Template 1: Budget Initiative template

Overview and context

Key Question/area	Comment/answer
Agency to complete	
Portfolio of lead Minister	Hon Dr David Clark, Minister of Health
Portfolio(s) of other Ministers involved (if this is a joint initiative)	Hon Jenny Salesa, Associate Minister of Health
Votes impacted	Vote Health
Initiative title	Reducing the incidence and the improving the management of rheumatic fever and rheumatic heart disease amongst Māori and Pacific
Initiative description	This funding will be used for rheumatic fever and rheumatic heart disease prevention and management in the Auckland region, and includes a set of initiatives to: • To improve access to primary care for sore throat management in the Auckland region for Māori and Pacific ethnic groups. • s. 9(2)(f)(iv) [redacted] It will also be used to: • [redacted] • Implement the recommendations from the Healthy Homes Initiatives process evaluation.
Type of initiative	This initiative is priority aligning
If this initiative relates to a priority, please outline the specific priority/ies it contributes to	This initiative aligns with the following priorities: • *Achieving equity* • *Reducing child poverty and improving child wellbeing, including addressing family violence*
Does this initiative relate to a commitment in the Coalition Agreement, Confidence and Supply Agreement, or the Speech from the Throne?	**No**
Agency contact	Niki Stefanogiannis, Ministry of Health Niki_stefanogiannis@moh.govt.nz [redacted]
Responsible Vote Analyst	s 9(2)(a) [redacted]

Funding

Funding Sought ($m)	2019/20	2020/21	2021/22	2022/23 & outyears [1]	TOTAL
Operating	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

No capital funding is sought through this initiative

[1] If funding is time-limited and does not carry on into out-years please delete the reference to "& outyears"

1. Executive Summary

1.1 EXECUTIVE SUMMARY

A. Short summary of the proposed initiative and expected outcomes.

This budget bid is for a package of initiatives to reduce incidence and improve the management of rheumatic fever and rheumatic heart disease in the Auckland region. Rheumatic fever and rheumatic heart disease primarily affect Māori and Pacific peoples, and over half of the cases occur in the Auckland region. The latest data for the 2017/18 financial year suggest that rates of rheumatic fever are increasing.

Although funding is currently available for the delivery of rheumatic fever prevention services, there are insufficient funds available to trial innovative community-led solutions. Due to funding pressures, DHBs find it difficult to divert funding from elsewhere to reduce rheumatic fever.

The proposed initiatives were identified as priority areas to focus on during two workshops with the sector in May and June 2018. The funding will purchase:

- The development and implementation of community-led and whānau-driven initiatives in the Auckland region to improve access to primary care for sore throat management. This will include awareness raising activities and focus on Māori, Samoan, and Tongan ethnic groups, who are disproportionately impacted by rheumatic fever and rheumatic heart disease.
- s. 9(2)(f)(iv) [redacted]
- The implementation of the key recommendations from the process evaluation on the delivery of the Healthy Homes Initiatives (this funding will benefit all the District Health Boards that deliver the HHI not just the Auckland region).

Rheumatic fever is an entirely preventable condition that is caused by an autoimmune response to a Group A streptococcal (GAS) infection. Rheumatic fever rates are increasing, if no further funding is made available, it is likely that they will continue to increase. The Prime Minister made a statement during the election campaign that if elected, the Government would work towards eradicating rheumatic fever (https://www.radionz.co.nz/news/political/339544/labour-sets-rheumatic-fever-elimination-target). Reducing the transmission of GAS infection through reducing household crowding and improving primary care access for sore throat management will contribute to reduction in rheumatic fever.

In some cases the inflammation caused by rheumatic fever can cause rheumatic heart disease, with scarring of the heart valves. Rheumatic heart disease is more likely to occur with recurrent episodes of rheumatic fever. Improving the management of rheumatic fever and rheumatic heart disease will result in better outcomes for people with these conditions.

This package of initiatives align with the Government priorities to achieve equity, child wellbeing, address poverty, and improve access to primary care.

