CSIRO PUBLISHING

The Royal New Zealand
College of General Practitioners
Te Whare Tohu Rata o Aotearoa

QUALITATIVE MIXED METHODS RESEARCH
https://doi.org/10.1071/HC26025

Journal of Primary Health Care

# Newborn enrolment, engagement, and immunisation in primary care: a qualitative study of healthcare providers' perspectives

Amber Young[A,*], Christine McIntosh[B,C], Felicity Ware (Ngāpuhi)[D], Emma Best[C], Nikki Turner[E], Nadia A. Charania[F], Andrew Campbell[A], Te Atarua Davis (Tainui)[D] and Samantha Marsh[E]

For full list of author affiliations and declarations see end of paper

***Correspondence to:**
Amber Young
He Rau Kawakawa | School of Pharmacy, University of Otago | Ōtākou Whakaihu Waka, Adams Building, 18 Frederick Street, PO Box 56, Dunedin 9054, New Zealand
Email: Amber.young@otago.ac.nz

**Handling Editor:**
Tim Stokes

**Received:** 25 January 2026
**Accepted:** 25 March 2026
**Published:** 23 April 2026

**Cite this:** Young A *et al.* (2026) Newborn enrolment, engagement, and immunisation in primary care: a qualitative study of healthcare providers' perspectives. *Journal of Primary Health Care* doi:10.1071/HC26025

## ABSTRACT

**Introduction.** Childhood immunisation coverage in Aotearoa New Zealand (NZ) is not meeting recommended targets. Enrolment and engagement with primary care are associated with timely immunisation uptake, yet enrolment and immunisation are inequitable, with Māori and Pacific children less likely to be enrolled and receive their 6-week vaccinations on time. **Aim.** This study aimed to understand healthcare providers' perceptions of barriers and enablers to primary healthcare enrolment from birth and provide recommendations to support enrolment, engagement, and immunisation, particularly for Māori whānau (families). **Methods.** This qualitative study, guided by a Kaupapa Māori-aligned methodology, involved interviews and focus groups to explore barriers and enablers to enrolment from the perspective of people working within the NZ healthcare sector ($n = 27$). Analysis was undertaken using qualitative content analysis. **Results.** Many participants expressed that the current system was contributing to inequitable enrolment and immunisation of pēpi (infants). Four categories were constructed: health services may not be accessible or practical for whānau; perceived complexity and skill shortages; the need to prioritise communication and engagement; and services must be built on cultural safety and trust. **Discussion.** Reasons for inadequate enrolment include poorly designed systems, limited resourcing, and inconsistent approaches. Enrolment needs to be simplified, with integrated and automated systems to reduce administrative burden for staff. Flexible whānau-centred practices can help support enrolment, engagement, and immunisation of pēpi.

**Keywords:** childhood healthcare, enrolment, general practice, health equity, immunisation, primary healthcare, vaccination.

## Introduction

Aotearoa New Zealand (NZ) has a universal healthcare system where almost all primary care general practices under the umbrella of Primary Healthcare Organisations (PHOs) offer free health services to tamariki (children) under the age of 14 as long as they are eligible (ie citizens, permanent residents, and some visa holders).[1] At birth, the 'newborn nomination' is sent to the general practice chosen by their whānau (family and carers) or the mother's general practice on the maternity record (as default). If the nomination is accepted by the practice, newborns become 'pre-enrolled', giving them access to funded services, but this expires;[A] and whānau need to complete documentation to gain full enrolment. In 2024, 3% of tamariki under 5 years of age were not enrolled, and in some locations non-enrolment was as high as 9%.[2] Enrolment inequities also exist, with Māori (NZ Indigenous population) consistently being less likely to be enrolled compared to other ethnicities.[3] In 2024, it was estimated that only 85% of Māori (any age) were enrolled with general practices, compared to 97% of non-Māori and non-Pacific ethnicity.

The benefits of enrolment with general practice include access to funded healthcare services for newborns and recalls for preventative care such as immunisations. Most (90%)

---

[A] At the time of this research, the pre-enrolment expired after 3 months, but this has now been extended to 12 months.

**WHAT GAP THIS FILLS**

**What is known about the topic:** Enrolment in primary healthcare is inequitable, with Māori and Pacific whānau being less likely to be enrolled with a general practice. Being enrolled with a general practice increases the likelihood of timely childhood immunisations.

**What this study adds:** Inadequacy in current systems perpetuates inequitable enrolment with Māori whānau. To improve enrolment, expansion of information sharing capabilities and simplification of processes are required. To increase engagement, whānau must be respected and feel safe when accessing health services.

newborn 6-week immunisations in NZ occur in general practice.[4] However, immunisation coverage has decreased considerably, with more than a 10% drop between 2020 and 2022 across childhood immunisation milestones.[5] In the quarter 1 April to 30 June 2025, only 71% of children were fully vaccinated at 5 years of age.[6] Furthermore, there are widening ethnic disparities for timely immunisation delivery and resultant vaccine-preventable disease,[7–9] with 49% of Māori and 62% of Pacific pēpi (infants) fully immunised at 6 months of age in 2024, compared to 74% European/other or 84% for Asian for the same quarter.[6]

Although immunisation is free for all tamariki up to the age of 18 years, no matter their eligibility for publicly funded services, early engagement and enrolment with a general practice is associated with an increased likelihood of timely immunisation.[10,11] However, because Māori pēpi may be less likely to be enrolled with a practice, Māori whānau may be less likely to receive the services to support their tamariki being immunised. Thus, it is important that pēpi are enrolled with a general practice early to ensure recommended immunisation events occur on time.

