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Whakataukī

E kore e taea te whenu kotahi ki te raranga i te whāriki kia mōhio tātou ki ā tātou.
Mā te mahi tahi ō ngā whenu, mā te mahi tahi ō ngā kairaranga, ka oti tenei whāriki.
I te otinga me titiro tātou ki ngā mea pai ka puta mai. Ā tana wā, me titiro hoki ki ngā raranga i makere nā te mea, he kōrero anō kei reira.

The tapestry of understanding cannot be woven by one strand alone. Only by the working together of strands and the working together of weavers will such a tapestry be completed. With its completion let us look at the good that comes from it and, in time we should also look at those stitches which have been dropped, because they also have a message.

Nā Kūkupa Tirikatene (1934–2018)
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This Review is probably the most comprehensive integrated look at the New Zealand Health and Disability System in a generation. The terms of reference were wide and challenging and required the Review to confront many of the inequities the system has perpetuated over the years.

This review was essentially completed before Covid-19 hit New Zealand. Obviously this pandemic has put the system under extreme stress. While the Review is totally supportive of the leadership and commitment the system is showing to help New Zealanders through, what only a few months ago seemed unimaginable, the experience only reinforces the Review’s conclusions. To meet the challenges of the future our population health focus has to be stronger, our preparedness for emergencies greater, and our system has to be much better integrated with clear lines of accountability and decision rights.

Putting this report together has involved a huge amount of effort from a wide range of contributors.

From written submissions, through face to face meetings, expert analysis, and the dedication of a secretariat who have worked tirelessly to pull it all together.

> continued
The Panel has had many lively discussions as we debated the merits of alternative proposals, but throughout, all Panel members have been driven by a strong commitment to providing a set of recommendations which we believe have the best chance of ensuring the Health and Disability system in New Zealand can evolve into a system which delivers health outcomes for all New Zealanders both equitably and efficiently. In the end there was no consensus on the extent to which the Māori Health Authority should control the funding and commissioning of services for Māori. But while that is a significant difference, and is a debate which is sure to be ongoing, it should not detract from the rest of the recommendations.

I firmly believe that, the changes being proposed by this Review have the potential to deliver a system which is a truly New Zealand system. A system which embeds te Tiriti principles throughout, where Māori have real authority to develop and implement policies which address their needs in ways which respect te Ao Māori, and a system where all New Zealanders, Māori, Pacific, European, Asian, disabled, rural or urban, understand how to access a system which is as much about keeping them well, as it is about treating them when they become sick.

It is important to acknowledge also that the real strength of our health system comes from the people who provide the care and deliver the services.

The job of this Review was to recommend system level changes which will allow those staff to be more effective. Staff need to be able to use all their skills to the best of their ability and consumers and whānau need to feel that the system is working for them. Policy makers need to have confidence that when decisions are made to introduce a new policy, effective levers are in place to translate those policies into action and create feedback loops to continually improve performance.

Equally importantly it should be a system where financial management is driven through clear accountability lines so that any government can be confident when it allocates funding to improve the system, it will be able to track where the money has been spent and will be able to see the changes which have come about as a result of the expenditure.

I am confident that if the system changes proposed by this Review are implemented and funded over the next few years, the system would grow stronger, the outcomes would be more equitable and overall the system would be much more sustainable.

So my sincere thanks go to all those who have contributed, to the Director and the staff of the secretariat, and especially to the Panel members and the members of our Māori Expert Advisory Group.

I commend the Review and its recommendations to the Government.
Executive summary / He whakarāpopoto

Introduction
The Health and Disability System Review was charged with recommending system-level changes that would be sustainable, lead to better and more equitable outcomes for all New Zealanders and shift the balance from treatment of illness towards health and wellbeing.

The challenge is clear. New Zealand has a diverse population with a history of experiencing significantly different health outcomes.

An indigenous Māori population whose ability to encompass te Ao Māori and participate in whānau and cultural connections are prerequisites to good health.

Increasing populations of Pacific peoples and a growing Asian population.

More disabled people, an ageing population, and a rural population that often feels they are invisible to urban decision-makers. As well, New Zealand has a level of intergenerational poverty which, perhaps more than anything else, negatively impacts on health outcomes.

On the positive side, New Zealand has, by world standards, a very good publicly funded health and disability system which can evolve into being more effective and more sustainable.

On the other hand, the health and disability system is under serious stress. Financially, it has had difficulty managing within the resources provided to it for some years. From a workforce point of view staff are feeling more and more stressed, facing increasing demands and significant shortages in supply, and the public hear more about deficits than they do good news stories.

In August 2019 the Review published an Interim Report that identified areas where submissions, and the Review’s own analysis indicated that change was needed.

These were grouped around four key themes.

- Ensuring consumers, whānau and communities are at the heart of the system.
- Culture change and more focused leadership.
- Developing more effective te Tiriti based partnerships within health and disability and creating a system that works more effectively for Māori.
- Ensuring the system is integrated and deliberately plans ahead with a longer-term focus.
Since the Interim Report, the Review has continued to talk with a wide range of stakeholders and conducted its own more detailed analysis in many of these areas and arrived at a set of final recommendations.

The recommendations range from legislative change, to structural and culture changes. The changes cannot happen all at once. To realise the benefits of a new system would require a determined change programme over a number of years.

This executive summary discusses some of the Review’s proposals under the themes previously identified.

**Ensuring consumers, whānau and communities are at the heart of the system**

Improving the equity of the health outcomes achieved in New Zealand requires first that we acknowledge that current inequities are not acceptable, that we understand better what is contributing to that inequity, and the health and disability system becomes more determined to operate differently so that inequities are addressed.

The system must understand the needs of individuals, whānau and communities in much more detail and must design and deliver services to address the identified needs. It also requires that the costs and benefits of service design to consumers are given much more weight relative to those of providers than has been the case in the past.

Analysis by the Review points to improvements in the way primary and community (Tier 1) services are organised as having the biggest potential to improve the health outcomes of those currently disadvantaged. The Review proposes working towards a much more networked Tier 1 environment where the full range of primary and community services are planned with the community, where services are digitally connected so information flows as required, and where more of the services have an outreach element making it easier for whānau to stay connected to the system.

Planning and funding these services must be driven by the needs of each community, not just the population numbers, so higher deprivation localities have more funding to allocate. Similarly, services need to be designed to work for the population they are serving, so Māori communities need to have access to a wider range of kaupapa Māori services.

Disabled people have not been well served by the existing health and disability system. Their health outcomes are worse and the way the disability support system operates is complex and confusing. The Review found that there is wide unexplained variability in the way assessment processes work around the country, and this should be addressed. The Review proposes that disability support becomes an integral part of Tier 1 service planning, funding and provision.

Home-based support, in particular, should be assessed by need rather than having eligibility determined by diagnosis. Needs assessment processes need to be more streamlined and less repetitive.

Consumers, whānau and communities are not, however, only concerned with their immediate wellness. Communities need to have a part in the decision making about the design and delivery of treatment services at all levels.
Tier 1 and Tier 2 services need to be well integrated and the Review proposes improved care management, within Tier 1 networks, and better digital information flows. Priority should be given to moving Tier 1 services currently provided in hospitals into communities.

The Review also proposes a much more transparent planning and reporting system. It stretches all the way from the New Zealand Health Outcomes and Services Plan (NZ Health Plan) which takes a long-term look at what outcomes we should be trying to achieve and how and where services will need to be developed, through five year district and regional strategic plans to funded annual DHB plans which describe what primary and secondary services communities can expect to see locally and that ensures regular reporting back to communities on health outcomes.

**Culture change and more focused leadership**

The further work of the Review reinforced the view that the health and disability system needs more active leadership at all levels. The Review concludes that this cannot be achieved through any one action or decision, but would require a clearer definition of functions and structures, more collective responsibility and more deliberate upskilling throughout the sector, from kaiāwhina to DHB board members.

The Review proposes that a new agency is created, provisionally called Health NZ, which is accountable to the Minister of Health for leadership of health service delivery, both clinical and financial.

Leadership for hauora Māori is also strengthened with the creation of the Māori Health Authority (provisional title) to sit alongside the Ministry of Health (the Ministry) and Health NZ, to not only be the principal advisor on all hauora Māori issues, but also to lead the development of a strengthened Māori workforce and the growth of a wider range of kaupapa Māori services around the country.

Leadership within the DHBs also needs to change. At the governance level the Review concludes that the effectiveness of elected over appointed boards is not compelling. The Review recommends that all board members be appointed by the Minister of Health against a transparent set of competencies ranging from financial and governance experience through to tikanga Māori and specific health and disability sector knowledge. The Review also concludes that the number of DHBs needs to be reduced within the next five years, to between 8 and 12 DHBs.

Providing effective leadership is, however, about much more than creating new organisations or changing governance structures. Effective leadership is as much about the culture of the sector as it is about the structure. Health NZ is not envisaged as an organisation that just tells DHBs what to do. It is designed to be an organisation that is responsible for working with all parts of the delivery system to ensure it is operating effectively, fairly and sustainably.

The Interim Report highlighted the lack of a collective culture in the health and disability system. The Review addresses this in a number of ways.

A legislated charter setting out the common values and workforce behaviours expected throughout the system is a start but will need to be reinforced by active management.

As noted above, New Zealand is a country of different cultures. Cultural safety for all and an absence of racism must be a given.
Interprofessional teamwork happens brilliantly in some places but in others it is still largely non-existent. Yet, if the system is to focus on keeping people well and treating patients with complex comorbidities as the norm, no single part of the system will be able to work on its own and be effective.

The culture needs to change at the organisational level as well. Currently, DHBs are only accountable for what happens in their own district. The Review proposes this should change and while each DHB must take responsibility for their domicile population, they should also be expected to consider how their planning and delivery impacts the overall system. This should be reflected in their formal accountabilities.

Along with these changes, the focus of the health and disability system needs to move. Despite primary health care strategies and numerous reviews of the system recommending more focus on keeping people healthy rather than simply treating illness, the structure, funding streams and accountabilities built into the system have not made this culture change happen.

This Review proposes that population health functions, which would underpin a shift to a health and wellness focus, need to be strengthened. The Ministry needs to lead with more focus on capacity and capability, planning and outcomes used to measure performance need to be population focused, and the funding and accountability for improving these measures need to be firmly managed by DHBs.

**Developing more effective te Tiriti based partnerships within health and disability and creating a system that works more effectively for Māori**

The fact that Māori health outcomes are significantly worse than those for other New Zealanders represents a failure of the health and disability system and does not reflect te Tiriti commitments.

Designing a health and disability system that will produce better results in the future requires a recognition that change has to happen right across the system.

