

Te Whatu Ora
Health New Zealand

Aotearoa Immunisation Register (AIR)

November 2022

The background of the slide is split into two horizontal sections. The top section, which is approximately the top third of the slide, features a dark blue background with a repeating geometric pattern of concentric diamonds and triangles in a lighter blue color. The bottom section, which takes up the remaining two-thirds, has a solid dark blue background. From the horizontal line separating the two sections, numerous thin, light blue lines hang down, resembling grass or a fringe, extending to the bottom of the slide.

Overview

AIR | Background

Over time the Aotearoa Immunisation Register (AIR) will replace the National Immunisation Register (NIR) and supersede the Covid Immunisation Register (CIR). Both systems have and continue to inform the design and build of the AIR.

Why is AIR being developed?

- The National Immunisation Register (NIR) is supported by ailing/ageing technology, originally built in 2005. The software that NIR is built with is no longer supported and the system breaks regularly. In summary, it is with urgency that we are working to replace NIR with a new system called the Aotearoa Immunisation Register (AIR).
- The NIR is no longer meeting the needs of the immunisation sector or consumers. AIR will be designed using current technology to enable desired outcomes across the sector.
- The business case to replace the NIR progressed in 2019, however the COVID19 pandemic delayed further action until late 2021. In 2020/2021, the Covid Immunisation Register (CIR) was built to support a mass vaccination roll out with urgency.
- Our approach to develop AIR is to take learnings from both the NIR and the CIR.
- The AIR's development is an iterative approach. This enables us to learn from our users to inform our design, through building and then implementing the system in stages. **We are working on tight timeframes given the number of issues that the NIR is currently facing in terms of its functionality and reliability.**
- We will operate a hybrid system of NIR and AIR as we transition. This involves temporary solutions and evolving ways of working until we can completely transition away from the NIR in mid 2023.

AIR | Basis for change

There are several business drivers that have led to the development of the Aotearoa Immunisation Register (AIR), including National Immunisation Register (NIR) technology no longer being fit for purpose and a multitude of lessons learnt from the development and roll out of the COVID Immunisation Register.

Key Drivers:

Incomplete data available on NIR and COVID Immunisation Register (CIR) and a lack of access for providers to data sources due to licensing issues and historic integration decisions

A **disparate** set of cohort, booking and patient relationship management tools and the need for centralised purchase and distribution of stock

Incomplete immunisation data, missing demographic data and capacity limitations of software, combined, result in sub-optimal reporting integrity

Aging technology, declining PMS vendor technical knowledge and the **probability of future pandemics**

Limited access due to licensing expense, technology issues, **changing requirements** for vaccination proof

Cost of total vaccination programmes is higher than necessary

AIR's Aspirations:

An **accurate and complete** set of vaccination data captured and accessible to New Zealand health providers

Technology that is **scalable** to manage pandemic, epidemic or business as usual vaccination programmes efficiently, and could connect to booking, patient management and stock management tools

Timely and accurate understanding of population immunity.

