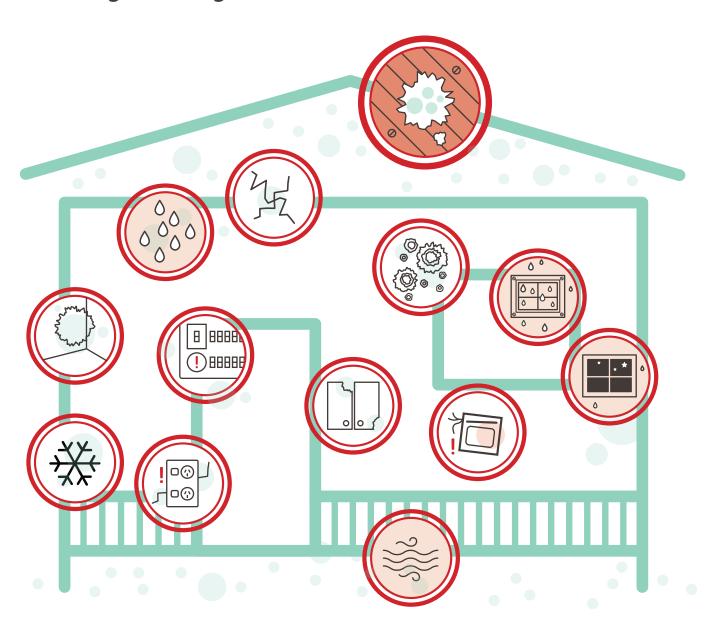
Healthy Homes Initiatives – Auckland

Co-design: testing ideas to make homes warmer and drier





Executive Summary

This report outlines the lessons from a co-design process on Auckland's Healthy Homes Initiatives. This is led by The Southern Initiative for the Ministry of Health.

This second report on the Auckland Healthy Homes Initiatives (HHI) co-design journey focuses on work undertaken since October 2016¹. It:

- builds on the key findings from earlier work by outlining the co-design process and lessons learned from the testing of ideas (prototypes)
- details the tensions that have surfaced during testing, and next steps in the process.

During this phase of the codesign process, the team has continued to test and refine ideas. We have learned by doing and made changes as needed. We have abandoned some ideas that did not work and returned to others, approaching them slightly differently. This has been done in a "safer to try, safer to fail" environment. Safer because we begin testing with smaller numbers and do not expect everything to be perfect. In testing, we are always supporting the whānau and minimising risk through the process while balancing live testing.

During the testing phase, the codesign team worked closely with many stakeholders. We refined and tested nine prototypes:

- 1. landlord letter to improve communications.
- 2. Minor Repair Service (MRS) to undertake low cost and high impact minor repairs for private rentals and low income homeowners.

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3. landlord liaison role (within the MRS) to strengthen the landlord's understanding and buy-in to improvements needed.



1. Link to first report: http://www.beaconpathway.co.nz/images/uploads/AWHI_Stage_One_report_May17.pdf

- 4. working with Auckland Council Compliance and MBIE Tenancy Compliance and Investigations teams to test how to best ensure properties are brought up to standard.
- 5. building capacity and capability within existing curtain banks to make them more effective and Auckland-wide curtain drives to boost the available stock.

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- 6. home performance training for HHI assessors including simple and practical tips on making a home warmer and drier based on science and expertise.
- 7. a locality-based 'peer to peer' empowerment model of home performance knowledge.

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8. testing whether a power voucher and education would help whānau to heat their homes more in winter.

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9. leveraging other resources to support whānau such as Healthy Rentals.

Through the co-design process, we have been able to test and document how current housing policy and legislation plays out in real life for vulnerable whānau. Testing with the MRS and the landlord liaison in particular, have shown that legislation change alone may not be enough to spur some landlords into making necessary changes to ensure their properties can be warm, dry and healthy. Early trends show that some landlords will "need to be managed into compliance" with persistent advice and engagement.

As the total housing supply will remain a challenge over the coming years - improving the quality of the existing stock quickly is crucial for lower income families.

The co-design team will continue to develop and refine prototypes, and to share the lessons learned. As we continue tracking the outcomes for whānau in the HHI system in Auckland, we will paint a stronger picture of what works for them, for landlords and for other stakeholders.

Background

From 2015 The Southern Initiative has been using a co-design process to establish a sustainable supply of housing-related interventions to create warm, dry, healthy homes for Auckland's Healthy Homes Initiatives.

In late 2015 the Ministry of Health contracted The Southern Initiative (TSI) at Auckland Council to increase the supply of housing-related interventions for the Auckland HHI service known as the Auckland-wide Healthy Homes Initiative (AWHI).

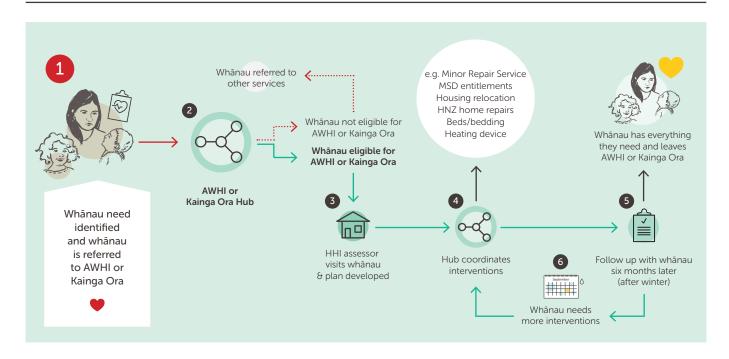
AWHI was the first Healthy Homes Initiative (HHI) set up by the Ministry of Health as part of the Rheumatic Fever Prevention Programme (RFPP) to reduce household crowding and the subsequent transmission of Group A Streptococcus (which can lead to rheumatic fever). In 2015, the initiative was expanded to other high rheumatic fever incidence DHB regions including Northland, Waikato, Wellington, Lakes, Bay of Plenty, Hawke's Bay and Tairāwhiti District Health Board (DHB) regions.

The services were further expanded as part of Budget 2016, beyond reducing household crowding and rheumatic fever to creating warm, dry and healthy homes for pregnant women and vulnerable 0-5 year olds (refer appendix 1 for eligibility criteria details).

At this time, Auckland and Waitemata DHBs established a new HHI service for their population called Kainga Ora. AWHI continues to deliver the HHI service for whānau living in the Counties Manukau DHB area.

Healthy Housing Initiatives target those with high health needs providing support and interventions through a mix of the Healthy Homes Hubs and inter-agency collaboration. The below diagram briefly outlines the HHI process.

The HHI process

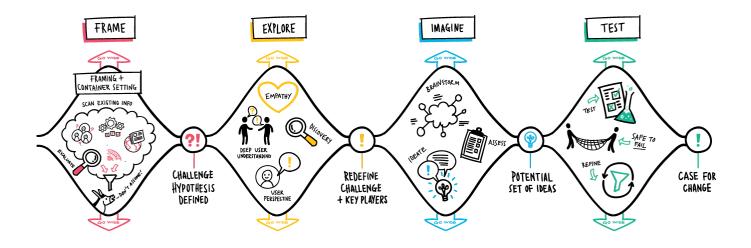


The Four Phases of Co-Design

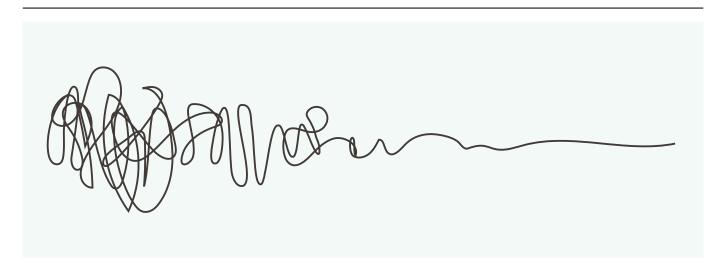
Co-design is a user-centred approach that focuses on:

- people's experiences and insights to generate new perspectives and new solutions
- fast experimentation (prototyping) and learning by doing.

