Te Whatu Ora
Health New Zealand

Hira healthcare provider personas

Researched completed in July 2023

Persona work, our process to develop personas

Desk research to understand what is already known in-house - what engagements have taken place already, which questions have been answered, what needs and challenges have been identified for healthcare providers

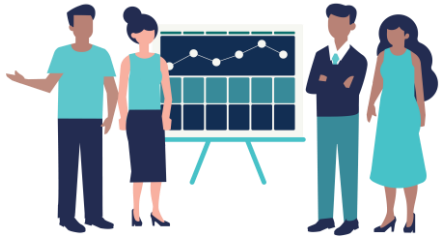
Workshops with stakeholders to identify assumptions and hypotheses to test

Identified specific roles and professions to engage with, and recruit through various channels, focusing on existing relationships within the organisation

Phase 1 Research: 1 on 1 interviews with Healthcare providers to understand their needs of Hira

Analyse data and pull out key insights to help form a view of what drives differences in needs of Hira. Test research hypotheses and refine.

Establish stream of information flow to feed into opportunity and value canvases



Check in half way with Stakeholders to refine research questions and dive deeper into certain profiles to identify differentiating needs.

Second phase research face to face and online interviews

Analyse data and themes to understand key groupings. Create outputs for review.

Research methodology

Research purpose: Understand the experiences of healthcare professional in Aotearoa when it comes to accessing health information and the impact this has on consumer health outcomes.

The Research Method

Approach

- Qualitative, 1-hour semi-structured interviews

Data Collection

- Interviews were digitally recorded (audio and video) and transcribed for analysis

Data Storage

- Data collected was securely saved on an access controlled SharePoint site only visible to the Research Team

Participant Recruitment

Sampling

- Convenient sampling – participants were identified through the Clinical Reference Group and contacts from within the team
- Snowball sampling – participants also recommended colleagues to participant in the research
- Demographic data was tracked along the way to ensure representation across ethnicities, geographic locations, and profession types

Process

- Participants were introduced to the Research Team by the CRG or members of the Hira Team via email
- The Research Team communicated with participants via email to provide information about the research and provide informed consent

Informed Consent

- Written informed consent was provided to participant before the interview and encouraged to review and ask questions
- Participants had the options to sign and return consent form or provide consent verbally at the interview which was included as part of the interview recording

Analysis, Insights, and Reporting

Analysis Approach

- Thematic analysis using line by line coding was carried out for each interviews
- Themes across interviews were grouped and reviewed by the team to generate insights

Insights and Reporting

- Insights generated were used to develop personas and current state/future state use cases

Research summary

REGIONS

CLINICAL

21

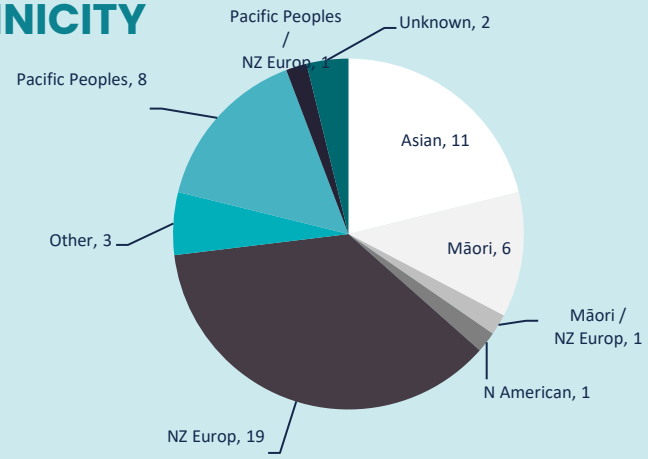
NON-CLINICAL

17

CLINICAL AND NON-CLINICAL

13

ETHNICITY



ROLE TYPES

What clinical providers think of Hira

Hira will fail if...

If you don't recognise the current system is not sustainable, if Hira is designed for the current state of the healthcare system, then it won't make a difference, Hira needs to be designed with a better future state in mind - design it for what healthcare in NZ could be, not what it is currently.

Hira will fail if it takes an opt-in approach where everyone has a choice, then you will end up with the same gaps you have now

Hira will fail if it doesn't enable sharing of information providers need to deliver care, this includes GP notes, hospital records, DHB records, mental health information – it needs to easily accessible to the people who need it.

Hira will fail if a wide range of healthcare providers are not consulted and involved in developing it. There are varying needs across different providers that need to be consider.

Hira will fail if it doesn't create one source of truth that is kept up to date regularly. If you don't pull together the health, PHO, DHB and allied health. You need to be able to marry up the information flow and the language used between the health sector and the disability sector

What clinical providers think of Hira

To be successful Hira needs to...

Make sure that Hira doesn't become just another system with the same problems...make all information (primary, secondary, tertiary) available in the same place. If I have to log into multiple places to get the information I need, then all of this will be a waste of time.

We need technology that is easy to learn and then be given the time to learn how to use it. Quite often new systems are rolled out, and we're expected to operate business as usual the next day, but it's not always a seamless transition. It is important to give us time to learn it, to have a play with it, and then have someone to go to if we have questions. An actual person we can reach out to for help.

Hira needs to understand the pressure that healthcare providers are under and the context we work in so that they develop technology that we can actually use in the field

Hira needs to consider using more visuals for how we talk about health conditions, also need to consider making information available in other languages.

Make sure that the right safeguards are in place so that I can access all the information I need and are not expose to information I don't need access to. There needs to be guidelines and structures in places to safeguard against privacy laws.

What clinical providers think of a Consumer Portal

If Hira is going to provide a consumer portal, consider...

If we are going to allow the consumer to see more information, we maybe need to be doing two kind of reports that go on the system. A consumer friendly one that goes to the patient portal, and the technical one that gets loaded into the system. Because otherwise what will happen is if you don't have that plain language that they can understand, they're gonna be making phone calls. They're gonna be even more confused.

One barrier to patient portals is that over half of our patients don't have email access.

While our patients might have Manage My Health, a lot of people don't access it because they don't understand it.

Another barrier to patient portals is not having the staff to support the messages that come through the portal – this is why we haven't turned on patient portals at my practice.

Giving consumers access to their health information has a downside that needs to be considered, a lot of reports are very technical and we have to accept that a lot of New Zealanders have low health literacy so there is a high likelihood that things will get misinterpreted.

The maximum impact from this service, from a consumer's point of view, will be for those who can't access health care data in the typical way. For people who have never had the option to access their data and healthcare with dignity and privacy, the opportunity here for really impactful change is exciting. If it's gotten right.

Barriers across communities

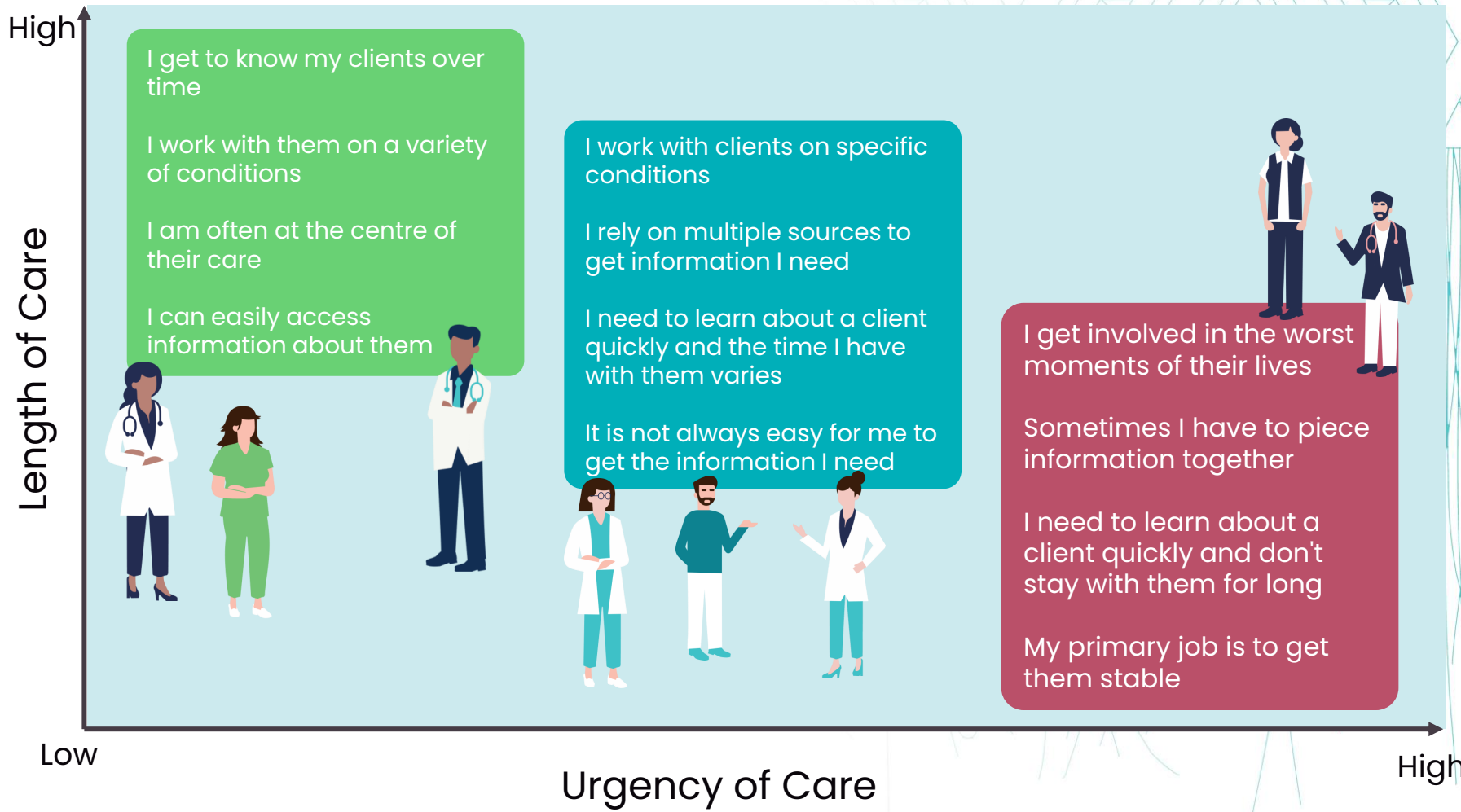
The communities that healthcare providers mentioned the most

Barrier	Description	Māori	Pacifica	Asian	Disability	Rural
Trust	There's a lack of trust in the healthcare system in the community.	○	○	○	○	○
Cultural alignment	There is a need to understand a patient's cultural context to deliver better health outcomes.	○	○	○	○	
Language	The lack of healthcare resources in multiple languages creates barriers to access, quality of care, and health outcomes.	○	○	○	○	
Access to Care	Transportation, reliable internet, financial cost, geographic location/distance impact access to care.	○	○	○	○	○

Persona framework, clinical personas

Through the research, length of care and urgency of care were identified as two characteristics that drive different needs and requirements of Hira.

Personas have been developed for each group to demonstrate needs and challenges. Current and future state scenarios were created to show ways in which these needs and challenges might be met by Hira.



