
Translating best practice research to reduce equity gaps in immunisation

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The University of Auckland

Prepared for:

The Health Research Council of
New Zealand and The Ministry of
Health

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reduce equity gaps in immunisation
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Date: July 2015

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EXECUTIVE SUMMARY

Background

Childhood immunisation is one of the priority health targets for New Zealand. Despite having made excellent progress in gaining high immunisation rates in the past ten years, we have not fully attained the stated goals of 95% fully immunised at 2 years and 8 months of age. While overall immunisation coverage rates have improved, these rates vary considerably among general practices at the local level. Literature suggests many factors contribute to this variation and strategies that focus on the practice and providers are likely to be the most important contributors to improving coverage. Earlier NZ research identified characteristics associated with general practices that obtain and maintain high immunisation coverage. We wish to take a further step and utilise these features and translate this knowledge and experience across to other practice settings.

Aims

To determine whether knowledge gained from general practices with high childhood immunisation coverage rates and timeliness of delivery can be translated into strategies and actions in practices with low immunisation coverage and lead to a successful increase in their childhood immunisation rates, timeliness of delivery and reduction in immunisation inequalities.

Methods

A randomised controlled intervention study was undertaken of General Practice Medical Centres from three specific DHB regions in New Zealand with low rates of childhood immunisation coverage. The process involved the listed steps:

1. Engaging with PHOs within identified DHB regions to participate as Health Delivery Partners;
2. Identifying eligible general practices for engagement;
3. Inviting practices to participate;
4. Randomising into intervention versus control (business as usual)
5. Undertaking face-to-face visits to practice to conduct 'needs assessment' interview via a structured questionnaire with the intervention practices;
6. Creating a practice specific action plan with the intervention practices;
7. Ongoing support to implement a practice-specific action plan over a 12 month period.

Immunisation coverage rates for 8 months and 2 years of age were measured for all participating practices, both intervention and control, prior to and after the intervention. Thematic analysis was undertaken to identify key factors associated with improvement or barriers to improvement with utilising a practice-designed action plan.

Major findings

There were significant challenges with recruitment of DHB regions, Primary Health Organisations and general practices willing to participate. The main reason for this was that during the period of design and prior to recruitment, the immunisation coverage rates in NZ improved dramatically, as a result of which many practices felt they no longer needed extra assistance with focus on their immunisation coverage. Other challenges faced at the practice level included competing practice priorities, limitations on time, resources and staff turnover.

In all DHB regions, significant increases had been made in immunisation coverage rates in all areas since the study was first proposed in 2012. The National immunisation coverage for New Zealand children at eight months old had reached 91 percent for the three month period ending December 2013.

PHOs were the Health Delivery Partners and their personnel have a number of competing priorities, particularly PHO Performance Targets (now IPIF), which impacted on their ability to devote time and resource to this study.

Of the 102 potentially eligible practices, 59 were excluded due to having a lower Māori percentage population than the protocol (and subsequent amendment) defined in the eligibility criteria; 10 were excluded due to the high rate of children with a code of "decline" for their immunisations and 5 were excluded due to low numbers of babies being born in their practice.

Of the 28 practices which would have been eligible to participate, 18 declined. The main reasons given were staff shortage and/or high workload.

In total from 5 DHBs and 10 PHOs as identified as having lower rates of childhood immunisation coverage and higher rates of Māori children, 32 practices were identified as eligible to participate based on predefined criteria. Ten practices were recruited, of these 6 were in the intervention arm and 4 in the control arm. All practices in the intervention arm developed action plans and worked with the researcher to implement them.

Coverage rates were followed for all practices, there was inadequate numbers to show any significant differences between control practices and intervention practices either in changes in absolute numbers fully immunised at milestone ages, or in rates of decline.

Qualitative thematic analysis of the results found important priority findings.

Firstly when exploring both barriers and enablers to childhood immunisation delivery, the biggest challenge was maintaining accurate contact information of patients due to the transient nature of some families. Transport barriers and access to the vaccinating facilities were seen as challenges for these families. Systematic barriers included discrepancies in the actioning of the referral processes to outreach services, lack of formal engagement with other service providers and issues with practice. Other perceived barriers were anti-immunisation

beliefs, competing priorities of parents, lack of vaccine-related education and health literacy of parents as well as difficulties in building rapport and relationships with family members.

Customised action plans were found by intervention practices to be useful and used a range of strategies identified by the practices. Within these action plans the most frequently designed and implemented strategies were around improving practice-based processes. The most important of these were implementing extra approaches related to maintaining accurate contact details of patients. Other practice strategies were around improving the efficiency of the systems used to collect and manage practice data, enrolment processes, capturing data on reasons for delinking immunisation and overcoming glitches in the interface with the practice management systems and the National Immunisation Register data.

Team focused strategies designed to increase the commitment to immunisation coverage were around practice team meetings, education resources to engage clinical staff and strategies to improve immunisation opportunities by better accommodating parents times and needs.

The other major area of initiatives in customised action plans were directed at communication, relationship building and education with parents. These took a variety of approaches in every practice but were all focused around improving engagement and building trusting relationships with families.

Other areas seen as important aspects of the action plans included improving partnerships and communication with local service providers such as midwives, community well child providers and allied healthcare workers.

Action plans were generally seen by the practices as a useful intervention. Support to implement and review them, including positive feedback and appropriate friendly engagement, was an important part of the action.

The most common barriers to acting on the action plans were demanding staff workloads, competing priorities and reluctance for change.

Conclusions

While this study was unable to show quantitative difference in improvement in immunisation coverage outcomes, there were important qualitative themes identified to support general practice approaches to implementing effective systems and support for maintaining high immunisation coverage with their childhood population. Firstly; customised action plans with support to engage and review appear to be a useful approach. The common themes in these plans include the importance of adequate practice processes, creating a team approach to immunisation and the commitment to engaging with parents. The most notable challenge for practices is in relation to providing services for families that are difficult to contact or hard to reach, particularly the very mobile families. Reliable practice systems alongside creative approaches, use of newer technologies, engagement with outreach services as well as

maintaining a focus and priority attention to childhood immunisation in the face of other challenges at the service delivery level, were all recognised. Practices are very aware of parental concerns and are aware the key focus is to build rapport and trust in the provider to parent relationship.

Overall, this study supports the notion that one initiative will not solely improve childhood immunisation rates and highlights the importance of having a toolkit of initiatives from which to draw from as well as guidance and support to implement and review it.