The diagram below shows the four phases of co-design. This report focuses on the testing phase, although the process is more iterative than shown in the diagram.



The actual design process might look more like this:



In late 2015, the design team began by listening to the lived experience of whānau and frontline workers through empathy interviews. These findings were developed into key insights and further developed into ideas (prototypes) through the following process:

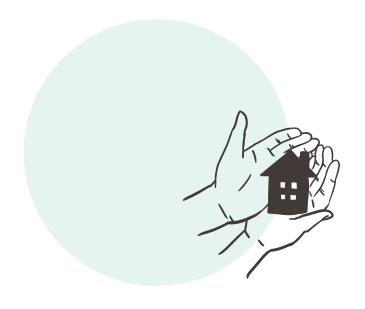
- insights were shared with stakeholders from the health, housing, social enterprise, community, government, and local government sectors at a stakeholder workshop
- ideas (prototypes) were generated by the stakeholder workshop

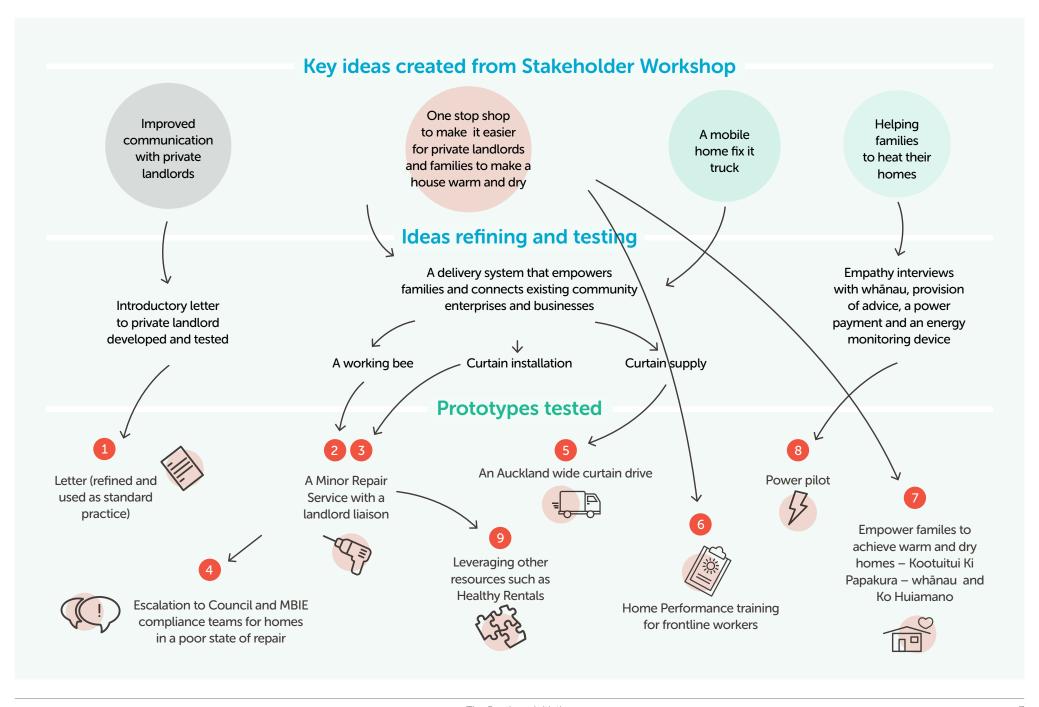
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- smaller groups worked with the ideas and refined them for testing
- further refinement and prototype testing was undertaken.

The co-design process is iterative so the first ideas tested resulted in additional ideas being tested. The lessons drawn from ongoing work with whānau and frontline staff across the HHI system have contributed to the evolution of these prototypes. The evolution of initial prototypes to those currently being tested is shown in the following diagram and described in more detail in the following sections.





The Southern Initiative 7

Key Insights

Listening to whānau and AWHI assessors in November and December 2015 helped the team develop key insights.

The eleven key insights listed below reflect AWHI referrals as the Kainga Ora service had not yet been set up. These insights have informed:

- the way in which Kainga Ora was established
- how AWHI operates now
- the development of prototypes.

1. Whānau try to be self-reliant

Many have tried to improve their homes before becoming part of AWHI.

2. Whānau are struggling and vulnerable

Some people sleep together to keep warm and more than one family might live in one small house because of need.

Families have expressed wanting to assist extended family members in need but wanting their own house at the same time.

Families perceive Housing New Zealand homes as a good option due to lower cost, greater ease, and higher quality compared to private rentals.

3. Whānau find some interventions too costly to run

If given heaters, many whānau do not use them.

4. Mixed views of AWHI process

Some whānau viewed the HHI process positively and believe that the interventions made a difference to their children's health. Others were frustrated by having to answer the same personal questions repeatedly with different agencies and did not want to be involved.

5. AWHI's advocacy

AWHI assessors play a crucial and positive advocacy role in getting interventions implemented. They also navigate the complex social assistance systems and have to follow up constantly on behalf of whānau.

6. Personality and dedication

Some AWHI assessors go beyond their role to get positive outcomes for whānau. Whānau do not feel judged by AWHI assessors as they do by some people in other agencies.

7. Communication with landlords could be better

Some private landlords are not being told that there is a sick child in the home and we cannot assume they know how to make the home healthy.

8. Healthy homes literacy

Whānau and AWHI assessors need appropriate education about how to make homes healthy and how to use the interventions effectively, such as heating, or mechanical ventilation in kitchens and bathrooms.

9. The Healthy Homes journey is difficult and complex

Whānau are contacted multiple times by multiple agencies but information is not always shared and it is unclear who is responsible for some tasks

10. Information sharing and relationships across agencies are critical for interventions to be delivered effectively and efficiently

An appropriate level of information about the AWHI process, and housing interventions is needed across government agencies and organisations supporting the AWHI process.

11. Frustration with agencies

Some AWHI whānau are frustrated by their treatment by government agencies and are nervous about them coming into their home.

Good outcomes have sometimes been dependent on the attitude of an individual within an agency.

The research also showed that the school nurse involved with Group A Streptococcus throat swabs was a positive relationship for some whānau.



"We were all sleeping just in my room. Just to keep warm."

– HHI whānau

1. Landlord letter

After preliminary testing, a letter to inform landlords that a sick or vulnerable child lives in the property has been refined, and is now used across Auckland.

The letter was developed and tested with landlords, a community paediatrician, the AWHI hub, AWHI assessors, and whānau. It was designed to be official (from the DHB) but also to set up a platform for an open dialogue between landlord, tenant and the HHI. We had found that the landlord may not know there was a sick child in the rental property and that whānau were often too nervous to communicate with the landlord. Landlords told us that an official signature from the local DHB would have the most impact and encourage landlords to engage.

The letter was adopted and used by the AWHI hub from 2016 and the Kainga Ora hub when it commenced. It has since been refined to take into account:

- the expanded HHI eligibility criteria
- services that the new MRS can provide to whānau living in owner occupied and private rental homes (including boarding)
- feedback from whānau, the hubs and their assessors and the landlord liaison.

The letter is sent to the landlord by the Hub if the whānau agrees. HHI assessors talked to the whānau about the home, their relationship with their landlord and the letter as part of the assessment.

Experience in talking to tenants about their landlords, and in contacting landlords with the letter, has identified that:

- many tenants have incomplete contact details for the landlords
- landlords respond in a variety of ways. The HHI calls landlords to get their details so they can send the introductory letter. Some are initially very defensive while others want to know what they can do
- whānau like the letter to support them in discussions with their landlord

 HHI assessors felt the letter assisted whānau to advocate for themselves.