Investigation is needed to determine ways to support Māori whānau to achieve early full enrolment of pēpi. The aim of this study was to understand healthcare providers' perceptions of barriers and enablers to primary healthcare enrolment from birth and provide recommendations to support enrolment, engagement, and immunisation, particularly for Māori whānau.

## Methods

### Study design

We drew from a constructivist research paradigm[12] and a Kaupapa Māori-aligned methodology,[13,14] drawing on principles such as tino rangatiratanga (self-determination), social justice (to redress power imbalances in the healthcare system), whānau, and whanaungatanga (building relationships).[14] Applying this lens to the design, analysis, and outcomes of the research was important to Māori and all researchers involved to ensure potential biases were challenged and that the research would benefit Māori whānau.

Ethical approval for this research was obtained through the Health and Disability Ethics Committee (NZ HDEC: 15464). Māori research consultation was undertaken with the Ōtākou Whakaihu Waka Kai Tahu Māori Health Research Unit (6048_23866).

### Interview guide

A semi-structured interview guide was developed (Supplementary material S1) based on the researchers' knowledge and experiences of the enrolment process, with peer review from the research team who have relevant backgrounds and expertise in general practice, paediatrics, pharmacy, Māori health, health policy, and immunisations. The interview guide was piloted with two individuals from the study cohort, with subsequent wording clarifications made. Participant demographics, workplace characteristics (eg funding model, population demographics, rural or urban setting), and responses on barriers and enablers to enrolment were collected.

### Participants, recruitment, and data collection

Members of the NZ healthcare workforce aged over 18 years and working in immunisation and primary health care across the country were invited to participate in focus groups or interviews either online or in-person, depending on preferences. Sessions were recorded and transcribed for analysis. Focus group discussions lasted approximately 2 h, and interviews approximately 1 h.

To recruit from a range of healthcare roles, we purposively sampled for healthcare providers including general practitioners (GPs), experienced practice nurses, managers and administrative staff in general practice, midwives, and staff from Māori-owned health organisations. To include a health policy perspective, we recruited strategists from Health NZ | Te Whatu Ora, the previous Māori Health Authority | Te Aka Whai Ora, and PHOs (eg National Immunisation Register administrators and immunisation leads, programme leads, and clinical leads). To obtain opinions from people working in diverse roles across the healthcare sector, we aimed to recruit 20–30 participants to address the study aims based on the concept of information power in qualitative research and research utilising similar methodologies.[15–17]

Recruitment utilised national immunisation communication and professional networks, such as General Practice NZ and PHOs, and purposive recruitment from areas with a higher Māori population; for example, with support from Ngāti Porou Oranga Centre of Excellence and Tūranga Health (a Māori health provider). Participants were provided with a $50 voucher as an appreciation of their time.

AY (Taranaki Iwi), a pharmacist of Māori and Pākehā (NZ European) ethnicity, developed the study protocol, which was reviewed by the research team, all of whom have a strong focus on health equity and support access to vaccinations. AY and AC, a Pākehā and junior health researcher, undertook the interviews.

## Data analysis

Categories were identified in the data by AY and AC using qualitative content analysis[18] and principles of Kaupapa Maori research.[13,14] Analysis started with transcription of the interviews and familiarisation with the dataset, followed by generation of codes in Microsoft Excel, initial construction of categories, further category review, and then final category refinement within a framework based on the aims of the study of (a) barriers to enrolment and engagement and (b) enablers and potential solutions.

## Researcher positionality and rigour

AY and AC undertook reflexivity exercises (eg reflexive journaling)[19] and debriefing sessions following each interview to clarify interpretations and discuss key concepts raised. Regular meetings with the wider research team saw discussion of interpretations and preliminary categories. A demographic questionnaire described the types of participants accurately and, along with clearly stating the context and circumstances of the study, supported transferability and dependability of findings.[20]

## Results

Twenty individual participant interviews ($n = 20$) and three focus groups ($n = 7$) were undertaken. Most participants were situated in primary care, worked as nurses (some in more than one role), and reported that they practiced in an area with a high proportion of Māori. Eight participants were Māori (Table 1).

All participants felt the current system was not adequately serving NZ communities, and many considered that this contributed to inequitable enrolment and immunisation of pēpi. Four categories were constructed to describe participants' views on enrolment in general practice and engagement: health services may not be accessible or practical for whānau; perceived complexity and skill shortages; the need to prioritise communication and engagement; and services must be built on cultural safety and trust.