2. The Investment Proposal

2.1 Description of the initiative and problem definition

What is this initiative seeking funding for?	This initiative is seeking funding to enhance the delivery of rheumatic fever prevention and management services. The funding will be used to: • The development and implementation of community-led and whānau-driven initiatives in the Auckland region to improve access to primary care for sore throat management. This will include awareness raising activities and focus on Māori, Samoan, and Tongan ethnic groups, who are disproportionately impacted by rheumatic fever and rheumatic heart disease. • s. 9(2)(f)(iv) [redacted] • The implementation of the key recommendations from the process evaluation on the delivery of the Healthy Homes Initiatives (this funding will benefit all the District Health Boards that deliver the HHI not just the Auckland region). Rheumatic fever and rheumatic heart disease primary affects Māori and Pacific. This initiative aligns with the Government priorities to achieve equity, child wellbeing, address poverty, and improve access to primary care.
Why is it required?	Rheumatic fever rates in New Zealand are high compared to other developed countries. Although the Rheumatic Fever Prevention Programme that was implemented between 2012 and 2017 had some success in reducing rheumatic fever, rates among both Māori and Pacific peoples (particularly Samoan and Tongan people) remain high. Over half of rheumatic fever cases are in Auckland. The latest data (for the 2017/18 financial year) suggests that rates in Pacific people are increasing. $5million has been allocated per annum until 2022 across the 11 high incidence DHBs for the implementation of their rheumatic fever prevention plans. Although more than half the funding has been allocated to the Auckland region, the majority is going to Counties Manukau ($2,590,356) with Auckland and Waitemata receiving only $240,755 and $134,567 respectively. As a result, the funding requested in this bid will support Auckland and Waitemata DHBs in particular to continue and enhance their rheumatic fever prevention efforts, and ensure they are tailored to their populations. If no funding is made available, rheumatic fever numbers in the Auckland region will continue to increase. Reducing the incidence of rheumatic fever requires a comprehensive approach including: • Reducing the transmission of GAS infections within households • Improving access to timely and effective treatment for GAS throat infections in priority communities • Increasing awareness of rheumatic fever As such, this budget bid is for a package of initiatives to ensure a comprehensive a, community-driven approach is taken to reducing rheumatic fever and rheumatic heart disease. In addition, this budget bid is also requesting funding for initiatives to improve management of rheumatic fever and rheumatic heart disease. People who are diagnosed with rheumatic fever need to have intramuscular benzathine penicillin injections (prophylaxis) every 21 to 28 days to prevent recurrence and the progression of rheumatic heart disease. It is important that prophylaxis is delivered in a timely way. A particular issue that has been identified is the difficulty managing the

timing and delivery of prophylaxis if patients move from one DHB to another. Although individual DHBs have registers to keep track of the delivery of prophylaxis, they do not work across DHBs. The sector identified that a national patient management system (PMS) could be used to keep track of secondary prophylaxis being given, as well as managing movement of patients across DHBs.

Good oral health is important for people diagnosed with rheumatic heart disease as they are at increased risk of developing infective endocarditis. Dental care is not currently free for those 18 years and over, although it is subsidised at some DHBs. It is important that people who have been diagnosed with RF and RHD have access to dental care. Providing free dental care for people on secondary prophylaxis for rheumatic fever and lifelong free dental care for those with rheumatic heart disease will ensure cost is not a barrier to access and improve outcomes.

s 9(2)(g)(i) [redacted]

Further information on rheumatic fever and rheumatic heart disease, and why these initiatives are required to improve prevention and management are outlined in Appendix 1.

More information on the Healthy Homes Initiative and evaluation is provided in Appendix 2.

2.2 Options analysis and fit with existing activity

What other options were considered in addressing the problem or opportunity?

The following different options have been considered:

1. Status quo:
   DHBs continue to deliver rheumatic fever prevention services within the allocated resources – Auckland DHB: $240,755, Waitemata DHB: $134,587, Counties Manukau DHB: $2,590,356. This funding is divided among the three strategies, which means that very little funding is allocated to each strategy (particularly for Auckland and Waitemata. This means that there are insufficient funds available to trial innovative community-led solutions. Due to funding pressures, DHBs find it difficult to divert funding from elsewhere to reduce rheumatic fever. However, if there is no further funding, DHBs may be innovative in enhancing BAU services to incorporate rheumatic fever prevention activities.

   DHBs continue to use their regional registers to coordinate the delivery of prophylaxis; people who have been diagnosed with rheumatic fever and rheumatic heart disease in Auckland, and who are over 18 years, access dental services when required acutely or prophylactically if they can afford it; Māori and Pacific women with undiagnosed rheumatic heart disease are identified when they develop cardiac complications.

2. Leverage of other work programmes to prevent rheumatic fever – for example, the Achieving equity or Child wellbeing workstreams. Rheumatic fever is a marker of

	poverty and inequity in New Zealand. A benefit of this option is that the underlying determinants of health that drive poverty and inequity will be addressed and may mean that the changes will be sustainable. However, these work programmes are very broad and may not focus on the specific needs of Tongan, Samoan and Māori people in relation to reducing rheumatic fever, in the Auckland region. The proposed initiative package has been identified as the preferred option as it will deliver focussed funding to the three DHBs (particularly Auckland and Waitemata) to identify innovative ways to reduce and manage RF and RHD that are specific to the populations that are at risk (Tongan, Samoan and Māori). It will also allow for a more long term approach by supporting funding of a [redacted] as well as the enhancement of the HHI that are currently being delivered. More detail on the options considered for each of the initiatives focused on improving management of with rheumatic fever and rheumatic heart disease is included in Appendix 3.
What other similar initiatives or services are currently being delivered?	The three Auckland DHBs are currently delivering rheumatic fever prevention services through contracts with the Ministry of Health. These services include improving access to sore throat management (through primary care and through primary and secondary school programmes), some awareness raising, and through healthy homes initiatives. Although the services target Pacific and Māori communities generally, there are not services specific to each of the ethnic groups that are most affected – Tongan, Samoan and Māori. There are no similar initiatives being carried out for the screening of rheumatic heart disease in pregnant women or the delivery of oral health services for adults with rheumatic fever or rheumatic heart disease. Most DHBs have registers for their rheumatic fever patients; however, these registers use different platforms and cannot link to each other.
What other, non-spending arrangements in pursuit of the same objective are also in place, or have been proposed?	The Ministry continues to work with the DHBs to identify what can be done as part of business as usual.
Strategic alignment and Government's priorities/direction	This initiative aligns with the Government's priorities to improve child wellbeing and achieve equity. Reducing the incidence and improving the management of rheumatic fever and rheumatic heart disease will result in better health outcomes for Māori and Pacific peoples – the populations that this condition almost solely affects. The delivery of the rheumatic fever programme was commended in the Ministry of Health Performance Indicator Framework: "The way the Ministry tackled this target embodied the vision of Better Public Services. It worked across sectors to get at the root causes of rheumatic fever. The Healthy Homes Initiative was an excellent example of the Ministry leading the health and other sectors (including other agencies) to be customer-focused, innovate and learn." A component of this initiative is to implement the findings of the process evaluation of the Healthy Homes Initiative, to ensure that we continue to deliver a high quality product that improves outcomes for Māori and Pacific children and young people and contributes to reducing inequities.