Some whānau declined using the letter for a variety of reasons including concern about rent increases and the reaction from their landlord. The HHI continues to work with whānau not using the letter to help ensure they are living in warm, dry and healthy homes.

The co-design team, hubs and MRS will continue to ensure the letter remains an effective tool to engage landlords. The impact of the letter is reviewed regularly with the regional HHI hubs and with the MRS team.



Above: A landlord letter from a DHB.

2. Working bee to Minor Repair Service

The early working bee prototype has developed into a Minor Repair Service that provides home improvements for low-income families living in private rental homes or their own homes.

Early AWHI data highlighted that whānau living in private rentals were not getting as many warm and dry interventions as Housing New Zealand families. Private sector landlords involved in ideation said that information and advice on making their rental properties warm and dry was not easy to find or understand. It also identified that this technical knowledge and skill often did not sit with the role of an HHI assessor.

The early working bee concept was to coordinate improvements to private rental homes to make them warmer and drier for HHI whānau.

As part of exploring this prototype the co-design team learned that:

- technical home performance knowledge is needed to understand how to best make a home warm and dry, and most HHI assessors did not have this expertise
- the relationship with the landlord is critical
- it was difficult to coordinate a time with the tenant, landlord, assessor and suppliers of the interventions
- only limited improvements can be made without landlord's consent e.g., they can install bubble wrap but

cannot hang curtain rails; some properties require extensive repairs beyond what a working bee could do

 legislation, including the Residential Tenancies
 Act 1986 requires a property to be provided and maintained in a reasonable condition.

The above learnings formed the basis of a number of prototypes explored later in this report.

Stakeholders, including the codesign team, Ministry of Health and Habitat for Humanity, refined the working bee concept to a MRS.

Habitat for Humanity was contracted to pilot the MRS covering south Auckland initially, while working with the co-design team to iterate and refine the prototype.

The team acknowledged there was a tension with this prototype between simplifying the HHI system and adding another assessment into the process for the private rental sector. However it is an important step in ensuring that those living in the private rental sector get the best possible outcomes.

"Yeah we've all learned a lot, the bubble wrap, little things can make a huge difference."

- HHI whānau



What does the MRS do?

The MRS is designed to:

- assess the property to identify what interventions and/or improvements are needed to enable a warm and dry home²
- discuss with the tenant how they can help keep the home warm, dry and healthy (reinforcing the messages delivered by the HHI assessor)
- send the landlord a report prioritising any changes needed to make the home warmer and drier

• contact the landlord and provide impartial advice on how to make the home warmer, drier and healthier for the tenant, advise on available subsidies that they may be eligible for, and get a financial contribution from the landlord towards the repairs

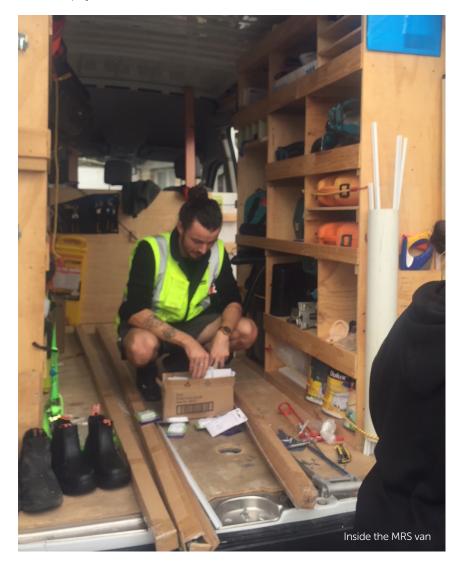
• undertake low cost but high impact interventions.

MRS staff complete the assessment and send the report to the landlord prioritising the key interventions required for the home and listing the ones that the MRS can undertake. The assessment is free and the service provides free labour for installing interventions. The landlord pays for the materials.

MRS interventions

Interventions undertaken by the MRS may include:

- draught stopping, including around doors and windows and covering broken windows
- providing a mould removal kit and advice on its use (use 70% white vinegar and 30% water to kill mould)
- providing column heaters, particularly when unflued gas heaters are being used
- repairing guttering (less than 2m long)
- applying secondary window glazing using bubble wrap
- installing window security latches where windows are not opened for security or safety concerns, to help with ventilation
- installing curtain rails where needed and collecting and hanging curtains provided by the curtain banks.



^{2.} The assessment design drew heavily on early Warrant of Fitness work undertaken by multiple parties including local government (Eco Design Advisors, Local Boards, Councils), Beacon Pathway, NZ Green Building Council and University of Otago

Habitat for Humanity, AWHI and Kainga Ora worked with other HHI around the country to get some of the supplies at cost such as bubble wrap. Currently curtain rails are supplied by some landlords or from local donations.

Early home assessments identified that some interventions could not be provided by the MRS, for example:

- mechanical ventilation which required an electrician so could not be installed
- interventions not making the home warmer and drier
- some interventions such as window security stays are only provided where they directly addressed helping keep the home warm and dry.

Intervention logic was developed to guide which interventions should be undertaken to achieve warm, dry and healthy homes.

Referrals have increased rapidly over the later part of the winter with 65 referrals from July to September 2017, up from 30 referrals in the previous quarter, when the service was just starting. As HHI assessors saw the positive outcomes for whānau that they were referring, the number of whānau being referred increased rapidly. The maximum capacity for MRS was 400 homes per year and around 250 referrals were received up until February 2018.



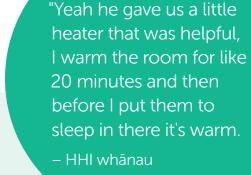
Curtain measurement and Installation

Early co-design work highlighted that some whānau received curtains but were unable to install them for reasons including a lack of curtain rails. It also identified that curtains frequently did not fit correctly. For example, some were measured only to the windowsill or did not cover the entire window.

As part of the MRS assessment,

the builder now measures for the curtains and checks if any curtain rails are needed. This ensures curtains are correctly measured, full-length, and cover windows properly to prevent draughts.

The MRS is a two year trial until 2019. Co-design will continue to work with the MRS team to capture lessons that improve MRS for families and landlords and inform broader systems changes.





3. Landlord liaison within the Minor Repair Service

Specialist skills for communicating impartially with landlords are required to gain landlord approval to implement minor repairs and to encourage the landlord to undertake other necessary interventions.

It is critical that landlords understand the need for warm and dry improvements as they will have an ongoing role in keeping their property up to standard. In addition, they need to agree and fund many of the interventions.

During the landlord letter testing and development of the MRS, it was identified that, in the same way that the HHI assessor is a navigator for the whānau, a landlord navigator role was needed within the MRS. We hypothesised that the landlord liaison needed to be a skilled communicator and negotiator who understood landlord motivations, home performance and the legislative context.

In the pilot of the MRS, the landlord liaison role managed all communications between the MRS and the landlord, including:

- contacting the landlord once they have received the report and explaining the MRS, the proposed interventions and their benefits
- explaining the interventions that the MRS will undertake that do not require landlord consent e.g., tenant education, secondary glazing using bubble wrap

- obtaining agreement from the landlord, where required to undertake interventions and to cover the costs of materials
- explaining and encouraging the landlord to implement other priority improvements (which cannot be completed by the MRS) and giving advice on available subsidies to assist with making these improvements. This includes reinforcing the landlord's legal obligations.

The landlord liaison works closely with the MRS assessors to ensure the landlord understands the improvements required and is encouraged to undertake them. The role has empathy for each individual landlord or property manager and explains that the MRS team also worked with whānau to improve their understanding of keeping a home warm and dry.