A system which doesn’t reflect mātauranga Māori or enhance rangatiratanga will not be effective at improving health and wellbeing for Māori. As a first step the Review recommends that, in line with recommendations of the Hauora Report (Wai 2575) te Tiriti principles in key health legislation are updated.

As noted above, the Review proposes to create an independent Māori Health Authority. As well as the functions referred to above it would be expected to monitor and report on the performance of the health and disability system as it impacts on Māori. The Māori Health Authority would identify the issues which need to be addressed and develop and test solutions.

The Māori Health Authority would also need to partner with other parts of the system; no one part of the system can improve equity on its own. The Māori Health Authority would need to partner with Health NZ to develop commissioning models that will work for Māori, whether for general, taha Māori or kaupapa Māori services. It would need to work with DHBs and iwi to develop partnership arrangements that can co-govern service networks and work with communities and providers to develop better need and outcome measures.

Governance in other parts of the system needs to reflect te Tiriti partnerships. The Review proposes that the Health NZ board have equal numbers of Crown and Māori members so that the way the delivery system functions incorporates different world views.
EXECUTIVE SUMMARY | HE WHAKARĀPOPOTO

While improvements in leadership and governance will assist Māori, perhaps the most immediate concern is to ensure the next generation of Māori have better lives and health outcomes.

More effort must go in to identifying unmet needs across the board, but especially for Māori communities. Health outcomes will not improve if the health and disability system waits for whānau to turn up to be ‘treated’. The system has to reach out with the explicit aim of preventing illness. For example, providing more flexibility to ensure Well Child / Tamariki Ora services meet whānau needs, rather than always expecting the community to adjust to the ‘rules’.

To achieve this there will need to be significant new investment. Funding for Māori communities needs to better reflect need and be protected from being diverted to broader treatment programmes. The Review proposes increased ethnicity and socioeconomic deprivation weighting within the population-based funding formula, formal ringfencing of Tier 1 funding within DHB budgets and a requirement to disclose indicative budgets to communities and report on expenditure against those budgets and outcomes.

Ensuring the system is integrated and deliberately plans ahead with a longer-term focus

The Interim Report highlighted the lack of structured planning within the current health and disability system. The Review is convinced this is a fundamental flaw and proposes a properly integrated planning system is legislated for which requires the system to cooperate and plan within an agreed framework.

The first requirement is to have a clearly articulated NZ Health Plan that looks ahead at least 20 years. Health systems take a lot of time to turn around and investment that is needed is often large and complex. Without a long-term plan there can be no certainty that the enablers: an appropriately trained workforce; buildings and facilities that are suitably equipped and fit for purpose; and data and digital systems that enhance integration, patient safety, efficiency and effectiveness, can be in place in a timely manner to produce an effective system.

Workforce development is a key constraint in our current health and disability system. In line with worldwide trends New Zealand is experiencing growing clinical workforce shortages. Our system will not be sustainable unless we change models of care and use the workforce differently. While the Review does not recommend immediate changes to workforce regulatory structures it notes that there are large numbers of different bodies involved in workforce training and regulation. Unless they work effectively together to promote and achieve relevant workforce plans then, in future, some tighter oversight may be required.

The New Zealand system is too small to duplicate expertise and effort unnecessarily, and when significant investments are needed, it is important they are made in the right places at the right time so that health outcomes and equity are improved for all New Zealanders.

The current system for planning and delivering capital projects is not cohesive or effective. While the Government has recently introduced improvements, such as establishing a health infrastructure unit and changing the capital charge regime, the system still encourages duplication and spreads scarce expertise too thinly.

The Review proposes a more streamlined prioritisation process coming from the New Zealand Health Plan. This process, along with improved governance from appointed national and regional boards should reduce time wastage and duplication of effort and give the Government more confidence the right investment decisions are being taken and can be kept on track.
Planning for the level of digital technology needed to support an effective health and disability system is lagging behind in New Zealand. The quality of data, the ability to transfer data securely, and the interconnectedness of the various systems operating around the country are all barriers. Having an agreed plan and an ability to enforce decisions regarding issues such as interoperability standards, would be a benefit from adopting the Review’s recommendations.

The health and disability system must act and be managed as a single integrated system comprising public, private and non-governmental organisation (NGO) providers. District health board strategic plans need to complement each other and be consistent with the New Zealand Health Plan. This does not mean that all health and disability services have to be delivered in exactly the same way. In fact, the Review proposes that there be less reliance on national contracts, especially for providing tier 1 services, because services must be more responsive to local communities.

That flexibility must be operated within a framework that gives New Zealanders the assurance that they know what to expect from their health and disability system, they understand the rationale for where and how services are being delivered, and they have confidence that where they live is not unfairly disadvantaged them in accessing quality services.

The Final Report discusses all these and many other issues in more detail. It does not repeat the analysis presented in the Interim Report but has applied the same structure to help readers make necessary connections.

Each chapter concludes with a set of changes which the Review proposes need to be taken to build the most effective health and disability system. Some of these changes would require government policy decisions, others are or would be within the control of the system itself.

Very few of the Review’s recommendations are stand alone. The lesson from past reviews and attempts to change the health and disability system is that it can not be done piecemeal.

- Without structural and accountability changes, cultural changes will not follow.
- Without changes to planning frameworks, investment strategies will be meaningless.
- Without changes to governance and performance management, governments can have little confidence that additional funding is really providing better and more equitable services for New Zealanders.
- Without changes to enhance rangatiratanga and embed mātauranga Māori, the health and disability system will never fulfil the promise of te Tiriti.

The Minister of Health commissioned the Review; the key recommendations are directed to Government. These are decisions the Government needs to make to allow the system to evolve into one which has the promise to change both the way New Zealanders view their health and disability system and in the level and equity of the outcomes it achieves.
Section A: Overview and context / Tirohanga whānui me te horopaki
1 Background / He whakamārama

Terms of reference

The Health and Disability System Review’s terms of reference encompass the overall health and disability system as set out in legislation.

The terms of reference require the Review, by March 2020, to deliver final recommendations to the Government on a future health and disability system that is sustainable, is well placed to respond to future needs of all New Zealanders, and shifts the balance from treatment of illness towards health and wellbeing.

The Panel will recommend how the system could be designed to:

- achieve better health and wellbeing outcomes for all
- ensure improvements in health outcomes of Māori
- ensure improvements in health outcomes of other population groups
- reduce barriers to access to health and disability services to achieve equitable outcomes for all parts of the population
- improve the quality, effectiveness, and efficiency of the health and disability system, including institutional, funding, and governance arrangements

Outside the scope of the Review are:

- the Accident Compensation Scheme (although the relationship between the health and disability system and the compensation scheme is in scope)
- the Pharmaceutical Management Agency (PHARMAC) (although the relationship between the health and disability system and PHARMAC is in scope)
- private health insurance (although its interaction with demographic drivers of health care need is in scope)
- the MidCentral Prototype (for disability service delivery) that is under way (although lessons from this work will be considered when the Review’s recommendations are developed).

The full terms of reference are in Appendix A.
Expert review panel and advisory group

The Minister of Health appointed Heather Simpson to chair the Review and lead an Expert Panel to identify opportunities to improve the performance, structure and sustainability of the health and disability system with a goal of achieving equity of outcomes and contributing to wellness for all, particularly Māori and Pacific peoples.

### Expert review panel

- Heather Simpson (Chair)
- Dr Lloyd McCann
- Dr Winfield Bennett
- Sir Brian Roche
- Shelley Campbell
- Dr Margaret Southwick
- Professor Peter Crampton

The Panel appointed a Māori expert advisory group (MEAG) to support the Review and to help ensure that the advice it provides appropriately incorporates te Ao Māori, including hauora (health and wellbeing) and mātauranga Māori (knowledge) in order to improve Māori health outcomes, equity, and wellbeing. The MEAG and Review were supported by a kaumatua, Rangi McLean.

### Māori expert advisory group

- Sharon Shea (Chair)
- Associate Professor Sue Crengle
- Dr Dale Bramley
- Takutai Moana Natasha Kemp
- Associate Professor Terryann Clark
- Linda Ngata
Developing our final recommendations: Phase Two and the Final Report

The Review was conducted in two phases.

Phase One enabled the Review to establish a clear view of current arrangements and inform its thinking about potential system-level changes.

The Interim Report, published in August 2019, signalled the culmination of Phase One and reflected what the Review heard regarding successes and challenges within the current health and disability system and provided an analysis of some of the issues and the Review’s thinking on the direction of changes required.

Phase Two continued the stakeholder engagement and focused on developing recommendations for the key changes that can best move the health and disability system towards more sustainable and equitable performance. Accordingly, the analysis and recommendations have not focused on specific initiatives, but rather on changes that have the potential to leverage the strengths of the current system to learn and evolve over the next ten years.

The recommendations set out in this Report, including the implementation pathway, are now the remit of Government to determine what happens next.

Reading the Final Report

The Final Report is intended to be read as a standalone document. However, there is additional detail in the Interim Report that has not been repeated here. The structure of both reports is the same to facilitate reading both as companion documents.

Given the breadth of the Review, it is challenging to bring this together in a succinct document. The Executive Summary provides a high-level view of how the health and disability system should operate in the future and the key recommendations for Government to consider. More detail on the challenges, analysis and recommendations for change are presented in each of the sections outlined below.
The next 20 years will bring sizeable shifts to New Zealand’s population in terms of age, ethnicity, and geographic spread. Environmental, social, technological, and cultural changes also will provide both opportunities and pressures on the sustainability and efficiency of the health and disability system.

New Zealanders told the Review that their health and wellbeing is important and needs to be prioritised and protected. Many wanted the system to be more accountable and transparent, and to be heard, seen, listened to, and treated fairly.

Consideration of changes to the health and disability system to effectively address inequities and improve health outcomes requires us to have a good understanding of population characteristics both now and in the future.

As a whole, New Zealanders are living longer and healthier lives, with high levels of self-rated health and wellbeing and good access to acute and emergency care.

A dedicated health and disability workforce delivers services each day to thousands of individuals and their whānau across an extensive hospital, community and home-based network. Compared with the OECD, New Zealand’s expenditure on health as a proportion of gross domestic product is in the mid-range, but key outcomes, such as life expectancy at birth, are above average.

Figure 2.1: Life expectancy at birth

<table>
<thead>
<tr>
<th>Country</th>
<th>Lithuanian</th>
<th>OECD</th>
<th>NZ</th>
<th>Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life expectancy at birth</td>
<td>74.5 years</td>
<td>80.6 years</td>
<td>81.7 years</td>
<td>83.9 years</td>
</tr>
</tbody>
</table>

Source: OECD/World Health Organization 2018
However, the health and disability system is under pressure and does not cater well for all. Despite progress, outcomes are not equitable across populations and life course, particularly for Māori, Pacific peoples, disabled people and people experiencing poverty. Rural New Zealanders also need sustainable and equitable access to health and disability services.

