Attachment 1

IMMUNISATION OF TAMARIKI 0-4 YEARS IN THE NORTHERN REGION: REVIEW JULY 2021

Immunisation Working Group

Contents

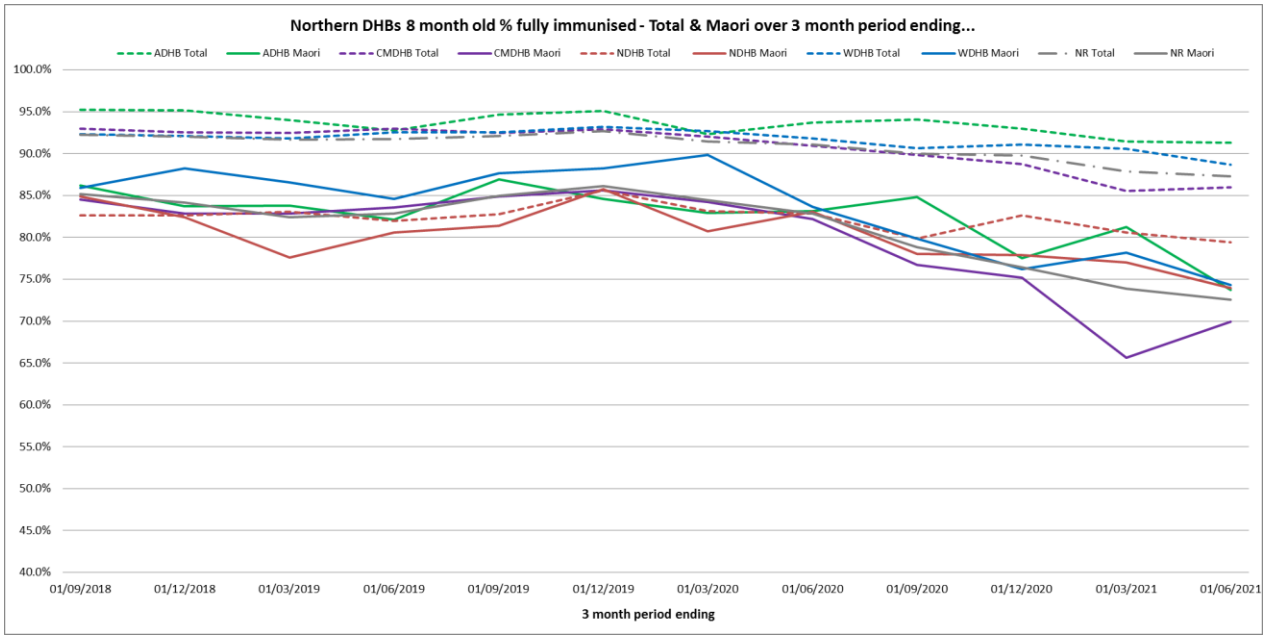
Immunisation of Tamariki 0-4 years in the Northern Region: Review July 2021

Executive Summary

In April 2021 the Northern Region Child Health Steering Group (CHSG) requested the development of a working group to formulate an urgent report for delivery in early August 2021. This was in response to regional data highlighting plummeting immunisation rates and growing inequities of immunisation coverage for tamariki across the Northern Region.

The review undertook to understand the state of regional childhood immunisation programmes including within the innovation space and to provide a series of recommendations. A sense of urgency and a requirement for a 'call to action' prompted the shortened time frame.

The table below provides 3-month trend data utilising the Ministry of Health 8-month milestone report since 2018. This highlights the continued decline in immunisation rates for tamariki Māori in the Northern Region. This significant downward trend shows that coverage has fallen below 80 % in most districts. This is below the rate required to prevent outbreaks of VPD (vaccine preventable diseases) and is well below the national target of 95%.



This equity gap for tamariki Māori in the Northern Region was increasing prior to the onset of the COVID-19 pandemic. COVID-19 has had a significant impact on childhood immunisations both within New Zealand and internationally. Additionally, providers point to factors around the introduction of the 12-month MMR vaccine as also attributing to the reported reduction in immunisation rates.

Significant current risk exists from the very low immunisation rates within our population. The current border closures are keeping most VPD out of the population. However, experience tells us that without a population health strategy we will be faced with future VPD lethal outbreaks within clusters. This will invariably inequitably impact Māori and Pacific children and their communities.

Structural barriers and ongoing program failures within the health system continue to perpetuate inequity for tamariki Māori in relation to immunisation. This requires an urgent and targeted response across all of the health system to fulfil Te Tiriti o Waitangi obligations.

The Northern Region must also deliberately target equity of outcomes for Pacific children.

Establishment of a Northern Regional Working Group

Membership of the working group was inclusive of the four districts within the Northern Region. The kaupapa (foundational principles) of the mahi required representation from Māori to achieve tino rangatiratanga and partnership in alignment with Whakamaua – Māori Health Action Plan 2020-2025 (Appendix 1).

There was leadership from a range of settings including DHBs, Primary Care and Funding & Planning. Working group members used DHB networks to include a much wider group of informants, limited only by the short time frames. Group participant's names are listed in Appendix 2.

Project Scope

The working group scope included a regional stocktake to describe current state for childhood immunisations. The focus was intentional toward tamariki Māori and their whānau. The working group committed to deliver a report identifying key immediate actions. The working group have confidence that strategies that improve immunisation rates for tamariki Māori will also lift other priority group immunisation rates for other populations.

Strategy

The working group followed the whānau journey to immunisation from pregnancy to the completion of the childhood series until the four year 4 immunisations.

Service delivery and reporting in the first instance requires focus on the successful completion of the 6-week immunisation. The ongoing strategy is to achieve immunisation scheduled events on-time at 6-weeks, 3-months and 5-months of age.

The table on Page 6 provides a summary of key issues and recommendations. Short term actions are focussed on VPD outbreak prevention and redress of growing inequities. Medium term and long-term recommendations are discussed in more detail and provide consideration to inform any future changes in the model of care for the northern region.

Stocktake of current service delivery

A stocktake of current regional immunisation activity was collated. This is represented in a matrix in Appendix 5. This wasn't broad enough to identify all Primary Health Care General Practices that are currently vaccinating.

Key themes from this review

Chronic inequities in immunisation coverage: Long term systemic failures have caused barriers for whānau Māori immunisation services in New Zealand. Covid-19 has stretched health services to capacity creating unpredictable challenges and widened health inequities. Pae Ora Healthy Futures for Māori (Whakamaua), and the health system re-structure provide us with an opportunity for reform.

Systemic racism and bias: Conscious and unconscious bias creates barriers for whānau trusting and accessing primary care and health services. Te Tiriti o Waitangi based leadership is key to ensure any service development is meaningful, culturally safe and sustainable (Jopnoe, 2021).

Referral pathway timeliness: The referral and enrolment to practice processes create gaps in a critical time period for relationship building between whānau and primary care and subsequently successful immunisation. Maternal vaccination provides a protective mechanism and an opportunity to further the conversation, trust and confidence around childhood immunisation and the early relationship with primary care (Wing Cheuk Chan, 2021) (Appendix 3). Immunisation is best considered holistically within the context of whānau needs.

Reporting and IT systems: Current reporting does not meet the needs of teams or enable early support to the immunisation journey. Reporting needs to reflect a proactive approach to immunisation and to allow for reporting of individual vaccination events. This includes the positive reinforcement of maternal immunisations and the protective factors influencing immunisation (Wing Cheuk Chan, 2021). Proactive and real time reporting would increase the timeliness of recalls for vaccination only if it occurs earlier than the current 8-month focus. An IT system with flexibility and improved access could eliminate cost and time consuming practices used to manage the current system. For example, having availability of on-line booking systems for whānau.

Workforce Capacity: Workforce is a limited resource and has been stretched to cover other priorities. Childhood vaccinators need to have protected time and resources to meet the demands of the current situation. Growing workforce capacity and using the semi-skilled workforce emerging from Covid-19 offers an opportunity to support whānau to navigate the health system. A training platform that is Te Tiriti o Waitangi compliant will enhance learning and resources available for staff and whānau.

Language, communication and relationship: Health outcomes are dependent upon a trusting relationship between whānau and health services, and between all health providers. A holistic approach to care that crosses the life span sits well in primary health; for childhood immunisation a well-child context is appropriate. Messaging needs to be consistent, friendly, available at all times and non-biased.

Covid-19: Covid-19 has added an extra layer of complexity impacting on whānau who are protecting their tamariki from potential risk of exposure. The changes in daily practices required for Primary Care to manage population wellbeing reduces the availability for staff to work face to face with whānau impacting on relationship building, trust and opportunities to provide immunisations.

Funding: System funding has siloed immunisation and services. A full review of commissioned services is indicated.

Getting it right from the beginning: Evidence shows that completion of the 6 week vaccination is a reliable indicator that the childhood series will continue to be completed on time (Rumball-Smith, Declining Care: A child's vaccination pathway, 2015). [i]However, it is recognised that a poor experience at this 6-week event can have a lasting impact on engagement with immunisation and the health system in general.