## Health services may not be accessible or practical for whānau

> We're employing a patient into the health system, where the health system becomes a full-time job to be a patient, which is not what we're after. (P10)

Participants described a strong desire to make services more accessible to whānau. Common accessibility barriers were

**Table 1.** Interviewed participants' demographic and practice characteristics ($n$ = 27).

| **Characteristic** | ***n*** | **Percent (%)** |
|---|---|---|
| Ethnicity of participants[A] | | |
| New Zealand European/Pākehā | 19 | 70 |
| Māori | 8 | 30 |
| Cook Island Māori | 1 | 4 |
| European | 1 | 4 |
| Fijian Indian | 1 | 4 |
| Middle Eastern | 1 | 4 |
| Areas served by participants[A] | | |
| Small-medium town | 11 | 41 |
| City suburbs | 9 | 33 |
| Rural or remote | 4 | 15 |
| Other – Whole district/s | 4 | 15 |
| Inner city | 3 | 11 |
| Other – National level | 1 | 4 |
| Roles of participants[A] | | |
| Practice nurse | 6 | 22 |
| Home visit service vaccinator (ie outreach vaccinator) | 5 | 19 |
| Other – Child health-related roles (such as child or newborn community nurse) eg PHO child health nurse, Well child Tamariki Ora clinical lead ($n$ = 3), Plunket nurse) | 5 | 19 |
| Other – undertaking immunisation-related roles at Te Whatu Ora (Health New Zealand)[B] | 4 | 15 |
| Immunisation coordinator | 3 | 11 |
| Kaimahi, kaiāwhina, kaimanaaki (other support staff working in the healthcare system) | 2 | 7 |
| Primary care doctor or in training | 2 | 7 |
| Midwife | 2 | 7 |
| Receptionist or administrator | 2 | 7 |
| Outreach support worker | 1 | 4 |
| Population served by participants[C] | | |
| High proportion of Māori patients | 9 | 33 |
| Not applicable | 8 | 26 |
| High proportion of Māori and Pacific patients | 5 | 19 |
| Neither high proportion of Māori or Pacific | 4 | 15 |
| Not sure/I don't know | 2 | 7 |
| High proportion of Pacific patients | 0 | 0 |
| Ownership/business model of participant's organisations | *n* | % |
| Not applicable | 11 | 41 |

(*Continued on next page*)

**Table 1.** (*Continued*)

| Characteristic | *n* | Percent (%) |
|---|---|---|
| Owner-operator (staff own and operate the practice) | 6 | 22 |
| Corporate (practice is one of several practices run by the same corporation) | 2 | 7 |
| Community provider | 1 | 4 |
| Iwi provider | 5 | 19 |
| I don't know | 2 | 7 |
| Government funding model their practice receives | | |
| Not applicable | 14 | 58 |
| Non-VLCA | 5 | 21 |
| Very low cost access (VLCA) | 4 | 17 |
| I don't know/not sure | 4 | 17 |

[A] Participants could select more than one option.

[B] Such as co-chair of the Immunisation Action Group, district immunisation leads, associate charge nurse manager, unit manager.

[C] Population served by participants as defined by the interviewee. Although intended for general practice staff, some participants not working in general practice completed this if their role meant they looked after certain populations.

recognised by participants (see Box 1). See Supplementary material S2 for supporting quotes and enablers/potential solutions identified by participants.

Participants identified the need to provide wrap-around support for some whānau, yet there was often limited ability to support additional services.

> … you can provide a lot of other sorts of support for people and but you can't do it if you're not funded and the funding is just inadequate really. (P18)

Participants were also frustrated with the enrolment paperwork requirements, describing it as 'arduous', particularly because much of it is already held within the health system databases.

> If [data] was linked up with Births, Deaths, and Marriages, issues wouldn't occur. It would also stop primary care running around trying to get that information. If Births, Deaths, and Marriages has already said 'these babies enrolled, these ones might not be' you've got sort of maybe five babies to chase up instead of 100. So put it in context, we have 800 babies—that's a lot of babies to follow up. And each one we have to get birth certificates and checking all that paperwork. (P1)

Some participants acknowledged the difficulty in accessing care. Some practices are not accepting new enrolments at all, and others are only accepting enrolments if other whānau are enrolled; therefore, if parents are not enrolled, it creates barriers for pēpi enrolment.

Many participants thought this issue was escalating, and whānau may become enrolled in a geographically distant practice or not with preferred general practices. Also, the practice location could be difficult for some whānau to get to if they did not have, or could not afford, transport.

In recognition of these barriers, some providers and PHOs had delegated increased resources to their outreach immunisation services (OIS) that visit whānau in their homes. Many participants appreciated the ability to refer to OIS, who were described as 'our best hope' (P18) and incredibly valuable for whānau that cannot or prefer not to go to providers. In some places, OIS were supporting pēpi enrolment by encouraging whānau to engage with practices.

> Young mums don't tend to go there because they've never built a relationship there. But they might have that outreach immunisation service go to them, because they've been there before and they know them, you know, been to their home before, so they know them. (P6)

Extra services were provided by practice-based kaiāwhina[B] or other support people who help whānau to navigate the health system, and they were seen as extremely valuable as they could build a relationship with whānau and support them to immunise pēpi.