Focusing on what New Zealanders value to improve their health and wellbeing remains critical including the quality, diversity, transparency and the timeliness of the health and disability system.

The people of Aotearoa New Zealand

The statistics and background information set out in the Interim Report remain valid and are not repeated here in full. Rather, some tables have been included to describe the population and communities context in which the Review’s final recommendations are set.

Diverse populations

Aotearoa New Zealand is a diverse society. It has a large indigenous Māori population and other cultures, including significant Pacific and Asian populations, with the majority New Zealand European/Pākehā.

The characteristics of New Zealand’s ethnic populations vary significantly (refer Table 2.1).

- As the indigenous population, Māori are highly connected through whakapapa and the wellbeing of individuals is strongly associated with the wellbeing of whānau. Their ability to access and participate in te Ao Māori (Māori world view) and their familial and cultural connections provide a strong and enduring sense of identity and are prerequisites to good health.

- Pacific peoples are a young and diverse population made up of cultures from the many different Pacific Islands. There are more than 40 Pacific ethnic groups in New Zealand, with the eight largest populations being Samoan, Cook Island Māori, Tongan, Niuean, Fijian, Tokelauan, Tuvaluan and Kiribati. Pacific peoples share cultural values such as the central place of family, collectivism and communitarianism, the importance of spirituality, reciprocity and respect.

- The Asian population is very broad, comprising ethnic groups from Afghanistan to Japan. Despite this diversity, Asian New Zealanders share common values, such as those based on family, education, and community ties. They also share the experience of negotiating between traditional values and those of the dominant Pākehā culture.

- New Zealand Europeans/Pākehā are people of European ethnicity. The median age for New Zealand Europeans is 40.5 years, almost 20 years older than Pacific peoples. The New Zealand European population aged over 85 years is four to eight times higher than other population groups.
Table 2.1: Distribution of New Zealand’s population, 2018

<table>
<thead>
<tr>
<th></th>
<th>NZ European</th>
<th>Māori</th>
<th>Asian</th>
<th>Pacific</th>
<th>MELAA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>3,489,100</td>
<td>765,900</td>
<td>749,900</td>
<td>389,700</td>
<td>77,500</td>
</tr>
<tr>
<td>Median Age</td>
<td>40.5</td>
<td>24.3</td>
<td>30.6</td>
<td>22.3</td>
<td>28.5</td>
</tr>
<tr>
<td>Percent of population</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total population</td>
<td>72%</td>
<td>16%</td>
<td>15%</td>
<td>8%</td>
<td>2%</td>
</tr>
<tr>
<td>Under 25 years</td>
<td>32%</td>
<td>51%</td>
<td>34%</td>
<td>53%</td>
<td>41%</td>
</tr>
<tr>
<td>Over 85 years</td>
<td>2.3%</td>
<td>0.4%</td>
<td>0.5%</td>
<td>0.3%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Identified as disabled</td>
<td>25%</td>
<td>26%</td>
<td>13%</td>
<td>19%</td>
<td>28%</td>
</tr>
<tr>
<td>Living in high socioeconomic deprivation</td>
<td>13%</td>
<td>40%</td>
<td>18%</td>
<td>54%</td>
<td>23%</td>
</tr>
<tr>
<td>Living in rural areas</td>
<td>15%</td>
<td>15%</td>
<td>2%</td>
<td>2%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Note: MELAA = Middle Eastern, Latin American and African.

In addition:

- A quarter of New Zealanders live with one or more disabilities. Māori have significantly higher rates of disability over all age groups. Eleven percent of children are living with disabilities (14% of Māori children), 21% of young and working age people (32% of Māori young and working age), and 59% of seniors (62% of Māori seniors). The number of New Zealanders living with disability is increasing. The range of impairments is diverse, and the impacts on people can vary substantially.

- New Zealand is becoming more religiously diverse. Other than Christian groups, other religious groups include Hindu, Buddhist, Muslim, Sikh and Jewish. Non-Christian religious groups have increased from 4% of the population in 2001 to around 6% (2013). Around 40% of the Asian population affiliate with a religion other than Christianity.

- New Zealand’s mental health challenges and suicide rates remain high, recognised by the Government’s recent acceptance of many recommendations from the Government Inquiry into Mental Health and Addiction. Suicide rates remain higher for males than females, for Māori than non-Māori, and for people in rural areas than in urban areas. Patterns of use for both inpatient and community mental health specialist services show higher rates for Māori, Pacific peoples, recently released prisoners, young people (13–24 years), and people who identify as LGBTQIA+.
If New Zealand is to address the inequities that currently exist in health outcomes, the health and disability system needs to recognise, design and deliver services to meet the differing cultural beliefs and world views of its diverse populations.

Changes to population and communities
New Zealand’s population is projected to grow by 1 million people over the next 20 years.

Table 2.2: Distribution of New Zealand’s population, 2038

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2038</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>NZ European</td>
<td>3,489,100</td>
<td>3,781,400</td>
<td>292,300</td>
</tr>
<tr>
<td>Māori</td>
<td>765,900</td>
<td>1,059,400</td>
<td>293,500</td>
</tr>
<tr>
<td>Asian</td>
<td>749,900</td>
<td>1,272,200</td>
<td>522,300</td>
</tr>
<tr>
<td>Pacific</td>
<td>389,700</td>
<td>590,200</td>
<td>200,500</td>
</tr>
<tr>
<td>MELAA</td>
<td>77,500</td>
<td>171,400</td>
<td>93,900</td>
</tr>
<tr>
<td>0-24</td>
<td>1,613,100</td>
<td>1,669,500</td>
<td>56,400</td>
</tr>
<tr>
<td>25-44</td>
<td>1,284,600</td>
<td>1,467,400</td>
<td>182,800</td>
</tr>
<tr>
<td>45-64</td>
<td>1,219,200</td>
<td>1,329,300</td>
<td>110,100</td>
</tr>
<tr>
<td>65-84</td>
<td>661,000</td>
<td>1,089,300</td>
<td>428,300</td>
</tr>
<tr>
<td>85+</td>
<td>86,800</td>
<td>214,100</td>
<td>127,300</td>
</tr>
<tr>
<td>Total</td>
<td>4,864,700</td>
<td>5,769,600</td>
<td>904,900</td>
</tr>
</tbody>
</table>

Source: Stats NZ, population projections.
Note: MELAA = Middle Eastern, Latin American, and African

Over half of this population increase will identify with Asian ethnicities. The median age of all ethnicities will increase with the number of people aged over 85 more than doubling.
This changing age profile will mean that:

- there will be a significant increase in the ‘working age dependency ratio’, from 55 dependents to 100 people of working age in 2018, to 65 dependents to 100 people of working age in 2038. However, projections from Stats NZ assume more people will stay in paid work past the age of 65, making the increase in the dependency ratio smaller.
- there will be increasing demand for health and disability services as use and complexity increases with age, and increasing prevalence of impairments and comorbidities.

Changes are also forecast in the distribution of where people live and work. Although around half of the population increase over the next 20 years will be in Auckland (increasing Auckland’s population by 23%), rural areas are projected to grow slightly faster than main urban areas at 14% (an increase of 100,000).

**Figure 2.2: Projected increase in population by area, 2018 to 2038**

Demographic growth and ageing will contribute to an increase in demand for health and disability services throughout the country. This will be felt most acutely in Auckland where the forecast population growth over the next 20 years is larger than the current population of 16 of the 20 DHBs.

**Socioeconomic deprivation and geographic differences**

By population size, New Zealand Europeans are the largest ethnic group (around 454,000 people) living in the highest quintile of socioeconomic deprivation. Some population groups are significantly more likely to live in high deprivation areas. This includes:

- 40% of Māori (around 306,000 people)
- More than half of the Pacific population (around 210,000 people)
The North Island and some regions in particular have significantly higher rates of socioeconomic deprivation than others. Over a third of the population in Northland and nearly half of the population in Tairāwhiti live in the highest quintile of socioeconomic deprivation.

There are also large numbers of people living in socioeconomic deprivation in Auckland, including:

- Almost all of south Auckland is in the two highest quintiles with large areas in the highest quintile.
- Significant parts of west Auckland also have high socioeconomic deprivation, and there are small pockets of high deprivation in central Auckland and the North Shore.

The compounding effects of socioeconomic deprivation on health outcomes are well researched. For example, people living in more socioeconomically deprived areas are 2.5 times more likely to experience psychological distress than those in less deprived areas (adjusting for age, sex and ethnicity). The rates of mental health service use are also significantly higher among those from high socioeconomic deprivation quintiles. Interactions between ethnicity, socioeconomic deprivation, age, disability, and geographic location exacerbate inequitable outcomes and access to healthcare.

Figure 2.3: Rate ratio for mental health service use by deprivation quintile, 2018

DHB populations vary significantly

The characteristics of DHB populations vary significantly by scale, density of population, ethnicity, age profile and deprivation, as outlined in Figure 2.4. Across DHBs, there is a correlation between deprivation and poor health status.
Figure 2.4: Deprivation and geographic differences
Health loss and health outcomes
A comparison of life expectancy, mortality and risk factors by ethnicity are set out in Table 2.3 below.