	The Prime Minister made a statement during the election campaign that if elected, the Government would work towards eradicating rheumatic fever (https://www.radionz.co.nz/news/political/339544/labour-sets-rheumatic-fever-elimination-target).
2.3 Outcomes	
Overall outcomes expected from this initiative	Together these initiatives will work to identify strategies targeted for Tongan, Samoan and Māori people to reduce rheumatic fever and improve the management of rheumatic heart disease. The initiatives include improving access to sore throat management services and reducing the transmission of Group A streptococcal infections. Providing funding to implement the recommendations from the HHI process evaluation will also benefit the populations of the other district health boards which delivering this initiative. The initiatives will also improve the overall management of rheumatic fever and rheumatic heart disease in New Zealand, leading to improved and equitable health outcomes for Māori and Pacific peoples.
2.4 Implementation, Monitoring and Evaluation[2]	
How will the initiative be delivered?	**Reducing rheumatic fever and rheumatic heart disease:** Ministry of Health officials will support the three Auckland region district health boards to work with their Tongan, Samoan and Māori communities to identify innovative ways to deliver sore throat management services and awareness raising activities. There will be a particular focus on Tongan-specific and Samoan-specific strategies. The district health boards may need to sub-contract Pacific and Māori providers to carry out the work. A cross agency working group has been convened to identify how the recommendations from the process evaluation of the HHI will be implemented. The funding outlined in this budget bid will support this implementation. **Improving the management of rheumatic fever and rheumatic heart disease** Information on the delivery of the [redacted] initiatives related to improving the management of rheumatic fever and rheumatic heart disease is included in Appendix 3.
How will the implementation of the initiative be monitored?	The delivery of the different activities within the package of initiatives will be individually monitored. The initiatives focused on reducing rheumatic fever and rheumatic heart disease will be monitored through contracts that are currently in place with the three Auckland DHBs. These contracts will be varied to include the services that will be indicated by the prevention initiatives. In addition, the Ministry of Health is developing a cross agency implementation plan to deliver the key recommendations of the Healthy Homes Initiative process evaluation. This implementation plan will also include a monitoring component. The screening [redacted] will be delivered through contracts with the three Auckland DHBs. As a result, the delivery of these initiatives will be monitored through contract management with the DHBs. The delivery of the register initiative will be monitored through internal Ministry of Health project management processes.
Describe how the initiative will be evaluated	**Reducing rheumatic fever and rheumatic heart disease** The key outcome of these initiatives will be a reduction in rheumatic fever rates in the Auckland region. First episode rheumatic fever hospitalisation rates will continue to be monitored every 6

[2] This doesn't necessarily have to include a full implementation and evaluation plan, however the information provided must provide confidence that the proposal will be successfully delivered and there is a plan to ensure that the outcomes described are actually achieved.

	months, with the updated data communicated to DHBs and published online. It must be noted, however, that attribution to this particular initiative would not be possible as other government initiatives – such as reducing poverty, housing standards legislation and improving access to primary care – will also contribute to alleviating the underlying factors that contribute to rheumatic fever. This budget bid has also factored in an evaluation component for the delivery of innovative community-led and whānau-driven strategies for Māori, Tongan and Samoan ethnic groups to improve access to primary care for sore throat management. The evaluation of these strategies will be embedded in the design of these strategies from the outset to ensure that outcomes can be measured, including value for money. **Improving the management of rheumatic fever and rheumatic heart disease** The overall funding requested for the pilots of rheumatic heart disease screening during pregnancy and improving access to dental care includes an evaluation of the initiatives. If successful, the evaluation plan will be developed alongside the project and implementation plan for each initiative.

3. Wellbeing Impacts and Analysis

3.1 Wellbeing domains – People's experience of wellbeing over time

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The table below uses an illustrative example of vaccination for children. Please delete the example complete the table for your initiative.