## Perceived complexity and skill shortages

> I think the newborn enrolment process is set up to fail from the start. (P9)

Barriers to pēpi enrolment include the overall complexity in the enrolment process and how there are widespread and longstanding skill shortages in the sector that compound existing issues, including immunisations. These barriers are summarised in Box 2. See Supplementary material S2 for supporting quotes and potential solutions identified by participants.

Participants identified widespread misunderstanding of enrolment processes amongst people within the system and with whānau. Administrative enrolment processes were also considered complicated and time-consuming, resulting in delays and resource intensive catch-up processes in an already stressed system. Participants thought enrolment should be automated as other processes were. But sometimes IT systems were not functioning as they should, causing manual work-arounds to prevent pēpi from 'falling through the cracks'.

Immunisation coordinators (ICs), either contracted by PHOs or Health NZ, play an important role in finding pēpi who are not enrolled/rejected and supporting practices, yet

---

[B] A non-regulated healthcare provider who supports engagement with whānau and holistic wellbeing.[21]

**Box 1.** Participants' opinions of accessibility barriers to primary care enrolment.

**Systems**

Funding

- Lack of funding for broader support for patients, such as walk-in options and intensive wrap around support

Enrolment procedures

- Pre-enrolment issues and knock-on effects on vaccination prompts
- Complex paperwork (compounded if literacy issues are present)

**Healthcare providers/clinics**

Blocks to enrolment at a practice

- Staff requesting a birth certificate (cost of $33[22]), incorrectly thinking this is required as proof of eligibility
- Closed books – GP practices are no longer accepting enrolments

Availability and access

- Requirement to book appointments for vaccination and lack of appointment availability
- Lack of convenient appointment times (ie only within business hours)
- Outstanding debt at practices means whānau cannot access appointments

**Direct barriers for individuals and whanau**

Lack of information provided

- Whānau not knowing services for pre-enrolled or enrolled pēpi are free of charge
- Parent unaware they have become unenrolled due to not visiting practice for more than 3 years

Attendance difficulties

- Transport issues or multiple children under care make attending services difficult

Complex needs

- Engagement with general practice low on the list of whānau priorities

**Box 2.** Participants' opinions of barriers to enrolment processes in primary care.

**Processes in practices**

Inherent complexity and widespread misunderstanding

- Process is time consuming, and not everyone working in primary health care understands the process of newborn nomination, pre-enrolment in the practice management system, eligibility check, and full enrolment
- Difficult to find information needed to complete enrolment or contact whānau

Lack of standardisation in the sector

- Inconsistencies in roles and responsibilities of immunisation coordinators

**Skill shortages**

Stretched services

- Staff shortages result in increased referrals to outreach immunisation services, increasing workload

Need for skilled administrators

- Skill shortages in vital receptionist -administrators and vaccine coordinator roles can result in mistakes
- Front-line health workers required to undertake administrative tasks, taking away from performing clinical duties

there were inconsistencies in roles and responsibilities across regions and between providers. In some locations, PHOs had dedicated IC roles to help contact difficult-to-find patients and update recalls in systems, but now those roles no longer exist, leaving practices without this support.

## The need to prioritise communication and engagement

> We are all whole parts of the picture but none of us hold the whole thing and we are hopeless at sharing that

> information. And interestingly, often our clients expect us to share that information. (P12)

There are gaps in communications within the healthcare sector, where the sharing of information would greatly help the enrolment process. Practices need to have a relationship with antenatal carers, including midwives, and have wider support from the PHO. There is also inadequate communication between healthcare providers and whānau that impacts enrolment and engagement with whānau, particularly whānau Māori. These issues are summarised in Box 3. See Supplementary material S2 for supporting quotes and potential solutions identified by participants. Lack of effective nomination processes and communication within the health sector has been further described, with potential outcomes, in Supplementary material S3.

Administrative processes could be time-consuming and required a large amount of oversight by practice staff: nurse practitioners, administrators, GPs, or receptionists, depending on who was responsible to undertake this task. Sometimes, practices could not find whānau contact details and required external support to find this information, resulting in missing timely enrolments and immunisations. Smaller practices with closer ties to the community could more readily link up information about whānau (eg those with different surnames to pēpi), but this was considered more difficult in larger urban areas. Also, if whānau have become unenrolled in smaller communities, administrative staff could still make the whānau connection and not reject nominations.

For pēpi born at home (4% in 2024[23]), transfer of care paperwork may come by post to the practice, and some participants reported only learning of home birth from mothers when pēpi were 3–4 weeks old. The importance of midwives being involved in improving these processes was identified, although it was also acknowledged that midwives were a stretched, time-poor workforce.

> I would have thought that midwife would be the key. [But I] don't want to dump more on a vulnerable workforce, but they've got that relationship with those mothers before birth. They will be the ideal one to get everything set up and … get [māmā] enrolled well before birth. (P12)

Early and effective communication with whānau about enrolment in general practice was seen as a priority. Inadequate communication was thought to cause ongoing problems, preventing early engagement and immunisation of pēpi and delaying early identification of whānau who may require access to additional OIS. Practices with established relationships with

**Box 3.** Participants' opinions of problems with communication within the healthcare sector and engagement with whanau.

