.