REPORTING TEMPLATE

HEALTH DELIVERY RESEARCH ACTIVATION GRANT – END OF CONTRACT REPORT

This template must be completed and uploaded to HRC Gateway as a PDF file.

This template is compatible with recent versions of MS Office. The fields have Arial 10-point font as default although bold and underlined variations are acceptable. Develop draft information in a separate document and then copy into this template. The draft should use Arial 10-point font to avoid automatic formatting that may cause problems.

HRC reference number: 20/1286

First named investigator: Michael Tatley

What category best describes the research activation activity?
Vaccine safety surveillance; Smartphone aided health survey; Real time vaccine adverse event surveillance, Immunisation program support; Vaccine safety epidemiology; Surveillance technology development

This section should be limited to single terms or words. Please categorise/state the type(s) of activity/activities that have been undertaken. Examples include (but not limited to) relationship development, priority setting, literature review, skill/capacity building**.**

Contract requirements

Has the activation activity specified in the original application been completed as intended? If not, please detail key changes.

The activation project has been completed as set out in the proposal. It was delayed initially due to COVID impacts on the researchers and COVID logistics in bringing a Pilot/Beta GP practice online. This was resolved and the project ran to completion to demonstrate satisfactory proof of deliverable as planned

Were there any personnel changes to the team listed in your contract? If so, please detail.

There were no personnel changes to the Team listed in the original application

Is your research related to a National Science Challenge?

The research was NOT related to a National Science Challenge

Impact of the research activation activity

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Please provide a description of your Research Activation Grant achievements that the HRC can use to communicate with non-specialist audiences.

The KIWIvax Proof of Concept has been achieved, Beta tested and demonstrated to be viable and achieving the objectives set out in the Grant:

- Prototype based on the Australian SmartVax system was developed to suit New Zealand requirements in generating SMS's to vaccinees who responded to SMS questions. These responders were then invited to answer questions tailored to the New Zealand setting about any post vaccine adverse events that may have occurred.
- SmartVax software modified to suit work with New Zealand Medtech 32 Practice Management Software (PMS) to identify vaccinees, generate the SMS and receive the responses to the survey questions.
- New Zealand section of an Amazon Cloud database created to hold anonymised data from SMS responses to enable analysis of data.
- Produced participating practice information and created set-up/installation manual and "agreement to participate"
- Information/Participant Brochures and Clinic Practice information posters for KiwiVax designed and produced for use
- Prototype software installed in Newtown Union Health Centre
- SMS messages were sent to 100 patients mobile phones from the KiwiVax system notified by the PMS which was triggered by a vaccination recorded in the PMS.
- 41 patients responded to and interacted with survey questions
- The responses, despite the low response rate nevertheless confirmed proof of concept of the technology as functional. However, the low response rate added to research questions o be explored by this technology pilot
- Demonstrated ability to produce analyses and practice reports of responses

Has the Research Activation Grant resulted in any immediate benefits? If so, please describe.

Proof of concept achieved. The research Team was able to realise:

1. The advantage of the advances in technology to support in assuring of the safety of each vaccine
2. The collection of the cohort of patients administered each vaccine via an automated system.
3. That data was easily collected, collated and analysed on a daily basis which in turn would enable the KiwiVax team to monitor the safety profile in a timely presentation via a Dashboard system updated daily

What is the potential future impact of this work and what plans do you have in place to realise this impact? For example, the readiness to proceed with research based on the outcome of the research activation activity and/or the planned next steps (noting that this is a key focus of the Research Activation Grant)?

1. This project was of interest to the Ministry of Health COVID Vaccination Immunisation Program, who used its basic elements and principles to form the core of a system constructed only for the COVID vaccine and inside the Ministry's dedicated COVID system.
2. There has been growing interest (currently 4) from other Primary Care practices who are keen to have this system implemented in their PMS for non-COVID vaccines. As in the Australian experience which grew in a similar manner from a handful to over 300, we look forward to similar uptake (and ultimately uptake up by the National Immunisation Programme for routine vaccines when the COVID vaccination pressures are reduced).
3. Consider the possibility of extending the applicability to PMS systems other than Medtech32 such as Indice which is gaining marketplace in Primary Care

4. This tool and technology will be piloted in medical practices/PHO's in NZ informing a research project that will determine its true functionality including user & PHO experience and where possible reasons for non-responding
5. Further research projects will demonstrate the utility and value of KiwiVax in supporting vaccine safety surveillance in New Zealand and the comparison of Australasian AEFI profiles from KiwiVax and AusVaxSafety.

Have you received any follow-on funding to support next steps?

None at present

What was the main barrier(s) experienced by you, or your team, while completing this research contract?

COVID and COVID Vaccination pressures and workload delayed the planned work plan for this project in the initial stages affecting researchers and implementation site, determination and commitment utilised opportunities where possible leading to a successful end point achievement of the projects objectives.

What is the main barrier(s) to proceeding with the planned next steps?

Although our plan is for wider roll-out to those practices (and further) who have expressed interest, the current impact of COVID on all aspects of health care is an obstacle to achieving this in the near term.
Once further roll-out implementation becomes apparent a research protocol to address and expand the research direction outlined earlier will be drafted for funding application. The barrier to further roll-out and research is limited currently by COVID pressure on capacity and funding support.

Feedback for the HRC

Do you have any comments on this funding opportunity regarding its accessibility and appropriateness to support your research activation activity?

This funding opportunity widely publicised and easily accessible. This funding provided an excellent vehicle and opportunity to progress a Proof of Concept to illustrate its practical clinical viability, Health System benefit and support future extension of its application. Such a tool will serve to inform the national Immunisation Programme as well as a source of data for ongoing research.