As the number of landlords in the service increased, processes to improve time frames and engagement with landlords were adjusted. An example of this is changing to sending the report to the landlord prior to phoning them. Conversations prior to this were sometimes difficult as landlords got nervous when they did not know what was going to

be required of them. Landlords were reassured once they read the report and were happy to discuss the recommendations.

Insulation referrals

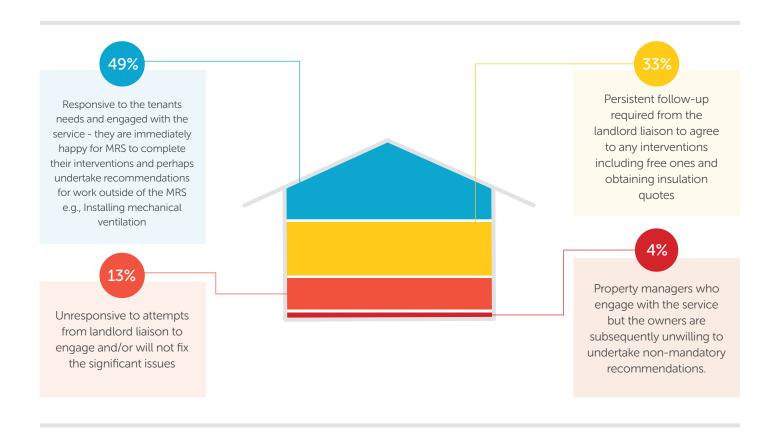
An insight from discussions with landlords was that some felt suspicious of 'cold calls' from insulation companies.

Therefore, one part of the landlord liaison role is to encourage landlords to obtain insulation quotes, taking advantage of Energy Efficiency and Conservation Authority (EECA) subsidies.

We tested changing the process from Greenstar making the introductory phone call for insulation, to the landlord liaison discussing insulation with the landlord as part of the MRS recommendations. So far this has resulted in more quotes being arranged but only a handful more homes have been insulated than when the insulation company previously cold called. A number of landlords are still sitting on quotes or have declined to receive an insulation quote. This will be further investigated with landlords and property managers.

Emerging trends about landlords of properties occupied by HHI whānau

Based on the first 200 referrals to the MRS, approximately 90 per cent have been private rentals and 10 per cent homeowners. About half of the private rentals are managed by professional property management companies. From the 70 cases that have been completed, four categories of landlords have been identified:



"For seven years every time the builders would come and fix it they would be paid to plaster over, and the builders kept saying like this is not a fix, and then eventually the ceiling collapsed."

– HHI whānau

Deferred maintenance

The MRS identified a number of rental and owner-occupied homes in poor repair where no recent maintenance had been undertaken. This included leaking roofs, rotting window frames where window panes had fallen out, or mould ingrained into the linings. It became clear that engaging some landlords in upgrading the homes would require extra advocacy and, ultimately for some cases, enforcement (refer section 4 on compliance prototyping).

"Within 23 minutes of me sending the email I had a response...saying she'd been in touch with the owner, listing the things she was going to do..."

Landlord liaison



Other findings so far include:

- there have been a few cases where one property management company or real estate branch has managed more than one HHI property
- a very small number of landlords or property managers increased the rent or served a 42 or 90-day notice at some point along the HHI process. This is being monitored. It is often difficult to tell whether it is attributable (in full or in part) to the HHI involvement. MSD offered to assist in these extreme cases where appropriate.
- the tenant and landlord relationships were inextricably linked. It appeared easier to achieve interventions where the tenant perceived that they had a good relationship with the landlord
- it is sometimes not clear cut whether damage is the result of poor maintenance and wear and tear or caused by a tenant, for example broken windows
- even when the tenant acknowledges that they have caused the damage it can add stress to the tenantlandlord relationship given the financial consequences of needing to remedy it.

Based on interactions so far it is estimated that if landlords do not engage meaningfully within 3 months, it is unlikely that they will undertake recommendations made by the MRS that require landlord consent.

Findings to date show that the landlord liaison role is crucial to the functioning of the MRS. Co-design will continue to work with the landlord liaison. One of the opportunities identified for further work is investigating ways to increase the number of landlords installing insulation. Another is to work more closely with property management companies to achieve better outcomes.

"We do get frustrated.
What we find though is that even when we ask tenants at inspections – is there anything?...they don't like to volunteer information."

- Property manager



"We have been asking for help for so long but nothing is done. We are grateful for anything that can be done to help us."

- Alisi



Residential Tenancies Act 1986

Section 45 Landlord's responsibilities

The landlord shall:

- (a) provide the premises in a reasonable state of cleanliness; and
- (b) provide and maintain the premises in a reasonable state of repair having regard to the age and character of the premises and the period during which the premises are likely to remain habitable and available for residential purposes;

If the owner is not named on the tenancy agreement and a property manager or company is named as the sole landlord for the tenancy, the company generally takes on all the rights and responsibilities of the landlord.

Alisi's family's property manager needs a push

Alisi's property manager agreed to repairs only after persistent followup by the Minor Repair Service

Alisi and Melino, their two adult children, two younger children and grandparents have lived in their four bedroom home since 2013. The house is managed by a well known real estate company.

They were paying \$430 a week in rent. There have been regular property inspections where the tenants have raised maintenance concerns such as a rotten lounge wall and mould in the bathroom.

No repairs had been undertaken and the family disguised the decaying wall in their lounge with a wall hanging. One of their children tested positive for strep throat three times and the school clinic referred the family to AWHI.







Above: Mould on the walls and ceilings in the lounge (left). Mould on the children's mattresses (right).

When the AWHI assessor visited, she noticed that there was a lot of mould in the home and it felt very cold, so the family agreed to be referred to the Minor Repair Service to see if they could help to improve the home.

The Minor Repair Service builder visited the family and talked about what the family could do to make the home warmer and drier. He also found that the home was poorly maintained. There was a significant roof leak and a bathroom with no external ventilation. These and other maintenance issues were contributing to a lot of mould.

It took many attempts for the Minor Repair Service to contact the property manager. They emailed him the report and offered assistance and advice on the EECA insulation subsidy. The property manager said that the report was "absolutely wonderful" and that would help him have a conversation with the landlord about getting the work done. He appeared surprised about the EECA subsidy.

The Minor Repair Service builder went back to undertake the repairs which did not require landlord

permission. At this visit the builder noticed that the landlord had started on some of the repairs that the Minor Repair Service had identified as needed. Alisi said that their rent had increased by \$50 per week but it was not clear if they were due for a rent increase.

The Landlord Liaison contacted the property management firm again. After several calls the Landlord Liaison found that the responsibility for the property had changed within the company. The new property manager agreed to the Minor Repair Service adding some safety latches to the windows so that the tenants could feel secure opening them to ventilate the house.

At the visit to secure the new latches the home still felt cold to the builder. The Minor Repair Service provided the family with an oil column heater and advice on how to heat most effectively and cheaply.

The property management company subsequently fixed the roof. The Minor Repair Service are still working with the property manager despite the case having been with the Minor Repair Service for nearly a year.





Left: The lounge wall had rotted from the roof leak. Above: No groundsheet or underfloor insulation. There is space to install both, but under the house needed clearing.

Right: New window latch and bubble wrap covering the glass.



4. Compliance

Where the landlords do not remedy issues, there may be avenues to enforce compliance through Council and Government agencies.

Landlords (and property managers as their agents) are required to provide tenants with a safe and healthy home (as set out by various laws and bylaws³).

The Auckland Council's Regulatory Compliance teams' responsibilities include investigating complaints of potential breaches of the Building and Resource Management Act(s) and as appropriate, enforcing the provisions under these Act(s) regarding dangerous or insanitary homes.

The MBIE Tenancy Compliance and Investigations team are tasked with enforcing the Residential Tenancies Act 1986.