Key short time recommendations requiring immediate action

- Engage all key sector partners and stakeholders in developing a Regional Action Plan to achieve a planned recovery of immunisation rates and re-address inequities.
- Specifically prioritise prevention of VPD outbreaks i.e. Measles and Pertussis. Direct focus toward communities with the lowest vaccination coverage; under 5 year olds and antenatal coverage.
- 'Business as usual' will not have the capacity to address this alone.
- A collective impact approach will be required to increase resourcing to immunise children across the entire health system.
- Endorse the need for strong Māori health leadership.
- Consider a regional Incident Management Team (IMT) approach with associated funding under 'missed planned care'.
- Leverage off increased immunisation workforce before dissolution post COVID response.
- Resource culturally and community responsive communication programmes alongside 'catch up'.
- Continue progress to ensure immunisation systems have flexibility to deliver integrated whānau care with a whole of life course approach.

Primary Care – inclusive of GPs, Pharmacies, WCTO, Māori Providers, Midwives

- Ongoing stocktake and consultation regionally is required within Primary Care General Practice to identify current capacity, the impacts of Covid and enablers they can identify.
- The working group endorses the current MEDINZ messaging:
    - Mandatory acceptance of all new-born referrals by Primary care practices.
    - Primary care to continue to concentrate on the 6-week vaccination event.
    - Primary care to prioritise childhood immunisations and continue to vaccinate throughout all COVID levels.
    - Prioritisation of Māori and Pacific whānau.

Outreach Immunisation

- Ongoing prioritisation of Outreach Immunisation Services (OIS) that includes home visiting options.
- Endorse current and further innovation for well child outreach including immunisation clinics.

Escalation to the MoH with the following additional recommendations:

Immediate requests:

- Integration with a National approach.
- Prioritisation and visibility of antenatal immunisation coverage.
- Temporary suspension of any mandated requirements for enrolment and immunisation e.g. ensure birth certificate is not required for immunisation.
- B enrolments are automatically extended to 6-months to limit potential disenrollment.
- Clarification of which immunisations can be co-administered with COVID (relevance to School Based Health Services).
- Data level reporting at 2-years is misleading. Reporting for childhood immunisations needs to occur at real time and at all milestones; especially at 6-weeks to influence proactive, successful immunisation.

Longer term:

- Current systems for data and reporting are no longer fit for use. Any planning for a new NIR must include additional functionality to improve communication and accessibility of immunisation events and system responsiveness.

Table of Recommendations for Immunisation System Change:

Responsibility for actions outlined are yet to be determined.

Areas of where responsibility may currently sit are depicted by the following code:

Green = Ministry of Health
Red = Regional
Orange = Primary Care
Blue = DHB's
Yellow = IMAC

Table 1:	Real Time Data and digital Enablement	Language	Communications Media	Structural Enablement	Integrated Whānau Care (Imms +)	Workforce	Funding	Intersectoral Working
Immediate – 0-3 months	Increase Qlik responsiveness and timeliness of reporting	Develop strengths based Primary Care consistent whānau contact messaging e.g. Text precalls, recalls, letters etc.	Communication (MEDINZ) to Primary Care to accept all new-born Baby Nominations	Removal of all barriers to enrolment through relaxation of eligibility e.g. - no birth certificate required to be immunised	Community engagement to identify groups requiring proactive community supported immunisation	- Prioritise skilled child health workforce for vaccination with alternatives for Covid response	A resourced catch-up programme for 0-4 years	Involve all key sector partners and stakeholders in developing a regional action plan
	Identify susceptible population. NHI level epi data on current immunisation coverage 0-4 year identify geographical areas for urgent attention. Identify N 0\1\2\ MMR.	Develop Regional Best Practice documents ensuring they are strengths based and Te Tiriti responsive.	Te Tiriti responsive and Te Reo accessible media campaign 0-4 year immunisation.	Extend B enrolments to 6 months	Proactive Integrated whānau care programme (OIS)	Strengthen opportunistic hospital and outpatient immunisations.	Payment of birth certificates IN priority populations	Identify sectors that work with priority populations. Opportunities for MoU (or similar) and supportive immunisation (e.g. Housing initiatives including access to integrated whānau care)
	Review of data system across the region to establish a clear plan of work	Identify key champions with Primary Care and Midwifery teams for relationship building	DHB sharing of communications and media practices across the region to ensure consistent messaging.	Prioritisation of integrated whānau care for Māori and Pasifika populations	Establish the who, how and when for the work programme	Gain clarity of the distribution of the current vaccination workforce. Potential opportunities to integrate immunisation activity differently	Review of capitation and funding of vaccinations to be in line with Covid-19	
	Tidy up connected health information services; including NES and NIR	Recommendations to IMAC to review responsiveness of website and resources to Te Tiriti o Waitangi	Update personal details at every opportunity across services. Flexible delivery aims to provide vaccinations at every available opportunity.	Relationship building with key stakeholders; Midwifery college, midwives, Pharmacy, MSD		Identify training pathways for future workforce. Consider options for Integrated Whānau Care (e.g. unregulated Kaimahi trained for Covid vaccination)	Avoid short term narrow focus contracts and move towards commissioning of holistic models of care (Imms +)	
			Work with midwives/midwifery college to ensure the correct GP for baby is identified at birth to ensure nomination goes to the correct practice.	For the 3 critical system issues, develop a regionally consistent solution for short term and recommendations for long term re-design				
Medium term 3 months-1 year	NCHIP reporting informs proactive anticipatory approach	Work with midwifery workforce to ensure positive strengths based messaging for immunisation	MOH and Māori Health Board to establish leadership for Imms programme based on Te Tiriti	Develop a plan for systematic process to maintain up to date contact details across all health points (NHIP).	Develop relationship with Māori Health Board and MOH to establish work on foundational documents	Policy/funding preparedness for future workforce - covid kaimahi	Policy/funding preparedness for future workforce - covid kaimahi	Development guidance for positive conversations with whānau about immunisation - see Comms/media
	NCHIP uptake in Counties Manukau	Training the workforce in strengths based enabling language and actions. Awareness therefore to overcome individual and practice level bias.		Standardise a regional pathway of care	Leverage from current work in the region that is performing well	Enablement of care by micro credentialed workforce (policy/funding)	Enablement of care by micro credentialed workforce (policy/funding)	Plan for digital enablement of contact sharing
	Development of a real-time Child Health Indicator monitoring dashboard	Connect with MOH and Māori Health Board for guidance with leadership			Develop regional strategy around delivery and capacity building	Development of workforce cultural competency with framework and resources	Review of across sector funding of immunisations in line with the vaccinating workforce identified e.g. Pharmacy	
	Review recommendations from Covid-19 experience							
Long term > 1 year		Have a structure in place that is working in Te Tiriti for workforce development, training, resourcing						

Immunisation Programme Delivery Nationally

The national immunisation system was last reviewed in 2016. Since that time health teams have continued to work hard to lift immunisation rates and connection with services for Māori (MOH, 2016). Despite intent, and occasional instances of achieving equity for Māori, rates of immunisation for Māori are continuing to drop. There is a long-standing history of a system that underperforms and continues to fail Māori. Consistent regional services operating under national oversight would provide transparency of care and service delivery.

A well-functioning immunisation program is a cornerstone of population health. The rate of pneumococcal infection associated with RSV is rising and adults may be at risk from under vaccinated children. There is a high risk of child mortality secondary to cluster outbreaks of VPD. The situation has been compounded by the Covid-19 outbreak for both New Zealand and our Pasifika neighbours.

Business as usual is not enough to remedy or impact the current situation. Immediate and intentional disruption of the current childhood immunisation programme is required to have any impact on tamariki wellbeing. Strategic change across the Northern region that is intentional and culturally responsive will need to specifically prioritise immunisation for the 0-4-year-old population.

Consistent throughout the themes was the notion that the additional MMR vaccination resulted in a significant increase in workload in an already under resourced workforce. A subsequent 20% reduction in vaccination rates noted by CMDHB (Wing Cheuk Chan, 2021) is thought to reflect capacity issues relating to programme delivery.

The implementation process for change and communication regarding the new MMR event was also described as inadequate. As a result, there has been confusion for the health workforce and whānau.