Domains List domains, using the key above, where there is an impact. Order domains by magnitude of impact, i.e. largest impact domain first[3].	**Impact(s) description** Identify the impacts, with a separate line for each impact relating to a specific domain *Note you can identify multiple impacts for a particular domain. Delete/add rows as needed.*	**Who are affected?** Individuals/families/government/etc? Be as specific as possible. Are there distributional differences?	**Magnitude of impact** Relative to the counterfactual key assumptions, quantified to extent possible, and where possible monetised	**How big?** High/ Moderate/ Low, or where possible present value	**Realised in** <5 / 5-10 / 10+ years	**Evidence base** Nature of evidence and key references	**Evidence quality** High/ Medium/ Low
Health Primary	Fewer deaths	Māori and Pacific people	Between 2000 and 2007, there were 159 deaths on average each year coded with rheumatic heart disease – a mean mortality of 4.4 per 100,000. Only four of these deaths were in children and young people, but mortality increase in mid-life, reaching 27.5 per 100,000 for Māori and 18.1 per 100,000 for Pacific compared to 1.1 per	High	10+years	New Zealand study – Milne et al 2012. Mortality and hospitalisation costs of rheumatic fever and rheumatic heat disease in New Zealand	

[3] *Please note that in CFISnet, you will need to include the primary domain impacted, and up to two secondary domains impacted by the initiative. You can include as many domains as relevant in this table.*

			100,000 for non-Māori/non-Pacific. Reducing rheumatic fever will reduce these deaths and contribute to achieving equity. Not monetised				
	Better birth outcomes	Māori and Pacific pregnant women who have rheumatic heart disease and their babies	Less preterm and low for gestational weight babies born to mothers with rheumatic heart disease	High	<5 years		
	Improved oral health	Māori and Pacific people with rheumatic fever and rheumatic heart disease	Better quality of life, less dental procedures, less infective endorcarditis	High	<5 years, ongoing		
	QALY gains	Māori and Pacific people	Number of QALYs gained	High	<5 years ongoing		Medium
	Fewer hospital visits, including fewer surgeries	Government – District Health Boards	High. Cost of hospital admissions in 2000-2009 for rheumatic fever and rheumatic heart disease across all age groups was $12 million. Heart valve surgery accounted for 28 percent of admissions and 71 percent of the cost. If we were to half rheumatic fever diagnoses, we would save at least $6million.	High	<5 years ongoing		
Jobs and earnings Secondary	Increased productivity and less time off lost work	Parents of children diagnosed with rheumatic fever. Adults who require prophylaxis (and need to take time off work to go to appointment)	Low. Care arrangements will vary, but often time off work by caregivers is needed while child is in hospital (sometimes for up to 6 weeks) and afterwards to take the child or	Med	<5 years ongoing		

			young person to appointments.				
Knowledge and skills  Secondary	School attendance and learning	Children with RF Government – schools	Low, but less disruption of schooling for students diagnosed with rheumatic fever. Not monetised.	Med	<5 years ongoing		

3.2 Wellbeing capitals – Sustainability for future wellbeing

Capitals	Describe the impact and its magnitude	Realised in <5 / 5-10 / 10+ years
Financial/Physical	**Increase.** This initiative draws down financial capital to fund the cost of delivery – however, it will result in long term financial gains due to less time off work for caregivers, and a longer productive life in those who would have otherwise had rheumatic fever.	The increase will be realised in <5 years. However, financial capital will increase in 10+years following increased productivity in individuals who otherwise would have been diagnosed with rheumatic fever.
Human	**Increase**. This initiative is focussed on improving individual health by reducing rheumatic fever and rheumatic heart disease and improving the management of these conditions. Because these conditions have lifelong health consequences on those they affect, this helps to build the stock of human capital by increasing the quality of life for an individual, reducing hospital visits and sickness and promoting productivity.	<5 years
Natural	**Maintain.** This initiative has no impact on natural capital.	N/A, as no impact
Social	**Increase.** This initiative will have a positive impact on social capital as it will contribute to improving health outcomes for Māori and Pacific people and contribute to achieving equity.	5-10 years

3.3 Risk and resilience narrative

Does the initiative respond to or build resilience?	

Costing understanding and options

3.4 Detailed funding breakdown

Please provide a breakdown of the costs of this initiative

The funding across the initiatives has been distributed as follows.

($m)	2019/20	2020/21	2021/22	2022/23 & outyears
Innovative initiatives to improve access to sore throat management services	s 9(2)(f)(iv) [redacted]			
Implementation of recommendations from HHI process evaluation				
[redacted]				
[redacted]				
[redacted]				

How the funding will be distributed between the three Auckland DHBs for improving access to sore throat management is yet to be determined. Further information and a breakdown of the costs for the initiatives related to improving the management of rheumatic fever and rheumatic heart disease are included in Appendix 3.

A key assumption that has been made is that this funding will be sufficient to deliver these initiatives.

3.5 Options for scaling and phasing

Scaling, phasing or deferring - including 75% and 50% scenarios

As indicated above in section 2, reducing rheumatic fever requires a comprehensive approach. Therefore it is difficult to phase or scale this package of initiatives.