**Fragmented communication within the health sector**

Errors in notifications

- Notifications may contain inaccurate or not enough information

Lack of information sharing

- Lack of communication between midwifery care and general practice (general practice may not know their patients are pregnant until they receive the notification after pēpi is born)
- Information systems do not share digital information between organisations (eg hospital systems share information with primary care), such as social information (eg next of kin address or phone number, eligibility for free public health services)

Lack of system interoperability

- Different patient management systems used across the health sector meant a lack of interoperability

**Ineffective engagement with whānau**

Poor communication

- Whānau are unaware of the need for enrolment and the need for completion of pēpi enrolment forms by 3 months of age
- Whānau may be unaware that immunisations are important

Variable efforts to reach whānau

- Whānau may be unaware that immunisations are important
- Practices varied in their persistence and ways of reaching out to whānau before notifying outreach services

**Negative perceptions impact engagement**

The impact of the COVID-19 pandemic response in NZ has had a long-lasting impact on immunisation services and patient engagement

- Parents have grown distrustful of medicines and the healthcare system
- Disengagement from primary care
- A decline in parents accepting pēpi vaccinations and 6-week health checks

whānau may find communication and engagement easier, particularly in smaller rural communities where practice staff know the community and can discuss outstanding enrolments opportunistically when whānau visit the practice.

Practices have different ways to reach out to māmā, including calling, texting, emailing, and mailing. Although some consistency in how it was approached would help, many people acknowledged that different communities may also need different ways to be contacted to suit their needs. There was support for adapting the way services are funded to help support practices that need to work hard to engage whānau to get pēpi vaccinated.

> What you'd really want is a way to keep as many people as you like on your books, and you just get funded per time to see those patients or the amount of work that you put into trying to contact them and get in touch with them and the services you provide to them [instead of capitation funding]. (P16)

## Services must be built on cultural safety and trust

> You come to us and you fit into our processes and our systems is essentially how it works. (P3)

Building services on cultural safety and trust has close ties with the previous category's focus on effective engagement and communication. Conventional services were described as inflexible and should instead be built on whānau needs. Participants identified many issues with current services and suggested approaches to creating more supportive environments, which are summarised in Box 4. See Supplementary Material S2 for supporting quotes and potential solutions identified by participants.

Primary health care needs to facilitate a welcoming environment to encourage engagement. For Māori, the concepts of whanaungatanga (building relationships) and manaakitanga (hospitality, respect, and reciprocity) are important when trying to engage and make them feel welcome into services. A number of participants worked for Māori healthcare providers who recognised the importance of whanaungatanga when carrying out their responsibilities.

> Make that first contact really about the whole 'congratulations!', the warm, fuzzy stuff … arrange a time that suits them in their home then rock around for that first appointment and try and make that as engaging as you can. (P12)

Previous experiences of poor service provision and a lack of continuity of care limit the ability to build trust with healthcare providers. This impacts engagement and the ability of healthcare services to support whānau needs. One participant also identified that racism impacts whānau enrolment, sharing that providers can stereotype whānau and purposively 'selected out the ones who are difficult' (P2) so the provider can meet health targets.

> I think honestly, racism is the number one [problem with enrolment]. Racism and bias. (P2)

**Box 4.** Participants' opinions of issues with service provision.

**General practice perceived as unwelcoming**

Unfriendly environment
- The staff at general practices can have a huge impact on peoples's perception of feeling welcomed. If whānau had a negative experience at a practice, they are less willing to engage with future services for themselves or their pēpi
- Whānau who owe money to practice may not be treated respectfully
- Whānau may not want to bring a healthy pēpi to a place where there is illness present

Relationships not being developed
- Not always a priority to build relationships to establish trust and increase engagement

Lack of continuity of care
- Lack of continuity of care, meaning people do not build trusting relationships
- Services may not address whānau needs

**Ongoing effects of colonisation and lack of cultural safety**

Workforce not reflective of communities
- The healthcare environment could be affected by the cultural backgrounds of those working within it

Distrust of healthcare services
- Māori have experiences of poor service provision, which prevents them from engaging in health care

Institutional Racism
- Health targets may result in vulnerable whānau being allowed to fall through the cracks and/or experience bias in healthcare services

Participants identified that the need for adequate training in Te Tiriti o Waitangi (the Treaty of Waitangi) and 'people skills' was needed for all staff, including administration and reception staff, to support the creation of a welcoming environment.

Some providers, particularly Iwi providers, provide extra support to whānau and use Kaupapa Māori approaches, such as providing services that look at whānau as a unit rather than an individual, providing additional support to enrol with the practice and access services, and making in-home services available for whānau who could not manage practice visits.

## Discussion

Successful early enrolment with general practices strongly predicts timely immunisation uptake.[10] This qualitative study identified that the health system is facing many challenges in effectively engaging whānau to enrol their pēpi. These challenges are widespread, from poor communication and lack of data sharing to complexity in enrolment services, persistent barriers in accessibility, and unwelcoming health services.