Glossary

MAP: Medical Application Portal

Telehealth: The ability to provide health services remotely

CSC: Community Services Card

HCS: Health Connect South

MDT: Multi-Disciplinary Team

ACS: Ambulance Care Summary

PMS: Patient Management System

Aiga: Family in Samoan

A&M: Accident and Medical centre

Healthcare Provider Personas - Overview

These are the personas that emerged from the research data

Green Persona Type
Leni
Registered Nurse
Porirua
Samoan, 32

Blue Persona Type
Theo
Physio
Dunedin
35, South African

Pink Persona Type
Raymond
ED Doctor
Hawkes Bay
44, Irish Immigrant

Non-Clinical
Paul
Managing Director
Auckland
57, Pākeha

Green Persona Type
Pania
General Practitioner
Pōtaka
Māori, 37

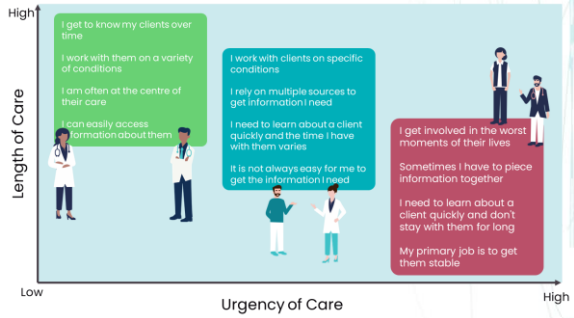
Blue Persona Type
Meg
Locum Pharmacist
South Otago
52, Pākeha

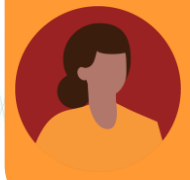
Pink Persona Type
Alana
Paramedic
Auckland
37, Pākeha

Non-Clinical
Ngāire
Social Worker
Wellington
48, Māori

Green Persona Type
Claire
Community Nurse
Christchurch
Pākeha, 42

Blue Persona Type
Mina
Ultrasound Technician
Blenheim
45, Korean





Non-Clinical
Varsha
Asian Community Health Coordinator
Auckland
39, Indian Kiwi

Personas and Use Cases

Green Persona Type

Leni

Registered Nurse
Porirua
Samoan, 32

Referred by Hospital Self-referral

Pacifica Community

Home grown database

Visual Explanations **Visiting Clients**

Language Barriers Household view

My Needs of Hira

Integrated Care Plan
across multiple providers

Low — High

Privacy Concerns

Low — High

Data Access Needs

Low — High

Where I work

I work for a community-based service that works to deliver health services to the local Pasifika community. I visit my clients in their homes and look at the needs of their entire household. The service I am part of uses a care model that is unique to the Pasifika community.
Once enrolled, clients stay with me which helps with achieving long-term health outcomes.

Typical Day

I arrive at the office early and check emails to see if there are any new referrals or messages from existing clients.
I then look at my client list for the day and pull their file from our secure filing cabinet. I gather the supplies I think I will need for the day and head out. Most of my day is spent out in the community visiting with clients. Some days, I will help a client get to their medical appointments. Transport is a challenge for many people in my community so we try to provide that so people can access the care they need.
When I am done, I come back to the office, enter notes from the day into our homegrown database. I leave my phone on in case a client needs to reach me. Often for my clients I am the first port of call if any medical issues arise in the household.

Data I Need

- Hospital records - which we can access through MAP
- Procedures they've had
- Medications, conditions, disabilities
- Follow up care
- Reason for referral
- Ethnicity, language, if they need an interpreter
- Any risk to nurses when visiting property (violence issues, dogs)
- Name, date of birth, NHI
- Household members

Challenges I Face

- If I discover that a client's hospital records are incorrect, I am not able to update them myself, so I will try to call them to change the information and will update it in our own system
- There is a lack of reliable health information in a client's preferred language, this makes it difficult to explain their health conditions
- We are limited in who we serve, we are only contracted for this region and at least one person in a household must identify as Pasifika for us to be able to serve that family
- We've created our own PMS because the ones available don't cater to our model of care which looks at household view

Needs I Have

- A system that aligns with the care model my clinic uses - household view vs individual
- Provide a human centred service that is enabled by tech not the other way round
- Be able to help my client understand what's happening to them in their language using accurate digital visuals
- A more efficient way to share information about our clients with hospitals
- Know when my clients have appointments so I can remind them and support in getting them there
- Notification if my client has been admitted to hospital, if they've had tests and when those results are back

Use Case/ Current State

Green Persona Type

Leni

Registered Nurse

Porirua

Samoan, 32

I have a new client Aleki, who has been referred to us for care post-surgery before his next surgical procedure. My colleague has done the initial assessment. I am assigned to Aleki as he is Samoan and we both speak the same language. I can see in the notes that there are six members in Aleki's household.

I put Aleki's paper file with notes in my bag and head to his house. At Aleki's home I am greeted by his aiga. I explain why I am there and how I can help. The family tells me that they don't understand why Aleki needs another procedure.

I sit down with the family and explain Aleki's treatment, and do my best to answer their questions. While I am fluent in Samoan, there are some medical terms that don't have a translation for, so I Google some photos on my phone. This helps me to visually explain the process.

Then, I check Aleki's surgical site and take his vitals, and note these down in the file.

I know that Aleki has a follow-up appointment at the hospital but the aiga weren't sure when. I'm not able to access MAP while at a client's home so, I call up the hospital. This takes a bit of time as I'm put on hold, but eventually I get through and I find out the day and time of the appointment. I let Aleki and his aiga know, and write it in my notes.

Aleki's daughter Sina tells me that she and her husband will struggle to organise time off work to take Aleki, to his appointment as they've used up all their leave taking care of him post surgery.

I ask Aleki and Sina if they would be comfortable with me taking Aleki to his appointment. They say yes. I ask them if there are any questions or concerns they want raised at the appointment. I note down their questions. I let Sina know that I will come around after the appointment to explain what happened and next steps.

When I get back to the office, I enter the notes from Aleki's paper file into our database including aiga members I met with so that there is a household view.

I also email the hospital and ask them to CC me in to any future appointments or messages to Aleki, so I can be across these.

Considerations & Pain Points

- Language is a key consideration for case assignment.
- Paper files for capture notes.
- Lack of medical resources available in non-English languages
- Not able to access MAP while at client's home.
- Not able to see entitlements.

  Advocating and translating during appointments.
- Double handling of notes and entering from paper file to database.

  Manually having to follow up with hospital to ensure future appointments aren't missed

Use Case/ Future State

Green Persona Type

Leni

Registered Nurse

Porirua

Samoan, 32

I have a new client Aleki, who has been referred to us for care post-surgery before his next surgical procedure. I am assigned to Aleki as he is Samoan and we both speak the same language.

I access Aleki's file on my iPad. I can see through the notes that he is part of a linked aiga (family) group and that there are 6 other people in the household. I also see that Aleki has nominated delegated consent to his daughter Sina.

I arrive at Aleki's home where I am greeted by his aiga. I explain why I am there and how I can help. They tell me that they don't understand why Aleki needs another procedure.

I sit down with the family to talk them through Aleki's condition and why another procedure is needed. I open a video on my iPad that explains the procedure in Samoan. Even as a Samoan speaker, I sometimes struggle to find the correct words to explain medical procedures. Having these visuals and Google translate on hand is very helpful. After the video, the aiga have more questions so we talk through them.

After explaining the next procedure and why it's needed. I check Aleki's surgical site and take his vitals. I note these down in Aleki's file on my iPad. I am able to see that Aleki has a follow up appointment coming up soon. And I show Aleki and Sina how they can look up appointments on the consumer portal.

Aleki's daughter Sina tells me that she and her husband will struggle to organise time off work to take Aleki, to his appointment as they've used up all their leave taking care of him post surgery.

I see Aleki is eligible for the CSC and travel assistance. I let Aleki and Sina know of the travel assistance and ask them if they would like me to help organise that. I also ask, if they would be comfortable with me attending the appointment with Aleki. The aiga agree so I book in a taxi. I mention that there's always the option for another family member to attend the appointment remotely through telehealth if they'd like and they say they'd talk to wider aiga members.
I ask the aiga if there are any questions or concerns they would like to bring up at the appointment. I make notes. I let Aleki and his aiga know that I will meet Aleki at the hospital and we agree on a day I can come around to explain what happened at the appointment.

The day before the appointment I receive a notification about Aleki's appointment. This prompts me to give Aleki a call to confirm he is all set for tomorrow and re-assure him that I will meet him at the hospital.

Considerations

- Able to see initial assessment notes digitally
- About to see aiga view and nominated delegated consent.
- Able to access MAP on iPad while at clients home.

  Visuals in client's preferred language.
- Able to see appointments and show client and their aiga how to access their info in the consumer portal.
- Able to view and invoke CSC and travel entitlements.
- Notification reminder of upcoming appointment. Reduces the number of "do not attends"

HIRA TI

- Update NHI Terminology Services
- Consent and Delegation (RFI)
- Consumer portal
- CSC Entitlement (if held)

Backlog opportunities

- Telehealth appointment option
- Family household /whanau / Aiga view
- View hospital bookings & referrals
- Entitlements- Travel, CSC, high user & details
  Telehealth appointment option for families to dial in
- Notifications (hospital appointments)

Green Persona Type

Pania

General Practitioner (GP)

Pōtaka

Māori, 37

Māori Outreach Centres

Rural Community

Manual Data uploading | Registered Professional

Lack of reliable internet access | **Trust**

My Needs of Hira

Integrated Care Plan

across multiple providers

Low — High

Privacy Concerns

Low — High

Data Access Needs

Low — High

Where I work

I am a GP based in Pōtaka which is a small rural town. Working in a rural community is very different to working in an urban setting.
About 80% of the community I work in identify as Māori, and all of my colleagues are also Māori.
Three of the Māori clinicians are fluent in te reo, which really helps when we have so many Māori-speaking patients on our books. Our approach to care is steeped in te ao Māori which means we follow tikanga, introduce ourselves to new patients with our pepeha, and start our day with karakia.
Generally there is a lot of mistrust in the healthcare system in Māori communities, but because our practice is woven into the community and we uphold tikanga and not associated with a hospital, there is a higher degree of trust.
Understanding the history of iwi and relationships between hapū is an important part of earning trust in this community.

Typical Day

I wear many hats, some days I'm an ED doctor, some days I'm doing minor surgeries, whatever needs doing. You don't really think about it, you just do what needs to be done. Being rurally located also means we work closely with other providers in the area, so we can make sure that all of our patients get the care they need.
My work is split up between the clinic and then being out on the road going to our outreach centres. Communities in this part of the country are spread out with large distances in between and the socio-economics of these communities means that traveling for a medical appointment isn't feasible, so I split my time between the clinic and being a travelling GP.

Data I Need

- Patient history
- Presenting condition
- Medications
- Allergies (past & present
- Whakapapa
- Iwi affiliations
- Discharge summaries
- Diagnostic results

Challenges I Face

- Transferring patient records into our system is arduous and time-consuming, and is very manual
- Not having records in a timely manner means that there's a risk in making decisions about care
- Using many systems at once which tends to make our internet crash
- Lack of reliable broadband internet access

Needs I Have

- A way to securely communicate with other providers involved in a patient's care
- A way to be able to access information when I don't have internet connection or am out in the community
- A way to input information into the system when I'm offline, and have it update when I'm connected again

Use Case/ Current State

Green Persona Type

Pania

General Practitioner

Pōtaka

Māori, 37

One of my patients is Hana, a young expecting māmā from our local community. This is Hana's first child and she's nervous about what to expect, she is working with a local midwife Maya

An unexpected email came into the system and I just happened to open it. It was results of a blood test that Maya had ordered for Hana.