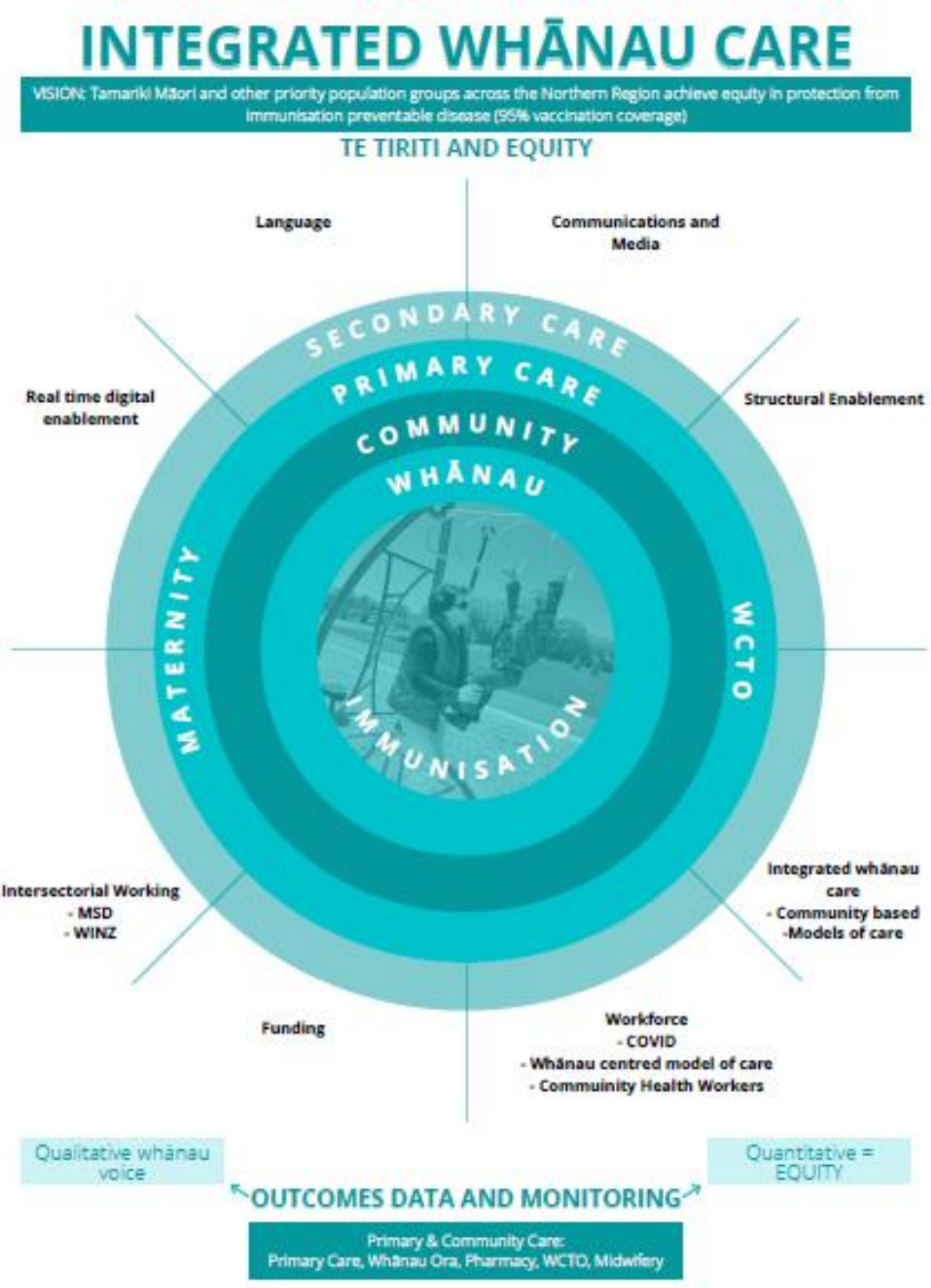
This highlights the need for carefully planned consistent national messaging for Child health immunisations working in partnership with key stakeholders to create a consistent confident approach.

Integrated Whānau Care – Immunisation - A Call to Change

The diagram below provides a model to visualise the factors that influence the whānau journey to reach immunisation. These are discussed further describing the areas of influence where change to the immunisation system is required.

The vision for immunisation provides the aspirational goal to achieve equity in immunisation for tamariki:

> Tamariki Māori and other priority population groups across the Northern region achieve equity in protection from immunisation preventable disease (95% vaccination coverage). All whānau will have equal opportunity to successfully immunise tamariki on time.


INTEGRATED WHĀNAU CARE
VISION: Tamariki Māori and other priority population groups across the Northern Region achieve equity in protection from immunisation preventable disease (95% vaccination coverage)
TE TIRITI AND EQUITY
Language
Communications and Media
Real time digital enablement
Structural Enablement
SECONDARY CARE
PRIMARY CARE
COMMUNITY
WHĀNAU
MATERNITY
WCTO
IMMUNISATION
Intersectorial Working
- MSD
- WINZ
Integrated whānau care
- Community based
-Models of care
Funding
Workforce
- COVID
- Whānau centred model of care
- Commuinity Health Workers
Qualitative whānau voice
Quantitative = EQUITY
OUTCOMES DATA AND MONITORING
Primary & Community Care:
Primary Care, Whānau Ora, Pharmacy, WCTO, Midwifery

Overarching principles: Te Tiriti and Equity

Successful immunisation starts with the underpinning principles and the framework of service delivery. The working group propose that all future work for immunisation is underpinned by Whakamaua as the framework to deliver vaccination regionally.

Whakamaua emphasises the significance of Te Tiriti o Waitangi as a foundational document. The text of Te Tiriti, including the preamble and three articles, along with the Ritenga Māori declaration, are the enduring pillars of Whakamaua. (Hon Peeni Henare, Whakamaua-Māori Health Action Plan 2020-2025) (Appendix 2).

The health and disability system is committed to fulfilling the special relationship between Māori and the Crown under Te Tiriti o Waitangi (Te Tiriti). With regard to the text of Te Tiriti and declarations made during its signing – the Ministry of Health (the Ministry), as the kaitiaki and steward of the health and disability system (under article 1 of Te Tiriti), has the responsibility to enable Māori to exercise authority over their health and wellbeing (under article 2) and achieve equitable health outcomes for Māori (under article 3) in ways that enable Māori to live, thrive and flourish as Māori (Ritenga Māori declaration[1]).

The social determinants of health and living in hardship continue to impact community's access to health care. Deprivation is reported to have the most significance on timely immunisations when experienced during the first year of a child's life (Rumball-Smith, Declining Care: A child's vaccination pathway, 2015). Māori are over represented in those living in areas of high social deprivation (50%). Whānau are more likely to immunise their child when services are holistic, close to home with established relationships with the provider (Rumball-Smith, Childhood immunisation in Northland, background paper, 2016). This fits well within a model that has a lifespan approach.

Other population groups may require further exploration to consider specific individual impacting factors, such as rural populations and children with disability or high health needs.

A number of system 'fixes' have been made to the delivery system for immunisation. This has created a cumbersome system that continues to create further structural barriers and increases inequity for Māori.

For the purposes of this report the working group developed themes to describe the structural barriers and identify enablers to successful childhood immunisation.

[1] Ritenga Māori declaration (often commonly referred to as the 'fourth article') was drafted in te reo Māori and read out during discussions with rangatira about Te Tiriti. The Ritenga Māori declaration provides for the protection of both religious freedom and traditional spirituality and knowledge (Te Puni Kokiri 2001).

System Enablers

Real time data and digital enablement

For the last five years Primary Health organisations reporting has focused at 8 months for childhood immunisations. Immunisations are overdue by 4 weeks prior to activating alternative systems and focuses only on the completion of the three immunisation events, rather than each individual event being delivered on time. With the knowledge that the 6-week immunisation event is a strong indicator of successful completion of the early childhood series, reporting the vaccination coverage at 8 months is too late. There is a missed opportunity to aim for timely vaccination to provide maximum protection to infants.

All teams report that the National Immunisation Register (NIR) does not interface with the National Enrolment System (NES). This has the effect of the wrong practice being contacted about overdue immunisation events, which can lead to delays in follow-up processes such as referral to OIS. The NIR requires significant manual re-alignment and clean-up to keep the system up to date as well as significant follow-up of immunisation events that are not messaging to the NIR from practice data. Various approaches are in use to overcome the system issues; however, the system remains reactive rather than proactive. Specific capacity is urgently needed to redesign to a proactive data driven systematic equity based approach.

Some system issues have impacted on the enrolment to PHO e.g. GP clinics access NIR through the Health link platform, messaging issues between NIR/PMS systems and Med Tech Evolution has resulted in inability to process new-born nominations in some clinics.

Joined up data across the system is important for identifying opportunities for system improvement. Currently there is no transparency of service delivery in the region. In addition, the current systems are not able to capture how many children are being referred to OIS by individual practices versus other providers. When an immunisation event is missed early activation of supports from a proactive system is required for successful immunisation to be achieved. There is potential to decrease the burden of managing system issues to free up valuable clinician time. A positively geared system would also be reflected in reporting and messaging to whānau, shifting the narratives to a positive framework.

The Qlik platform is a useful tool to increase the transparency of immunisation coverage through reporting. However, there are system limitations for how the current reporting is used. For example, for this report we were unable to gain specific graphed reporting for the 6-month coverage from MOH. Current reporting is for 8-months coverage and data is loaded up until March 2021 only, a current 5-month gap in reported immunisation data. Whilst reports can be run for 6-month coverage this creates additional data analysis burden. Having a central methodology that is embedded in Qlik would increase data consistency. Having data available that is up to date and has the flexibility to report on all ages and individual immunisation events will increase response time to immunisation success e.g. being able to report on timeliness to 6 week immunisations in real time at a population level, compared to NHI level data being analysed.

A new register for Covid-19 is currently in use and may be a precursor for the new NIR system which has been in the pipeline for a few years now. This is an opportunity to design a positively geared proactive system. This replacement cannot be delayed, too much administrator time is spent undertaking workarounds for a legacy system that has outgrown its capabilities.