Table 2.3: Comparison of life expectancy, mortality, and risk factors by ethnicity

<table>
<thead>
<tr>
<th>Notes</th>
<th>Category</th>
<th>Date</th>
<th>Māori</th>
<th>Pacific</th>
<th>Non-Māori non-Pacific</th>
<th>New Zealand</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Life expectancy</td>
<td>2015–17</td>
<td>75.6</td>
<td>76.5</td>
<td>82.8</td>
<td>81.7</td>
</tr>
<tr>
<td></td>
<td>Life expectancy gap</td>
<td>2015–17</td>
<td>7.2</td>
<td>6.3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Gap attributable to potentially avoidable causes of death (male)</td>
<td>2013–15</td>
<td>5.0</td>
<td>3.4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Gap attributable to potentially avoidable causes of death (female)</td>
<td>2013–15</td>
<td>4.4</td>
<td>3.3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1, 3</td>
<td>Mortality rate per 100,000 population</td>
<td>2017</td>
<td>631.3</td>
<td>619.5</td>
<td>339.3</td>
<td>378.6</td>
</tr>
<tr>
<td>3</td>
<td>% of deaths potentially avoidable</td>
<td>2013–15</td>
<td>53.0%</td>
<td>47.3%</td>
<td>23.2%</td>
<td>27.3%</td>
</tr>
<tr>
<td>1, 3</td>
<td>Amenable mortality rate per 100,000 population*</td>
<td>2015</td>
<td>188.8</td>
<td>179.9</td>
<td>74.7</td>
<td>90.8</td>
</tr>
<tr>
<td>1, 3</td>
<td>Cardiovascular disease mortality rate per 100,000 population*</td>
<td>2015</td>
<td>200.8</td>
<td>185.6</td>
<td>99.5</td>
<td>111.1</td>
</tr>
<tr>
<td>1, 3</td>
<td>Cancer mortality rate per 100,000 population*</td>
<td>2015</td>
<td>200.9</td>
<td>168.5</td>
<td>113.9</td>
<td>123.5</td>
</tr>
<tr>
<td>1, 2</td>
<td>Infant mortality rate per 1,000 live births*</td>
<td>2018</td>
<td>4.7</td>
<td>-</td>
<td>3.3</td>
<td>3.7</td>
</tr>
<tr>
<td>1, 3</td>
<td>Suicide rate per 100,000 population*</td>
<td>2013–15</td>
<td>15.9</td>
<td>7.9</td>
<td>9.8</td>
<td>10.9</td>
</tr>
<tr>
<td></td>
<td>Ambulatory sensitive hospitalisations (0–4 years) per 100,000 population*</td>
<td>2018</td>
<td>8,503</td>
<td>12,658</td>
<td>5,519</td>
<td>6,948</td>
</tr>
<tr>
<td></td>
<td>Ambulatory sensitive hospitalisations (45–64 years) per 100,000 population*</td>
<td>2018</td>
<td>7,794</td>
<td>8,966</td>
<td>3,101</td>
<td>3,916</td>
</tr>
<tr>
<td></td>
<td>Acute hospital bed days per 1,000 population*</td>
<td>2018</td>
<td>574.1</td>
<td>700.5</td>
<td>341.8</td>
<td>385</td>
</tr>
<tr>
<td>4</td>
<td>% adults who are daily smokers</td>
<td>2017/18</td>
<td>31.2%</td>
<td>20.0%</td>
<td>11.7%</td>
<td>13.1%</td>
</tr>
<tr>
<td>5</td>
<td>% adults who are current smokers</td>
<td>2017/18</td>
<td>33.5%</td>
<td>22.9%</td>
<td>13.5%</td>
<td>14.9%</td>
</tr>
<tr>
<td>6</td>
<td>% adults obese</td>
<td>2017/18</td>
<td>47.5%</td>
<td>65.0%</td>
<td>30.7%</td>
<td>32.2%</td>
</tr>
<tr>
<td>7</td>
<td>% children obese</td>
<td>2017/18</td>
<td>16.9%</td>
<td>30.0%</td>
<td>9.8%</td>
<td>12.4%</td>
</tr>
</tbody>
</table>

Notes
1 Rate age standardised except for ambulatory sensitive hospitalisations and infant mortality.
2 Non-Māori non-Pacific includes Pacific in this instance.
3 Mortality rates use year death registered.
4 Non-Māori non-Pacific (excludes Asian) – Asian is 6.5%.
5 Non-Māori non-Pacific (excludes Asian) – Asian is 7.8%.
6 Non-Māori non-Pacific (excludes Asian) – Asian is 15.1%.
7 Non-Māori non-Pacific (excludes Asian) – Asian is 7.0%.

The six leading health risk factors in 2016 that contributed to mortality and health loss were tobacco use, dietary risks, high body mass index, high blood pressure, high fasting glucose, and alcohol use. As has been signalled in recent reviews and inquiries, New Zealanders’ mental health outcomes are also of particular concern.

**Māori health outcomes**
Clear disparities in health outcomes exist for Māori. Life expectancy remains one key indicator. On average, Māori live seven years less than non-Māori non-Pacific people, of which 4.4 years for females and 5.0 years for males was potentially avoidable (see Table 2.3).

For Māori, inequities of health span the life course. Health equity for Māori is substantially influenced by the unequal distribution of the socioeconomic determinants of health. However, healthcare services do have a significant role to play. For Māori, there is evidence that inadequate access to services, poorer quality of care, and a failure of health services to improve outcomes for Māori can and do lead to inequities in health outcomes.

**Pacific health outcomes**
There are long-standing inequities in health outcomes between Pacific and non-Māori non-Pacific people in New Zealand. Inequities include shorter life expectancy, a higher amenable mortality rate, multimorbidity, and a higher rate of death from cancer compared with non-Māori non-Pacific people. Pacific peoples are disproportionately affected by intergenerational poverty, and are more likely to reside in high deprivation areas, live in crowded households, be unemployed, and have a lower median income than non-Māori non-Pacific people.

Table 2.3 shows that Pacific peoples live six years less than non-Māori non-Pacific people, of which 3.3 years for females and 3.4 years for males was potentially avoidable.

**Health outcomes for disabled people**
Disabled New Zealanders report lower life satisfaction on average, being more likely to live in low-income households, and having poorer outcomes across health, economic and social indicators. Disabled people aged 15-64 years are half as likely to be employed compared to non-disabled people of the same age. Disabled children are more likely to be in households that have low incomes and that report having just enough or not enough money.

**Rural health outcomes**
While data is limited, indications are that people living in rural towns can have poorer health outcomes, including lower life expectancy, than people living in cities or surrounding rural areas, an effect that is accentuated for rural Māori and disabled people. Mental health challenges and access to health and support services in rural areas remain a priority.
Addressing the equity challenge

The Interim Report noted that the urgency for making improvements to outcomes for Māori, Pacific peoples, and low-income and rural households requires:

- ensuring the principles of te Tiriti o Waitangi are incorporated and mātauranga Māori is embedded throughout. Priority should be given to designing services for these communities, rather than simply making system-wide changes in the hope that the benefits trickle down.
- focusing on child and maternal wellbeing to ensure more equitable outcomes for the next generation of Māori and Pacific children. The first 1,000 days of a child’s life is a critical time for development and sets the stage for physical and mental wellbeing throughout life.
- the long talked about move to give more emphasis to preventive care and the promotion of wellness needs to become a reality. This would require more multidisciplinary services and a reduced dependence on models that focus on throughput.

Change is also required to ensure:

- disability is no longer treated as an exception or managed separately. The increasing number of disabled people have the right to expect equitable outcomes from the system and the system should ensure services strive to achieve that.
- services are designed to be effective for frail older people and the increasing number of people living with complex long-term conditions.

Service delivery will also need to change:

- Health services need to be planned more strategically, with more meaningful engagement with communities and better connections to other agencies with responsibilities that impact the socioeconomic and cultural determinants of health.
- Workforce strategies need to be strengthened to ensure the future workforce better reflects the community it serves and has the skills necessary to operate effectively under different models of care.
3 Hauora Māori / Māori Health

Hāpaitia te ara tika pūmau ai te rangatiratanga mo ngā uri whakatupu.

Foster the pathway of knowledge to strength, independence, and growth for future generations.

Improving equity and wellbeing for Māori requires immediate improvements in the way the system delivers for Māori, a growth in the range and distribution of kaupapa Māori services and providers, and enhancements to rangatiratanga and mana motuhake. The most visible sign of the latter will be the establishment of a Māori Health Authority with direct accountability to the Minister of Health for all advice, monitoring and reporting with respect to Māori health.

All recommendations proposed by the review are designed to improve the effectiveness and the equity of outcomes for Māori, but this chapter has focused on the structural and cultural shifts necessary.

The Interim Report examined in detail the evidence of the inequities and poor outcomes for hauora Māori, the causes contributing to these inequities and noted several directions for change.

To transform hauora Māori from one of our country’s greatest health risks to one of our greatest achievements, the future health and disability system needs to look, act and work differently to make a positive difference in the lives of iwi, hapū and Māori whānau in Aotearoa New Zealand. As Ta Himi Henare (Sir James Henare), Ngati Hine stated:

Kua tawhiti kē to haerenga mai, kia kore e haere tonu.
He nui rawa o mahi, kia kore e mahi tonu.

You have come too far not to go further,
you have done too much not to do more.
The Review agrees that the future integrated health and disability system for Aotearoa New Zealand requires progressive thinking to realise Māori success. It has identified areas of urgent concern and changes that are critical. The Review recommends:

- incorporating te Tiriti o Waitangi principles across the system and updating legislation accordingly
- establishing a Māori Health Authority (provisional name only)
- reflecting te Tiriti partnership in governance structures
- investing in kaupapa Māori services
- embedding Māori knowledge and worldview perspectives across the system.

The Review also recommends an increased emphasis on health equity and quality improvement performance for hauora Māori. This requires updating the equity clauses in legislation; addressing racism and discrimination, inclusive of improving cultural safety and competence; growing and investing in the future Māori health workforce and providers and increasing Māori-specific funding.

The Review believes that Māori equity will be enhanced through accountability of the entire health and disability system to address equity issues at all levels. The Review recognises that systemic inequity cannot be addressed through piecemeal initiatives alone. This entire report is aimed at addressing inequity and it will be important that the issues are addressed from all angles.

**Te Hauora Māori ki Tua / Future of hauora Māori**

*He rangi tā matawhāiti, he rangi tā matawhānui.*

A person with a narrow vision has a restricted horizon, a person with wide vision has plentiful opportunities.

Pae ora: healthy futures is the Government’s vision for Māori health. It provides a platform for Māori to live with good health and wellbeing in an environment that supports a good quality of life.\(^\text{24}\)

The Review heard from the Māori Expert Advisory Group (MEAG), wānanga participants and other stakeholders that iwi, hapū, and whānau want a system that is more aspirational and inspirational.

The Review was urged to propose a system that saw beyond ‘just equity’.

**MEAG’s advice on Māori aspiration (see Appendix B for the full statement).**

- Whānau are living healthy and thriving lives, as Māori and as valued citizens of New Zealand. Māori enjoy equity of access, quality of care and outcomes. This is the norm for New Zealand.
- All health services will be viewed by whānau as agile, barrierless, and an easy pathway to improved health and greater wellbeing.
- New Zealand’s health workforce is envied globally for its inclusive and partnered delivery culture. New Zealand has a system that is free of racism and is dominated by culturally safe and competent delivery practices.
- The system has strong and interconnected partnerships with others that are engaged in addressing the social determinants of health.
As a first step, the Review believes the health and disability system must create opportunities for Māori to exercise their rangatiratanga, mana motuhake, and whānau rangatiratanga.

Pae ora encourages everyone in the health and disability sector to work collaboratively, to think beyond narrow definitions of health, and to provide high-quality and effective services. The health and disability system envisaged by the Review would help achieve Pae ora, and by ensuring the principles of te Tiriti are upheld, that there is respectful application of te Ao Māori leadership and knowledge (inclusive of mātauranga Māori and kaupapa Māori) and a whole-of-system commitment to and ownership of achieving Māori health equity and wellbeing.