I see in the results that it's something that Maya needs to address urgently with Hana.

As Maya is an independent contractor who works across multiple communities, she is not able to access our PMS to know that the results have come in and there is no way for me to notify her within our PMS either.

As I can't contact Maya easily through our system, I contact her on WhatsApp. This isn't a secure way to communicate patient information, but being rural WhatsApp messages are often the most reliable way to communicate.

Because the conversation occurred outside of our system, it isn't included in Hannah's file. I have to remember to manually enter notes into her file, and make sure to delete any messages sent between Maya and I.

Considerations & Pain Points

- GP is not aware tests were ordered
- The lab diagnostic system doesn't alert the midwife when results are available. GP has to identify the email and see that it needs actioning
- Results are within GP PMS which mid-wife is not able to access.
- There is no way for GPs and midwives to communicate securely when an urgent response is required – emails may not be read in a timely fashion
- Information shared through unsecured channels poses a security risk, and it is up to the provider to remember to record the details of the interaction and outcomes. There is no way to be sure that Maya has taken the necessary steps to delete the messages

Use Case/ Future State

Green Persona Type

Pania

General Practitioner

Pōtaka

Māori, 37

One of my patients is Hana, a young expecting māmā from our local community. This is Hana's first child and she's nervous about what to expect, she is working with a local midwife Maya

In Hana's care plan, she has consented for both Maya her midwife, and I to be notified and have access to any test results related to her maternity care.
She also has set up her consented whānau members (her mum and partner) who can view her maternity information

I get notified that Hana's midwife Maya has ordered some routine 20-week blood tests for her.

I am notified when Hana's results are back, and am able to access them in my system. I also see that Maya has received the same notification, and has accessed the results through her portal.

The results require an urgent follow-up, and I can see in Hana's care plan that Maya has scheduled a follow up with Hana about her results.

I receive a notification that Maya has created a new action for me in Hana's care plan. She has recommended that Hana should be put on a new medication. I review her notes, and send the prescription to Hana's local pharmacy.

Considerations

Patient is able to set their preferences for who they're happy to access their records and be part of their care team.

Midwife and GP are both notified when results are back and the notification indicates urgency.

Midwife and GP are both notified when results are back and the notification indicates urgency.

Midwife is able to access the results through a portal.

Midwife and GP are able to communicate on course of action for patient via a secure channel, the conversation and any changes to care plan and medications are recorded to the patient's file.

HIRA TI

Lab results
Consent and delegation (RFI)

Lab Notifications

Consumer portal results

Lab Notifications

Medications API

Backlog opportunities

Lab notifications
Integrated care plan

Integrated care plan

Integrated care plan

Secure Messaging
Integrated care plan

Green Persona Type

Claire

Community Nurse
Christchurch
Pākeha, 42

GP Engagement

Community

Nursing care

At home care

Injury

Registered professional

Medications

Managing access to information

My Needs of Hira

Integrated Care Plan
across multiple providers

Low — High

Privacy Concerns

Low — High

Data Access Needs

Low — High

Where I work

I work for an organisation that provides service all across the Canterbury Region, and the Waikato in the North Island. We serve urban and rural communities. Clients are referred to us generally through their GPs or as they are discharged by the hospital.

We have access to discharge notes and some members of the team can access GPs files which allows us to learn more about our patients. We have an internal system to manage client information, and while it meets all our needs, it doesn't talk to other systems, this means that when we need background information we have to log out of one system, log back into another, which of course has different credentials. As a community nurse I'm having to do this on the go, on my mobile phone.

Typical Day

Everyday I am scheduled to work, the list of clients I am meant to visit is pushed my phone through the CRM app. I stop in at the office to gather the supplies I need for each visit and load it into my company issues vehicle. Then I get on the road. Some of my clients have a specific time I have to visit them because they have time sensitive needs, the app highlights these clients in yellow so I can easily see the times I have to see them. The clients that don't have a specific time requirement I can fit in at any time in the day.

When I am driving to a client's home, indicate I am traveling on the CRM app. When I arrive at the client's home, I change the status to indicate I am at the visit. Then I pull up their care plan on the app to remind myself what needs to be done. I grab the supplies I need and then head into the client's home. At the end of my visit, I enter my notes and if I need to order more supplies for the client, I order them through the app. If I think the patient needs to be referred for additional care or needs some diagnostics, I will send an email to the client's GP. Then I will update the status for the client to 'complete' before I head out to the next client. This is my day from 7 in the morning to 5 in the evening. I get a lunch break but if I am running late this time gets deducted from my lunch time. I am also on call once a week. On-call shifts are from 5 in the evening to 7 in the morning. Sometimes when I am on call I need to go out to a client's home in the middle of the night.

Data I Need

- Discharge notes
- GP notes
- Single Care plan
- Medications/med chart
- Allergies
- Follow up care
- Reason for referral
- Ethnicity, language, if they need an interpreter
- Any risk to nurses when visiting property (violence issues, dogs))
- Name, date of birth, NHI
- Information from any healthcare providers involved in care
- Notifications of any changes in clients condition, change in their meds

Challenges I Face

- I am not notified when a client has been sent to hospital until I show up for a visit.
- As a community nurse, I have to know a little bit about every speciality and I am out in the community without any wrap around support that I would get in a hospital environment.
- When new client referrals comes through, often we get very vague details (e.g. wound care but no details on where the wound is, what type of wound it is) or key information is missing (e.g. med chart). Getting the information we need takes up a lot of time and delays getting care to clients.
- When an existing client is released from hospital we aren't always notified, this delays clients getting the care they need.

Needs I Have

- I need to know that I have all the data to be able to care properly for my clients
- I need to know that my privacy requirements are taken care of, that I'm not exposed to information I shouldn't have access to
- I need an easy way to share information between GPs, hospitals, and other providers
- I need people to recognize that the work we do is clinical primary healthcare and that healthcare doesn't just happen in a GP clinic or hospital, it also happens at home
- I need systems that looks at care beyond health, in terms of goals and needs of the clients I work with

Use Case/Current State

Green Persona Type

Claire

Community Nurse

Christchurch

Pākeha, 42

It's Monday morning, and after packing my car up with the supplies I need for the day, I set my CRM app to "en route" and head to my first client, Shannon. She's an elderly woman who was referred to our service by her GP for acute wound care. She'd developed foot ulcers which became infected, so I'm visiting her daily.

When I arrive at Shannon's home, I update my app's status to "at appointment" and grab my supplies. I ring the doorbell and Shannon lets me in.

I unwrap Shannon's bandages. I see that the wound has become infected.

I discuss my concerns with Shannon, and suggest that her GP should prescribe her some antibiotics.

I call Shannon's GP directly, but can't get through, so I leave a message. I try calling the practice's reception, but I can only leave them a message as well.

I redress Shannon's foot and tell her that I'll follow up with the GP before I see her tomorrow. I write my observations into my app.

Later in the day, I call Shannon's GP again and am able to discuss my concerns. She agrees with me, and says she'll send an urgent script to the pharmacy for me to pick up tomorrow.

The next day, I pick up Shannon's medication and head to her house. When I arrive at Shannon's home, I ring her doorbell but there is no answer. I give it a few minutes and then ring the doorbell again. Still no answer.

This is unusual, as Shannon is usually at the door to greet me. I call Shannon but she doesn't answer. I call the nurse manager Tina to let her know that Shannon's not here, and ask her to log into the portal to see if she had an appointment that I wasn't aware of.

Tina tells me there's no appointments on file for Shannon for today, so she should be home. Tina tells me to head off to my next client, and she'll call Shannon's daughter who is her emergency contact.

Several hours later, I get a call from Tina who let's me know that Shannon was taken to hospital last night. We weren't notified of this, and Tina had to chase up lots of people to figure out what happened. Tina has asked the hospital to notify us when she is discharged so that we know when to resume our visits.

Later in the week, I receive an irate phone call from Shannon's daughter. Shannon's not had a visit from a nurse in several days and her foot ulcers have not been cleaned.

I apologise and explain that I was not aware that Shannon was back home from hospital. I let her daughter know that I will make sure that someone get's out there as soon as possible.

I call Tina and ask her to assign someone else to Shannon, as my day is fully booked with other client visits.

Considerations & Pain Points

- CRM app provides real time updates on client visits
- The only way to contact GP is by phone and often requires multiple follow ups to get through.
- Community nursing service is not notified when a client goes into hospital.
- Several hours wasted trying to track down the whereabouts of a patient – this is part of services duty of care.
- Community nursing service is not notified when client is back home.

Use Case/ Future State

Green Persona Type

Claire

Community Nurse

Christchurch

Pākeha, 42

It's Monday morning, and after packing my car up with the supplies I need for the day, I set my CRM app to "en route" and head to my first client, Shannon. She's an elderly woman who was referred to our service by her GP for acute wound care. She'd developed foot ulcers which became infected, so I'm visiting her daily. The GP has a care plan to track her treatment, and I've been added as a member of her care team temporarily.

When I arrive at Shannon's home, I update my app's status to "at appointment" and grab my supplies. I ring the doorbell and Shannon lets me in.

I unwrap Shannon's bandages. I see that the wound has become infected. I take a swab and some photos so I can upload them to her care plan.

I discuss my concerns with Shannon, and suggest that her GP should prescribe her some antibiotics.

I call Shannon's GP directly, but can't get through, so I leave a message. I create a request in Shannon's care plan for to the GP to review the notes and photos and prescribe antibiotics, or contact me to discuss.

I redress Shannon's foot and tell her that I'll follow up with the GP before I see her tomorrow. I write my observations into the portal.

Later that day, I get a notification in my portal that the GP sent a script for the antibiotics. I get a text from the pharmacy saying the prescription is ready to be collected, so I'll be able to pick that up tomorrow.

The next morning, I go to the pharmacy to pick up Shannon's antibiotics. I get a notification in the portal that Shannon was admitted to hospital last night. It's unfortunate that we weren't able to get the prescription to her in time, but I'm glad she's being cared for.

I put a request to the hospital to notify her GP, my manager and I when Shannon is discharged so I can resume the visits

On Wednesday afternoon, I get a notification in my portal saying that Shannon has been discharged. I'm able to read her discharge summary. She was given IV antibiotics in the hospital, so I make a note on her care plan that I won't be giving Shannon the antibiotics that were prescribed earlier. I want to let the current ones work properly, but if I see no improvement I'll consult with her GP.

I contact Tina, our nurse manager, and ask her to reassign me to Shannon from tomorrow. I send Shannon and her daughter a text saying I'll be in to visit in the morning, so they know I'm coming.

Considerations

- There is a shared care plan that the GP can add other providers to as needed, so they can access patient records.
- Uploading images for other providers to review
- Able to send requests to GP within the system which is accessible via nurses phone app
- Nurse is notified through portal that the request has been actioned, and they are able to pick up prescription on behalf of the client.
- System notification when client is admitted to and discharged from hospital.
- Access to discharge summaries means in-hospital treatment is considered when visits resume.
- Able to seamlessly resume client home visits.