Deficiencies in information sharing between secondary and primary care have long been documented,[24] yet issues persist in the NZ health system. Lack of interoperability has been a source of frustration for healthcare providers for many years.[25] Participants highlighted unnecessary complexity in the system, which relies on manual information gathering and lacks automatic information sharing. Inefficiencies with duplication of work and manual data entry,[25] and a need for a national enrolment system that allows for automatic enrolment,[10] have previously been highlighted. Failure to adequately transfer health information can cause concern about delays in care, perceived lack of care for patient wellbeing, and concern about inaccurate information.[24]

Inequitable immunisation rates have serious health implications, with Māori and Pacific infants more likely to experience vaccine-preventable diseases.[10] This inequity in health outcomes for Māori and Pacific whānau has been recognised for decades[26] and is a direct result of the ongoing effects of colonisation and institutional racism.[27] The interpersonal and institutional racism Māori experience directly impacts their health.[28] In our study, the effects of racism on enrolment and immunisation services were acknowledged by many participants. Echoing previous calls, participants emphasised the need for a strong Māori and Pacific health workforce to support culturally affirmative service provision.[27] In recent times, there has been an increase in Māori and Pacific service providers, yet there is still unmet need.[29] Participants, particularly those working in Māori health providers, spoke of whānau-centred services their practice delivered and the closeness with the communities they serve, which support relationship building and delivery of services. However, participants also reported factors, including perverse incentives created by targets, that might lead practices to let enrolment lapse or to unenrol pēpi, leaving whānau unenrolled, or overburdening other practices providing care to communities in greatest need.[3]

Participants identified adverse outcomes caused by COVID-19 lockdowns and vaccine mandates, including vaccination hesitancy and mistrust of healthcare providers. However, pre-pandemic there were already signals of decreased confidence in immunisation over time in NZ.[16,30] Positive experiences with the health system, such as early relationship-building exercises and community-based approaches, can build trust in immunisation services.[31] Participants identified many ways that engagement can be effectively achieved, such as building relationships and improving communication with whānau. However, good communication requires established trust and good interpersonal skills.[24] Māori health provider staff in our study discussed their philosophy of whanaungatanga, where they work to first build relationships with patients, and then engagement comes naturally after that process. Building whanaungatanga into vaccine delivery helps whānau feel that they are in a comfortable and safe environment.[32] In practice, establishing whanaungatanga has been successful in a variety of different immunisation applications, such as a Māori-led HPV vaccination campaign amongst rural male Māori[33] and community-led COVID-19 responses.[34]

Barriers to engagement and accessibility of services continue to be a problem,[35] particularly for Māori.[36] Workforce shortages across the health sector hinder appointment availability and enrolment with general practices.[37,38] These workforce shortages in NZ directly cause 'closed books' where general practices are no longer accepting new enrolments into their services.[38] This means whānau may be unable to choose practices they would like to attend or that are most accessible to them.

Participants identified the usefulness of outreach services in overcoming barriers in immunisation service access as an adjunct to effective general practice engagement. Outreach services providing proactive immunisation services could help counter the disparities in immunisation coverage.[10] However, these services are expensive and usually only vaccine-delivery focused, so not as ideal as effective early engagement. Strengthening primary care to perform effective, accessible service delivery, including home visiting, is a more ideal long-term sustainable option.

## Strengths and limitations

Like other qualitative studies, this study had a small sample size.[39] However, our study purposively sampled Māori participants and those working in areas of high Māori enrolment to understand their unique insights into enrolment and engagement with healthcare services. Moreover, to gain diverse perspectives, we included practitioners from across the country and a range of disciplines, from point-of-care services to health policymakers.

The questionnaire largely focused on questions relating to general practice enrolment. Even though immunisation was also discussed, if this had been more explicitly included in the questionnaire, then different data may have been generated. Furthermore, solutions were identified by those working within the health system. Perceived barriers and proposed solutions may be different for those who are accessing services/those that the services are designed to be delivered to.

## Conclusion

In NZ, pēpi are missing out on enrolment because of poorly designed systems, limited resourcing, and inconsistent approaches. Many barriers to enrolment persist, such as a lack of practices accepting new patients and institutional racism. Several initiatives could improve enrolment and engagement with primary care, such as starting the process before pēpi is born, building integrated and automated systems to reduce administrative and whānau burden, and fostering a whānau-centred welcoming environment.

## Supplementary material

Supplementary material can be accessed from the article page online.

## References

1 Te Kāwanatanga o Aotearoa New Zealand Government. Free health checks for children under 14. Wellington, New Zealand; 2025. Available at https://www.govt.nz/browse/health/free-health-services-for-children/free-health-checks-for-children-under-14/

2 Ministry of Health. Enrolment with a general practice and primary health organisation. Wellington, New Zealand: New Zealand Government; 2022. Available at https://www.healthnz.govt.nz/about-us/health-data/data-sets-and-collections/primary-care-data-and-statistics/enrolment-with-a-general-practice-and-primary-health-organisation [updated March 2026].

