

National Review of Outreach Immunisation Services: Summary and Recommendations

May 2016

Overview

Outreach immunisation services (OIS) are an important tool for increasing childhood immunisation coverage. The services ensure that immunisation is available to children who are unable to access a general practice in a timely fashion for their immunisation events.

The Ministry of Health Tier Two Service Specification defines what services are required to be delivered by OIS and expected outcomes, but not *how* they will be delivered. Funding sits within district health board (DHB) budgets. The number and type of providers in a region vary, and how services are delivered differs widely between DHBs.

In order to identify the most effective and cost-effective approaches to service delivery, the Ministry of Health contracted the Immunisation Advisory Centre (IMAC) to carry out a national review of outreach immunisation services. The review included:

- an appraisal of contracts with DHBs to identify any variations from the Ministry's service specifications and to understand what key performance indicators were being used; 15 DHBs made contracts available, covering 22 OIS providers
- an online survey completed by 28 of 35 OIS providers that included characteristics of the population/area they covered, processes, linkages and engagement with the sector, reporting and evaluation methods, strengths and challenges, and staffing
- in-depth interviews with 28 staff from 15 OIS providers
- collection of cost data supplied by 10 OIS providers
- a cost-effectiveness analysis.

Recommendations for service delivery

The Ministry accepts the findings provided by IMAC to improve the efficient delivery and cost-effectiveness of outreach immunisation services.

The Ministry recommends the following.

1. Where implementation is feasible, the delivery of services can be improved by:
 - co-location of the OIS provider team with the NIR team, immunisation co-ordinator, and/or other child health services
 - prompt referral of children overdue for their immunisations, with automatic referral directly via the NIR where appropriate
 - intensive processing of referrals by the NIR team and/or other dedicated administration staff, including finding families and checking contact information and immunisation status, before passing referrals on

- use of well-connected staff with extensive local knowledge, particularly in the community health worker role, to locate, make contact and build trust with families
- use of technology in the outreach setting to access NIR and hospital records and allow entry of immunisation data into practice management systems
- maintenance of close relationships with the Medical Officer of Health and other child health services
- regular internal evaluation of the service with a continuous quality improvement model
- a drop-in immunisation clinic with extended hours, preferably based in the local after hours clinic, being offered as an alternative before home visit immunisation.
- reducing avoidable referrals to OIS through building relationships with Child Youth and Family providers to facilitate consent and opportunistic immunisations during Gateway checks and developing effective systems to check immunisation status and provide other opportunistic vaccinations in secondary care.

2. The barriers to service delivery should be addressed at both the funder and provider levels.

Funder issues include the following.

- Contracting many small OIS providers in a DHB can lead to service fragmentation and is likely to be less cost effective.
- Short-term contracts between funders and OIS providers create uncertainty and put service continuity at risk.
- Small OIS providers cannot benefit from the economies of scale of the larger providers.
- Small providers have limited capacity to cover OIS staff leave, resulting in lack of service continuity if resource support is not provided.

Provider issues include the following.

- Using staff with nursing qualifications to perform time-consuming administrative tasks is inefficient.
- Administration associated with processing referrals in some services is excessive, with paper-based systems and double-handling.
- Current templates for OIS reporting are inadequate and will be revised as part of a service specification revision by the Ministry. Providers also need to develop internal processes for evaluation of their services

Specific recommendations for OIS providers in large urban areas

The Ministry recommends the following for OIS providers in large urban areas with a DHB population of more than 20,000 children aged 0 to 4 years.

- One main provider for the DHB with automatic referrals received directly via NIR as per Ministry guidelines for timing of referrals to OIS. To increase timeliness, individual general practices do not refer children.
- The services need to be closely integrated (preferably co-located) with the NIR team and immunisation coordinators to provide clinical expertise.
- The service maintains strong relationships with other health and social service providers in the area to facilitate finding children, and uses well connected community workers to help find families and build trust.

- The NIR team and/or other dedicated administration staff intensively process referrals before they are passed to OIS vaccinators.
- Selected staff should have direct read-only access to hospital patient records, National Health Index look-up and NIR.
- Opportunities for vaccination are extended to better meet needs of families, including extended practice hours for immunisation, access to immunisation in other settings such as Well Child / Tamariki Ora clinics, and evening and weekend immunisation clinics at after-hours centres and/or in emergency departments.
- Placement of student nurses with OIS providers, which can be mutually beneficial to both the student and the provider.

Specific recommendations for OIS providers in remaining urban/rural areas

The Ministry recommends the following for OIS services in smaller urban (DHB population of less than 20,000 children aged 0 to 4 years) and/or rural areas.

- Outreach immunisation services are co-located, where feasible, with the NIR team and/or immunisation coordinators and/or other child health services.
- Referrals are received directly from the NIR team (as per Ministry guidelines for timing of referrals) and from other sources including general practice, but all referrals must go through the same NIR information checking process.
- The NIR team and/or other dedicated administration staff intensively process referrals before they are passed to OIS vaccinators.
- The service maintains strong relationships with other health and social service providers in the area to facilitate finding children, and where possible use community health workers to help find families and build trust.
- Staff in co-located services or other child health services are used, where possible, to maintain service continuity when regular staff are away (for services where nurse vaccinator commitment is less than one full-time equivalent.)
- When other vaccination services experience quieter periods (eg, school-based services during school holidays), other vaccinators could be seconded in to support specific extra work, such as a focus on four-year-old immunisation.
- Placement of student nurses with OIS providers, which can be mutually beneficial to both the student and the provider.
- Access to services is improved by extending outreach immunisation hours to better meet needs of families. For example, engagement with Well Child Tamariki Ora could enable immunisation during their clinics.
- Practices are encouraged to extend the hours during which they will immunise and/or extend opening hours.
- Amalgamation of small providers or sharing of administration services to improve economies of scale.

Cost information

An important aim of the review was to understand what the costs were in delivering outreach immunisation services. The review found that:

- on average, 4 percent of children aged under 7 years in a DHB are immunised by OIS

- OIS services appear to be used more frequently by DHBs with a higher than average proportion of Māori children and those with lower than average immunisation coverage
- the rate of completed vaccination events per OIS referral was 62 percent (1 vaccination is achieved for every 1.6 referrals)
- the total cost per referral was on average \$361 (median \$257)
- the total cost¹ per vaccination event was on average \$636 (median \$458)
- the unit (vaccine delivery) cost² per vaccination event was on average \$381 (median \$233).

These costs had wide variability across providers (unit cost per vaccination \$46 to \$1376). Reliability of the cost estimates is limited because data was from a small number of providers (ten) and not all information was directly comparable. Furthermore, data was provided at the discretion of the DHBs and providers.

It was not possible to measure the effectiveness of OIS in reconnecting families with general practice for future vaccinations, a potentially better and more cost-efficient outcome than continued immunisation through outreach services.

How the results will be used

The results of the review are being shared with primary health organisations, DHBs and OIS providers to enable more efficient models of delivery to be considered and implemented where appropriate. The recommendations are supported by the Ministry, but none are prescriptive.

The findings will also be used by the Ministry to guide revision of the Tier Two Service Specification for OIS and reporting templates.

¹ Total costs include vaccination delivery costs, administration and support staff, management, training, software and consumables, overheads and other infrastructure costs.

² Costs for activities directly associated with vaccination delivery that vary with the number of vaccinations delivered: costs of nurses and community health workers, travel, patient-related expenses, equipment and materials.