HIRA TI

- Allergies
  Medicines View
  Problem list
- Lab results

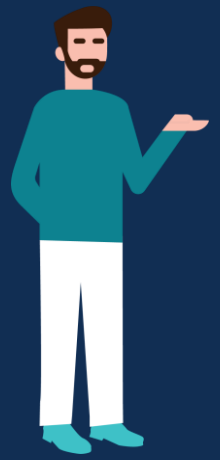
Backlog opportunities

- Integrated care plan
  Managing care plan members
- Images and Lab test requests
  Integrated care plan
- Secure messaging
  Connections to pharmacy systems
- Notifications: Pharmacy & lab results
- Admission notifications
- Discharge notifications
  Notification to resume services
  Integrated care plan

Blue Persona Type

Theo

Physio
Dunedin
35, South African



Chronic Care
Referrals **Consent** DHB ACC
Lack of access **Imaging**
Diagnoses Results **Scans** **Injury**
Accident/Injury Reports

My Needs of Hira

Integrated Care Plan
across multiple providers

Low — High

Privacy Concerns

Low — High

Data Access Needs

Low — High

Where I work

I work for a chain organisation that has physio clinics all over New Zealand. The branch I work at is just outside of Dunedin. My organization uses Gensolve to manage our client information, I can access scans and imaging results through MAP. As a physio I focus long term care as well as sport injuries. I've been with my current organization for five years. I work in a high needs low access community where I can make a real difference.

Most of the clients I work with are chronic cases meaning they have long term needs. I also do see a fair share of injury related cases, these clients generally have short term needs. Regardless of how long a client stays with me, it's important for me to understand who they are, their environment, and what motivates them so that I can create a plan that works for them.

Typical Day

My day-to-day, I come in around 8 am, check the appointments I have for the day, see if there are any new referrals.

We do 45-minute sessions, on a given day I can see somewhere between 8 to 12 clients. Sometimes we might have an injury come in that requires urgent attention so that can throw my schedule off a bit. Once I am done seeing clients, I have quite a bit of admin to do. There might be things like following up on referrals. If I've referred a patient for tests, I need to log in the portal to see those results. Sometimes I have to follow up with a GP to make sure referral requests are actioned.

Data I Need

- Imaging, scans, and any relevant diagnostic results
- Pre-existing health conditions, prior injuries
- Other health issues (e.g. diabetes, under going cancer treatments)
- Medications
- Accident/injury reports
- Patient name, date of birth, NHI

Challenges I Face

- Communication with other providers, there isn't an easy way to coordinate care
- ACC has moved to this assisted care approach and it doesn't work, the model was better because you had a person that knew the case
- As a community physio I am not privy to ACC and DHB information, a healthcare navigator has to request this information

Needs I Have

- At the end of the day I just want to be able to deliver good care to my clients without a lot of admin
- To be able to get up to speed on my clients background quickly, this is especially difficult when I am treating them on the field
- An easier way to refer clients to additional care they need that I cannot provide
- Better ways to communicate with other providers

Use Case/Current State

Blue Persona Type

Theo

Physio

Dunedin

35, South African

A new client Stephanie comes into the clinic. She's in a lot of pain so I only get a brief overview of her history. She tells me she recently had surgery on her shoulder.

I quickly diagnose Stephanie with a frozen shoulder, a common injury post surgery. I create a care plan for her, and recommend that she gets a steroid injection which her GP needs to refer her for.

I try to call her GP but they aren't available. I do some exercises with Stephanie, and send the GP an email once she's left. After a couple of days I still haven't heard anything so I try calling the GP again. After 2 weeks I manage to get hold of them. We discuss Stephanie's issues and my proposed treatment, and the GP asks me to send the information again as to why I recommend this treatment. The GP finally refers Stephanie for the steroid injection. The whole time the client is in pain.

I don't hear anything until Stephanie comes back for her next appointment. She says that the injection was effective and she's got a greater range of motion in her shoulder. While we're doing some exercises, she shares that she has a physically demanding job and also loves to spend time with her granddaughter. She usually takes care of her a few days a week, but since the surgery and her frozen shoulder she hasn't been able to play with her granddaughter. Her shoulder issue isn't just impacting her work, but it's impacting time with her whānau.

We spend the rest of the appointment conducting mobility tests. Now that I understand Stephanie's goals, I am able to tailor her treatment and exercises so she can get back to playing with what she loves as soon as possible.

I update her rehabilitation programme and enter her new exercises into the system. I book her in for fortnightly follow up appointments, and email the updated plan in our system with the rehab exercises she needs to do. And book her in for a follow up in 2 weeks. I email the updated plan to Stephanie

Considerations & Pain Points

- Didn't have much information about the client beforehand, and wasn't able to spent as much time getting to know the client because they were in so much pain.
- Quick and straightforward diagnosis
- Chasing the GP and being the advocate for the treatment, sending through the information and having to go back and forth. Client in pain whilst waiting for referral
- Not having any notifications that the client has had her specialist appointment, or how it's gone.
- Understanding the client helps to create a more tailored plan aligns with their goals.
- Manually updating the system after the appointment

Use Case/Future State

Blue Persona Type

Theo

Physio

Dunedin

35, South African

I have a new client, Stephanie come in for an appointment. I see she has set up a "My Story" in her health profile so I spend a few minutes reading this before she comes in.

I can see that she has a physically demanding job, as well as a granddaughter that she looks after. I can also see in her medical records that she's recently had surgery on her shoulder. I can see her ACC number. By understanding all of these factors, I'm able to think about how to get Stephanie back to full fitness.

During the consult, I diagnose Stephanie with a frozen shoulder, a common injury post surgery. We walk through some exercises, and I create a care plan for her and add her GP to her care team. We book her in for a follow-up appointment in 2 weeks.

After Stephanie has left, I write up my report and add it to her record so the GP can access it. I assign an action to her GP in the care plan to refer Stephanie to a specialist for the steroid injection.

I receive a notification that her injection is booked a week from now at 3pm. The specialist was also able to access Stephanie's "My story" along with her reports and treatment information.

The GP and I receive a summary from the specialist directly into our systems that Stephanie has been for her treatment.

When Stephanie comes for her next appointment, she tells me that the injection has improved her range of motion. I'm able to tailor a rehab plan that will hopefully help her get back to work and playing with her granddaughter as soon as possible. I update her care plan so her GP can view her progress if they want to, and email Stephanie the new exercises for her to do.

Considerations

- My Story helps to prepare for meeting client and understand the client's situation and motivating factors.
- Diagnosis is straightforward and next step recommendations
- Able to send request for referral directly from the system and share the diagnosis report with GP within the system.
- Receives notification of that specialist appointment has been booked.
- Receives notification that client has received treatment and has booked in their next physio appointment.
- Theo is able to prepare in advance the right kind of rehab for Stephanie's persona goals and preferences, this way the consultation can focus on the rehab exercises and long term goals

HIRA TI

- Update NHI
- Medications
  Allergies GP Provided
  Problem list GP Provided

Backlog opportunities

- My Story
  Past injuries
- Referrals
  Note sharing
  Integrated care plan
- Notifications – appointments
  Referrals
- Notifications – appointments
  Referrals
- Notifications
  3rd party App integrations
  My Story

Blue Persona Type

Meg

Locum Pharmacist

South Otago

52, Pākeha

Chronic Care

Referrals **Consent** DHB ACC

Lack of access **Imaging**

Diagnoses Results **Scans** **Injury**

Accident/Injury Reports

My Needs of Hira

Integrated Care Plan

across multiple providers

Low — High

Privacy Concerns

Low — High

Data Access Needs

Low — High

Where I work

As a locum pharmacist in the South Otago area, I work across multiple pharmacies in the area and I also work at the local hospital pharmacy.
What this means for me is that I have to keep track of multiple log-ins and passwords, every location requires a different set of credentials. Each locations uses a different system and/or does things differently so there is a lot to know and then remember how things are done at each location.

Typical Day

Most people think that the job of a pharmacist is to just put pills in bottles but there is much more to the job than that. The major responsibility of a pharmacist is making sure that whatever a client is putting into their body is the right thing for them. This requires understanding the client, understanding the medications they've been prescribed, as well as understanding what else the client might be taking. Safe guarding against drug interaction is a big part of the job
On hospital days, my days start with reviewing charts. For patients that are getting discharged it about making sure they have what they need to get home and coordinating with their community pharmacy. Then for admitted patients it's making sure they get any existing or newly prescribed meds.
On community pharmacy days, there is a bit of travel involved depending on which pharmacy I am working in. What I do in a day can change based on what walks in the door or what comes through on email. The main task is consulting with patients and dispensing medication. Sometimes I have to follow up with the healthcare provider who has prescribed the medication, if I discover a potential interaction or something like that.

Data I Need

- Patient name, date of birth, NHI
- Pre-existing health conditions
- Other health issues (e.g. diabetes, under going cancer treatments)
- Medication the patient is on
- Allergies
- Understanding why a medication is prescribed, medications have multiple uses

Challenges I Face

- The job of a pharmacist has shifted from being purely a dispensing function to also a quality checking function yet we don't have access to information
- Getting access to patient information is a challenge and takes up a lot of time
- Tracking down the prescribing healthcare providers if more information is needed
- Multiple log-ins and passwords, every location I work in requires a different set of credentials
- Lack of a consistent system is especially challenging as a locum, it means I have to learn a different way of doing things for every location I work at

Needs I Have

- Easy and timely access to patient health information
- To be trusted to have access to patient information
- A consistent system and one set of credentials to log in no matter which location I am working
- A more effective way to communicate with healthcare professional prescribing medications

Use Case/Current State

Blue Persona Type

Meg

Locum Pharmacist

South Otago

52, Pākeha

This week I'm working locum in a new pharmacy. A client, Karl, comes in with a script from the local A&M clinic. I try to login to the system, but forget my new credentials the first few times. I eventually get in and search Karl up in the system, but can't find any dispensing history for him.

I come out from behind the counter and chat to Karl to get some more information. He tells me he's visiting from Auckland, and suddenly fell ill last night so went to A&M, who gave him a script. I ask Karl about his general health, and whether he takes any other medications.

Karl tells me he is on medication for his blood pressure but can't remember what it is called. This concerns me as the script he wants me to fill is known to interact with some types of medication used to treat high blood pressure.

I explain to Karl that this medication might interact with his blood pressure meds and that I need to get more information. I ask Karl who his GP is and if he's okay for me to contact them.

Karl tells me the name of his GP but doesn't have their contact information on hand. So, I Google the GP to get the contact details of the practice. I give the practice a call, but the receptionist tells me they're in an appointment and not available right now. I explain why I'm calling and ask for a call back.

I know that I can find out what medication Karl is on by contacting his regular pharmacy in Auckland. Karl tells me that he uses a couple of them. I Google one of the locations he mentions and speak with the pharmacist.

I speak with a pharmacist in Auckland who is able to tell me exactly the medications and dosage that Karl is on. I determine that Karl needs to be prescribed a different medication, so I call A&M. After waiting on hold, I am able to get the doctor there to prescribe a different medication.

I come out again from behind the counter to explain to Karl that's I've managed to track down his medication and then gotten A&M to prescribe a different medication that won't interact with the ones he takes. I thank him for his patience and then tell him I will go fill his script now, it won't be long.