The co-design team has been working with both compliance teams to test how to best ensure properties are brought up to standard.

This includes, when each organisation has a role and under what legislation, and safeguarding the whānau.

The MRS identified several homes they thought might be dangerous or insanitary, and where the landlord was difficult to engage with to improve the home.

The co-design team asked the Auckland Council Building Compliance team to visit one of these homes to see if the building was insanitary or dangerous according to the Building Act. Many of the issues at this property were the result of a combination of poor quality housing, lack of maintenance and the tenant behaviour, for example the tenant confirmed that they were not opening windows regularly to ventilate their home. However, the home had:

- external doors bolted locked from the outside
- windows that could not be opened due to a lack of maintenance
- a PVC roof without gib in parts or insulation and was therefore extremely cold.

"...her cousin would always visit and she would smell it herself as well as Plunket did, they would say oh you know what is that and we would tell them oh it's the hole in the bathroom that hasn't been fixed, like we've been complaining for ages and they're like yeah we're going to come do it, we're going to come do it but still nothing was done until we took it to court."

- HHI whānau



3. e.g. Residential Tenancies Act 1986, Building Act 2004 and Building Code, Housing Improvement Regulations 1947, Council bylaws.

The Council Building Compliance team was confident that the house would not meet the definition of dangerous or insanitary in court and it was their view that the recently established MBIE Tenancy Compliance and Investigations team would be better placed to achieve warmer and drier improvements to the property under the Residential Tenancies Act 1986

Therefore the MBIE Tenancy Compliance and Investigations team visited the same property particularly in view of whether Section 45 of the Residential Tenancies Act 1986 (Landlord's Responsibilities) was being met. They identified issues that they could act upon under the Residential Tenancies Act 1986 and are working with the landlord.

The MBIE and Council teams have checked several other HHI properties that may be in breach of legislation. They have a range of tools to ensure compliance is met ranging from education through to formal warnings, and in the most serious of cases, legal enforcement.

We will continue to work with both

teams on a case by case basis, if we identify properties, which may not comply with the legislation.

There is now an established pathway for all HHI to share information on suspected non-complying landlords with the Tenancy Compliance and Investigations team. In Auckland there is an established pathway to inform the Auckland Council Compliance team of possible cases. They will undertake the necessary investigations and determine if further action can be taken. This prototype is continuing to be tested.

The main legislation includes:

The Residential Tenancies Act 1986 requires landlords to provide and maintain rental properties in a reasonable state of repair, and comply with all relevant laws and bylaws including.

• Building Act 2004 and the Building Code

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- Health Act 1956
- Housing Improvement Regulations and bylaws set by individual councils under the Local Government Act 2002.

The Housing Improvement Regulations 1947 are enforced by the relevant local authority. Their purpose is to ensure that properties are warm, dry, safe and sanitary, by creating minimum requirements that housing must meet. This includes provisions for:

- room size, function and safety
- light, ventilation, drainage and dampness

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- overcrowding
- sewerage and sanitation
- heating

The **Building Act 2004** requires local councils to have policies on dangerous and unsanitary buildings.

Buildings are considered dangerous if they're likely to cause injury, death or damage to other properties.

Buildings are considered insanitary if they:

- are offensive or likely to be harmful to health
- don't have enough protection against moisture
- don't have an adequate supply of drinkable water, or
- don't have adequate sanitary facilities (such as a toilet or shower).

A tenant can apply to the Tenancy Tribunal for a work order or other type of order if a landlord won't meet their responsibilities for providing a safe and healthy home.

Daniel's family had a disengaged landlord

Daniel's landlord had not fixed fixed their home despite Daniel and the Minor Repair Service contacting him many times.

Daniel and Sonia had rented their five bedroom home for 10 years. It was originally a commercial premise and was in poor condition. The family paid more than \$500 a week rent and did not receive an accommodation supplement. All of Daniel's three children have had rheumatic fever and one may need heart surgery. He is also the legal guardian of his two young nieces who are frequently sick. The family was referred to Kainga Ora by the rheumatic fever nurse at the bicillin clinic.

At the Kainga Ora assessment, the family talked about what was wrong with their home and the HHI assessor referred the family to the Minor Repair Service.

When the Minor Repair Service visited they found a number of problems. The home was very cold and draughty.







Above left: The kitchen and main living areas had plastic roof sheets with no insulation Above right: Windows in the home were broken and putty was coming away from the rotting timber window frames

Very little maintenance had been done over the past 10 years. When Daniel has asked for repairs, the landlord had suggested that Daniel do them himself because the house was going to be demolished eventually. The landlord had the toilet glued four times when it needed screws - it was still broken.

Daniel bought some silicone and patched the shower himself. The landlord liaison phoned the landlord who said he was going away for a month. In the meantime, the Minor Repair Service:

- applied sealant around the windows
- covered the broken windows
- covered the windows with bubble wrap to help with insulation - they had to be very careful so the glass would not fall out

Another attempt was made to contact the landlord after a month but he could not be reached. Daniel wanted a better home for his family, however it took many months for the family to find a property large enough. In the meantime, Daniel had been clear that he didn't want another family to live in these conditions. The MBIE's Tenancy Compliance and Investigations team came to check if the property complied with the Residential Tenancies Act 1986.

They concluded that the home was in not in a reasonable state of repair including missing fire alarms and other fire hazards such as bedroom doors padlocked from the outside.

The Tenancy Compliance and Investigations team thought it was reasonable to insulate the ceiling. However, this would not be required until July 2019. After a number of months of looking the family found another home and the Tenancy Compliance and Investigation team are working with the landlord to ensure another family does not live in this property in its current condition.





Above: There was severe mould on bedroom ceilings and in other rooms
Left: In places outside the ground level was high, making the walls damp.

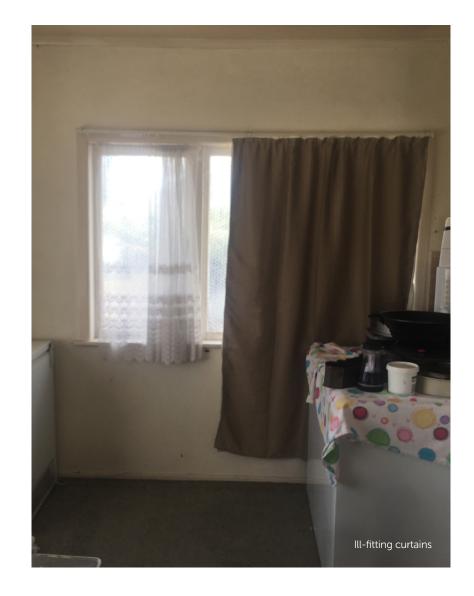
5. Curtain supply prototype

To meet the increased demand for curtains from the HHI expansion the Auckland curtain banks needed to increase their supply of lined correctly fitted and hung curtains.

Curtains are key to insulating a home, as 21-31% of heat is lost through windows in an uninsulated house. For a house insulated pre-2007 levels, windows account for the largest proportion of heat loss (42-45%)⁴.

This prototype tested what was needed to ensure that all whānau received curtains that were effective in stopping heat loss. Initial testing with the South Auckland Curtain Bank (SACB) identified a need to increase their supply substantially and change their curtain standards. Improving curtains for AWHI and Kainga Ora whānau in private rental and owner occupied homes required a multi-pronged approach:

- improving understanding across multiple agencies about how curtains worked and why it is important to have them correctly measured, lined and installed
- providing (where possible) doubled lined curtains for all rooms except toilets and bathrooms. Previously they were supplied for less rooms due to limited resources
- adding staffing capacity at the SACB to meet the demand for effective curtains created by the increase in HHI referrals
- making delivery and installation of curtains much simpler for whānau.