Recommendations:

- A full review of the data and information systems to understand the detail of the current systems and work out the priorities of work.
- Resource is identified and funded to redesign the data system that reflects a proactive equity based approach and that is fit for purpose.
- MOH investment includes an immunisation recording system with flexible digital capacity that supports timely analysis of all immunisation events.
- The current systems established in response to Covid-19 are considered and are used where the legacy elements are appropriate.
- The National Enrolment Service and NIR data have a 'tidy up'. Explore what opportunities there are for future management. Identify who is not enrolled and shape a planned approach for the future.
- Future management opportunities of the system are explored.
- Work out what needs to happen for Counties Manukau to be successfully enrolled on NCHIP.
- Explore reporting for use in Primary Care services so that enrolment numbers and care is visible.

Language Korero

The way language is used in communication with whānau, between services and for reporting immunisation impacts all aspects of the immunisation journey (Rumball-Smith, Childhood immunisation in Northland, background paper, 2016). Personal values and beliefs of the health provider toward immunisation are reflected in the way messages are delivered. This can be both positive and negative, depending on the relationship built with the mother, health literacy, resources and support given ((Sinclair, 2021), (Gauld, 2020)). Language and messaging are also likely to impact the maternal response to vaccination and may increase the burden of care experienced by a woman.

Whānau come in to contact with many services that will have influence on the immunisation conversation. Even when a child is not enrolled in a PHO they are likely to have had at least one recorded contact with another health service over the first 6 weeks of life (Wing Cheuk Chan, 2021). This presents many opportunities to reinforce the vaccination message at all service encounters across health in the first instance.

The language and behaviours used during the early journey to enrolment have been described by Māori whānau as racist, discriminating and unfriendly (Gauld, 2020) (Sinclair, 2021). Development of best practice messaging and education is required to support health professionals to overcome personal and practice induced bias/racism so that whānau are welcomed and empowered to confidently immunise. This needs to align with the positive outcomes associated with immunisations to lift community's expectations of service delivery.

The Immunisation Advisory Centre (IMAC) is the lead agency under the MOH contracted to provide the training for vaccinators and immunisation information. There has been inconsistent use of Māori and Pasifika staff employed to work with a cultural lens within IMAC since 2017. Roles which had subsequently been discontinued may be now recreated for the Covid-19 vaccination space. Staff within the Northern Region report a lack of easy to find, culturally appropriate resources. Translated material is available on Health ED via the Health Promotion Agency; although translated material may not necessarily be culturally appropriate. To maintain our commitment to Te Tiriti o Waitangi culturally appropriate training and resources is a high priority to address.

Successful transition for whānau through the health journey and the messaging from all health services is crucial for determining the relationship with Primary Health and the future success of immunisation. Trust and relationship building are a key part of health and wellbeing for Māori. Inconsistent messaging, lack of service co-ordination and communication supports the cycle of mistrust and overburden .

Recommendations:

- Strong relationships across all community and health partnerships to build consistency in messaging language and trust is prioritised. The role of the midwife is pivotal and the links with Primary Care General Practice could be strengthened through collaborative working on the enrolment to practice process.
- A relationship is established with the Māori Health Board to provide leadership to build the framework for immunisation. Consider the Northland DHB work to see what learnings could springboard in to a regional system reframe.
- Training and resources are Te Tiriti o Waitangi compliant.

Communication & Media

Media and communications about childhood immunisations are being targeted throughout the region creatively. There is a need for consistent messaging that is Te Tiriti o Waitangi compliant, with potential strengthening in the Region by sharing resources and feedback from the Hui currently working with community partners.

How immunisation messaging is delivered impacts on Whānau choice and confidence to vaccination (Gauld, 2020). Proactive approaches to immunisations that include holistic and 'fun' aspects e.g. weaving days are also positively influencing Whānau confidence.

The positive outcomes associated with immunisation should be reflected in the messaging used in promotion across the region. Campaigning using high profile sports to ambassador the immunisation message as proactive role models is being warmly received by the public. (Rumball-Smith, Childhood immunisation in Northland, background paper, 2016).

Counties Manukau have commissioned a Kaupapa Māori provider pilot to deliver 'Connect-up' as part of the MMR vaccine catch up for 15-30-year olds. This initiative has a wider whānau focus on immunisation information and support kiosk based in the local mall. Whānau are encouraged by trained whānau support workers to come in and check their vaccination status. Education and vaccination opportunities are supported by the mall Pharmacy's and whānau primary care providers. Whānau report that incomplete messaging acts as a barrier to immunisation. The information about immunisation needs to be full including pros and cons for whānau to make decisions for their tamariki, whānau need to feel that they have been given enough time with their health provider to make an informed decision.

Sharing of information across services and the region would begin to address the need to standardise the messaging and resources around immunisation to bring some consistency and surety for whānau.

Recommendations:

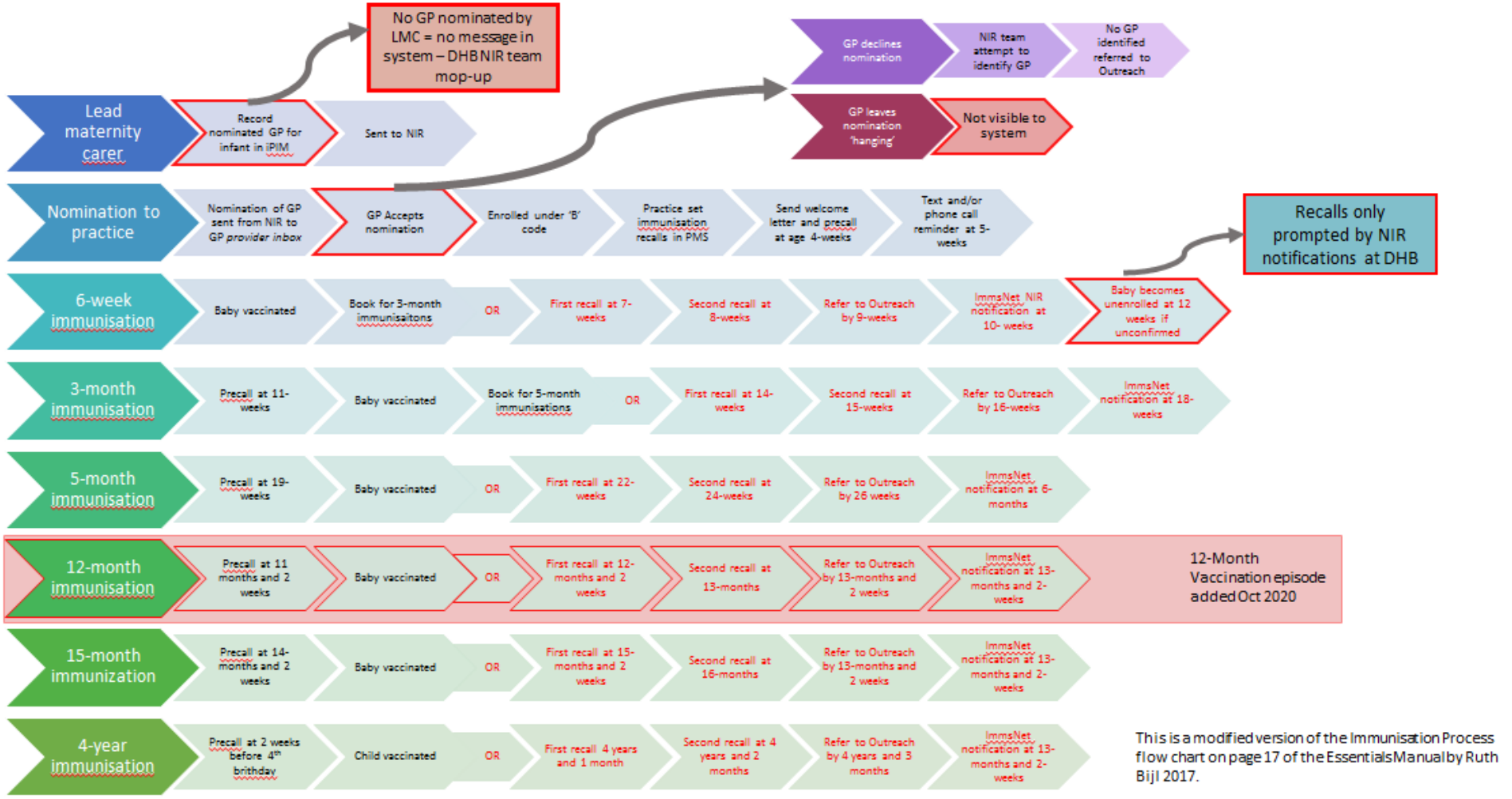
- Immunisation messaging will benefit from a regional approach where resources, campaigning and media are standardised and consistent. All immunisation providers will require access to shared resources.
- Use of a communication team will ensure message transparency.
- Consideration that MOH and the Māori Health board lead central messaging that is Te Tiriti o Waitangi compliant.

Structural Enablement

There are three critical system issues common across the four northern DHB's that create barriers to access to immunisation that disproportionally affect Māori and are outlined in heavy red in the diagram below:

1. GP nomination and referral
2. Referral acceptance at Primary care
3. Primary care B Enrolment successfully converting to full enrolment

Immunisation process flow chart 2021



This is a modified version of the Immunisation Process flow chart on page 17 of the Essentials Manual by Ruth Bijl 2017.