I fill Karl's script, and ask him to monitor for any side effects.

After he's left, I try to find where this particular pharmacy records their patient notes, as each one does it differently. I get the other pharmacist to show me where to write my notes.

Considerations & Pain Points

- Locum's have a different set of credentials for each location which requires them to remember multiple passwords.
- Unable to access information for consumers that are not local to the area, no dispensing history.
- Consumer is not able to remember the name of his medication and pharmacist is not able to look it up in the system.
- No access to details of other care providers. They're required to do a lot of chasing up to keep patient safe, which should have been done earlier on.
- Pharmacist has to call around to get information about consumer, which takes time.
- Finally able to get consumer a medication that is appropriate for them.
- No consistent way of capturing data, each location has a different process

Use Case/Future State

Blue Persona Type

Meg

Locum Pharmacist

South Otago

52, Pākeha

This week I'm working locum in a new pharmacy. A client, Karl, comes in with a script from the local A&M clinic. I login to the system using my single-sign-on and search Karl up in the system.

The system indicates that Karl isn't local to Otago, but I am able to see Karl's dispensing records and an overview of his health history and conditions.

I can also see who his GP is, and which pharmacies he usually goes to.

Because the A&M staff also had access to this information, they were able to check for any potential interactions between the new script and Karl's current medications. To be safe, I put the medication into the NZF checker and everything comes up okay.

While I complete the script for Karl, I make my notes in the system about our interaction. I also send a notification to his GP, so they're aware that Karl's been prescribed a new medication in case there's any side effects or complications.

Once I've packaged up the medication, I bring it to the counter and ring it up on the till. I can see on my system that Karl qualifies for the prescription subsidy scheme, so he gets his prescription for free..

I wish Karl an enjoyable rest of his holiday, and ask him to keep an eye out for any side effects that might occur. I let him know that he can give me a call if he needs any further advice while he's visiting Otago

Considerations & Pain Points

Pharmacist is able to log-in easily using single-sign-on	Pharmacist is able to see consumers full dispensing history across multiple pharmacies.	A&M and pharmacist all have access to consumer's information so are able to prescribe the appropriate medication the first time.	Pharmacist is easily able to share information with GP through the system.	Pharmacist is able to see entitlements and charge the consumer the right amount.	Consumer receives the medication that is appropriate for them the first time and can trust it is safe.

HIRA TI

My Health Account Workforce Update NHI	Medications lists	Medications lists Allergies list			

Backlog opportunities

Single sign in for locum pharmacist	Access health records outside region	A&M connections to customer information	Notification with GPs PMS	Entitlements – High use Prescriptions	

Persona Profile: Blue

Mina

Ultrasound Technician
Blenheim
45, Korean

Hospital
Referrals **Small town**
Diagnostic results **Imaging**
Varying degrees of care **Scans**
No automatic notifications

My Needs of Hira

Integrated Care Plan
across multiple providers

Low — High

Privacy Concerns

Low — High

Data Access Needs

Low — High

Where I work

I work in a hospital in a small town which means that I get to see a variety of cases. Clients are referred to me either by another department within the hospital or by GPs and specialists. The information I need about a client is generally provided within the referral but there are times I might need to get more information, in these cases I can access patient info through Health Connect South, SIPICS, SYGNO Dynamics.

Typical Day

As a ultrasound technician, I work in a hospital in a small town. I am a general sonographer which means I can work across many types of cases which works well for a smaller hospital.

The variety means that I see clients who need varying degrees of care, being able to adjust to what each person needs is important. For example. some are very anxious so I might need to take my time and explain more what's happening. Some clients have had these scans multiple times so what they need is very different.

At the start of my shift, I am given a list of the appointments that I will cover during that shift. Each appointment is about 45 minutes to an hour which means I can typically do eight appointments in a day.

The 45 minute appointment includes meeting and greeting the client, doing their scans, and sending off the images to the radiologist so they can review the report and finalise them before sending them back to the referrer. If I am running behind I leave the writing of the reports to the end of my shift so that I'm not keeping clients waiting.

Sometimes I have to manage between scheduled appointments and urgent ED cases, where someone might need emergency surgery and a scan is needed.

Data I Need

- Patient name, date of birth, NHIPre-existing health conditions
- Referral letter and concern
- Any relevant reports or results
- Medications
- History of interactions with public health system

Challenges I Face

- The referring healthcare provider isn't automatically notified that a scan has been completed this has to be done manually this is time consuming, can cause delays in getting patients results, and there is a risk that something gets missed
- Systems within healthcare don't talk to each other, which means that often consumers have to repeat what's happened to them over and over

Needs I Have

- An automatic way for referring providers to be notified when a scan is complete
- An automatic way for referring providers to be notified if scan results require urgent action

Use Case/Current State

Blue Persona Type

Mina

Ultrasound Technician

Blenheim

45, Korean

I'm seeing a new client Seo-Yeon today for 4a 12-week ultrasound. She was originally assigned to a colleague, but it wasn't mentioned in her referral that she couldn't speak English. Our receptionist was able to reschedule her to see me, but she had to wait for an extra hour until I was free.

Before I bring Seo-Yeon into the exam room, read her referral letter. It doesn't provide much information other than what I already know.

I call Seo-Yeon into the exam room. I try to engage in some light conversation in English, but she isn't able to converse well. I can see her relief when I start during the scaspeaking Korean, and she tells me I'm the first provider she's been able to talk to in her native language. I talk her through what I'm going to be doing n.

Once I have completed the scan, I walk Seo-Yeon' out to the receptionist to book in her 20-week scan. I translate between the receptionist and Seo-Yeon. Seo-Yoon asks if she can book me for her other scans, and I tell her that there aren't usually any other scans scheduled after the 20 week one.

She looks confused and stressed. Seo-Yeon talks to me about how she's feeling anxious because her best friend back in Busan is also pregnant, and the care she's getting is very different to how it is in NZ. In Korea, scans are done more frequently during pregnancy. Seo-Yeon tells me it's her first pregnancy, and she's concerned that the lack of scans might be putting her baby at risk.

It is almost time for my lunch break. I can see that Seo-Yeon is stressed so I decide to take some of my lunch break to explain the way maternity care in NZ works. I can remember being confused by it as well when I first immigrated here, so I'm empathetic towards her. I've try to find NZ maternity resources in Korean online, but it's difficult to know which sources are reputable. I tell Seo-Yeon that I'll translate some resources tonight and send them through to her.

After Seo-Yoon has left, I grab my lunch and eat while I finalise the images to be sent off to the radiologist, who reviews the images and writes the report to go back to the referrer. I need to work through my lunch break so I don't fall behind on the rest of my appointments for the day.

At the end of my shift, I spend an extra an hour in the office translating some resources into Korean, and send them through to Seo-Yeon. Before I head home, I set myself a reminder to give Seo-Yeon's midwife a call later in the week to check that she's seen the report. Even though the midwife can access the report through HCS, she doesn't get notified when the scans are available.

Considerations & Pain Points

- No visibility into client's language preference at the time appointment was booked.
- Language capabilities not clear
- Client unable to converse with providers who don't speak their language. Unable to indicate preferences
- Confusion about NZ healthcare system, no resources available in client's native language
- Healthcare provider taking time out of their break to explain NZ care
- Healthcare provider working through break time to stay on schedule
- Need to manually follow up to notify referrer of results.

  Taking personal time to translate resources into client's native language.

Use Case/Future State

Blue Persona Type

Mina

Ultrasound Technician

Blenheim

45, Korean

I'm seeing a new client Seo-Yeon, whose LMC is a new Korean midwife in my region. She was able to find me from a list of Korean-speaking ultrasound techs, and requested that I be assigned to this client. I've been added to Seo-Yeon's care team, so I'm able to access her maternity care plan.

Before her appointment, I look at Seo-Yeon's health records and care plan. Her 'My Story' populates in my system, and I can see that her preferred language is Korean, though she can speak some conversational English. I also see that she's only been in NZ for 18 months, and that this is her first pregnancy. She doesn't have any hereditary conditions in her notes that I need to be watchful about.

I call Seo-Yeon into the exam room, and greet her in Korean. I chat to her while I'm setting up for her scan. I explain what I will be doing today and ask if she has any questions. Seo-Yeon tells me her LMC told her about a Korean maternity app that has helpful resources about New Zealand's maternity care written in Korean which has been helpful. She also tells me that because her Health Records is translated to Korean she can finally read and understand her results.

Everything in Seo-Yeon's ultrasound looks great. I finish up the scans. On my computer, I can see that her LMC has also booked me in for her 20-week scan. I ask Seo-Yeon if she has any other concerns or questions about the process, because I know there's quite a difference between Korea and New Zealand's pre-natal care.

Seo-Yeon doesn't have any concerns, as she understands how the system works here now. She does ask if she'd be able to get extra scans if she wanted to. I tell her she's welcome to book in for more scans, but there'll be an additional cost as only the first 2 are funded.

After Seo-Yeon has left, I finalise the images to be sent to the radiologist so they can review them and write the report to be submitted to the LMC. I also write a note in my appointment summary asking the LMC to provide Seo-Yeon a copy of her images so she can share them with her friends and family

The next day, I get a notification that the report and images have been uploaded to HCS, and that the midwife has added a copy to Seo-Yeon's maternity care plan. After her LMC has discussed the results with her, Seo-Yeon will be able to access a copy in her Health records portal which she can translate into Korean

Considerations & Pain Points

Able to easily refer clients based on language preference	My Story is shared across providers and gives more information about the client.	Reliable health information resources are available in client's native language.	Client understands the NZ maternity care.	Providers can easily communicate within system.	Notifications remove the need for manual reminders to follow up.

HIRA TI

Terminology services – ethnicity & language NHI	Terminology services – ethnicity & language Condition list		Entitlements		Consumer portal

Backlog opportunities

Integrated Care plan Referrals & Appointments Provider directory Interpreter services connections	My Story Family medical history Connection to GP notes Connection to specialist notes	Multi-lingual patient portal Connection to information source for 3rd party apps and services	Integrated Care plan	Service request between providers eg radiology	Notifications Shared care record Translation services such as google translate

Pink Persona Type

Raymond

ED Doctor

Hawkes Bay

44, Irish Immigrant

Stabilise and Refer out

Manual Processes Allergies

Medications **Diagnostics**

Lack of Access **Frequent Flyers**

Delays in getting information

Urgent Needs **Acute Care** **Injury**

My Needs of Hira

Integrated Care Plan

across multiple providers

Low — High

Privacy Concerns

Low — High

Data Access Needs

Low — High

Where I work

I am an Emergency Department doctor of a regional hospital in a popular holiday town., I have only been at this hospital for 18 months. Working in the ED is fast paced and that's what I like about it. I also get to see a variety of patients and treat different kinds of conditions which makes it very interesting work. The ED schedule also allows me to spend a lot more time with my kids because my work day isn't restricted to your typical 9 to 5 schedule.

There is a big retirement population here. The socio-economics of the area is a mixed bag of those struggling with poverty, barely making ends meet, to people that have their second or third home here.

There are a few frequent flyers as we call them that come in regularly, but most clients I see once, I treat them, make sure they are stable and then refer them on if they need further care or discharge them if they are sorted.