If scaling back is required then the following options could be considered:

Option 1: Year 1-3 – fund the development and implementation of community-led and whānau-driven initiatives in the Auckland region to improve access to primary care for sore throat only - [redacted] over three years

Option 2: Year 1-3 – fund the development and implementation of community-led and whānau-driven initiatives in the Auckland region to improve access to primary care for sore throat as well [redacted] over 3 years

Option 3: Option 1 or 2 above and [redacted] Year 2

Option 4: Options 1, 2 or 3 above [redacted] Year 2

In all of the above options, the implementation of recommendations from the HHI process evaluation could be funded through business as usual.

4. Collaboration

4.1 Collaboration and evidence	
What type of cross-agency and/or cross-portfolio initiative is this?	This initiative is not a cross-agency and/or cross-portfolio bid where there is collective responsibility, but there are cross-agency relationships and implications, particularly with District Health Boards and the partners in the HHIs - MSD, HNZ, MHUD and EECA.
Agencies and Ministers that have been engaged in initiative development	The initiatives have been discussed with Associate Minister of Health Jenny Salesa and she is very supportive. No other Government agencies have been consulted. A high level indication of these initiatives have been discussed with key DHB colleagues. The logistics of the initiatives have also been discussed at a high level.
Impact of cross-agency collaboration	These initiatives have been identified by the health sector through workshops in May and June 2018 as important for reducing the incidence and improving the management of rheumatic fever and rheumatic heart disease.
Risks and challenges	Expectations may have been raised in discussing these initiatives with the wider health sector.

Appendix 1 – Rheumatic fever and rheumatic heart disease

Rheumatic fever is an autoimmune response to a Group A streptococcal (GAS) throat infection. In some cases the inflammation caused by rheumatic fever can cause rheumatic heart disease, where there is scarring of the heart valves. Rheumatic heart disease is more likely to occur with recurrent episodes of rheumatic fever.

While rheumatic fever is rare in most developed countries, New Zealand has a relatively high incidence, with high rates among Māori and Pacific children and young people aged 4–19 years living in the North Island of New Zealand.

Rheumatic fever and rheumatic heart disease prevention strategies fall across four categories:

a. Prevent the sore throat – primordial prevention. This strategy consists of addressing the socio-economic conditions that lead to increased GAS transmission (such as household crowding).
b. Treat the sore throat – primary prevention. This strategy consists of identifying and treating GAS throat infections quickly and effectively. Primary prevention also aims to raise awareness of getting sore throats checked and supports people to access treatment for them.
c. Prevent further attacks of rheumatic fever and worsening heart disease – secondary prevention. Secondary prevention consists of stopping further episodes of rheumatic fever by giving monthly penicillin injections for at least 10 years to those who have been diagnosed with rheumatic fever.
d. Preventing complications of rheumatic heart disease – tertiary prevention. Tertiary prevention focuses on managing the symptoms of rheumatic heart disease and preventing premature death. It includes heart valve surgery, medication to manage heart failure, and preventing stroke.

The Rheumatic Fever Prevention Programme (RFPP), established in 2011, focused on the primordial and primary prevention of rheumatic fever.

The RFPP was expanded significantly in 2012 following the introduction of the rheumatic fever Better Public Services (BPS) target to reduce the rheumatic fever rate to 1.4 per 100,000 people by the end of June 2017.

The RFPP was a comprehensive population health programme delivered in eleven DHBs[4] that had a high incidence of rheumatic fever. It had three main strategies to reduce rheumatic fever rates:

- reduce household crowding and therefore reduce household transmission of GAS throat bacteria within households
- improve access to timely and effective treatment for GAS throat infections in priority communities
- increase awareness of rheumatic fever, what causes it and how to prevent it.

The programme officially ended on 30 June 2017 with the retirement of rheumatic fever as a BPS target. However, rheumatic fever continues to be a focus for the 11 DHBs with a high incidence of the disease.

The government has allocated a total of $5 million per year until 2022 to these 11 DHBs so they can continue to deliver a balanced mix of rheumatic fever prevention activities to address rheumatic fever and reduce rheumatic fever rates.

[4] These DHBs were: Northland, Auckland, Waitemata, Counties Manukau, Waikato, Bay of Plenty, Lakes, Hauora Tairāwhiti, Hawke's Bay, Hutt Valley, and Capital & Coast.

The latest data (for the 2017/18 financial year) suggests that rates in Pacific people are increasing.

The Ministry hosted two national rheumatic fever workshops in Auckland in May and June 2018 to identify the way forward with regards to addressing rheumatic fever now that the RFPP has ended. The first workshop on 10 May focused on the primary prevention of rheumatic fever; the second workshop on 12 June focused on improving the management and experiences of people with rheumatic fever.

Workshop attendees were from District Health Boards (DHBs), Māori and Pacific providers, and primary care providers.

The latest New Zealand-based research was presented at both workshops, followed by group discussions and feedback.