The successful completion of the 6-week immunisation is seen as a reliable indicator of the likelihood whānau will continue the vaccination series on time and to completion.

Primary Care General Practice provide the majority of childhood immunisations in the Northern Region. Outreach immunisation services attempt to vaccinate those who are not immunised in a timely way. Primary Care Data shows that this immunisation system has historically under performed for Māori; (Table 31 (Wing Cheuk Chan, 2021)).

The two significant events impacting 0-4-year-old immunisation since March 2020 are described below:

- The effects of the COVID-19 pandemic lockdowns and changes in care because of infection prevention control measures have led to a significant impact on overall capacity in primary care. Cheuk Chan et al. 2021 report a 20% reduction in total 0-4-year immunisation episodes across the system in Counties Manukau Health domiciled children over the 12-month period ending March 2021.
- An additional childhood vaccination event at 12-months of age added to the national vaccination schedule in October 2020. This has increased total vaccination episodes from five to six in the 0-4-year-old cohort increasing the burden of activity in the system by 20%. As a result, a concerted effort is now required to avoid falling further behind in immunisation in the current scheduled period.

This has increased the number of events Primary Care provide, and reduced the time available for staff to undertake recall and follow-up of the original immunisation events. This also includes reduced time to respond to information requests from the NIR teams required to keep the data on the NIR accurate.

Early and continuous enrolment in Primary Care is a strong predictor of improved immunisation outcomes (Grant et al 2010 BMJ). Enrolment to Primary Care prior to 6 weeks of age, with no subsequent enrolment gap, is a protective factor in support of childhood immunisation. Being a part of a Primary Care Practice population enables recalls and reminders for immunisation events. (Wing Cheuk Chan, 2021). The systems in use to support enrolment from the time of birth are creating barriers to successful enrolment and increasing the potential for gaps in the referral and reporting systems. Provisional enrolment created at the time of birth (via NIR nominated provider messaging) provides initial funding for the child. However, this expires after 12 weeks if the enrolment is not converted to full enrolment. Anecdotal evidence reports that practices do not undertake recalls for 'casual' patients. New-born babies become 'casual' if their pre-enrolment is not converted to full active capitation enrolment.

There are several barriers to primary care enrolment. Primary Care Practices are sometimes reluctant to accept new-born nominations if they do not know the mother. If a woman does not have a high need for primary care prior to having their baby, there is an increased likelihood of non-acceptance of the new-born enrolment. Some Primary Care Practices have closed books to accepting any new patients due to capacity issues.

There have been some regional responses to try and improve enrolment rates. For example, NDHB has focused on improving enrolment to GP Practice through mandatory acceptance of all new-born notifications to Primary Care referrals, even when the mother is not a current patient. This has shifted enrolment from 49% in May of this year to 72% at the beginning of July. Likely fluctuations are expected. However, the positive and quick increase in enrolment numbers is an early indication of success. All services are engaged in regular reporting and multi-service review meetings to signal data discrepancies and areas of issues for early action.

It is important to remove all barriers and foster the early relationship Māori whānau experience with Primary Health to prevent enrolment gaps and dis-enrolment. (Wing Cheuk Chan, 2021). One barrier to converting pre-enrolment to full primary care enrolment is the requirement for birth certificates as proof of eligibility for funded healthcare. At a cost of $33, this is prohibitive for many of high needs families.

There is variability in primary care and practice level response to the new-born notification referral and subsequent engagement with whānau. Some practices have taken a proactive approach and use dedicated staff to maintain reporting and acceptance of new-born referrals. Within Auckland and Waitematā DHBs, funded Immunisation Co-ordinators within larger practices support smaller practices and other non-primary care providers. They have been pivotal in supporting Primary Care Practices with their immunisation practices, follow-up of new born enrolment and overdue immunisations. Our current IT systems make this process labour intensive.

Standardising pathways of whānau centred care delivered from the first new-baby notification offers the best opportunity to improve immunisation in Primary Care. Best Practice Manuals have been in circulation since 2010 across Auckland and Waitematā DHBs. These resources have also been shared within the wider Northern Region. There is good evidence that standardising best practice at the early transition points results in sustained improved outcomes. This includes; correct identification of GP, acceptance of GP nomination from new-born referral, and intentional, proactive early engagement. Achieving both primary care full enrolment and on-time 6-week immunisation are the best measures of improvement.

Intentional and proactive engagement with whānau Māori at the community level provides a flexible approach to care (Sinclair, 2021). Immunisation Coordinators and Community Health Assistants that mobilise around whānau and offer home visiting options have reported success along with use of mobile units in some cases (Papakura Marae). Health West has used a pop up unit at Hoani Waititi Marae in response to a community request for an increased presence of the health team on site. This is staffed by two nurses, a GP and administration support to provide a holistic service for the whole whānau including vaccination education and opportunistic events. Co-ordinated activity is considered to be easier if care is PHO led or where the practice is larger and robust management systems are in place. (Sinclair, 2021).

Recommendations:

- Immediate action is required to remove all barriers to immunisation so that whānau can be immunised more flexibly across the health care continuum. Temporary relaxation of the enrolment criteria requiring a birth certificate for capitation to be received by Primary Care before being able to provide new-born vaccination.
- Review of eligibility criteria and recommend that there is no charge for birth certificates.
- That ‘B’ funded enrolments are extended to six months to prevent unnecessary disenrollment from Primary Care and ensure continued recall for immunisation.
- Relationship building and communication is prioritised with Midwifery services to positively influence the nomination and referral flow to Primary Care.
- Standardise regional pathways of care.
- MOH reporting via Qlik increases its ability to provide more sensitive reporting of individual vaccination events and to have a central control of the methodology applied to the data.

Workforce

The pivotal New Zealand Immunisation Determinants study found that immunisation coverage is associated with practice staffing and shortages, independently of socio-economic factors (P=0.004). (Cameron C Grant 2. H.-H.-S., 2018) (Cameron C Grant N. M., 2010).

The workforce delivering childhood immunisations has not been possible to clearly identify or quantify. There are multiple contracts and providers with no current reporting available. Though there are published guidelines that support service delivery, practice varies between individual providers.

It is widely reported that the workforce has been re-directed to Covid-19 swabbing and the new 12-month immunisation event as a priority. This has impacted on the availability of the vaccination workforce. Covid-19 vaccination urgency has driven the development of a new unregulated, micro-credentialed vaccination support workforce, many of whom are Māori or Pasifika. There is an unprecedented opportunity to create new pathways of career development for this newly introduced workforce to support roles in healthcare.

Conversely all services agree that it takes special skill to vaccinate a child well. The current workforce of specialist nurses is a relatively small number. They are a limited resource which needs to be strengthened both in numbers and quality of service delivered. Practitioner skill includes working with bicultural understanding and a commitment to education and holistic care, specifically targeted to care of whānau. This is different to service provided for adult population vaccination.

Most immunisation events occur in Primary Care who are reporting loss of the nursing workforce in many practices. The usual pipeline of international recruits has been suspended and anecdotally nurses have taken up roles in the Managed Isolation and Quarantine facilities or in the Covid-19 vaccination programme.

OIS have had inconsistent success in providing immunisation. They are reported to have had positive influence on whānau confidence in subsequently achieving immunisation success (Wing Cheuk Chan, 2021). In 2020 there was a 20% reduction in vaccination episodes across the system in Counties Manukau Health area triggering an overwhelming increase in the number of referrals to OIS. Most vaccinations for children who were referred to OIS eventually occurred in Primary Care. Stress on the OIS system reduced its effectiveness and thereby disproportionately disadvantaged Māori and Pasifika populations who are more likely to engage with the OIS for vaccinations.

There is an opportunity to utilise a non-vaccinating support workforce and rethink OIS to a proactive integrated whānau service that supports vaccination in primary care. Anticipating extra demand on an OIS type service in future lockdowns should be planned for with availability of dedicated resource.

All DHB's have increased options within the DHB workforce to provide more opportunity for whānau to immunise. This includes using or trialling a mixture of services to offer extended hours or weekend clinic options. Some hospitals deliver opportunistic vaccination. For example, WDHB uses an opportunistic vaccinator at Waitakere Hospital who works across the children's ward, ED and antenatal clinic. ADHB have an antenatal vaccinator. The role focuses on providing antenatal immunisation. However is also able to support children to be immunised alongside general anaesthetic for dental surgery or other operations when requested.

The role of immunisation as part of discharge planning needs to be strengthened. If a child is well enough to be discharged, it is well enough to be immunised. Vaccinations can be provided in hospital at the time of discharge to provide immunisation rather than advising whānau that they are overdue and to see their GP.

All DHB's have nurses working with children in the community but not all offer a vaccination service. There is a difficult balance between providing immunisation services that are easy and convenient for whānau to access, while continuing to encourage relationship building with PHO services. (Wing Cheuk Chan, 2021)

Cultural responsiveness and addressing bias, beliefs and values underpins excellence in delivering meaningful health care. A standardised training programme and resources that are shared across the region would be beneficial. Counties Manukau are currently reviewing the Māori vaccination workforce and are supporting development of education sessions for Māori providers. There is a need to be able to share resources across the region to encourage consistency of practice and to reduce duplication of work.