Typical Day

I work shifts so I don't have set times that I always work, it differs. On days that I have a later shift I do breakfast with the kids and walk them to school and then try to get a nap and then hit the gym before my shift. On days when I work a morning shift, we try to cook diner as a family.

No two days are the same at the ED, it is rather unpredictable what will come through the door. On a given day we might have 100 - 150 patients presenting with anything from flu to broken bones to patients with chronic conditions. My day is spent moving from patient to patient. I have to try to get up to speed, learn as much about each patient as quickly as possible, in the ED that time between investigating and treating can be critical.

Data I Need

- Existing and pre-existing conditions
- Medications
- Procedures they've had
- Allergies
- Basic info like name, date of birth
- Diagnostic results/scans
- Triage notes
- Paramedic notes

Challenges I Face

- We have so many passwords, and are having to log on and off of computers constantly
- Communicating and coordinating care even within the hospital can be challenging
- The system we use doesn't alert us when tests and scan results are ready
- Shortage of hospital beds means that we have to look after patients longer than we would which adds to our capacity
- One of the challenges with getting access to consumer information is that there are different systems and not all of them feed into Clinical Portal

Needs I Have

- Access to patient information from around the country because people who show up at the ED might not necessarily live in the area
- Being able to see GP notes would be very helpful
- Diagnostic results and investigation notes are all in different places so we have to access multiple systems - all of this being in one place
- A digital prescription system that can see what meds a patient is on and to be able to check for interactions as you are writing the script.

Use Case/ Current State

Pink Persona Type

Raymond

ED Doctor

Hawkes Bay

44, Irish Immigrant

I am working at the Emergency department and it's a busy Saturday afternoon with lots of Patients needing urgent treatment, My team and me are rushed off our feet

A patient Margaret arrives at the ED via ambulance, she's just suffered a stroke. She's on her own and unable to communicate. The paramedics provide their notes and the print out of the ECG that was done in ambulance.

The triage nurse hands me Margaret's file which has a print out of the paramedic notes (ACS) and the triage notes, but I need more information about Margaret to figure out what to do next. I search for her information on our PMS and Clinical Portal.

I eventually determine that Margaret must not be local to Hawkes Bay, as I'm unable to find her medical records in our systems. So I have to piece together what I can observe, until the tests I've requested are back.

I keep walking back to the computer station to check for Margaret's results. Each time I do, I have to log-in and then log-out before I walk away.

As she is stable, Margaret is admitted to the inpatient ward and her care is taken over by the team there. Margaret goes with her folder of notes that are paper based

After Margaret is transferred to a different ward, I receive her test results. I have to now figure out whose care Margaret is under so I can get the test results to them. This isn't easy, because once a patient is discharged from the ED we don't know whose care they are under.

Considerations & Pain Points

- ECG readings can only be printed out, there is no way to electronically share so it is not added to patient file.
- There is very limited information available about the patient. All notes are in paper format and are easy to mis place
- Access to patient information is limited by geography, mainly patient's primary address or location of enrolled GP office. Does not accommodate for the fact that patients travel or split their time between locations.
- No system alerts to let doctors know when test results are back, they have to check the system periodically. Paper based notes
- Paper based notes
- No way to update where test results should go when a patient is transferred.

  No way to easily look up whose care a patient is under after being discharged from ED.

Use Case/ Future State

Pink Persona Type

Raymond

ED Doctor

Hawkes Bay

44, Irish Immigrant

I am working at the Emergency department and it's a busy Saturday afternoon with lots of Patients needing urgent treatment, My team and me are rushed off our feet

ED

Margaret arrives at the ED via ambulance, she's just suffered a stroke. She's on her own and unable to communicate. I am able to access all the diagnostics done in ambulance and paramedic notes are available in system. The paramedic team have her NHI number

I log into the system and see her triage notes and can also access Margaret's full medical history through her NHI details. I can see that she doesn't live locally. I am able to access her current medications and I can see that she's had a stroke before. With this information I move quickly to action care for Margaret.

I can see Margaret has nominated her daughter Susan in her consent and delegations as well as her EPA , so I get someone on the team to call her and let her know what's happening She heads to Hawkes Bay from Wellington

I order blood work and medications. I also notify Margaret's GP through the system of what's happened.

We were able to stabilise Margaret, so she is going to be admitted to the inpatient ward for monitoring and further care. We package all of her notes electronically and initiate the referral to the inpatient ward.

I receive a notification that Margaret's blood results are back. I can see that her inpatient team has also been notified. I briefly check them in my portal, and carry on with my duties.

Considerations

Diagnostics done on patient are electronically transferred to patient's file. Able to look up paramedic notes electronically

On-demand access to triage and paramedic notes, and Margaret's full medical history, including medications, previous diagnoses, medical conditions, allergies, and surgical procedures.

Able to look up nominated peoples for consent and delegation and contact them, plus EPOA

Able to look up & notify GPs

Patient's file including ED notes is electronically transferred to the inpatient ward

Able to receive notifications on phone when diagnostic and lab results are available

HIRA T1

Updated NHI details
Medic Alert

Allergies
Medications
Problem and conditions

Consent and Delegation (RFI)

Diagnostics
Notifications

Diagnostics, lab results
Notifications

Backlog opportunities

ED systems connect live to paramedic notes
Paramedic access her NHI details

Medical history for outside the region
Allergies

GP notifications

Electronic transfer of care
Ability to update information

Pink Persona Type

Alana

Paramedic
Auckland
37, Pākeha

Stabilise and Refer out

Manual Processes Allergies
Medications **Diagnostics**
Lack of Access **Frequent Flyers**
Delays in getting information
Urgent Needs **Acute Care** **Injury**

My Needs of Hira

Integrated Care Plan
across multiple providers

Low — High

Privacy Concerns

Low — High

Data Access Needs

Low — High

Where I work

I am a paramedic covering the Auckland Central region. I've been in this job for 4 years now. My work is in the community, I get to work with all sorts of people, from the elderly, to young people, to children. Everyday I get to help my community.

Typical Day

As a paramedic, every day looks a bit different. The one thing that is consistent is that I spend the entire day on the road going from one place to another. In one day I can be called out to an accident, help an elderly member of the community, or transport a cardiac patient to hospital.
When a job comes in through 111 it gets routed to our contact centre. Then based on geographic location it is pushed to the ambulance. The information that comes through is often limited tells us where we are going, why we are going there, and who we are meant to see. Onsite I make an assessment of the situation, not all jobs end up going to hospital. Sometimes the situation can be addressed onsite, sometimes it's referral to another provider or service. As a paramedic, I am very aware of the capacity challenges that hospitals are facing so it is important that only those cases that need hospital care are taken to hospital.
After my shift is over, I stop over at mum's who is the carer for my gran and we have dinner together. I also check in on gran because her health is failing, it also gives mum a bit of a break. At the weekends if I am not scheduled to work, I help mum with chores around the house.

Data I Need

- presenting condition
- priority of the job
- basic information
- medications
- pre-existing conditions
- location of the client
- GP notes
- hospital notes
- DHB records

Challenges I Face

- Many members of the community do not know what conditions they have or what meds they are on
- We don't have access to GP notes so if the information is not in a DHB system that we have access to, this is information we have to work without
- The contact centre does not have access to all DHB systems so sometimes there is information I need but cannot get
- Some clients don't understand that they don't need to go to hospital but they are insistent, they don't view us as qualified to make that decision
- There are multiple systems, that sometimes have conflicting information, and it's not easy to know which is right

Needs I Have

- Visibility of all relevant client notes and records
- We need to be recognised as being part of the healthcare system
- A single sign on, we have so many passwords
- One system that is the source of truth
- Ability to share treatment notes with GP

Use Case/ Current State

Pink Persona Type

Alana

Paramedic

Auckland

37, Pākeha

I'm on the road on a Sunday evening with Katie, an EMT. We get a call from dispatch out to a patient who is having chest pain, which is high acuity. They're about 15 mins away, so I plot the address into the GPS system and turn on lights and sirens.

By default, I have very little information about a patient aside from their name, address and sometimes an NHI. I don't have an NHI for this patient, so I can't look at previous ambulance records which means I don't know what could be causing their issues.

We get to the house and hit 'scene' on the system, which alerts me to start an EPRF. I'm let in by an elderly man, Roger. He takes me to his wife Lydia, who is sitting on the ground quite short of breath and clammy. I give her some aspirin, and start to assess her while filling out treatment details in the ePRF. I ask Roger about Lydia's medical history and if she's on any medications or has any allergies. He's quite upset and isn't able to give me clear answers apart from telling me she has some heart problems.

While we're assessing Lydia, I try and find more information about her. I ask Katie to look in the bathroom and kitchen to find some pill bottles or blister packs. She brings some back, and while it's hard to tell what she's currently taking, the packaging gives me information about Lydia like her NHI and D.O.B. I take a photo of the medication, and add the photo and a written record to the ePRF.

Katie calls the clinical support desk to provide them with Lydia's NHI. I explain to Lydia that I need to get an ECG and what that will involve, and ask for her consent. The support desk are able to find an ePRF from when she was taken to hospital a year ago after suffering a stroke. But we aren't able to see any other medical records or her current medications. I continue providing care, but it's unsettling not knowing if she has an allergy or a comorbid condition.

The ECG reading shows Lydia has STEMI, so we explain to Lydia that we need to talk her to hospital. She agrees, so we transport her to the ambulance and ask her husband to sit in the back. Katie jumps behind the wheel and phones the STEMI coordinator for recommendations on which hospital to go to. Waitemata is the nearest hospital equipped for STEMI, so we head there while Katie phones the ED to let them know they've got an incoming patient. I continue completing the ePRF with notes, diagnoses and decisions.

When we arrive at the hospital, we meet the cardiac team in the loading bay and wheel Lydia into the lab. I give a handover of her condition before we transfer her from the stretcher. Once she's in the lab, I finalise her ePRF and transfer it to the hospital's system. Katie and I head back out in the truck

Considerations

- Paramedics only have information given to them by the caller, and without an NHI can't access previous records
- Difficult to gather any key information to inform treatment when patient is distressed.
- Paramedics often rely on information they can find on the scene, like scripts or contact information in wallets/ pockets. This isn't always reliable.
- Paramedics don't know a patient's current medications or conditions if it wasn't captured on an ePRF.

  Systems don't require personnel to indicate if consent was obtained, and it is mostly verbal.
- Paramedics get a print out of the ECG, and they are also required to take a photo of the reading. This can take up a lot of space on the tablet.
- The ambulance team and ED staff have to agree on the patient's NHI, or assign them a temporary one. Not knowing a patients NHI means care records have to be reassigned later on.

Use Case/ Future State

Pink Persona Type

Alana

Paramedic

Auckland

37, Pākeha

I'm on the road on a Sunday evening with Katie, an EMT. We get a call from dispatch out to a patient who is having chest pain, which is high acuity. They're about 15 mins away, so I plot the address into the GPS system and turn on lights and sirens.