Te Tiriti o Waitangi / Treaty of Waitangi

Mā pango mā whero, ka oti te mahi.

With black and with red the work is completed

Developing an effective Treaty based partnership within health that delivers a health and disability system that works for Māori

Te Tiriti o Waitangi / the Treaty of Waitangi must be fully incorporated to provide a framework for meaningful and substantive relationships between iwi, Māori and the Crown. This will provide a positive flow on effect linked to leadership, governance and decision making, and assist in strengthening Māori provider, workforce and service development. | Interim Report, page 6

For hauora Māori, the Review was guided by a vision of creating a more effective health and disability system that produces equitable health outcomes for whānau, hapū and iwi. For Māori, this requires that rangatiratanga and mana motuhake is demonstrated throughout the system.

Te Whakahou i te wāhi ki te Tiriti o Waitangi i roto te pūnaha / Updating Te Tiriti o Waitangi in the system

The Review considered recommendations of Hauora: Report on Stage One of the Health Services and Outcomes Kaupapa Inquiry (Hauora report)²⁵ (Wai 2575) regarding primary health care, as to how health and disability system legislation should be updated. While it is not the responsibility of the Review to respond to the Hauora report, the findings of the report were a valuable contribution to our analysis.

The Hauora report recommends amending sections of the New Zealand Public Health and Disability Act 2000 to ensure the whole health and disability system complies with te Tiriti principles. The report also recommends updating te Tiriti principles used in the health and disability system. The Review agrees that te Tiriti section in the overarching legislation should be updated to ensure it reflects more recent interpretations of te Tiriti and is consistent with any new Public Service legislation provisions. While the detailed wording of such provisions is beyond the Review, appropriately updating the principal legislation for health would support te Tiriti principles being applied through the entire system.
The Review recommendations regarding how best to achieve rangatiratanga in the health and disability system have been guided by several factors.

- A recognition that the principles of te Tiriti must be fully incorporated in how the health and disability system works if it is ever to serve Māori well.
- A recognition that the current system has failed Māori. To remedy this failure, there will be significant changes in the way the health and disability system is designed, and services are delivered.
- An acceptance that remedying decades of under-performance by the health and disability system will require changes so that Māori expertise and more effective services can be designed and embedded into the system.

The Review’s recommendations aim to enhance rangatiratanga and mana motuhake opportunities within the health and disability system. Achieving this includes the formation and operation of an independent Māori Health Authority, changes to governance arrangements, and ensuring that equitable funding allocations and expenditure properly reflect the higher needs of Māori communities.

**Tirohanga Whānui ki te Mana Hauora Māori / Overview of the Māori Health Authority**

The Review is recommending that a Māori Health Authority be established as an independent departmental agency with direct accountability to the Minister of Health. The Māori Health Authority would sit alongside the Ministry of Health (the Ministry) and have a similar range of functions relating to Māori health as the Ministry does for the overall system.

The Māori Health Authority would be a partner to the Ministry. It would also develop working relationships with Health NZ, DHBs, Māori health providers and consumers, and other key stakeholders such as the Health Quality & Safety Commission, the new Mental Health and Wellbeing Commission, and the Cancer Control Agency.

The Māori Health Authority would act as the kaiarataki (steward) of Hauora Māori across the health and disability system.

Its key functions would include policy, growing and supporting hauora Māori models of care, growing kaupapa Māori services, and developing the Māori health workforce and Māori health providers. It would also monitor and report on the health and disability’s performance in achieving equity and improving health outcomes for Māori.

While the Māori Health Authority would assume all the current functions of the Māori Health Directorate within the Ministry, this would not absolve the rest of the system from ensuring they act in accordance with the principles of te Tiriti, and for achieving equity (access, experience and outcomes) and wellbeing for Māori.
Ngā Mahi a te Mana Hauora Māori / Functions of the Māori Health Authority

The Māori Health Authority would be responsible for the following functions.

Te Tohutohu i te Minita mō ngā āhuatanga katoa o ngā kaupapa here hauora Māori / Advising the Minister on all aspects of Māori health policy

The Māori Health Authority would:

- be the principal advisor to the Minister on Māori health. It would be responsible for developing, updating and monitoring He Korowai Oranga – the Māori Health Strategy and implementing the Māori Health Action Plan across the system.
- lead, support and advise on intersectoral activities to improve Māori health aspirations such as the Child Wellbeing Strategy, the Whānau Ora programme with Te Puni Kōkiri (Ministry for Māori Development) and Māori–Crown relationships with Te Arawhiti (the Office for Māori Crown Relations) and engage with other sector stakeholders such as the new Mental Health and Addictions Commission and the Health Quality & Safety Commission.
- provide advice on the appointment of Māori members on Health NZ and DHB boards

The health and disability system will see coordinated efforts on Māori health between the Māori Health Authority, the Ministry and Health NZ. The clinical, cultural, system and service-level intelligence provided by the Māori Health Authority will be used by the Ministry to draft policy, by Health NZ to produce accurate health needs assessments and by DHBs to produce accurate locality plans, and to commission and deliver network health services.

Te whakahoa me ngā wāhanga katoa o te pūnaha / Partnering with all other parts of the system

The Māori Health Authority would partner with:

- the Ministry to develop expectations in the long-term services plan for improved service delivery to Māori communities and whānau. It would also partner with the Ministry to ensure all health strategies prioritise; achieving equity for Māori, Māori workforce and provider development, and incorporating the role of mātauranga Māori and kaupapa Māori in the health and disability system and services.
- Health NZ to develop the principles and rules for health service commissioning as it relates to Māori equity and wellbeing. This includes commissioning related to kaupapa Māori services, the respectful use of mātauranga Māori and in particular, effective commissioning of local Tier 1 networks. This also includes the Māori Health Authority developing outcomes measures for Māori health and system-wide adoption and implementation.
- DHBs in undertaking Māori health needs assessments and locality plans within Māori communities. In localities where there is a DHB and iwi partnership, the Māori Health Authority will actively support these relationships and there will be an opportunity to co-govern and co-develop services within the rohe (see the Tier 1 chapter).
Te aroturuki me te pūrongo ki ngā huanga hauora Māori me te whiwhinga ōrite / Monitoring and reporting on Māori health outcomes and equity

The Māori Health Authority would provide Māori health leadership and intelligence for the health and disability system, alongside Māori intelligence within the Ministry, Health NZ and DHBs. The Māori Health Authority will monitor and report to the Minister on the performance of the health and disability system with respect to Māori health equity and wellbeing.

It would provide advice on Māori health priorities at a population level, driven by population data. It would be equally important to use kaupapa Māori and mātauranga Māori methodologies and input from whānau rangatiratanga in any Māori health needs assessment and analytical work.

Māori equity-focused insights and analytics would be required for all outputs from Health NZ (as the lead advisor on DHB performance) along with the Ministry (as the monitor of system performance). The Ministry, Health NZ and DHBs would be using Māori health and disability data routinely in their policy advice, strategy, ongoing systems design and service delivery.

Te haumi ki ngā ratonga me ngā kaituku hauora Kaupapa Māori / Investing in kaupapa Māori health Services and providers

As well as ensuring Māori services and the Māori workforce grows, it will be important to develop and implement policy to grow the number and range of kaupapa Māori service providers. The vision is for kaupapa Māori services being equitably available to Māori communities across the country and across Tier 1 services, based on life course needs (pēpi to kaumātua): from child wellbeing to mental health to older persons and palliative care. This will require a deliberate and sustained effort for change, alongside dedicated investment that should be led and commissioned by the Māori Health Authority (see also more detail in the mātauranga Māori section in this chapter).

Te whakawhanake me te arataki i te whakatinanatanga o te rautaki ohumahi hauora Māori / Developing and leading the implementation of the Māori health workforce strategy

The Māori Health Authority would be responsible for developing and implementing a Māori health workforce strategy. This includes leading and supporting Māori workforce development and engagement, for example, through supporting the Māori workforce, and identifying and developing emerging Māori health leaders as part of a succession planning approach. This would include responsibility for the national Māori workforce development fund, system-wide target setting and monitoring.

The Māori Health Authority would partner with the Ministry to ensure other health workforce strategies also recognise the need for building the Māori health workforce and growing the cultural safety and cultural competence of the non-Māori workforce (see also the Workforce chapter).

Other governance arrangements of rangatiratanga and mana motuhake would also be enhanced by increasing the Māori-Crown partnership across the health and disability system.

The Review recommends ensuring equal representation of 50:50 Māori and Crown membership is adopted for the Health NZ board. It is also recommended DHB boards, independent commissions, and other boards across the health and disability system reflect te Tiriti partnership.
Mātauranga Māori / Māori knowledge systems

Ma te mātauranga Māori ka ora ai te whānau, te hapū, te iwi.

Through Māori knowledge, the family, the sub tribe and the tribe prosper

The Interim Report noted the importance of mātauranga Māori as a vehicle to provide cultural constructs for improving Māori health and wellbeing and the delivery of health care and services in Māori communities. It was also acknowledged that the last four decades has seen a positive era in which mātauranga Māori is starting to be incorporated into health care. There has also been an increase in Māori health services offering kaupapa Māori services or mātauranga approaches as alternative or complementary care options in the health and disability system.27

Māori leadership and control over using and applying mātauranga in contemporary health settings is critical to ensure the appropriate protections and processes are in place to protect the integrity of mātauranga in health. Mātauranga Māori is led by Māori and should be at the centre of any service delivered to Māori.28

The Review supports mātauranga Māori being embedded in the health and disability system and that it should recognise the holistic approach to mātauranga Māori towards health and wellness as being more than just a cultural option; it should be an integral part of the system.

In order to both embed mātauranga Māori practices and to safeguard and protect their cultural integrity, there are several considerations that would need to be addressed.

Te whakauru i te mātauranga Māori ki te pūnaha / Incorporating mātauranga Māori across the health and disability system

In order to mātauranga Māori and kaupapa Māori solutions to be incorporated into the health and disability system, there would need to be ongoing and enhanced integration of mātauranga Māori in health services, appropriate levels of funding and strong organisational leadership. Finally, given previous challenges to effectively monitor and report on the impact and effectiveness of mātauranga Māori in improving health care, there is a need for culturally relevant evaluations and assessment mechanisms to complement existing measurement tools.29 30

Investing in mātauranga Māori ways of working and embedding these into health services could provide additional options and choice for Māori health consumers and their whānau (whānau rangatiratanga). In practice, this means that tikanga Māori should be applied as a norm in delivering health services for Māori whānau and communities. For example, tikanga guidelines for hospitals and apps. Further, given that tikanga can, and often does, differ between different iwi rohe, the role of mana whenua in developing guidelines and processes so there is an appropriate application of tikanga for their rohe will be crucial.