Key themes identified in the workshops

There were some overarching themes that were identified in both workshops. These themes included that:

- Poverty and housing need to be addressed.
- Systems change is needed – particularly in the delivery of primary care but also in having a holistic approach to both prevention and management which puts whānau at the centre.
- Partnerships and a collaborative approach are important with communities and the multiple agencies that are involved in both prevention and management.
- Māori, Tongan, and Samoan people are different and need different plans. There needs to be Māori-specific, Samoan-specific, and Tongan-specific local engagement and service strategies.
- Initiatives and solutions need to be community-led and whānau-driven.

A key rheumatic fever prevention theme that was identified was the continued focus on sore throat management. The research also confirmed the strong link between having a family history of rheumatic fever and the development of the condition.

Key themes identified specifically for improving the management and experience of rheumatic fever and rheumatic heart disease included:

- s 9(2)(g)(i) [redacted]
- **Acknowledging and managing rheumatic fever and rheumatic heart disease as a chronic condition.** In particular, this includes ensuring access to free dental care for [redacted] with rheumatic heart disease. Good oral health is important for people diagnosed with rheumatic heart disease as they are at increased risk of developing infective endocarditis.

Dental care is not currently free for those 18 years and over, although it is subsidised at some DHBs.

- **Improving the management and experience of delivering and receiving intramuscular benzathine penicillin to those people diagnosed with rheumatic fever and rheumatic heart disease**. People who are diagnosed with rheumatic fever need to have intramuscular benzathine penicillin injections (prophylaxis) every 21 to 28 days to prevent recurrence and the progression of rheumatic heart disease. It is important that prophylaxis is delivered in a timely way.

  A particular issue identified in the workshop was the difficulty managing the timing and delivery of prophylaxis if patients move from one DHB to another. Workshop participants identified that a national patient management system (PMS) would work towards addressing this issue. A PMS could be used to keep track of secondary prophylaxis being given, as well as managing movement of patients across DHBs. More detail on how the PMS could look like is provided in Appendix 3.

The themes identified in the workshops are consistent with and confirm the lessons the Ministry has identified from implementing the RFPP. These lessons include the importance of a comprehensive community-centred approach that allows communities to define problems and identify solutions.

Appendix 2 – Healthy homes initiatives

Background

The Healthy Homes Initiatives (HHIs) were established between December 2013 and March 2015 and cover 11 District Health Boards (DHBs) with a high incidence of rheumatic fever. Initially, the HHIs targeted low-income families with children at risk of rheumatic fever who were living in crowded households. However, the breadth of the programme was expanded, with funding from Budget 2016, to focus more broadly on warm, dry and healthy housing for low-income families with 0 to 5 year-old children and pregnant women[5].

The HHIs identify at-risk families, undertake a housing assessment and then facilitate access to a range of interventions to create warmer, drier, healthier homes, such as: insulation, curtains, beds/bedding, floor coverings, heating sources, and private/community/social relocation. They also educate families how to change their behaviour and practices to keep a house warm and dry, and reduce risks associated with household crowding. A flow chart that illustrates how the HHIs work in practice is attached as Appendix Four, along with a family case study in Appendix Five.

HHIs do not use government funding they receive to directly purchase housing interventions for families. The HHIs' role is to identify, coordinate and broker with existing services and agencies to maximise opportunities and impacts for eligible families.

The HHIs complement and align with many of the Government's strategic priority areas, including reducing child poverty, improving child wellbeing, improving Māori and Pacific health, improving equity of health outcomes, and ensuring warmer, drier and healthier homes.

Since the inception of the HHIs, the Ministry has worked closely with key government agencies, such as HNZ, MSD, EECA and MBIE, to improve and streamline their processes (or develop new ones) for families most in need. For example, some families are eligible for the Rheumatic Fever Fast Track onto the social housing waitlist and families living in HNZ properties are able to access (usually within 90 days) key capital interventions[6].

The HHIs have a strong focus on improving child wellbeing and equity. The HHIs target those families that are low-income, are Māori or Pacific, and are living in areas of high deprivation. For example, families could be referred because they have a child that has had a past episode of rheumatic fever or a child that has been hospitalised with a housing-related condition.

The Ministry believes that the HHIs complement the current Government's housing initiatives. The HHIs take a holistic approach with the family at the centre and include, but are not limited to, the behavioural aspects of keeping a house warm and dry, advocating for families, and working with MBIE and others to ensure landlords are meeting their obligations.

Healthy Homes Initiative evaluation

The Ministry commissioned a process evaluation of the HHIs, which was published in July 2018 (https://www.health.govt.nz/publication/healthy-homes-initiative-evaluation-final-report). The evaluation) found that the HHIs were exceeding expectations in one area and meeting expectations in the remaining four areas, as summarised below:

- The HHIs are exceeding expectations in how whānau perceive their engagement with the HHI and the achievement of desired outcomes. Most whānau report that their involvement with the

5 Expanded eligibility criteria include: 0-5 year olds hospitalised with a specified housing-related indicator condition; families with children aged 0-5 years old for whom at least two of the social investment risk-factors; or pregnant women and newborn babies.

6 The HNZ five capital interventions include: curtains, a fixed form of heating in the living area, insulation, ventilation and floor coverings.