Covid-19 has had a significant impact on the workforce as staff are seconded to other priorities. Skilled paediatric vaccinators are lost to Covid-19 programmes reducing workforce capacity. For the remaining staff this is increasing the day to day work demands. Staff retention and replacement of the retirement or loss to other regions or areas remains problematic. Pay with changes to MECA agreements have been one factor.

Recommendations:

- Stop seconding workforce to other areas to be able to prioritise childhood immunisations.
- Increase the opportunity for immunisations in other services. Identify the requirements of Urgent Care, Pharmacy, and Midwifery Services to complete childhood vaccinations supported by robust reporting systems for recall with associated communication back to Primary Care.
- Strengthen the opportunistic vaccination process for when a child is about to discharge from hospital.
- Develop career pathways for a new workforce. Consider opportunities for Health Care Assistants.
- Develop consistent training in korero, understanding of cultural bias and strengthen cultural awareness for the vaccination workforce.
- Development of shared cultural resources for regional use.
- Review of payment structures for vaccinating staff and nursing staff in role in Primary Care.

Funding

Funding drives service delivery and determines where resources are provided. Payment for Covid-19 vaccinations includes an increased payment for weekend and after-hours immunisations, this is not the case for childhood immunisation. To ensure equitable service delivery a review of the costings for immunisation across the whole sector would support the resources required to complete all immunisations.

There are co-existing demands on the immunisation workforce with Covid-19 vaccination as well as catch up campaigns for MMR, HPV and other adult vaccinations. As reported, the additional childhood immunisation event (12 month) in the last year has added pressure on an already stretched system and means work demand have outstripped workforce capacity. With no increase in staffing or funding to achieve the required vaccinations some report that everyday business is not achievable. Services are in a seemingly impossible 'catch up' phase to complete the overdue immunisations.

The OIS primary initiative provides a service to 'mop up' overdue unvaccinated infants, made up of quite small teams and is an expensive model of delivery of care. Agreements with OIS providers such as Health West Te Puna Manawa in Auckland and Waitematā DHBs includes a whānau-centred model to include antenatal and other catch-up immunisations. However the capacity to do this at scale is limited when the emphasis is on the under 6-year-old population and limited appointment times. OIS does not have the capacity to provide extended services to whānau who report a preference to be seen by OIS rather than attending a Primary Care Practice.

An Integrated Whānau Care Immunisation approach to address all whānau immunisation needs is proposed for consideration in place of the current OIS. While this may seemingly distract from childhood immunisation, over the whole system it is more whānau centric and promotes efficient use of the existing vaccination workforce. To achieve this merging of historically distinct funding pools will be required.

Funding short term contracts to employ staff to work in the childhood immunisation space has created an opportunity to employ and work with whānau in the community. For example, WDHB/ADHB have worked with Te Whānau o Waipareira in 2018 on an enhanced Well Child Tamariki Ora service to provide immunisation alongside well child checks. Lack of vaccinator workforce prevented this service from continuing as envisaged.

Small, short term contracts create an opportunity to pilot approaches. However, they also create uncertainty and risk. Lack of continuity may also have an overall detrimental effect when the approach predominantly is established to address unmet need for tamariki Māori.

The future state requires commissioning bold new ways of working with adequate capacity and resources to positively impact Māori childhood immunisation.

Recommendations:

- Capitation should include a package of care.
- A dashboard used across Primary Care Services will provide transparency so that enrolment numbers and care is visible.
- Pharmacy to claim for funding for maternal pertussis vaccinations.
- Mandate catch-up immunisations as part of discharge planning for hospital admissions.
- Short term contracts are least favourable and to review all funding as part of the new model of care from a regional perspective.

Intersectoral Working

The working group discussions have identified that easy to find, holistic, timely and consistent messaging across service providers is essential. Consistent information concerning immunisations across the whole journey, including maternal immunisations, is key to increasing whānau knowledge, confidence and decision making around immunisation.

All service partners e.g. MSD, and Housing have a role to play supporting whānau to engage with Primary Care, and support the delivery of consistent immunisation messaging. Cross sectoral, appropriate information sharing with consent is needed to ensure babies are not lost to immunisation opportunities.

Trust and relationship building are a key part of health and wellbeing for Māori. Inconsistent messaging between services, lack of service co-ordination and communication, supports the cycle of mistrust and overburden (Funding Maternal vaccines in pharmacy: effects on uptake, 2020).

Recommendations:

- All services recommended to update a child's details and check immunisation status at every health encounter, including access to systems such as NCHIP that provide a holistic snapshot of children's access to universal health services.
- Agency collaboration to develop a MoU for information sharing regarding the priority population.
- Shared resources and communication strategies for immunisation.
- Digital system enablement for contact sharing.

Covid-19

Covid-19 has presented different challenges in relation to access to health services, beliefs and values related to vaccination, vaccine hesitancy and confidence. It has contributed to the acceleration of the statistical downward trends indicating the difficulties around accessing health care and immunisation. The Ministry of Health guidance is to continue to prioritise national schedule vaccinations in Alert Level 4, although practical implementation is variable.

Common themes reported by whānau and staff are related below:

Whānau report they are waiting longer to be seen due to change in clinic protocols. Antenatal visits are commonly occurring virtually with less opportunity for maternal and childhood opportunistic conversation and immunisations. Some whānau reported that PPE wearing was off-putting reducing confidence attending clinics due to the increased or perceived risk of exposure to illness.

Primary care clinics have had to change processes and environments to maintain patient safety.
An increased focus on Covid-19 management has reduced staff input to and follow-up with regular immunisation programmes. In some cases, changes in clinic protocols have seen whānau turned away and sent to ED services for the unwell child. As a result there is a loss for opportunistic care. Immediate health needs are met by another health provider. However the holistic review of the child and other siblings could have been completed at the clinic including an immunisation discussion. Work pressure due to vaccinators seconded to Covid-19 programmes has reduced workforce capacity.

Recommendations:

- Review the new systems developed in response to Covid-19 and see what legacy processes can be used.
- Review outbreak preparedness plans and consider alternate pathways to on-time immunisation.

  during lock down periods.

Outcomes: Data and Monitoring

The desired outcome for immunisation services is to achieve the vision of equity across the region for Māori whānau to immunise tamariki on time by six weeks of age. Achievement of this goal is directly impacted by the processes, service messages, interactions, reporting and systems available.

The Qlik platform is a useful tool to increase the transparency of immunisation coverage through reporting. Current limitations and opportunities are outlined above under 'System enablers'.

The legacy National Immunisation System is dysfunctional and also discussed above under 'System enablers' however requires specific emphasis.

Presently it is requiring significant administrator time to ensure it is recording accurate data. The system not being integrated with the National Enrolment System can mean an outdated provider is being followed up regarding overdue immunisations, Auckland and Waitematā DHB have estimated that the NIR clinic for a child is correct for 85% of the population under 5 years of age, with over 8,000 children having an outdated provider as their nominated clinic on the NIR – a significant amount of data-clean up required to update this. Likewise, this is seen at a practice level where they receive NIR notifications for patients no longer in their care, including for adults who have transferred to other practices. The administrative burden is lengthened by ongoing messaging issues between Patient Management Systems and the NIR. Where practice records of an immunisation event do not transmit successfully to the NIR, this requires time at both the NIR and practice end to rectify the record. The design of the NIR also reflects a primary care model that is no longer reflective of the current state; for example, having a specified GP rather than a clinic, and that authorised vaccinators do not need a GP to oversee the immunisation event of a child.

Joining up data across the system will be essential to have a view of what is working and what is not and priority areas for action. It is important that data is both qualitative information from the whānau voice, and quantitative to achieve the understanding of effective service delivery.

Recommendations:

- MOH review and recommission the reporting system to be able to provide consistent reports across the childhood immunisation series, including a focus on graphs and coverage at the timeliness milestone rather than the health target age (e.g. 8 months, 18 months and 4.5 years).
- Emphasis is given to commissioning the replacement of the National Immunisation Register that is fit for purpose.

Integrated Whānau Care (Immunisation +)

Described below are some of the current pieces of work across the region that demonstrate an integrated holistic approach to immunisation.

Ngā Tātai Ihorangi

Early this year Northland DHB started a rebrand of their services. Ngā Tātai Ihorangi adopts a common operating language and philosophy of care, taking a holistic service approach (Northland Distric Health Board, 2021). This is being used to shift the narrative around immunisations to empower whānau positively through use of language (affirming), consistency and getting back to basics. The focus of this programme is to start early and co-ordinate services with Hapū Waingangā (early pregnancy service). There has been intentional system change to use a whānau journey approach. Service delivery across all agencies focuses on welcoming whānau into the practice in a warm, welcoming and affirming approach, recognising that immunisation is just one way whānau will be able to successfully look after tamariki. Languaging is whānau focused and acknowledges diversity, strengths and range of needs. Development of a common language and vision is shared across all agencies to create consistency and strength of care.