In order to embed mātauranga Māori practices across the health and disability system and safeguard and protect their integrity, there are other considerations that will need to be addressed.
Table 3.1: Embed mātauranga Māori practices

<table>
<thead>
<tr>
<th>Tikanga / ritenga</th>
<th>Kaitiakitanga</th>
<th>Ngā rautaki haumi</th>
<th>Whakawhanake ngā kaimahi</th>
<th>Arotakengia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintaining cultural integrity, quality and clinical safety and standards</td>
<td>Nurturing and protecting cultural practices, respect for traditional ownership of healing concepts and properties, and protecting against the commercialisation and commodification of traditional practices</td>
<td>Funding and support for the implementation of mātauranga Māori approaches in health</td>
<td>Support for and development of mātauranga Māori practitioners, and developing the competence and confidence of non-Māori health workers</td>
<td>Assessing intervention integrity, measurement of effectiveness and monitoring and accountability</td>
</tr>
</tbody>
</table>

The Māori Health Authority would be responsible for ensuring policy is developed and will oversee the effective implementation of these policies through its relationships and accountability settings with the Ministry, Health NZ and DHBs.

Te whakahaumi ki ngā ratonga hauora kaupapa Māori / Investing in kaupapa Māori health services

Health services are delivered for Māori in a number of settings and can be characterised as:

- **General services:** Services delivered under the principles of universality and consistency for all populations, they are not specifically designed with Māori in mind, and are based on non-Māori models. For example, GP services.

- **Taha Māori services:** deliver Māori services in parallel to or alongside general services. These services often employ Māori staff, are underpinned by either tikanga Māori or bicultural principles and values and may arise from a focus on Māori health equity. For example, the Mason Clinic.

- **Kaupapa Māori services:** led, owned and governed by iwi, pan-tribal, or Māori organisations that are specifically designed with Māori in mind. For example, Ora Toa or Ngāti Porou Hauora.

**Figure 3.1: Health and disability services delivered for Māori**

SOURCE: Te Puni Kōkiri
To achieve equity for Māori there is a need to invest in kaupapa Māori services. Kaupapa Māori services are synonymously linked to mātauranga Māori and underpinned by: Te Tiriti o Waitangi; self-determination; cultural validity; culturally preferred teaching; socioeconomic mediation of Māori disadvantage; whānau connections; collective aspirations; and respectful relationships underpinned by equality and reciprocity.32

Kaupapa Māori services should have clinical proficiencies that will respond to the clinical and health needs of the person and their whānau. Knowledge of te reo Māori and tikanga Māori underpins both contexts, as does clinical capability and competence.33

Investing in kaupapa Māori health services provides additional options and choice for Māori consumers. Based on Māori consumer experiences, the most frequently recommended actions to improve Māori experiences of health care included integrating tikanga into all health services and increasing Māori workforce capacity and involvement in developing health services. In particular, Māori consumers wanted to see an expanded use of tikanga and culturally safe and competent practice in health services. This requires:

- capacity building to support Māori participation in the health workforce and in developing health services
- Māori access to responsive clinical services based on Māori consumer needs and expectations
- health and disability system-level strategies including appropriate and equitable funding to develop kaupapa Māori health services
- developing culturally relevant interventions for whānau rather than individual-centred care.34

Investing in kaupapa Māori health services would improve Māori experiences of health care. To ensure services are available throughout the country, DHBs should be required to include kaupapa Māori health services in all locality planning (refer to Tier 1 chapter).
Figure 3.2: Estimated Māori Providers by DHB and type
Te whiwhinga ērite mō ngāi Māori / Health equity for Māori

*Mā Me orite te raranga ai nga pumanawa.*

*Weaving the realisation of potential together.*

The Ministry of Health acknowledges that the New Zealand population has differences in health that are not only avoidable but unfair and unjust and defines equity as recognising ‘different people with different levels of advantage require different approaches and resources to get equitable health outcomes’. 

Interim Report

Inequitable access to health services, the social and economic determinants of health and inequitable health outcomes for Māori are well documented in health literature and in the Interim report.

Recent health equity research suggests that fragmented approaches have limited success and will continue to be ineffective in establishing long-lasting system-wide change to address equity. To be successful, efforts to achieve equity must be sustained, systematic and multileveled.

The Review sees that the improvements in Māori health outcomes will come from better primary and community care services being provided in ways that are more accessible and appropriate for Māori communities. This will require a much greater focus on understanding the health needs of Māori communities, addressing these needs in a more connected way, and expanding outreach and home-based care, and addressing the social and cultural determinants of health. The proposed solutions are discussed in detail in the Tier 1 chapter.

Te mātua whakarite he ratonga tika, whaihua, haumaru hoki ki ngā whānau Māori, ngā hapū me ngā iwi / Delivering culturally safe, competent and effective services to Māori whānau, hapū and iwi

Māori access non-Māori provider services across the health and disability system. Future investment is required to build the capability and capacity of the non-Māori workforce and providers. All health services in Aotearoa New Zealand must have the capacity to engage with Māori in ways that endorse Māori cultural identity and the relevance of Māori values and approaches to addressing health and wellness.

Providers should be required to build a workforce that can deliver high-quality care and equity for Māori. In addition to a general expectation that workforce and service delivery is culturally safe, competent and clinically effective for Māori there needs to be specific investment strategies to increase understanding. These could range from non-Māori workforce and organisational development through to equity-based standards, regulations, performance monitoring and management tools and frameworks.

The Māori Health Authority would lead some of this work and it is anticipated that the Ministry, Health NZ, DHBs and others would lead other components within a pro-equity system.
Te whakahou i ngā wāhanga whiwhinga ōrite o roto i te ture / Updating the equity clauses in legislation
The Review recognises that as legislation is developed to incorporate the changes in the health and disability system, updating equity clauses would also be necessary and performance against equity objectives monitored across the system.

Te whakatau i te whakatoihara iwi me ērā atu momo whakahāwea / Addressing institutional racism and other forms of discrimination
The Interim Report outlined evidence about the impacts of racism on Māori health. Submissions from phase one of the Review identified the following approaches to addressing racism including:
- a commitment throughout the health and disability system to address institutional racism
- developing a diverse health workforce that is representative of New Zealand’s population groups
- co-designing health equity research with Māori to inform all health policy development
- developing a national action plan to eliminate racism, as well as measures to develop a culturally safe and competent workforce
- increasing Māori participation and decision-making powers in consultation processes for redesigning services
- increasing support and capacity building to enable Māori to fulfil leadership and governance roles
- developing robust evaluation and quality improvement processes to monitor and evaluate the performance of the system in eliminating institutional racism
- recognising and responding appropriately to Māori health needs and ensuring Māori worldviews and mātauranga Māori are embedded throughout the health and disability system.
- The Review is aware that the latest draft of the Māori Health Action Plan by the Ministry includes a programme of work to address racism and discrimination in the health and disability system. The Māori Health Authority will continue a dedicated approach to this work and work collaboratively with others to ensure system-wide ownership and delivery against this programme.

Te whakatipu i te ohumahi hauora / Growing the Māori health workforce
The Interim Report highlighted that a diverse and representative health workforce that understands the importance of achieving health equity is critical to delivering equitable health services to Māori. The Interim Report identified the continued under-representation of Māori in the health workforce as a gap that requires urgent action.

Developing the Māori health and disability workforce is a key enabler for improving equity and achieving better health outcomes for Māori. Ideally, the ethnic distribution of each health workforce in New Zealand would match the ethnic population distribution they are serving. No profession has reflected the expected ethnic population distribution, and this has not changed over time.37
The Review also acknowledges some progress is being made to grow the Māori workforce. For example, DHB targets to increase Māori workforce participation and other efforts. See the following case study from Waikato DHB.

It is proposed that the Māori Health Authority leads the development and implementation of a Māori health workforce plan and equitable investment strategies (see also the Workforce chapter).

**Case study: Puna Waiora**

Puna Waiora is a new kaupapa Māori support system offered by Waikato DHB, empowering and supporting rangatahi/young Māori to pursue a career in health. The programme was launched on 1 February 2019. This programme is led by young Māori who are passionate about growing young Māori to pursue health careers.

- Puna Waiora recognised a need for a Māori-specific health workforce service and this was evident with the introduction of the Te Tomokanga programme (Māori Gateway) where the Puna Waiora team increased the number of Māori in gateway students from 15 to more than 90 in its first year. This meant that the Waikato DHB gateway programme had more than 59% Māori students in 2019 and this had never been done before. In the first year of operation Puna Waiora supported five Māori medium kura to receive additional funding they were eligible for but never accessed. On top of that, one school has received funding for a full-time careers advisor. The Puna Waiora team are all fluent te reo Māori speakers therefore enabling them to effortlessly present their mahi in both mainstream kura and whare kura when and how they need it.

- The programme was launched with a science expo attended by hundreds of rangatahi where they were offered hands-on exposure to real careers in health with a variety of health care, science and technology experts at Turangawaewae Marae, Ngaruawahia.

- The programme is a positive outcome formed from the relationship between Iwi Māori Council and Waikato DHB. The Puna Waiora team (rangatahi led) aims to inspire rangatahi to be the future of our health and disability system by supporting them with goal setting, hands-on experience and pastoral care. Puna Waiora offers support services to students from year 9 through to successful employment.
Ngā pūtea ake mō te hauora Māori / Māori health-specific funds

In addition to the recommendations outlined in the funding section (see the Governance and funding chapter), such as amending funding formulas to account for ethnicity and deprivation to improve equitable funding – there is a need for specific initiatives aimed at increasing the size and expertise of the Māori workforce, the growth of kaupapa Māori providers, and innovation for Māori population health and other initiatives.

There will be a growing need for Māori workforce, kaupapa Māori and other health services that meet community preferences and needs. The Māori population will grow over the next few decades: it is estimated that Māori children will make up 30.3% of all New Zealand children (aged 0–14 years) in 2038, compared with 25.6% in 2013, and that Māori adults aged over 65 will make up 11.9% of Māori in 2038, compared with 5.3% in 2013. This future population growth, population demographics and the number of Māori living longer with disabling health effects means the future design of the health and disability system needs to anticipate, now, what will be needed for Māori.

To accommodate the growing demand, there will be requirements to broaden the scope of the Māori workforce and Māori health providers. The Māori Health Authority should be responsible for developing Māori health provider and workforce development strategies to ensure the system has the appropriate Māori workforce (both clinical and non-clinical roles) and the services available to meet the health needs of Māori whānau and communities.