3 Irurzun-Lopez M, Jeffreys M, Cumming J. The enrolment gap: who is not enrolling with primary health organizations in Aotearoa New Zealand and what are the implications? An exploration of 2015–2019 administrative data. *Int J Equity Health* 2021; 20(1): 93. doi:10.1186/s12939-021-01423-4

4 Te Whatu Ora | Health New Zealand. 6-week Immunisation Events Summary Dashboard. Wellington, New Zealand: Ministry of Health; 2026.

5 Howe A, Best E, Hobbs M. NZ children face a 'perfect storm' of dangerous diseases as immunisation rates fall. Wellington, New Zealand: The Conversation Media Group Ltd; 2022. Available at https://theconversation.com/nz-children-face-a-perfect-storm-of-dangerous-diseases-as-immunisation-rates-fall-188157 [18 October 2022].

6 Health New Zealand | Te Whatu Ora. 1A-Q4-2425-Quarterly-Childhood-Imms-Coverage-by-age-district-region-dep-and-PR-eth-redacted.xlsx. Wellington, New Zealand: Te Kāwanatanga o Aotearoa New Zealand Government; 2025.

7 Somerville RL, Grant CC, Grimwood K, *et al.* Infants hospitalised with pertussis: Estimating the true disease burden. *J Paediatr Child Health* 2007; 43(9): 617–22. doi:10.1111/j.1440-1754.2007.01154.x

8 Rachel Bol. Predicting risk of vaccine preventable disease in Taranaki 2022. Taranaki, New Zealand: Taranaki District Health Board; 2021.

9 Environmental Science and Research NZ. Measles weekly report Week 39:21–27 September 2019. Wellington, New Zealand: New Zealand Government; 2019.

10 The Immunisation Taskforce. Initial Priorities for the National Immunisation Programme in Aotearoa. Wellington, New Zealand: Health New Zealand | Te Whatu Ora; 2022.

11 Goodyear-Smith F, Grant C, Poole T, *et al.* Early connections: effectiveness of a pre-call intervention to improve immunisation coverage and timeliness. *J Prim Health Care* 2012; 4(3): 189–98.

12 Labonte R, Robertson A. Delivering the Goods, Showing Our Stuff: The Case for a Constructivist Paradigm for Health Promotion Research and Practice. *Health Educ Q* 1996; 23(4): 431–47. doi:10.1177/109019819602300404

13 Cunningham C. A framework for addressing Māori knowledge in research, science and technology. *Pacific Health Dialog* 2000; 7(1): 62–9.

14 Walker S, Eketone A, Gibbs A. An exploration of kaupapa Maori research, its principles, processes and applications. *Int J Soc Res Methodol* 2006; 9(4): 331–44. doi:10.1080/13645570600916049

15 Malterud K, Siersma VD, Guassora AD. Sample Size in Qualitative Interview Studies: Guided by Information Power. *Qual Health Res* 2016; 26(13): 1753–60. doi:10.1177/1049732315617444

16 Charania NA, Tonumaipe'a D, Barbarich-Unasa TW, *et al.* Exploring the impact of the COVID-19 pandemic on perceptions of national scheduled childhood vaccines among Māori and Pacific caregivers, whānau, and healthcare professionals in Aotearoa New Zealand. *Hum Vaccin Immunother* 2024; 20(1): 2301626. doi:10.1080/21645515.2023.2301626

17 Penney L, McCreanor T, Moewaka Barnes H. New perspectives on heart disease management in Te Tai Tokerau: Maori and health practitioners talk. Auckland: Te Ropu Whariki, Massey University; 2006.

18 Hsieh H-F, Shannon SE. Three Approaches to Qualitative Content Analysis. *Qual Health Res* 2005; 15(9): 1277–88. doi:10.1177/1049732305276687

19 Bradbury-Jones C. Enhancing rigour in qualitative health research: exploring subjectivity through Peshkin's I's. *J Adv Nurs* 2007; 59(3): 290–8. doi:10.1111/j.1365-2648.2007.04306.x

20 Braun V, Clarke V. Successful qualitative research: A practical guide for beginners. Sage; 2013.

21 New Zealand Government. Order a birth certificate. Wellington, New Zealand: New Zealand Government; 2025. Available at https://www.govt.nz/browse/passports-citizenship-and-identity/proving-and-protecting-your-identity/order-a-birth-certificate/

22 Te Whatu Ora | Health New Zealand. Kaiāwhina Plan. 2026. Available at https://kaiawhinaplan.org.nz

23 Health New Zealand | Te Whatu Ora. Report on maternity web tool. Wellington, New Zealand: New Zealand Government; 2024. Available at https://www.tewhatuora.govt.nz/for-health-professionals/data-and-statistics/maternity/report-on-maternity-web-tool

24 Sampson R, Cooper J, Barbour R, *et al.* Patients' perspectives on the medical primary–secondary care interface: systematic review and synthesis of qualitative research. *BMJ Open* 2015; 5(10): e008708. doi:10.1136/bmjopen-2015-008708

25 Lovelock K, Martin G, Gauld R, *et al.* Better, Sooner, More Convenient? The reality of pursuing greater integration between primary and secondary healthcare providers in New Zealand. *SAGE Open Med* 2017; 5: 2050312117701052. doi:10.1177/2050312117701052

26 Pomare E, Keefe-Ormsby V, Ormsby C, *et al.* Hauora: Maori standards of health III: a study of the years 1970-1991. Te Rōpū Rangahau Hauora a Eru Pōmare/Eru Pōmare Māori Health Research Centre. 1995.