Flexible to effectively and rapidly respond to changing immunisation demands

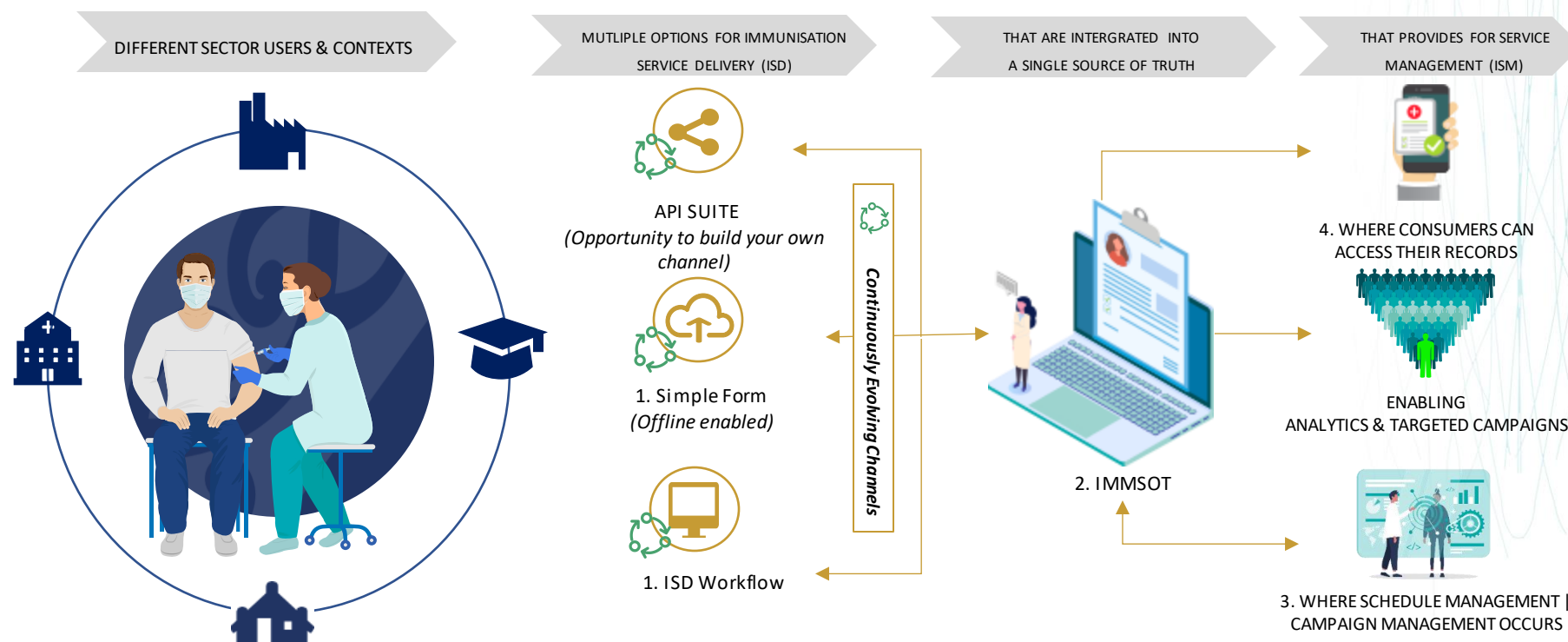
Access to immunisation history for consumers and vaccinators

Cost effective by enabling health providers to forecast accurately

AIR | Future State – Where we are going!

The overarching goal of AIR is to achieve equity of outcomes through better delivery of immunisations for all population groups. The image below identifies the future state of the AIR when it is complete, and clearly identifies the four different components that combined will become AIR:

- 1. Vaccinator Portal & Cohort Mobile Application** - Allowing vaccinators more flexibility around how providers can record vaccinations and view vaccination history
- 2. Immunisation Data / Schedule Repository & Rules** – A single source of truth for vaccination records, individual schedules and the national immunisation schedule
- 3. Immunisation Admin Portal** - Immunisation Service Management (ISM), is the data management layer that supports managing the single source of truth
- 4. Consumer Digital Self Service & Products** - Immunisation Self Service Channel / Portal / App so individuals can view their immunisation records



* Illustrative diagram

BUSINESS CASE INVESTMENT OBJECTIVES:

- ✓ Vaccinators can work where and when they are needed
- ✓ Each vaccination will be easy to record in the AIR
- ✓ Individuals in the New Zealand public will be able to view their immunisation status
- ✓ Local and national immunisation service planners will have access to complete and recent data
- ✓ As new data requirements and new vaccine programmes are made available the solution can be easily modified

AIR | Engagement to date

AIR has a strong engagement approach. These span across different engagement levels, from inform and consult through to co-design. Below are some examples of the groups and engagements the programme is utilising to help build, inform or consult this work:

COMMUNITY



Māori and Pacific Working Group
Fortnightly hui set up with Māori and Pacific health providers

Vaka Atafaga Pacific Nursing Service
Site and experience visit

Primary Care
Attended General Practice NZ Data + Digital leads hui, Nursing Leadership rōpū, Primary Care Clinical Leads Hui

Midwifery
Connecting with the Te Whatu Ora team and NZCOM

VACCINATORS



Pharmacy
Industry Newsletters, Te Whatu Ora led hui working with pharmacy industry bodies

Occupational Health
Industry Newsletters, Occupational Nurses professional body meetings

Provider User Groups
Weekly hui held with providers across occupational health, Pharmacy, Primary Care, Māori and Pacific groups, School Based, Outreach, Corrections, Defence

Youth Justice, Corrections, Defense
Connecting widely across the sector providing regular updates

TE WHATU ORA TEAMS



NIR Administrators
Weekly NIR Admin hui and bi-weekly NIR Admin FAQ run by the AIR team

Districts
Provided inform updates via Technical advisory services and Regional Accounts Managers, one on one meetings with Districts informing General Managers and Senior Responsible Owners and attending regional task force meetings when required

National Public Health Agency
Collaborated in design workshop

Wider Public Health Response
Engagement across the teams involved with COVID shifting models to apply where possible to other communicable diseases

INDUSTRY BODIES



Software Vendors Forum
Have stood up a software vendors forum with a workshop series running from Jun-Dec.