Dispatch are given details of a MedicAlert bracelet. Information is relayed to us over the phone and into our MDT. Our caller is Roger, whose wife Lydia is having chest pain and breathing problems. While Katie drives, I pull up Lydia's past ePRFs and find that she was taken to hospital for a stroke about a year ago

We get to the house and hit 'scene' on the tablet, which alerts me to start an ePRF. Roger meets us outside, and takes us to Lydia who is sitting on the kitchen floor quite short of breath and clammy. I give her some aspirin, and start to assess her while filling out treatment details in the ePRF. I ask for Lydia's consent to access her GP's health records, and she says yes.

While we're assessing Lydia, I look at her records and see her GP has prescribed her some beta blockers and anticoagulants to manage her heart issues. I also see that her GP has requested to be notified if Lydia is attended by an ambulance, so I make a note to sent him a message. I talk Roger and Lydia through each step we're taking to try and keep them calm.

I ask for Lydia's consent to acquire an ECG, as we're required to for women if possible. She consents, so I place the electrodes and start the reading, and capture her consent on the tablet. The ECG shows that Lydia has STEMI, so we need to transport her to a PCI-capable hospital equipped to care for her. We put her on the stretcher and me and Roger sit in the back of the ambulance while Katie gets behind the wheel.

Katie jumps behind the wheel and phones the STEMI coordinator for advice on which hospital to go to. I know that the ED will be able to see Lydia's in-progress record on their Arrivals Board, so I make sure to update her ePRF and upload the ECG reading to her file.

When we arrive at the hospital, we meet the cardiac team in the loading bay and wheel Lydia into the lab.

I give a handover of Lydia's diagnosis and condition before we transfer her from the stretcher. Once she's in the lab, I confirm Lydia's NHI so I can finalise her ACS and transfer it to the hospital's system.

When I get back to the truck, I send her GP a notification and write a short summary. Even though he'll be notified when she's discharged, her file said to let him know if Lydia goes to hospital

Considerations

- Identifying the patient allows dispatch to pull MedicAlert information, and personnel can look at patient's past ePRFs to understand their conditions before arriving on scene
- Able to locate patient primary health records, and get consent from patient to access. If patient was unconscious, would have continued on implied consent.
- Access to past medication and history
  Patient preferences
  GP notifications
- Capturing consent
  Still need to get consent for undressing female patient, but capturing this is important
- Connection to hospital systems in transit so ED can prepare for treatment
- Automatic update of hospital systems from Paramedic systems
  GP notifications

HIRA T1

- NHI information
  Medic Alert
- Diagnostics
  Medication
  Allergies
- Consent & Delegation (RFI)

Backlog opportunities

- Paramedic access to Patient GP notes
- GP notifications
- Capturing consent
- Live update of information between ambulance and ED
- GP notifications
  ACS and Hospital system connections

Non-clinical Personas and Use Cases

Non-clinical Persona

Paul

Managing Director
Auckland
57, Pākeha

My Needs of Hira

Coordinating Care
across service providers and agencies

Low — High

Data Access
Visibility and connecting health, social, and entitlement data

Low — High

Capturing and Sharing Data
paperless and secure way to share across agencies

Low — High

Where I work

I've been the Managing Director of our organisation for nearly 5 years now. Before this, I worked as a social worker in the mental health and disability space, so this work is definitely close to my heart. We're located on a cool little street because just down the road we have a food bank, a counselling service and a low-cost general practice. So there's a few NGOs around and we bounce off each other where we can, if there's someone who maybe needs support in another area that we don't offer.

As the director, I am not involved in the day-to-day client interactions. Most of my work involves dealing with the administrative side of things. On a daily basis, I interact with various government agencies (e.g. MSD, ACC), community service providers, funding organisations - to name a few. I also work very closely with my team to make sure they have the support they need and jump in if a case particularly challenging and needs my support.

Typical Day

My day starts with me coming into the office and checking emails. We have a team meeting each morning where we talk about our current cases, any challenges, or if anyone on the team needs help with something. Then we review any new clients and discuss as a team who is the best person to take on the new client.

Then I will have various tasks such as approving timesheets, leave requests, and milage claims. Sometimes there are HR, entitlement, or contract conversations I need to have. I am also responsible for generating reports for the various contracts we're funded through.

Data I Need

- Active clients
- Claim information
- Timesheets and mileage from staff
- Other services a client is accessing
- All referrals and case notes
- Staff schedules
- Other agency databases for coordination and referrals
- Funding contract details and criteria
- WINZ or other support worker details
- Client contact details

Challenges I Face

- Disability is seen through a purely medical lens. The ultimate goal in the medical model is to make something go away. You can't make a disability go away
- The disability sector is often an afterthought when services are implemented
- Some of our funders have client management systems, but not all of them which means we have disjointed information in multiple places.
- Not all patient portals are accessible, which means we remove people's dignity and ability to evaluate their own health information and drive decisions
- Disabled people tend to have a more active relationship with social support agencies, as well as the various health professions, and a lot of health providers tend to hide behind the Privacy Act whenever attempts to share information across health and social services are made.

Needs I Have

- Information from both the health and disability sector perspectives to be considered when making decisions for a person's care
- A shared record for a person, so they don't have to repeat their story to every point of contact not just in the health system, but the wider social system as well
- I want a platform that enables us to report on outcomes rather than outputs. How do we quantify and tell stories through an effective database?
- Equipment and resourcing to train our clients on how to use assistive technologies

Use Case / Current State

Non-Clinical

Paul

Managing Director

Auckland

57, Pākeha

I arrive at the office early, as our weekly team meeting is on this morning and I want to get a head start on the other things on my to-do list

At our team meeting, one of my senior staff members, Sara, shares that she's having some issues with a new client she was recently assigned to. Juan has muscular dystrophy and has recently started using a wheelchair, and came to us for financial and social support as he is adjusting his house and lifestyle.

As Juan's condition has progressed, he's been receiving support from multiple private and public health providers, as well as social support agencies. Sara is struggling to get access to information about his treatment and entitlements because some providers aren't willing to share that with our organisation. It's frustrating, but I've seen this exact situation play out so many times. It's frustrating as a NGO not being able to support our clients.

Juan also told Sara that he's been struggling to fill out forms at some of his appointments. Muscular dystrophy is affecting his dexterity, and he had to dictate his personal information to a receptionist in the waiting room last week because he couldn't steadily grip a pen. He was both embarrassed and frustrated by this and is asking for our help.

Sara has been trying to pull together a complete picture of Juan's situation so that we're able to easily share that information when we help refer him to any new services. Unfortunately, because some providers are reluctant to share health information with social services, she's unable to do her job. I ask Sara to send me the contact details of the organisations so I can call them and remove this barrier for her

I spend the morning calling around, speaking to case managers and specialists, and finally get them to understand that they're able to share Juan's information with us. I create a folder to put all the information in, but it might take a while for everything to be sent through. and trying to figure out how we might gather Juan's health information in a way that makes it easy for him to share with the various specialists he needs to go see.

I pop into Sara's office and tell her that I'm making progress, and that we should have everything in a few days. I have to leave for my meetings soon and I still don't have a solution. Not only that but I haven't been able to get the reports I needed to get done, which means I will have to do then later this evening from home.

. find a solution to help Juan with the paper work he needs to complete for all of the specialist appointments. Sara doesn't have a way of gathering all of the information so that it can easily be shared with the different specialists Juan needs to see.

Considerations & Pain Points

- The need to access and collate health information
- Client's loss of independence is made worse when they try to access the health services they need.
- No solution to support client's needs.
- Loss of time and productivity and still no solution.
- The lack of a systemic solutions means service providers work outside of their normal work day to catch up.

Use Case / Future State

Non-Clinical

Paul

Managing Director

Auckland

57, Pākeha

I arrive at the office early, as our weekly team meeting is on this morning and I want to get a head start on the other things on my to-do list

At our team meeting, one of my senior staff members, Sara, shares that we have a new client Juan contact us for services. Sara met with Juan who has muscular dystrophy. He has recently started using a wheelchair, and has approached us for financial and social support as he is adjusting his house and lifestyle.

When Sara met Juan, he gave us consent to access his files and be part of his Integrated care plan
We could see from his records that as Juan's condition has progressed, he's been receiving support from multiple private and public health providers, as well as social support agencies. Sara is able to quickly get an overview of Juans situation

During their initial consultation Sara helped Juan to set up his profile in the consumer profile and to also create his "my story" so he doesn't have to keep repeating the same information.
In his profile they also set up his accessibility requirements against his NHI number so future providers can quickly view his accessibility needs.

As Sara now have clear view of Juan, his history and his needs, and we're able to view his Integrated care plan, Sara is able to stand up the services Juan needs.
We can also see what Juan is entitled to, so this makes our accounting and resource allocation easier.
We can even arrange his travel to and from his appointments with us.

Considerations

Able to gather information for him → Specialists are now able to access Juans notes to gather his medical information → All information now accessible by carers and Juan → Client has ability to control who can see their information. & create his own story of needs → Health and social service needs are available to everyone that needs access to them in a secure way.

HIRA T1

Updated NHI details
Problem & Conditions

Allergies
Medications
Problem and conditions

Consumer portal
Consent and delegation (RFI)

Consent and Delegation

Diagnostics, lab results
Notifications

Backlog opportunities

Connections between specialists

My Story
Integrated care plan

My story
Integrated Care Plan

Integrated care plan
Entitlements

Non-clinical Persona

Ngāire

Social Worker
Wellington
48, Māori

My Needs of Hira

Coordinating Care
across service providers and agencies

Low — High

Data Access
mental health data

Low — High

Capturing and Sharing Data
paperless and secure way to share across agencies

Low — High

Where I work

I am in private practice on my own serving the Wellington community. If the situation is right and appropriate, sometimes I meet clients in a quiet, private place like a mall. Having a more informal setting works best for some people, instead of an overly formal process. I usually never let a client come to my home address, unless it is a female and I can offer her some breakfast.

As a private practitioner, I can receive referrals from anywhere, as long as they meet the criteria of what I can provide. My work involves engaging with clients, ACC, hospitals, law enforcement, Ministry of Social Development, and other community services. The clients I work with vary from parolees, assault victims, people experience domestic and family violence. My clients also have varying needs which means they might require access to healthcare, mental health services, social services such as housing. I've worked with high-risk clients where police and probation are heavily involved, and I meet those clients in public places in plain sight. I let those departments know, and they assign people to tail and monitor us. It's difficult working with those clients - I've had to put a protection order against some men

Typical Day

Before I leave home, I karakia because it sets me on a safe passage for the day. The starts with me checking my emails and voicemails but each day is different depending on which clients I have that day and also if I have any new referrals. Some of my day is spent in my office doing admin, there is always a lot of admin and then the rest is going out meeting with clients. I work from home so usually I will meant clients out in public places for safety reasons. Sometimes I do go to client's homes which carries with it some personal safety risks.