Improving the understanding of effective curtains

To increase understanding about good quality and correctly installed curtains, the co-design team documented the key components of effective curtains. This knowledge formed part of discussions with key implementing organisations including the MRS and curtain banks.

This information was reinforced in the Home Performance Advisor training that was delivered to HHI assessors and other key staff.

Increasing the supply of recycled curtains

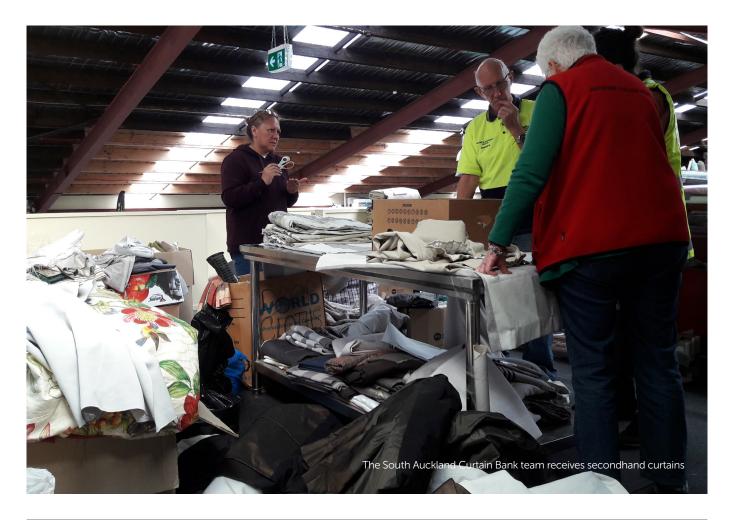
To test the supply of recycled curtains, the co-design team organised curtain drives with three high schools in late 2016, collecting approximately 100 curtains. This identified that working with community organisations could increase the supply of donated recycled curtains and the SACB took over contacting schools in early 2017.

The co-design team organised an Auckland-wide online 'call for curtains" through Auckland Council in mid-June 2017. Collection points were organised across Auckland, with three Council community centres and Habitat for Humanity supplementing the existing collection points. Approximately 100 curtains were collected and it was decided to extend the curtain drive and increase advertising (through community newspapers). Habitat for Humanity assisted the curtain

drive by collecting and delivering the curtains to the SACB and Vision West Curtain Bank. Approximately 500 more curtains were collected during the extension.

One of the learnings from the curtain drive was that people replace curtains as their needs dictate; therefore, the opportunity to recycle needs to be ongoing. The additional curtain collection points have agreed to support the drive until at least the end of 2018 and advertising will be ongoing.

About 10-15% of curtains collected were not fit for repurposing, and reusing donated curtains is slightly more time consuming than sewing new ones given they need to be sorted, washed, frequently resized and lined.



Increasing the supply of new curtains

As the demand for curtains increased, the co-design team wanted to investigate how much it would cost to get new curtains sewn in comparison to refitting second-hand curtains. Habitat for Humanity assisted the SACB by securing 1100m of donated curtain material from Guthrie Bowron. The added staffing capacity enabled new curtains to be sewn with this material.

belong to them, so to keep any landlord curtains to rehang when they leave the property.

To meet the demand for curtains, stakeholders realised we needed to increase the capacity of the Curtain Banks long term. Habitat for Humanity has been working closely with the SACB in aligning the delivery and installation of curtains and is now responsible for managing the curtain bank.

Comparison

We found that repurposing curtains was 10-15% more expensive than sewing from new material but had the added benefit of diverting those curtains from landfill. As the supply of recycled curtains is variable, therefore a supply of new curtains will always be needed. At the time of publication increasing the supply of ready-made curtains is being investigated at the national level.

Linking with the MRS for measurement and installation

Previously curtains were measured by HHI assessors as part of their initial home visit. Discussions with assessors and whānau identified an inconsistency in measurement and that the task was at times time consuming.

It was decided that the MRS builders measure for curtains when they undertake their initial home assessment.

The MRS then provided the SACB with the measurements for the required curtains and collected and installed the curtains once made. Whānau are told the curtains

"It's heaps warmer, it's the warmest the house has ever felt..."

- HHI whānau after receiving curtains



6. Home performance training

Tailored Home Performance training was organised to strengthen understanding of how to keep a home warm, dry and healthy.

The co-design team worked with the nationwide Home Performance Advisor programme to develop training that was tailored to meet the needs of the Auckland HHI. The programme covered how healthy homes are linked to healthy people, what a healthy home needs to have, and what households can do to improve their home's performance to support their health.

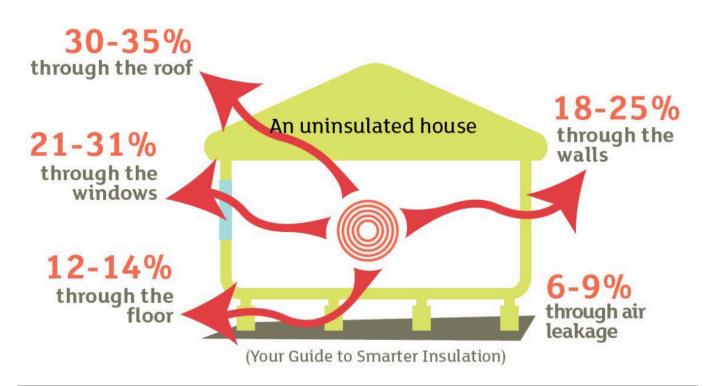
Over 50 HHI assessors and other related people from AWHI and Kainga Ora participated in the two daylong courses (one early 2017 and one late 2017). The feedback from participants was positive and regular joint AWHI/Kainga Ora courses are planned.

This training has also been tailored for local community delivery, as explained in section 7 Empowerment Models.

"If I understand how to make a house warmer and healthier...I can explain and have a knowledgeable discussion by sharing and offering cost-effective ways."

- HHI assessor





Key home performance messages delivered during these trainings included:

- how the home works together as a whole
- how to keep the heat in your home what are good curtains and how to use them effectively, draught stopping, the importance of insulation and simple secondary glazing options including bubble wrap
- · why it is important to reduce moisture in the home and cost effective ways to achieve this
- how to best ventilate the house to remove moisture dry air is easier and cheaper to heat
- the importance of heating and how to heat more efficiently.

Attendees were taught the basic science behind the messages they were delivering to whānau. With this, they are better able to understand, remember and explain to whānau why actions are required.

The co-design team is continuing to work with whānau in delivering their training. Regular training for AWHI and Kainga Ora staff is being refined for delivery in 2018.







"Not only can it be used in what I do in my workplace, but I can also apply this in my own home and share with family and friends."

- HHI assessor

7. Empowerment models

A community of whānau working with the Kootuitui Ki Papakura Trust tested if home performance education could be shared through a peer to peer model to empower communities to make improvements themselves.

An opportunity to test an empowerment model arose through TSI's work with partners Kootuitui Ki Papakura Trust and Kootuitui whānau.

The Kootuitui Ki Papakura Trust supports three strands of work with six Papakura schools and whānau - education, health and homes. The homes strand is being led by Kootuitui whānau with the support of the Kootuitui Whānau Engagement Facilitator and the TSI.

This model reaches whānau who HHI may not be aware of or have struggled to engage with.