HHI had been positive and it increased their overall confidence in dealing with other health and social service agencies. The majority of whānau interviewed considered their homes were warmer, drier and healthier after their involvement with the HHI.

- The HHIs are meeting expectations in establishing referral pathways to ensure the initiative reaches its priority population. For example, HHI providers have achieved a high level of confidence amongst referrers in most regions, but could do more to systematise referral processes and communications with referrers.
- The HHIs are meeting expectations in using innovation to make the service more efficient and effective, particularly in sourcing and delivering interventions for families. However, challenges remain where the decision to provide interventions that will create warm, dry and healthy homes rests outside the service, such as the consent or finance required from private landlords or other agencies.
- The HHIs are meeting expectations regarding effectiveness (including partnerships with relevant organisations, intervention delivery, the workforce and from families' perspective). The evaluation found there is some inequity in the supply of interventions across the HHI regions, with few charitable organisations and philanthropic funds available to support HHIs in regions with dispersed populations.
- The HHIs are meeting expectations in terms of providing value for money. The evaluation found that the HHI resources are mostly being spent fairly, wisely and well, and funding invested is likely to have a positive effect on whānau health. The evaluation shows that HHIs are actively seeking ways to enhance service efficiency by linking with existing programmes and services.

The report includes 11 recommendations, which the Ministry is taking into account. Some recommendations the Ministry is considering include: working with cross-government partners to address barriers to the delivery of interventions and reviewing the current per-family funding model of [redacted] to better reflect the true cost of coordinating and delivering the service to at-risk families. Other recommendations are for the HHI providers to consider widening referral pathways and systematising communication with referrers.

A cross-agency implementation plan is being developed with MSD, HNZ, MHUD and EECA that will respond to the recommendations and other opportunities raised in the HHI evaluation report. This budget bid includes funding to support the delivery of these recommendations.

Appendix 3: Descriptions of initiatives and options analysis for improving management of RHD

s. 9(2)(f)(iv) [redacted]

Māori and Pacific pregnant women have a particularly high burden of rheumatic heart disease compared with women of other ethnicities. One in ten of these women are only diagnosed with rheumatic heart disease once they develop symptoms during pregnancy. During pregnancy, plasma volume increases which results in an increased heart rate and cardiac output – women who may not have had symptoms related to their heart disease prior to pregnancy, suddenly deteriorate due to the increased burden on their heart.

s 9(2)(f)(iv) [redacted]

The other option considered in developing this budget bid was the status quo, which is Māori and Pacific pregnant women with previously undiagnosed rheumatic heart disease are diagnosed when they develop symptoms of their heart disease. In some situations, this will only happen early if they have a Lead Maternity Carer or easy access to primary care – otherwise presentation may only occur

when symptoms are severe. Within this option, pregnant women who have rheumatic heart disease and their babies will continue to have adverse health outcomes.

Delivery of the initiative

Delivery of this initiative will be developed in collaboration with the Auckland district health boards.

Funding sought

Funding Sought ($m)	2019/20	2020/21	2021/22	TOTAL
Operating	[redacted]	[redacted]	[redacted]	[redacted]

There are approximately 6000 Māori and Pacific women who give birth each year – a total of 12,000 over two years. This funding optimistically assumes that [redacted]

This funding includes:

- [redacted] for the scanning service [redacted] per year for 2019/20 and 2020/21). Cost = [redacted] for a scan for [redacted] women over two years
- [redacted] for training of sonographers (2019/20)
- [redacted] administration costs plus overheads [redacted] per year for 2019/20 and 2020/21)
- [redacted] evaluation (2020/21)

[redacted]

Good oral health is important for people diagnosed with rheumatic heart disease as they are at increased risk of developing infective endocarditis. Dental care is not currently free for those 18 years and over, although it is subsidised at some DHBs. Dental care is free for those under 18 years.

[redacted] If this pilot is successful and cost-effective, it is proposed that the District Health Boards continue funding this initiative, including ongoing preventative dental care which will incur lower costs. It is proposed that this initiative is piloted in the Auckland region as this is where the burden of rheumatic fever and rheumatic heart disease is.

People who are on the Auckland region rheumatic fever registers, and who are over 18 years, would be eligible for this service. There are approximately 400 people who are 18 years and over on these registers.

[redacted]

[redacted]

Delivery of the initiative

Delivery of this initiative will be developed in collaboration with the Auckland district health boards.