Data I Need

- Ethnicity, language, if they need an interpreter
- Name, date of birth, NHI
- Any risks at the address such as history of violence, dogs
- Household members
- Mental health diagnosis
- Information from healthcare providers involved in care
- The reason they are being referred
- If a client has a protection order against someone, or against themselves

Challenges I Face

- I have to fight with the ACC case managers, and put in a lot of extra effort, to justify why I need extra hours with a client
- It's dangerous getting involved with mentally unstable clients - I'm often the first person who has shown them any type of attention in their lives, and it can form an unhealthy attachment, to the point where I've had to put restraining orders against some
- It is very difficult to get information out of the health system, even when I have consent from clients to access their information
- Access to mental health information is limited to certain professions and not easily accessible it's critical to understand if a client is dealing with mental health issues
- Information isn't shared between agencies, this makes it really difficult to get clients the help they need, I spend a lot of time chasing information
- A lot of processes are heavily reliant on paper, which is done in triplicate carbon copies and copies are manually shared across agencies
- Referral forms don't always have all the information I need which makes it difficult to know why someone is being sent to me

Needs I Have

- I need to know if there is a restraining or trespass order on a client against me by the police
- Secure and easily accessible storage of important documents like the enrolment and consent forms, so my supplier or I can provide evidence if it is questioned
- Having a social worker peer to run cases by is helpful, because then you've got 2 pairs of eyes to make the judgement call.
- I need to have other things in my life, like my political, educational and supervision work. Not being solely focused on the frontline is what keeps me from burning out

Use Case / Current State

Non-Clinical

Ngāire

Social Worker

Wellington

48, Māori

I have a new client, Cara who is being referred to me after she experienced a sexual assault. Cara has already been in for a medical exam and completed a kit. Ahead of our appointment she signed a consent form so that I could access the report and results of her exam. This is important context for me to know how to best support her and I can minimise her having to retell her story.

Even after sharing the consent form and multiple follow ups, I wasn't able to get access to her files.

When Cara shows up for her appointment I don't have the information I need and I will have to rely on Cara to share information with me.

Cara arrives at my office I introduce myself and explain to her my role and how we can work together. Then I explain to Cara that although she provided a consent form, I wasn't able to get access to her files so I don't have all the information I need. I then tell her I will need to ask her some questions.

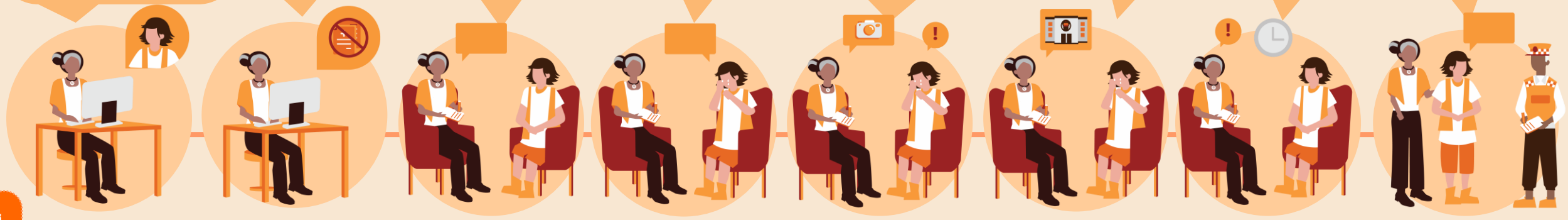
I go through my questions and Cara is emotional as she retells her story and shares with me the information she shared during her medical exam.

As we were talking Cara shared with me that she was told that she would also need to go to the police station to have her injuries photographed but she had not done this yet. She didn't understand why, when everything was already photographed at the medical exam. I explain to her that the court system only accepts photos taken by the police because they have a system that can ensure the photos weren't tampered with in anyway, the court needs this assurance of the evidence they accept. Cara was angry, frustrated, and scared. She tells me that every time she had to talk about what happens or let someone examine her it's like living through what happened all over again.

I ask Cara if she would like me to go with her, she is very thankful for this offer. So, we make a plan to meet the next day to go to the police station together.

It is now the end of our appointment time and we've spent this time gathering information about Cara's case. We have to arrange a second appointment so I can provide Cara the support she needs.

The next day we arrive at the police station where Cara has to retell parts of her story and present her physical wounds to be photographed.



Considerations & Pain Points

- Unable to access client information even with consent being provided.
- Lack of information means client has to repeat their story and relive the trauma .
- Lack of a secure way to share information between agencies
- First appointment is spent gathering information rather than providing service and support needed.
- Double work Re-living trauma for client.

Use Case / Future State

Non-Clinical

Ngāire

Social Worker

Wellington

48, Māori

Cara is a new client who has been referred to me after she was a victim of sexual assault. I read through her referral and see that Cara has already been in for a medical exam and completed a kit at the hospital. Ahead of our appointment she signed a consent form so that I could access the report and results of her exam. This is important context for me to know how to best support her and I can minimise her having to retell her story.

In preparation for our appointment, I access Cara's information through the provider portal and review the information. I can see that her photographs have been included in the police file. This helps me organise the services and support she will need ahead of our appointment.

When Cara shows up for her appointment, I am prepared. I introduce myself and explain my role and how we can work together. I let Cara know that I have reviewed her files and understand her situation. Cara is thankful that she doesn't have to tell her story all over again.

Then I ask her if there is anything additional she would like to share with me or talk about. Cara tells me that she is worried about her whānau being able to see information about this case as they have access to her health record. I show Cara how she can make certain parts of her record/ profile private without anyone knowing that there is information they cannot see. I also so Cara how she can set up her My Story (with controlled access) so she doesn't have to repeat her story.

She asks me what happens from here. So, I share with her some options and services she can access.

We agree on next steps and schedule a time for our next meeting. I enter this information into the portal so that Cara can easily access it when she gets home. I let her know that she can message me through the portal and add notes to the next steps we've agreed on.

Considerations

- Consumer is able to select who can access their information Specialist able to access the case inforation
- Ability to review file and prepare for meeting with Cara.
- Consumer is reassured that nageire knows what's going on for her.
- Consumer is able to control who can access certain parts of their profile/record.
- Able to provide help within the first appointment due to availability of data before appointment.
- Consumer and Service Provider are able to communicate and share notes/information securely through the portal.

HIRA T1

- Updated NHI details Lab results
- Consumer portal Consent and delegation (RFI)

Backlog opportunities

- Sharing of information between agencies
- Sharing of information between agencies Entitlements
- My Story Managing consent and delegation
- My story Integrated Care Plan
- Integrated care plan Entitlements

Non-clinical Persona

Varsha

Asian Community Health Coordinator

Auckland

39, Indian Kiwi

My Needs of Hira

Coordinating Care

across service providers and agencies based on language and cultural needs

Low — High

Data Access

Visibility of health and entitlement data

Low — High

Capturing and Sharing Data

paperless and secure way to share across agencies

Low — High

Where I work

I work for an organisation that supports the Asian community access and navigate healthcare in New Zealand. The organisation I work for is based in Auckland which is where over 62% of the Asian community in Aotearoa is based. We have locations within communities all around Auckland.

My work involves me working with members of the Asian community, which includes a wide variety of ethnicities. The majority of my clients have immigrated to New Zealand from China, Korea, or India. English is not their first language and they are not familiar with the New Zealand Healthcare system.

Typical Day

My days are filled with meetings, emails, and working with clients. We put on community clinics and events, organising and running these is a big part of my job.

Data I Need

- Basic information like names, addresses, contact details
- Household members and their ages
- Job/income
- Immunisation records
- Diagnosis or health conditions
- Client ethnicity, cultural needs and language
- Whether the client needs an interpreter

Challenges I Face

- Lack of qualified healthcare professionals in general and also culturally diverse healthcare professionals
- Healthcare information is only available in English which means that the few culturally diverse providers end up filling the gap
- Our healthcare system is very fragmented and leaves it up to consumers to figure things out, people often don't know what they can access or how to access it
- There is a lack of trust in the healthcare system within certain communities, this lack of trust keeps people from accessing healthcare
- The Asian community is bucketed into one big category but there are many ethnicities within the Asian community, they have different needs, different cultural norms, and different healthcare needs
- Ensuring cultural safety and appropriateness of how services are presented and talked about with clients

Needs I Have

- Able to connect consumer information across agencies such as healthcare, MSD, WINZ
- Information about the health system and health conditions written in other languages
- Ability to easily communicate across health and social service agencies
- A way to easily refer clients to the services across agencies
- View/assess client entitlements

Use Case/Current State

Non-Clinical

Varsha

Asian Community Health Coordinator

Auckland

39, Indian Kiwi

I am at one of our community events, where I meet Preethi and her mother. I learn that Preethi is in the early stages of pregnancy and hasn't yet been seen by a midwife.

Preethi tells me that her pregnancy was confirmed by her GP who then provided her some pamphlets and told her she needs to select a midwife.

She tried to read the pamphlets but as English is not her first language it wasn't clear to her what she needed to do. She happened to be walking by when she saw a sign for our event and decided to stop by.

I tell her that we can help get her sorted and ask if she prefers to speak in Hindi, she says yes. Speaking in Hindi I explain to Preethi how maternity care works in NZ.

Together we visit the *Find Your Midwife* website and we search to find a midwife who speaks Hindi. We find a few profiles and I read them out to Preethi. She selects one and I help her fill out and submit the form. Preethi tells me that she's relieved to be able to find a midwife that understands her culture as this is something she's been worried about.

Then I show her the *Work and Income* website, I explain that she may be eligible for additional support.
We start to fill out the "check your eligibility" form and I notice Preethi gets very uncomfortable answering questions related to income and other household information.

I tell her that we don't have to do this now and that she can complete this at home if she prefers, she tells me she will look at it from home. I write down the website for her. I tell Preethi that I will check in on her in a few days but if she has any questions she can contact me.

Considerations & Pain Points

- Client discovers Asian Community Health Services by chance. GP is not aware of this service to refer client.
- Health information provided is only available in English.
- Language barriers prevent consumers from accessing support and services for which they are eligible
- Getting help to access these services causes embarrassment or having to share personal information with a third party that a consumer may not want to

Use Case/Future State

Non-Clinical

Varsha

Asian Community Health Coordinator

Auckland

39, Indian Kiwi

I have a new client Preethi who was referred to us by her GP after confirming her pregnancy.
Preethi needs some support navigating maternity care in NZ, I was assigned to her because we both speak Hindi and she is not fluent in English.

When Preethi arrives for our appointment, I greet her in Hindi and she tells me how nice it is to speak with someone in her native language

I explain to Preethi the system we use allows me to look up some information about her, I request her consent/ permission to do so - she provides consent

I look her up in our portal. Here I am able to see that she does not have any major medical diagnosis or disabilities. I can also see household information and entitlements

Based on the information from the system, I collate information about the benefits that Preethi is entitled to as a resident of NZ

Speaking in Hindi I explain to Preethi how maternity care works in NZ. I also provide pamphlets written in Hindi about maternity care so she can review at home.

I also show her the find your midwife and how she can find midwives with profiles written in Hindi. She is very happy to learn that she can access this information online in her language from a trusted source.

Preethi tells me she would like to review these profiles at home and select a midwife with her mother's input. She makes a note of the website to come back to later.

Preethi tells me that she's relieved to be able to find a midwife that understands her culture as this is something she's been worried about.

I tell Preethi that I will check in on her in a few days but if she has any questions she can contact me.

Considerations

GP is able to refer consumer to community services based on cultural and language needs/preferences

Community service provider can access basic information that help coordinate services across agencies, including entitlements

Consumer is able to get information about healthcare from a trusted source in their preferred language

HIRA T1

Terminology services

Consent and delegation (RFI)

Updated NHI details
Problem & Conditions

Backlog opportunities

Sharing of information between agencies

Sharing of information between agencies

Household view
Entitlements