Ko Huiamano

Also using a co-design process, the Kootuitui whānau developed a peer to peer training and skill share prototype called "Ko Huiamano", which is based on the key principles:

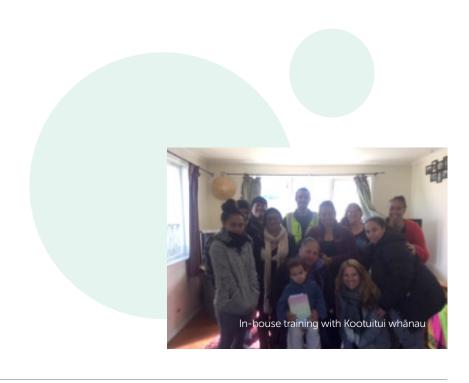
- Whakawhānaungatanga: connecting with people
- "Fill my kete, fill your kete":
 empower whānau champions
 with accurate information
 and skills and help them to
 share that knowledge and
 empower other whānau
- strengths-based approach: acknowledge whānau in Papakura are best placed to design local solutions that will contribute to better housing and social outcomes.

Home performance training

The Kootuitui whānau and codesign team worked together to develop a training tailored for whānau in which they learned the key components of home performance. Eight of the whānau participated in home performance training so they could spread that knowledge in their own community. This built on training they had already had in tenancy services and financial literacy.

The training was reinforced by immediately assessing two of their own homes alongside Habitat for Humanity and the Auckland Council's Eco Design Advisor.

The first home assessed in Papakura on a sunny September morning was very cold. Habitat for Humanity taught the whānau how to apply draught stopping and bubble wrap, and correctly install full-length curtains. The codesign team was able to assist with requesting HNZ to get the home insulated and the process helped the co-design team understand the importance of whānau knowing what to ask for so they can advocate for themselves. Those changes have resulted in a warmer home - the whānau feel they can now have grandchildren back in the home.



A second private rental home was assessed and upgraded by the Kootuitui whānau. They installed draught stopping, bubble wrap and some curtains. During this process, whānau identified where their skills and interests lay, with one member showing strong aptitude and interest in the physical repairs process.

community needs and has the flexibility to adapt to opportunities as they arise. The knowledge remains in the community and is further embedded with each whānau that becomes involved. This is a proactive locality-based model.

Continuing support for Kootuitui

Kootuitui whānau will share their housing knowledge with local whānau. This includes education, housing assessments and assisting whānau with interventions to make their homes warmer, drier and healthier. The Kootuitui whānau will start with simple interventions such as draught stopping and bubble wrap, referring to other suppliers for more difficult work. If eligible, whānau can be referred to AWHI for further support if they choose.

The "fill my kete fill your kete" principle means the empowerment will not stop there. It is hoped that those whānau will then support other whānau in their understanding of how to make their homes warmer and drier.

The co-design team is continuing to work alongside the Kootuitui whānau so that their continued learning meets theirs and their community's needs. In the past year, the enthusiasm and interest of the whānau has expanded, as the benefits have been realised in their own homes. As their knowledge has increased, the whānau have identified further areas of interest, and follow-up workshops have been provided.

This local empowerment model is responsive to whānau and



8. Power

The cost of power was identified as a barrier for some whānau in heating their homes. This prototype tested providing healthy homes education, and assistance with heating costs.

Empathy interviews and key insights identified that even if whānau were given a heater, many did not use it. They often could not afford the power or were concerned about how much heating would cost. A heating voucher prototype was identified during the brainstorming session and further refined by key stakeholders including the AWHI hub, Mercury Energy and TSI.

In winters 2016 and 2017 we tested whether providing healthy homes education, and assistance with heating costs, impacted on how much whānau heated their home. Empathy interviews were undertaken in 2016 with five whānau who were Mercury Energy or GloBug customers⁵, to better understand how and when they heated their home, their understanding of keeping their home warm and healthy, and how they approached electricity costs and payment. This informed a pilot in 2017 involving AWHI whānau who were recorded as having insulation and curtains⁶ and who were Mercury or GloBug customers. The pilot, completed by 42 whānau included a presurvey, education on keeping

the home warm and dry, two months' payments towards power (\$150) and a post-survey (with \$75 power payment). The payments were made directly to the family's electricity account. The key findings are based on the 42 whānau who completed both surveys⁷.

Key findings from the research were included:

- most whānau already understood and implemented the key components of keeping a home warm, dry and healthy
- most whānau managed their power use tightly, understood their power bills, and had been a customer of Mercury or GloBug for a number of years
- education needed to be specific to the needs of whānau

 a user centric approach meant that while the key messages were always covered, the areas of focus differed based on the whānau need and interest.

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The post powerpayment survey showed improvements in the heating of homes including:

- more whānau heating their home and a corresponding increase in use of electric heaters and a reduction in the number of whānau who used their electric oven to heat their home (see Main Way of Heating chart)
- a reduction in the number of whānau sleeping together to keep warm (60% of whānau slept together frequently to keep warm in the pre-winter survey compared to 35% in the post-winter survey).

While whānau identified improvements in the warmth of their home, in the post-winter survey, many of the homes were still cold. Nearly half of whānau (48%) identified that their home had been warmer over the past two months, and a third (33%) stated that it was partially/ sometimes warmer.

- 5. Mercury and its prepay service GloBug attended early stakeholder meetings and supported the power research.
- 6. Homes with insulation and curtains were chosen as these interventions reduce heat loss.
- 7. This was conducted in September and October so part of the improvements could relate to the mild spring.

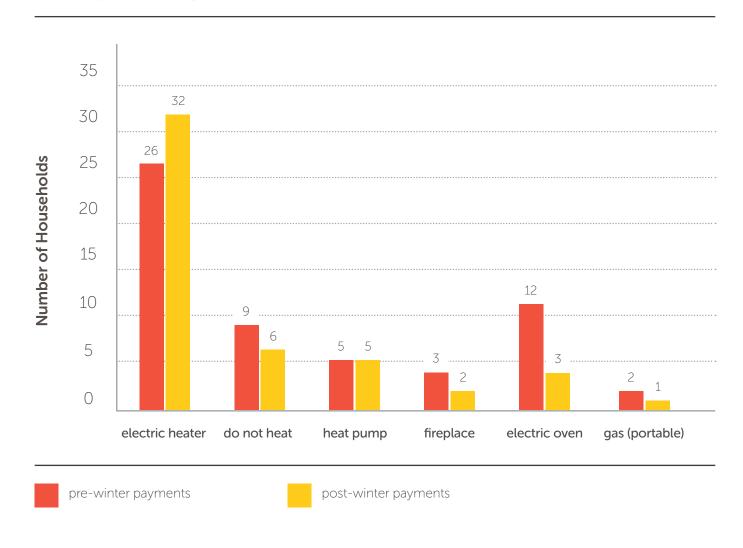
However when asked if their home was very cold, 38% responded yes, and 38% somewhat.

Heating of bedrooms remained an issue with 71% of whānau identifying that they did not have enough heaters to heat their bedrooms.

The Families Package Winter Energy payment will provide support to some HHI whānau. We will investigate ways to support whānau who will not be eligible for the payment.



Main ways of heating



9. Leveraging other resources

A number of housing improvement and assistance programmes in Auckland have similar or complimentary objectives to the Healthy Homes Initiative. By working together, whānau can access more interventions.

A key benefit of this process was that stakeholders peripherally involved in the HHI, or in delivering similar services were linked together. Some of these are described below.

Auckland Council

Eco Design Advisors provide free, independent advice to Auckland households on sustainable and healthier buildings, better use of energy, water, and materials, and minimising waste. Advisors share information through presentations, community workshops, one-on-one meetings and in-home advice.

The Eco Design Advisor service has been a key adviser to the codesign team and is also a service that is offered to homes that do not meet the HHI eligibility criteria.

Healthy Rentals provides a free independent home assessment, and partial subsidies for improvements including insulation, heat pumps, bathroom ventilation and groundsheets. It focuses on improving housing quality for tenants with low income or health conditions related to cold, damp, mouldy housing. Initiated by the Maungakiekie-Tāmaki Local Board in 2013/2014, the programme is now also provided in the Māngere-Ōtāhuhu, Papakura, Puketāpapa

and Whau Local Board areas. The initially landlord driven programme has since been expanded to have a tenant focus.