Funding sought

Funding Sought ($m)	2019/20	2020/21	2021/22	TOTAL
Operating	[redacted]	[redacted]	[redacted]	[redacted]

This funding includes (for [redacted] adults 18 years and over);

- [redacted] for
- [redacted] administration costs plus overheads ([redacted] per year for 2019/20 and 2020/21)
- [redacted] evaluation (2020/21)

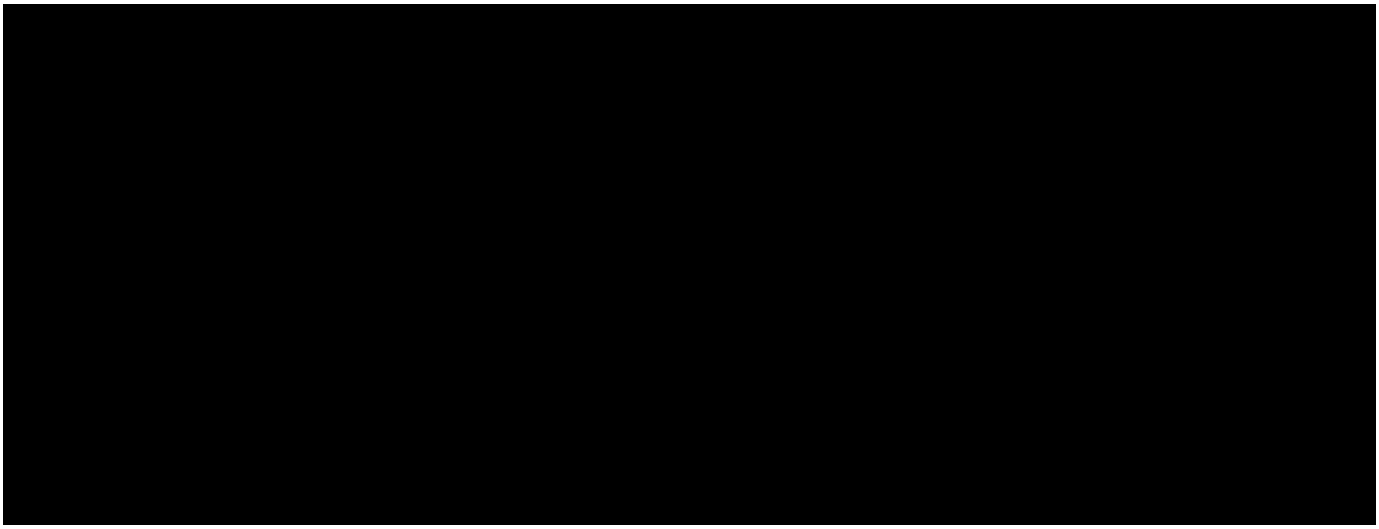
Rheumatic fever register / patient management system

People who are diagnosed with rheumatic fever need to have intramuscular benzathine penicillin injections (prophylaxis) every 21 to 28 days to prevent recurrence and the progression of rheumatic heart disease. People diagnosed with rheumatic fever and rheumatic heart disease require secondary prophylaxis for at least 10 years, with people with very severe heart disease receiving it for life. It is important that prophylaxis is delivered in a timely way to prevent recurrences.

A particular issue identified by the sector is the difficulty managing the timing and delivery of prophylaxis if patients move from one DHB to another. Although individual DHBs have registers to keep track of delivery of prophylaxis, they do not work across DHBs. It has been identified by the sector that a national patient management system (PMS) could be used to keep track of secondary prophylaxis being given, as well as managing movement of patients across DHBs.

[redacted] but is developed on a platform that will be able to have other conditions added to it as appropriate. For example, some cancers, hepatitis C, newborn screening outcomes, intersex etc.

[redacted]



The following two alternative options were also considered in the development of this budget bid:

1. Status quo – DHBs continue to use their regional registers / patient management systems to coordinate the delivery of prophylaxis.

Advantages of this option:

- No further investment required
- No centralised intervention with work that is planned or is already undertaken for developing local registers by DHBs.

Disadvantages of this option:

- Regional registers only provide a limited, siloed view
- Health professionals will not be able to view a patients' prophylaxis history if they are not from the clinician's region.
- Does not address the underlying issues with the localised view of information, where a view of a patient's history is lost when they move outside of the DHB region.

2. Develop a stand-alone register / patient management system specifically for the management of rheumatic fever

Advantages of this option:

- A national register / patient management system allows the tracking and management of patients regardless of where they present themselves.
- The scope is narrowed to focus specifically on rheumatic fever
- The cost could be less than developing a register that would include other conditions. However, initial costs would be the same.
- Development of a rheumatic-specific register / patient management system would be more focused and requirements would be narrower and easier to define

Disadvantages of this option:

- This incentive would require a considerable investment of both funds and efforts in terms of time and work.
- Efforts invested in designing and developing a stand-alone rheumatic fever register might not be considerably lower than efforts invested in designing and developing a national centralised cross sectors register.

[redacted]

Delivery of the initiative

If successful, the first steps in the delivery of this initiative would be:

- All relevant stakeholders will be engaged, and a complete Vision and Scope for the project will be documented.
- High level requirements will be agreed
- Work will be scoped in further detail, broken down into phases, as applicable
- An estimated total work effort per phase, will be detailed.
- This preliminary work will be agreed by the stakeholders, and signed off.
- Together with the agreed high level requirements, the vision and scope for the project will be used as the basis for a RFP

Resourcing efforts will see a project team put together for the purpose of developing the register.

Funding sought

Funding Sought ($m)	2019/20	2020/21	2021/22	2022/23 & outyears	TOTAL
Operating	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

This funding includes:

- [redacted]

Appendix 4: Intervention logic map