The Māori Health Authority would take over accountability for three Māori development funds: the Māori Provider Development Scheme (MPDS); the National Māori Workforce Development Fund (MWD); and Te Ao Auahatanga Hauora Māori: the Māori Health Innovation Fund (Te Ao Auahatanga). These funds are intended to support Māori health providers to grow and innovate and support development of the future Māori health workforce. These funds have been operating for several years and have played a significant role by increasing the number of Māori health providers and the number of Māori participating in the health and disability workforce.

In line with the Review’s overall emphasis on ensuring population health drives all service development, the Review proposes that these three funds: MPDS, MWD and Te Ao Auahatanga be increased to provide a broader range and scale of innovations across more priority areas. Increasing Māori provider innovation funding has been identified in the Ministry’s draft Māori Health Action Plan. These funds could, for example, be used to establish and develop Māori-specific population health initiatives such as screening, primary prevention and health promotion programmes.

More generally, it should be a priority for the Māori Health Authority to review the terms of reference of each of these funds to update both the scope and the size of these funds, and to advise the Minister on funding priorities in relation to workforce and kaupapa Māori provider development.
The Review proposes the following changes

Te whakauru i te Tiriti o Waitangi ki te pūnaha / Incorporating Treaty of Waitangi into the system

- Te Tiriti o Waitangi sections in health legislation should be updated to ensure they reflect recent interpretations of te Tiriti principles.
- An independent Māori Health Authority should be established, as kaiarataki for hauora Māori, reporting directly to the Minister with the following functions:
  - advising the Minister on all aspects of Māori health policy
  - partnering with all other parts of the system to ensure mātauranga Māori and other Māori health issues are appropriately incorporated into all aspects of the system
  - monitoring and reporting to the Minister on the performance of the health and disability system with respect to Māori health outcomes and equity
  - investing in kaupapa Māori health services and providers
  - developing and leading the implementation of the Māori health workforce strategy
  - developing or supporting innovative Māori-specific population health initiatives.
- Reflecting the Te Tiriti partnership in the system through 50:50 Māori–Crown representation on the Health NZ board and ensuring DHBs and other boards also reflect the te Tiriti partnership.

Te whakararau i te mātauranga Māori ki te pūnaha / Embedding Māori knowledge systems in the system

- The Māori Health Authority should develop and implement policy on mātauranga Māori.
- Mātauranga Māori should be embedded into all health and disability services. Additional investment should be made in kaupapa Māori health services and providers, and DHBs should be required to ensure kaupapa Māori services are provided for in all locality planning.

Te whakawhanake i te ohumahi hauora / Developing the Māori health workforce

- The Māori Health Authority should work with Health NZ to ensure that the whole workforce, organisations and services deliver culturally safe, competent and effective services to Māori.
- Equity clauses in health legislation should be updated.
- The Māori Health Authority should:
  - work with other parts of the system to ensure the programme to combat institutional racism is delivered effectively
  - develop the Māori health workforce by ensuring it has a detailed Māori health workforce plan and invests in its implementation
  - develop Māori health provider development strategies to ensure there is an appropriate Māori workforce and the range of services to meet the health and disability needs of Māori whānau and communities
  - ensure funding provided for increasing innovation of Māori providers, supports the development of more specific population health initiatives for Māori
  - review the terms of reference of the Māori Provider Development Scheme, the National Māori Workforce Development Fund and Te Ao Auahatanga Māori Health Innovation Fund, and update both the scope and the size of these funds.
## Kuputaka / Glossary

<table>
<thead>
<tr>
<th>Māori</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arotakengia</td>
<td>Evaluation, development of scientific understandings</td>
</tr>
<tr>
<td>Hapū</td>
<td>Sub-tribe</td>
</tr>
<tr>
<td>Hauora Māori</td>
<td>Māori health, holistic health and wellbeing</td>
</tr>
<tr>
<td>Iwi</td>
<td>Tribe</td>
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<td>Kaiarataki</td>
<td>Steward</td>
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<td>Kaitiakitanga</td>
<td>Guardianship</td>
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<tr>
<td>Kaumātua</td>
<td>Elderly Māori</td>
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<tr>
<td>Kaupapa Māori</td>
<td>Synonymously linked to mātauranga Māori and underpinned by: Te Tiriti o Waitangi; self-determination; cultural validity; culturally preferred teaching; socioeconomic mediation of Māori disadvantage; whānau connections; collective aspirations; and respectful relationships underpinned by equality and reciprocity</td>
</tr>
<tr>
<td>Kaupapa Māori services</td>
<td>Led, owned and governed by iwi, pan-tribal, or Māori organisations that are specifically designed with Māori in mind</td>
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<tr>
<td>Kaupapa Māori health providers</td>
<td>Iwi, pan-tribal, or Māori-led organisations</td>
</tr>
<tr>
<td>Kaupapa Māori methodologies</td>
<td>By Māori, for Māori, with Māori developed methodologies</td>
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<tr>
<td>Mana motuhake</td>
<td>Self-determination, autonomy</td>
</tr>
<tr>
<td>Mana whenua</td>
<td>Customary authority exercised by an iwi or hapū in an identified area</td>
</tr>
<tr>
<td>Mātauranga Māori</td>
<td>Māori knowledge systems: reflecting indigenous ways of thinking, relating, and discovering; links indigenous peoples with their environments and is often inspired by environmental encounters; and is conveyed within the distinctiveness of indigenous languages and cultural practices.</td>
</tr>
<tr>
<td>Ngā rautaki haumi</td>
<td>Investment strategies</td>
</tr>
<tr>
<td>Pēpi</td>
<td>Baby</td>
</tr>
<tr>
<td>Rangatiratanga</td>
<td>Authority, ownership, leadership</td>
</tr>
<tr>
<td>Rohe</td>
<td>Territory or boundaries of iwi (tribes)</td>
</tr>
<tr>
<td>Rūnanga</td>
<td>Iwi authority</td>
</tr>
<tr>
<td>Tangata whenua</td>
<td>In relation to a particular area, means the iwi or hapū, that holds mana whenua over that area</td>
</tr>
<tr>
<td>Te Ao Māori</td>
<td>Māori world view</td>
</tr>
<tr>
<td>Tikanga Māori</td>
<td>Protocols and customs. Approaches and protocols embedded in Māori customary values and practices</td>
</tr>
<tr>
<td>Tikanga / ritenga</td>
<td>The correct way to do things</td>
</tr>
<tr>
<td>Whakawhanake ngā kaimahi</td>
<td>Developing the workforce</td>
</tr>
<tr>
<td>Whānau</td>
<td>Family, extended family</td>
</tr>
<tr>
<td>Whānau ora</td>
<td>Healthy Families</td>
</tr>
<tr>
<td>Whānau rangatiratanga</td>
<td>Whānau decision-making, participation and voice</td>
</tr>
</tbody>
</table>
Section B: Settings / Ngā whakaritenga o te pūnaha
4 Governance and funding / Te mana tautiaki me te whāngai pūtea

While health and disability systems worldwide are inherently complex, the New Zealand system can and should be simplified. Changing a health and disability system’s structure can be very costly and disruptive, divert attention from delivering care and can impede innovation. Therefore, wherever possible, the Review’s recommendations focus on making the system’s current arrangements work better.

However, to generate the significant change in how the health and disability system operates, some structural change is proposed. The roles of the Ministry of Health and DHBs are refined, two new organisations are created (Health NZ and the Māori Health Authority) and one is disestablished (the Health Promotion Agency) and new planning and funding arrangements are proposed.

Findings from the Interim Report

The Interim Report identified the following potential changes to how the health and disability system operates, how plans and decisions are made, how consumers are involved and how it is funded. These are underpinned by proposals that emphasise that the system’s design must be driven by a focus on population health, improving Māori and Pacific health outcomes and equity, and be committed to te Tiriti o Waitangi principles. [see Hauora Māori Chapter).]
Interim directions for change: governance and finance

A more cohesive system with consistent and effective leadership
- The Panel believes that while the shape of the particular structures within the health system are important, they are not the key reason for the lack of effective performance.
- If New Zealand is to develop a system that operates effectively with equitable outcomes throughout, it must first operate as a cohesive, integrated system that works in a collaborative, collective, and cooperative way. Behavioural and attitudinal changes are needed. These changes need to be led from the centre and applied consistently throughout the system.
- To this end, the Panel believes a clearly defined set of values and principles that appropriately reflects the diversity of cultures and Māori as tangata whenua should guide the behaviours and operation of the entire system.

Collaborative long-term planning
- The Panel strongly believes that the lack of mandatory longer-term integrated planning throughout the system makes it impossible for communities or government to have confidence in the effective performance of the system. Planning needs to be strategic and undertaken within a system-wide framework.
- Effective strategic planning will require more systematic community and stakeholder engagement, both within the health and disability sector and with other sectors. Such engagement will be necessary in both the development and implementation of plans. Iwi and Māori must be fully involved.

A system that is less complicated with a clearer decision-making framework
- The Panel recognises that the health and disability system will always be complex but believes the objective should be to make it less complicated with fewer agencies.
- The Panel believes a clearer decision-making framework is needed across the system that allows decisions to be made in a timely manner, made at the appropriate level, and enforced effectively.
- Decisions should support the best use of available resources across the whole system, rather than being driven by the interests of a region, discipline, or organisation. Governors should be responsible (and held accountable) for both local and system-wide impacts.

Consumer representation
- The Panel believes that if the system is to be reoriented so it purposely focuses on the needs of the community it is serving, communities need more effective avenues for guiding the direction of health service planning and delivery. The Panel has not formed a definite view on whether DHB elections are an effective or an essential way of achieving this.

Funding
- The Panel recognises that there will always be worthwhile ways to spend more money within a health and disability system and that the relatively slow growth in expenditure in recent years has added to stresses within the system.
- The Panel recognises however, that increasing funding alone will not guarantee improvements in the equity of outcomes. The Panel’s initial focus is, therefore, on how the system could operate differently to make better use of whatever financial resources are available to it.

These issues are discussed further below.
A cohesive system

Cohesion requires clarity on where functions reside, how decisions are made and how organisations are held accountable.

For the health and disability system to perform better and more equitably, coordinated service delivery requires stronger, direct leadership with direct accountability to the Minister. In addition, the system needs clearer direction and accountability for what it must achieve. The World Health Organization describes this concept as ‘system stewardship’. This means taking responsibility for the health and wellbeing of the population and guiding the whole health system.

System stewardship involves three broad tasks:

- setting the vision for, and direction of, the health and disability system
- collecting and using intelligence, such as data and evidence based research
- exerting influence on organisations working in the health and disability system through regulation and other means.