27 Waitangi Tribunal. Hauora Report on Stage One of the Health Services and Outcomes Kaupapa Inquiry. Wai 2575. Lower Hutt, New Zealand: Ministry of Justice; 2019.

28 Harris R, Tobias M, Jeffreys M, *et al.* Effects of self-reported racial discrimination and deprivation on Māori health and inequalities in New Zealand: cross-sectional study. *Lancet* 2006; 367(9527): 2005–9.

29 Sheridan N, Love T, Kenealy T, *et al.* Is there equity of patient health outcomes across models of general practice in Aotearoa New Zealand? A national cross-sectional study. *Int J Equity Health* 2023; 22(1): 79. doi:10.1186/s12939-023-01893-8

30 Lee C, Sibley CG. Attitudes toward vaccinations are becoming more polarized in New Zealand: Findings from a longitudinal survey.

*EClinicalMedicine* 2020; 23: 100387. doi:10.1016/j.eclinm.2020.100387

31 Ozawa S, Paina L, Qiu M. Exploring pathways for building trust in vaccination and strengthening health system resilience. *BMC Health Serv Res* 2016; 16(7): 639. doi:10.1186/s12913-016-1867-7

32 Sinclair O, Russell J, de Lore D, *et al.* The urgent need for an equitable COVID-19 paediatric vaccine roll-out to protect tamariki Māori. *N Z Med J* 2021; 134(1547): 8–15.

33 McLelland H, Hindmarsh JH, Akroyd S. Effective HPV vaccination with Māori male students: Evaluation of a Kaupapa Māori primary health care initiative. *Nurs Prax Aotearoa N Z* 2021; 37(2): 45–52. doi:10.36951/27034542.2021.023

34 Russell L, Levy M, Barnao E, *et al.* Enacting Mana Māori Motuhake during COVID-19 in Aotearoa (New Zealand): "We Weren't Waiting to Be Told What to Do". *Int J Environ Res Public Health* 2023; 20(8): 5581. doi:10.3390/ijerph20085581

35 Lee CH, Sibley CG. Demographic and psychological correlates of satisfaction with healthcare access in New Zealand. *N Z Med J* 2017; 130(1459): 11–24.

36 Jeffreys M, Ellison-Loschmann L, Irurzun-Lopez M, *et al.* on behalf of the Primary Health Care Programme Grant T. Financial barriers to primary health care in Aotearoa New Zealand. *Fam Pract* 2024; 41(6): 995–1001. doi:10.1093/fampra/cmad096

37 Hitchon E, Eggleston K, Mulder R, *et al.* The Aotearoa New Zealand doctor shortage: current context and strategies for retention. *N Z Med J* 2024; 137(1592): 9–13. doi:10.26635/6965.6553

38 Mohan N, Irurzun-Lopez M, Pledger M, *et al.* Addressing closed and limited enrolments in general practices in Aotearoa New Zealand: a mixedmethods study. *N Z Med J* 2024; 137(1599): 55–64. doi:10.26635/6965.6517

39 Boddy CR. Sample size for qualitative research. *Qual Mark Res* 2016; 19(4): 426–32. doi:10.1108/QMR-06-2016-0053

**Data availability.** The data that support this study cannot be publicly shared due to ethical or privacy reasons and may be shared upon reasonable request to the corresponding author if appropriate.

**Conflicts of interest.** The authors declare no conflicts of interest.

**Declaration of funding.** This research was funded by a grant from Cure kids (Ref 3625).

**Acknowledgements.** Thank you to Cure kids (Ref 3625) for funding this research project. The study team acknowledge the participants and thank them for their contributions towards this project. We also thank Ngāti Porou Oranga, Immunisation Advisory Centre (IMAC), Tūranga Health, and the National Hauora coalition for supporting recruitment for this project.

**Author affiliations**

[A]He Rau Kawakawa | School of Pharmacy, University of Otago | Ōtākou Whakaihu Waka, Adams Building, 18 Frederick Street, PO Box 56, Dunedin 9054, New Zealand.

[B]Prevention Immunisation, National Public Health Service, Te Whatu Ora | Health New Zealand, Manukau City Centre, Auckland 2103, New Zealand.

[C]Department of Paediatrics: Child and Youth Health, School of Medicine, University of Auckland, Auckland, New Zealand.

[D]Hāpai te Hauora Tapui Ltd, 6/8 Pioneer Street, Henderson, Auckland 0612, New Zealand.

[E]Department of General Practice and Primary Health Care, School of Population Health, University of Auckland, 22-30 Park Avenue, Grafton Campus, Auckland 1023, New Zealand.

[F]Department of Public Health, School of Community and Public Health, Auckland University of Technology, 90 Akoranga Drive, Northcote, Auckland 0627, New Zealand.