In Counties Manukau, Papakura Marae has approximately 3000 enrolments, 92% attending are Māori. In a recent report the following strategies are attributed to the on-going strive for success of the practice (Anderson P., 2021)**:**

- **Real time data** – being able to see who is due for immunisation and what has been missed for easy reporting and making the most out of every opportunity – able to offer vaccinations every time whānau present to clinic.
- **Flexibility** – seen as a very important factor in meeting people where they can – offering extended practice hours, weekend clinics, pamper days, providing transport for appointments.
- **Equity lens** – taking an in-depth approach to understanding what people need to succeed, often requiring going above and beyond what some might feel is needed.
- **Champions** – whānau are given the 'why' people would be following up about immunisations and the target that was important for all (i.e. 8-month immunisation for Māori).
- **Culturally appropriate** – showing an open willingness to understand individual cultural needs.
- **Welcoming, transparent sharing of information** – early referrals with an open-door policy using a Community health worker for personal follow up when needed.

There is a planned Hui for WDHB/ADHB to explore what the local challenges are for Māori and what strategies have been helpful in the trial of a flexible, community-based approach to care.

By bringing together the current programmes and strengths of each area in the region there is opportunity to share a common vision, resources and training to lift the immunisation programme. Any future work could address equity through a shared vision so services could work consistently in partnership. Working within the current health reforms a Regional governance structure could support the work required to see a transformation across the Northern Region while continuing to support the individual local population needs.

Conclusion

Long term systemic failure continues to cause barriers for whānau Māori accessing immunisation services in New Zealand. There are small teams of DHB NIR staff currently trying to hold the system together to manage critical system issues which urgently need to be addressed. In the current Covid environment, and with health system reform planning, there is opportunity to make effective change at pace. Immunisation services can be restructured with a goal of achieving Tino rangatiratanga with partnership to shape the health service to deliver improved immunisation outcomes for whānau.

Holistic services, working flexibly with whānau and integrated with Primary Care are currently practiced in pockets throughout the region. A positively geared service model that understands the needs of Māori and resourced to provide immunisations for the whole whānau for instance, could mobilise the workforce proactively while meeting the needs of whānau.

A regional approach to care through a shared framework offers opportunity to remodel the current programme that is not fit for purpose. Digital alignment will go some way to addressing processes, however, it is the how services are delivered that most importantly requires a different approach.
Pae ora healthy futures for Māori (Whakamua) requires a rethink of the immunisation programme Integrated Whānau Care is the proposed conceptual framework that looks to change how we currently work with whānau across the immunisation journey. Te Tiriti o Waitangi underpins the work to give the lens through which services can positively respond to, and provide an immunisation service that is culturally aware and responsive and ultimately successful in lifting Māori and other priority group immunisation.

Appendix

Appendix 1:

Whakamaua https://www.health.govt.nz/system/files/documents/publications/whakamaua-maori-health-action-plan-2020-2025-2.pdf

Appendix 2:

The Working Group

The working group has met 6 times since the beginning of May 2021 and includes regional Māori representation and all DHB's. Representation from primary care has been sought along with data analysts reporting on data consistency. The scope of this work is focused on the scheduled vaccinations from birth to five years of age (Early Childhood Series). Members of the working group are as below:

Working group membership and key contributions from:

NDHB:

- Koha Aperahama – Hapū Waingangā Programme Manager
- Ailsa Tuck – Community Paediatrician
- Catherine Jackson – Public Health Physician
- Delwynne Sheppard – Divisional Manager, Community Clinical Services
- Clarissa Thompsen – Mama, Pepe, Tamariki locality, Mahitahi Hauora

WDHB and ADHB:

- Georgina Tucker – Immunisation Programme Manager
- Ruth Bijl – Funding and Planning
- Natalie Desmond – Funding and Planning
- Owen Sinclair – Te Rarawa, Paediatrician
- Scott Abbot – Māori Health Gains Team

CMDHB:

- Christine McIntosh – GP Liaison, Clinical Lead
- Carmel Ellis – Provider Arm
- Sharon McCook – General Manager Māori health Development
- Claudelle Pillay- NIR

PRIMARY CARE PHO:

- Kristin Shepherd - Immunisation Co-ordinator Pro-Care
- Catherine Roscoe

NRA:

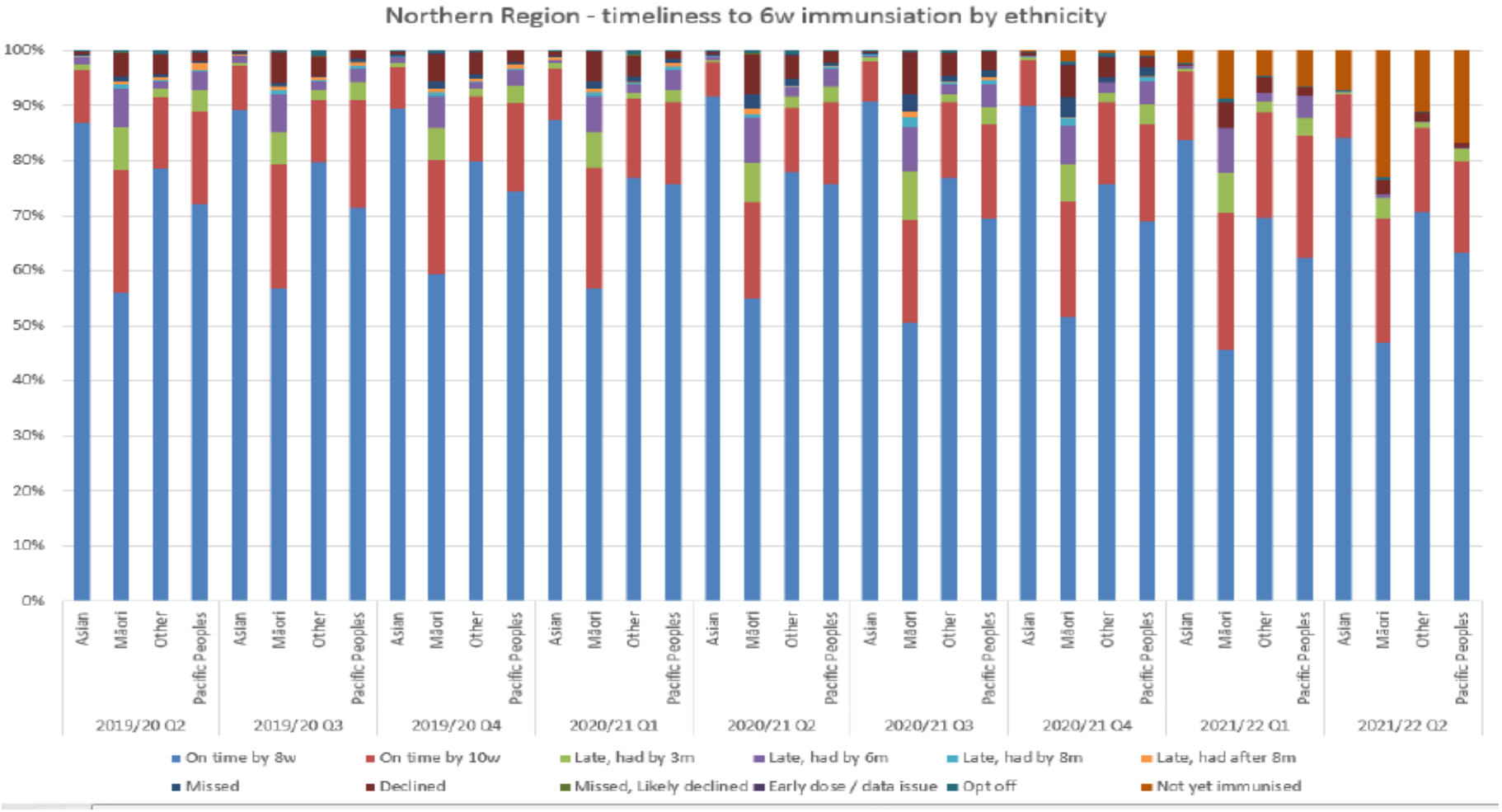
- Richelle Timmins – Project Manager
- Pam Henry – Child Health Project Manager

Appendix 3:

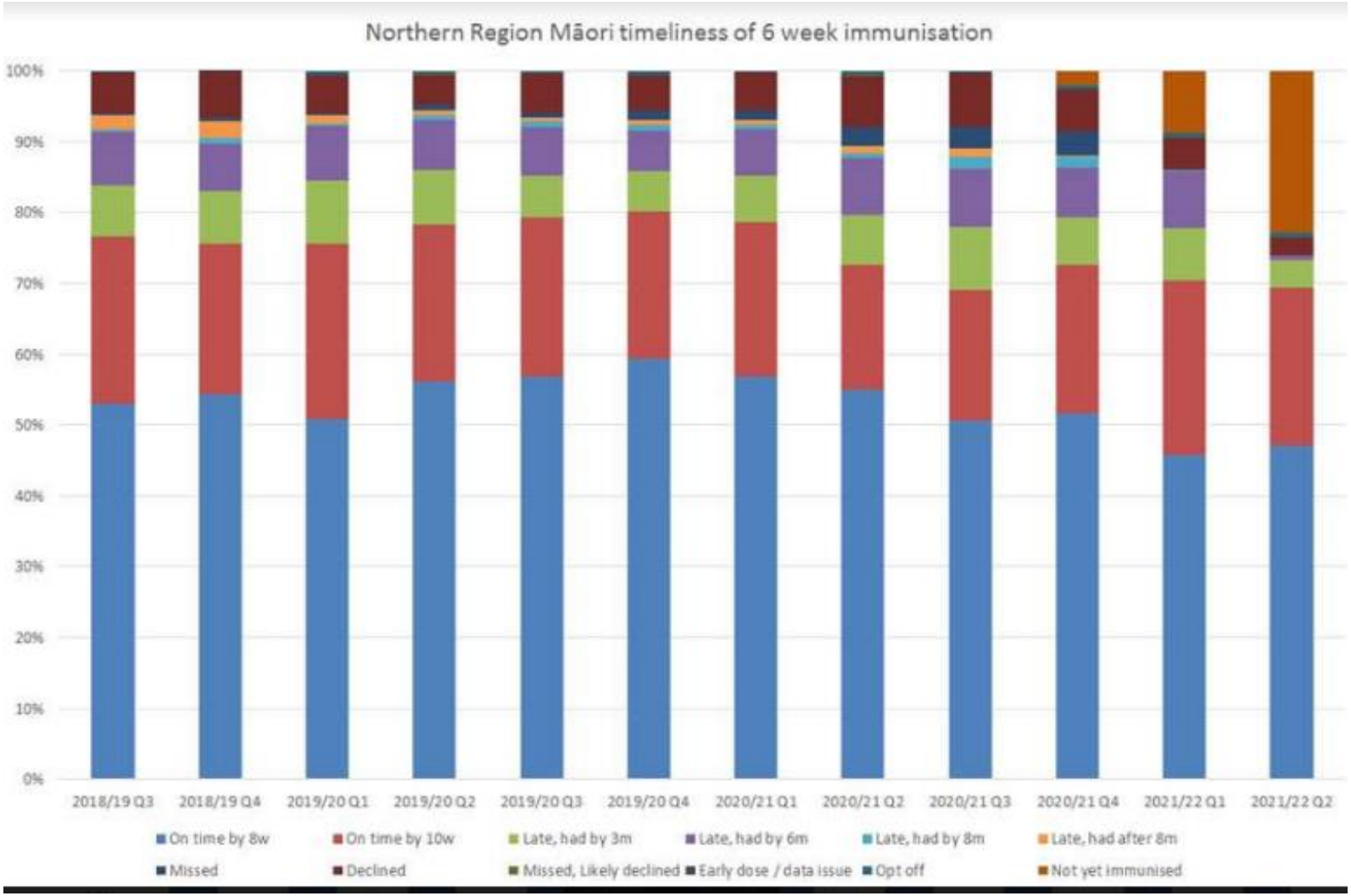
Report Wing et al 2021 Immunisation coverage (primary series) and children's interactions with t....docx

Appendix 4: Northern Region Timeliness to 6 week immunisation by ethnicity (Tucker, 2021)

Combined data measuring timeliness of 6-week immunisation over 3 years shows that Māori are less likely to receive immunisation or receive immunisations on time compared to all other ethnic groups.



In the 2021/2022 Q2 a reportable change in children not being immunised emerged as a large proportion of Māori children compared to other ethnic groups who are not yet immunised (25%). Vaccinations being completed between 6 and 8 months indicate a growing number of children are receiving 'catch up' immunisations suggesting whānau are experiencing significant barriers to vaccinating tamariki on time. (Tucker, 2021)



Appendix 5: Regional Matrix of Current Childhood Immunisation Activity

	Pressure Points	Flexible approaches	Current Projects	Cultural responsiveness
NDHB	• Referral from Maternity to PHO remains paper not electronic. • Follow up processes are not consistent e.g. whānau opting off - may get offered a vaccination if they come to the practice but there are no regular call backs. • How to increase whānau choice re: Māori health providers? Capitation and funding a current barrier if there are no GP in the practice. • PHN team covers the OIS contract, staff are being assigned to Covid team reducing workforce. • Rural areas take double the time due to travel, low staffing, and are poorly resourced. • Whānau are opting off as not wanting their details held by another authority. Beliefs around personal information, how this is stored and used. • High 5 forms- not working remains a paper exercise not electronic. 20 % not being filled out correctly. • Social determinants of health are high impacting on access to health care. • Current structure is not collaborative making it difficult to create change or make improvements in the system.	• EN training scheme being trained as vaccinators and will cover BAU vaccinations not just Covid response. • Holistic, wrap around, welcoming, giving choice. • Working the Hapū Wainganga services for early start.	• Ngā Tātai Ihorangi since beginning of 2021 Rebranding philosophy of care. • Health care navigator works alongside whanau. • Mandating acceptance of a new referral for enrolment of new-born in to practice. • 6/12 project mapping the journey conception – 5 years. • Using a health Coach: Tangi Devan – kaupapa Māori walks alongside whānau to navigate health – positive feedback from whanau.	• Ngā Tātai Ihorangi. • Kaupapa Māori health coach.
ADHB / WDHB	• NIR system. • Seasonal flu vac increasing pressure on capacity. • Workforce capacity & Staff attrition impacted by Covid and vaccination roll-out. • Decreased opportunity for Antenatal Imms - WDHB opportunistic vaccinator seconded to Covid & many antenatal visits virtual. • WCTO change in service model due to Covid - not seeing all babies - but prioritising M,P&Q5 babies.	• Pop up clinics, wrap around services. • Opportunistic vaccinator WDHB 0.8 FTE (request to increase this FTE). • ADHB antenatal vaccinator also supports childhood imms under GA. • Health WEST OIS trialling drop-in Saturday clinic once per month. • From 2020 service spec has whānau centred model including weeknight, weekend and opportunistic imms. • Mobile clinic in low decile street for flu vaccine during lockdown.	• Review of 6w imms Timeliness for Northern Region. • Next step to identify provider and timeliness at 3m. • NCHIP, MSD work for children with no address. • Creation of Uri Ririki CHCC - NCHIP, NIR, missed event service - more information reviewed to locate families. • ADHB & WDHB monthly case review (Māori 6m not fully immunised). • NIR team track and trace of children through milestone age for automated referral.	• Work based at local marae and kura. • Māori provider hui to understand challenges and identify next strategies. • Encourage Māori WCTO. • providers to immunise. • Education includes tamariki telling their own stories of immunisation being shared across media platforms.

	Pressure Points	Flexible approaches	Current Projects	Cultural responsiveness
CMDHB	• Increasingly families are requesting OIS before being overdue for imms but not currently contracted to provide this. • There was a 20% fall in number of vaccinations administered in 2020 compared to 2019 for all children under 5-years in CM Health. The most significant drop was in the August 20 lockdown. • There has been an increase in discrete vaccination events in the 0-5-year group with the addition of the 12 month MMR and PCV. • The majority of children who did not meet the 8-month imms milestone had some contact with the health system which presents an opportunity to promote/support vaccination and update contact details.	• Whānau focused/centred recognising the spectrum of needs and diversity of experience. • Māori infants are kept on OIS for future events unlike other infants who are returned to PC. • Whānau journey approach for Māori providers.	• Contracted provider OIS (Plunket) discontinuing and will be brought into KF provider and staffed by 3 FTE OIS vaccinating nurses. • Focus on the role of provider or (COVID-19) site in community and targeted communications to reflect this. • Stocktake of Māori providers re vaccination workforce (as part of regional COVID work) with associated workforce modelling. • Other screening programmes could be a proxy for the types of information/supports that whānau need for informed decision-making and to counter historical mistrust in health system (particularly those screening programmes where equity is 'designed in' from beginning and that target key decision-makers in whanau. • Learnings from local COVID-19 communications planning at Māori-led vaccination sites.	• Integrated communications approach currently being developed based on review of evidence and feedback from whanau. • Supporting development of IMAC education sessions for Māori providers.
Pro Care feedback	• Culturally appropriate education for staff; resources are required. • Current gap in training on how to effectively communicate with Māori when vaccine hesitant. • Consistency of practice in early pregnancy and use of a consistent Assessment tool. • Increased need for interpreter services and language appropriate resources. • COVID related work dominates time resources and the prioritisation of work loads. • Education for staff re catch up schedules and schedule changes. • Primary care Workforce depleted with secondment of Practice nurses to COVID vac centres.	• Use of the whānau tree to contact whānau who were more mobile during COVID lockdowns. • Early engagement, use of B codes and accepting New-born nominations. • PHOs have managed own promotional work e.g. in malls. • Pro Care pilot of PJs and nappies. • NHI level imms data Reported to practices – identifies imms due and overdue, with filter for ethnicity for specific follow up. • Support to practices to complete NHI overdue lists by due date, and F/U on New-born enrolments.	• Pro care IC's working with Data teams to develop multiple lists for pregnancy NHI, MMR, Flu, childhood imms to establish if opportunities are being missed in the practice. • Procare ICs Involved in the 0-4 yr. best start group for connection between GPs, MWs, NGOs and other support services in nearby communities.	

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