The close fit of this programme with the MRS and the opportunity to expand the MRS delivery to include Healthy Rentals was identified. Healthy Rentals is now providing a range of interventions that assist with energy efficiency to HHI whānau within the relevant local board areas. This allows the whānau to benefit from more improvements which might assist them including: replacement of incandescent bulbs with LED bulbs; providing a thermostatcontrolled portable heater or a thermostat if needed for an existing heater; and wrapping the hot water cylinder and lagging the pipes.

Habitat for Humanity has been contracted to deliver the programme which allows them to funnel the different referrals and the landlord liaison is working with both programmes.

Habitat for Humanity

The Home Repair Programme provides assistance to low-income homeowners who could not otherwise undertake home repairs. It uses a mix of volunteers, donated materials and repayment terms tailored to the family's ability to repay to help the homeowners continue to live independently and securely in their homes. The Home Repair Programme has been used where HHI homeowners have significant repairs beyond the scope of the MRS.



Key Learnings to Next Steps

Prototyping has provided significant learnings for the Auckland HHI. Co-design will build on these learnings, developing existing and new prototypes to improve the supply of housing-related interventions for HHI, and to influence the broader housing system.

HHI are working inside a complex housing system. Low income whānau are often most disadvantaged in this broader system.

Auckland's housing supply will not be able to meet demand in the short to medium term – from home owners and renters, both in the private and social housing markets. For many years the largest social housing provider in Auckland, HNZ had to return profit to Treasury. In addition the private rental market has become more unaffordable and is poorly regulated. Over the past 15 years, the private rental sector has largely been driven by investors who benefit from capital gains more than rental return from a well maintained asset and secure tenants. Homeownership rates have continued to drop, along with this reduced security of tenure.

- 8. Capital interventions include:
- insulation
- triple weave curtains in living areas, dining rooms and bedrooms.
- fixed heating source in the living area
- bathroom extractor fan and kitchen rangehood
- carpet or vinyl installed over bare floors

Lessons learned about Auckland housing based on the experience of whānau:

- many landlords are not undertaking regular property maintenance, impacting on the warmth and dryness of homes
- some landlords are willing to undertake interventions with the advice of an external party
- some landlords do not act until enforcement teams became involved.
 Increased legislative standards will help, however the process has shown that some landlords are not motivated sufficiently by a law change
- landlords will need considerable assistance to achieve the standards and it will take time, so whānau need ways to help themselves in the meantime
- some tenants are worn down from repeatedly asking for home repairs.
 They no longer believe they deserve a warm dry home
- tenants can be scared to speak out because they think they will not find another place or reluctant because of any damage they may have caused (e.g. child breaking a window)
- some tenants were reluctant to involve the Tenancy Compliance and Investigations team as they feared retaliatory action including losing their home
- many tenants receive the Accommodation Supplement from government to help pay for private rental costs, however there is no quality control over the types of homes the supplement is paid for
- some HNZ homes still need capital interventions⁸
- more good quality social housing is needed as the private rental sector is increasingly unaffordable

Lessons about the process

Co-design has supported the Auckland HHI by taking a user-centred approach to improving the range of interventions that whānau receive through the HHI programme.

Design is not a linear process – we have abandoned some ideas that did not work and returned to others, approaching them slightly differently. This has been done in an environment which is 'safer to try' and 'safer to fail'. Much of the testing has been with whānau. Therefore the process needed to balance testing realistically, minimising risk and always supporting the whānau through the process.

By focusing on achieving outcomes, we may have simplified in some areas and added complexity in others by testing new ideas that might supplant others in the future. We will continue to iterate these ideas until we achieve the outcomes as simply as possible.

The co-design process has also assisted with a growing collaboration and partnerships between a range of stakeholders and partners who have benefited from the deeper understanding of whānau experience in housing.

The changing environment and recommendations

The government elected in late 2017 has signalled a number of changes which will impact on the housing system. These include:

- programmes to increase housing supply such as Kiwibuild
- HNZ becoming more than just asset manager and being no longer required to return a profit to Treasury
- · state housing sales halted
- a winter energy payment for people on specified benefits as part of the Families Package
- review of the Residential Tenancies Act

Development of tighter standards under the Healthy Homes Guarantee Act 2017 for:

- heating
- insulation
- ventilation
- moisture ingress
- draught stopping
- · drainage.

This will encourage some landlords to upgrade their homes. Others will need assistance from programmes such as the MRS. Co-design experience indicates that some landlords will continue to rent illegal and substandard homes and will need to be managed into compliance by Council or government.

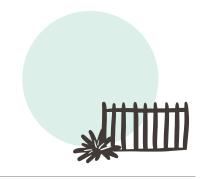
Even with the change in environment, housing supply will remain a challenge for some time. This is why housing support to low income whānau, such as the HHI, will be needed for the foreseeable future. With the housing shortage, it is critical to bring the existing private homes up to standard and retain them in the market. In addition there needs to be additional resources to bring some state homes up to standard.

Recommendations based on what we have learned so far:

- continuing support for programmes that assist low income whānau in crowded and poor quality housing
- continuing support for effective programmes that assist landlords to bring their homes up to standard that can possibly create local employment opportunities in the community
- continuing the support for peer to peer models that disseminate home performance knowledge in the community which will be more sustainable
- continuing collaboration between MBIE and Council Compliance around the Residential Tenancies Act 1986, Health Act 1956 and Building Act 2004

Next Steps

By working with whānau we are able to have a deeper understanding of how policy and legislation works in reality. Based on this we can continue to make informed recommendations and suggestions at a national level. As we continue tracking the outcomes for whānau in the HHI system – we will see what works for the whānau, landlords and others involved in the system including regulators and HHI hubs, and will share the lessons about what works for those most disadvantaged.



Appendix 1. AWHI and Kainga Ora eligibility criteria

- Low income measured by MSD Community Service Card thresholds
- One member of the household is a NZ citizen or permanent resident
- The family lives in the DHB catchment area

Rheumatic fever/Household Crowding Focus

- 1. A child (0-14) hospitalised overnight with an indicator condition (Hospital); or
- 2. A person in the house is eligible to receive monthly penicillin injections as a result of a past episode of RF (Prophylactic Penicillin Services); or
- 3. Three or more episodes of GAS pharyngitis within a household within a 3 month period (Sore throat management services);

And:

- At least one other child

 / young person (0-19 years)
 living in household; and
- Evidence of structural or functional crowding

At-risk 0-5 year olds

- 1. Those aged 0-5 hospitalised for an indicator condition; or
- 2. Priority population of 0-5s (families with children aged 0-5 for whom at least 2 of the following risk factors apply: CYP finding of abuse or neglect; caregiver with a Corrections history; mother has no formal qualifications; and long term benefit receipt); or
- At risk pregnant women / new mothers

Prototyping Parners, Contributors and Co-design Team

Auckland Council

Ministry of Health

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Ministry of Business Innovation

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and Employment AWHI ••••• Ministry of Social Development Kainga Ora ••••• Housing New Zealand Health West Auckland District Health Board Otara Health Charitable Trust Waitemata District Health Board Habitat for Humanity ••••• Counties Manukau District National Hauora Coalition Health Board Greenstar Energy Solutions AWHI and Kainga Ora whānau ••••• Home Performance Advisor

The co-design team:

Anne-Marie Mujica
TSI Social Intrapreneur
Auckland Council
Glenda Lock
Programme Manager
Beacon Pathway

Nicky Cranshaw
Medical Officer
Auckland and Waitemata DHBs

training

and whānau

Vision West

GloBug

Mercury Energy

Energy Efficiency and

Conservation Authority

Beacon Pathway

Kootuitui ki Papakura Trust

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