Digital Health Authority
Presented at quarterly forum

IMAC
Presented at Immunisation Advisory Centre (IMAC) Symposium and regular IMAC webinars

AIR Phases | Current

We are currently at phase 2 of our AIR journey. While we're moving through the phases it's also important to note that **this is an iterative process**, where we are continuously planning, designing, implementing, testing and reviewing through to our target state.

Estimated Sep 2022 to Sep 2023



PHASE 1

Improve the capacity to monitor, analyse and report on population immunisation status and identify reasons for inequity –
With a focus on the influenza 2022 campaign



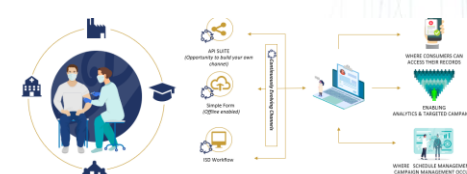
PHASE 2

The “focus on core” phase aims to build out all of the key components that are required to support the future state while coexisting with the “legacy” components.

Continuously Evolving



Late 2023



PHASE 3

The target state has all of the schedules and settings onboarded and operationalised within the AIR. PMS's and other sector systems will be integrated, the schedules will be centrally managed enabling the NIR & CIR to be decommissioned.

Continuously Evolving



On-going through 2023



PHASE 4

Additional opportunities to be considered that sit outside the core workplan of replacing the NIR but could add significant value to the health vaccination sector.

Continuously Evolving



AIR Delivery Roadmap | High level estimated timelines

SEPTEMBER 2023 ONWARDS
POSSIBLE FUTURE

JANUARY – JUNE 2022

JUNE 2022 – DECEMBER 2022

JANUARY 2023 – JUNE 2023

JULY 2023 - SEPTEMBER 2023

CONSUMER



I have more opportunities to be vaccinated at more sites for Flu and COVID



I have access to my immunisation history from NIR, CIR and AIR

I can see if either myself or my dependents are up to date with their vaccines on the basic schedule

I can see if either myself or my dependents are up to date with their vaccines on the basic schedule or customised schedules

ENROLLED
PATIENT SERVICE
PROVIDER



Nothing changes for me I continue to record vaccinations in my PMS, and I am notified by CIR, NIR or AIR, when a enrolled consumer is vaccinated not at my practice



Nothing changes for me; I can continue to record vaccines in my PMS however the information is now going into the AIR

I can record and modify a catch-up or and custom schedule for a consumer based on clinical indicators which are stored in the AIR

UNENROLLED
PATIENT SERVICE
PROVIDER



I can offer Flu and record this



I can view vaccination history held in the NIR, CIR and AIR and record some vaccines in the new vaccinator portal. I can authorise AIR users for my site



I can record more vaccines in the new vaccinator portal. I will have basic site reporting capabilities

I can view if a consumer is up-to-date against the standard immunisation schedule

I can now view if a consumer is up-to-date against their vaccinations including any customised schedules

DELIVERY

CENTRAL & LOCAL
ADMINISTRATION



There is a basic centralised reporting of Flu coverage on a weekly basis



AIR Admins commence using the AIR Admin portal. There is a basic reporting for the vaccines recorded to support operational activities.



There is near real time reporting for all vaccine delivery and coverage

We can now view both normal and custom schedules and plan follow-up campaigns or outreach based on this

SOFTWARE
VENDORS



GP Notifications from AIR commence



Te Whatu Ora will engage with me on the future state of AIR. My system will co-exist with AIR and NIR



I will work with Te Whatu Ora to co-design the integration requirements and roadmap with AIR. My system will co-exist with AIR and NIR

My system will now integrate with AIR, with minimal changes required. I will have the blue-prints to be able to build out direct API integration to AIR

I can establish my own integrations into AIR for new services and can choose to migrate off existing integration patterns



KEY:
COMPLETED