Initially, the Review considered whether it was feasible for the Ministry to build capability and capacity to undertake both stewardship and service delivery leadership roles. However, system stewards - or chief policy advisors - and service delivery leaders need different ‘organisational brains’ and skillsets. The service delivery function needs strong business acumen, focused clinical leadership and expertise in delivering health services so services can be provided effectively, efficiently and in an integrated way, across the country.

Well performing health systems overseas, for example, in many European countries (such as Norway and Finland), have shown the benefits of separating the stewardship role from the service delivery role. The Review concludes that the health and disability system would benefit from a similar structure.

Reinforce and focus the role of the Ministry of Health

Under this new model, the Ministry would be the chief steward of the health and disability system (alongside the Māori Health Authority) and chief advisor to the Government on strategy and policy, to improve health and equity of outcomes. This would streamline the Ministry’s current role (eg, it would no longer be responsible for funding services and managing contracts). However, having a more focused purpose gives it greater potential to improve health outcomes and equity.

The Ministry’s core functions would be:

- setting clear direction and strategic policies
- providing population health leadership and defining long-term health outcomes
- developing and overseeing health legislation and regulations
- monitoring the overall performance of the health and disability system
- delivering statutory duties (such as the Director of Public Health) and strategic clinical leadership (for example, through roles such as the Chief Nurse)
- leading the Vote Health budget process.
The Ministry would also be responsible for scanning the horizon, so the system can respond to pressures appropriately and in good time. It would also be expected to use what it learns from the system, and other international systems, to reset the strategic direction. The Ministry would need to work with the Māori Health Authority so that its strategic policy reflects mātauranga Māori and its aims to achieve equitable health outcomes. The Ministry would need strengthened population health expertise, so it could build illness prevention and wellbeing promotion into every part of the health and disability system. It would have responsibility for leading intersectoral collaboration with other central agencies.

The statutory duties of the Director-General of Health, the Director of Public Health and Director of Mental Health and Addiction Services and other professional leadership roles would not change.

Establish the Māori Health Authority
As discussed in the Hauora Māori chapter of this report, a Māori Health Authority would sit alongside the Ministry. It would lead the policy advice with respect to hauora Māori, act as kaiarataki or steward for hauora Māori and ensure the health and disability system is committed to achieving equity of outcomes for Māori.

The Māori Health Authority’s core functions would be:
- advising the Minister on all aspects of Māori health policy
- monitoring and reporting to the Minister on the performance of the health and disability system with respect to Māori health outcomes and equity
- partnering with the system to ensure that mātauranga Māori and other Māori health issues are appropriately incorporated into all aspects of the system
- managing the development and implementation of the Māori workforce strategy and plans
- managing investment in workforce and Māori provider development and in initiatives to develop innovative approaches to improving Māori health outcomes.

The Māori Health Authority would be an independent departmental agency, reporting to the Minister of Health and working with the Ministry, Health NZ and DHBs to embed mātauranga Māori across the health and disability system and achieve improved health outcomes for Māori. (See Hauora Māori chapter for further detail on the roles and functions of the Māori Health Authority.)

Establish Health NZ
A new crown entity provisionally called Health NZ would be responsible for leading health and disability services delivery throughout New Zealand. It would be accountable to the Minister of Health for the overall performance of the health and disability system delivery and its impacts on improving health outcomes and equity.
Health NZ would:

- drive consistent operational policy and lead delivery of health and disability services across the country. All DHBs would be required to operate cohesively subject to Health NZ leadership
- be accountable to the Minister for the overall financial balance of the system
- drive continuous improvement both clinically and financially and address unwarranted variation in performance
- undertake common functions for the system, e.g., strategic employment relations
- drive the development of new commissioning frameworks ensuring that it partners with the Māori Health Authority to include specific provisions for commissioning Māori health services

Health NZ would work in partnership with the Māori Health Authority to ensure mātauranga Māori is embedded in the health and disability system and, in particular, to support DHBs in commissioning services for Māori populations.

The Review proposes that Health NZ would be governed by a board made up of eight members and a Chair, with 50/50 Crown/Māori representation, with board membership drawn from DHB board members in each of the regions.

The figure below illustrates the relationships between the Ministry, Health NZ, the Māori Health Authority and DHBs. (Changes to the role of DHBs is discussed later in this section.)

**Figure 4.1: Integrated system overview**
Increase population health expertise in the Ministry

The Review recognises that the best way to achieve equity and strengthen the sustainability of the health and disability system is to put much more focus on embedding population health into all levels of the system.

Population health is proactive in promoting and protecting health and keeping people and populations as healthy as possible. It recognises that the health of populations is shaped by the social, economic, cultural and environmental contexts in which people live, learn, play and work, and that responses are required across the health and disability system and other sectors to create environments that support health and wellbeing.

Population health has an inherent, explicit focus on equity. Working to eliminate systemic inequities in health outcomes requires:

- looking at which groups are most impacted
- understanding how and where inequities manifest
- recognising the socioeconomic determinants that underpin health inequity
- implementing comprehensive strategies to eliminate or reduce inequities.

Using metadata to understand population health and service activity is critical not just for national health surveillance, but also for strategic planning, health needs assessment and service design. Rich datasets already exist for health and disability services, as well as related services such as social development and education. However, the health and disability system must become more skilled at using data to identify variations in factors and conditions that influence the health of different populations, and to apply this knowledge to commissioning decisions.

As the steward of the health of New Zealand populations, the Ministry should lead the sustained effort and development of the expertise needed to support this change. Capability to provide advice should also be available from the Māori Health Authority (in relation to Māori population health expertise), and Health NZ (that would require analytic capability to drill down into the data). However, these capabilities must also be mandated at a regional level to assist DHBs in strategic and locality planning that takes a strong population health focus.

Using population data and analytics must become the norm, with analysts working alongside commissioners, service designers and the frontline workforce to identify and respond to unmet need. Bringing the Health Promotion Agency’s functions and expertise within the core system would also increase focus and capacity for leadership, transparent reporting and partnering to improve population health and health equity.

Roles of other statutory agencies

The roles of other statutory agencies, including Crown entities, departmental agencies and statutory boards and committees would continue as at present. Their support for improvements in population health, health equity and responsiveness is likely to become more effective as the system becomes focused on collaboration and integrated working.
Refocus DHBs and regions to operate more effectively

Hold DHBs accountable for improved health outcomes and equity

DHB boards and board members are accountable to the Minister of Health, both individually and collectively for performance locally. Currently there is no requirement or mechanism for them to be accountable for contributing to the effectiveness of the whole health and disability system.

Also, the primary intention of restructuring the health and disability system in 2001 was to devolve significant decision-making powers to DHBs but, in reality, devolution has been only partial and this has compromised DHBs’ ability to make strategic decisions.

The Review concludes that it is essential to achieve the right balance between DHBs aligning with the system’s strategic direction and desired outcomes, while having the autonomy to configure services to meet local needs, including responding to iwi and Māori aspirations. DHBs must be accountable for:

- improving health outcomes and equity for their local populations by developing long-term plans to meet community needs
- contributing to the system’s effectiveness

DHBs need to know what decisions they can take, to whom they are accountable and how controls are delegated throughout the system. There must be clearer direction about what must be consistent nationally and greater power for DHBs to make decisions to tailor local solutions.

Facilitate more DHB regional collaboration

The Interim Report noted that DHBs replicate processes and analysis. ‘Doing it once’ and sharing knowledge would be much more cost-effective. The health and disability system needs to support DHBs to share their knowledge and expertise, and to collaborate with each other. Health NZ would provide increased support to encourage and facilitate regional collaboration between DHBs, with managers appointed by Health NZ to the regions.

- Some regional functions would be mandated by Health NZ (such as population health analysis and expertise, guidance and coordination, shared expertise in planning and engagement and other operational functions) while other activities would be managed by local DHBs on the basis of determined priorities.
- Regional entities should also lead the development of regional plans and facilitate other collaborative efforts on behalf of DHBs.
- Māori Health Authority would provide support and guidance on building stronger relationships with iwi and Māori.
- DHBs in each of the regions would be required to collaborate and develop a Regional Strategic Plan at least every five years. The plan would need to be consistent with the New Zealand Health Plan and complement the District Strategic Plans. These plans would cover certain services specified by Health NZ as requiring a regional focus for planning and any other services that are identified as priorities by DHBs within the region.
Reduce the number of DHBs
More consistently applied operational policies and better regional planning and collaboration would:
- simplify the structure of the health and disability system
- streamline decision-making
- allow for better use of scarce expertise and increase efficiency.

As regional collaboration increases, the Review proposes that the number of DHBs be reduced from 20 to between 8 and 12 DHBs. Health NZ should lead the process for determining the final boundaries and achieve the reduction in numbers within five years of being established.

Once the number of DHBs is reduced, there should be a corresponding decrease in the number of regions from the current four to two or three regions.

Focus each part of the system on the same values, objectives and outcomes

Develop a charter for Health NZ
Many health and disability organisations share common perspectives on and motivations for delivering services. However, while the health and disability system has legislation, plans and guidelines, there is no one place for its combined core values and goals.

The Interim Report introduced a tentative set of shared system values that were grouped into seven themes:

- **Te Tiriti o Waitangi / the Treaty of Waitangi:** A system that embraces te Tiriti, including a commitment to rangatiratanga (authority, ownership, leadership) and mana motuhake (self-determination, autonomy). One that works to avoid institutional racism and build cultural leadership and governance across all aspects of the system.
- **Wellbeing, hauora (health and wellbeing), and prevention:** A system that empowers people to keep healthy and avoid, minimise, or delay poor health. One that embraces a holistic perspective—including wairuatanga (spirituality), relationships, belonging, and empowerment.
- **Upholding equity, aroha (love), manaakitanga (reciprocity and support), fairness, and respect:** A system that provides all New Zealanders with high-quality, culturally appropriate, affordable, and accessible services regardless of where you live and how you identify.
- **Trust:** A mana-enhancing system that builds trust within and across communities and organisations, treating people as partners in care and actively collaborating to enhance health and wellbeing. A system that builds and values intersectoral relationships.
- **Integrated, collaborative, and connected:** A system that is cohesive and well-coordinated, exemplified by high levels of collaboration within the entire system and intersectorally. A system that supports cooperation and transitions between services, with a workforce that works together to deliver seamless support to all.
- **Outstanding leadership, work practice, and whakawhânaungatanga (relationship building):** A system with a shared understanding of purpose and clarity of leadership that values its workforce and provides secure and supported workplaces cross the system.
- **Supporting excellence, integrity, and innovation:** An evidence-based system that makes best use of available resources for all New Zealanders and strives for quality of care in all it does. This includes using data effectively and ethically across the system, valuing expertise of communities in service delivery, and welcoming fresh thinking and innovation.
The Review recommends a legislated Health NZ charter that articulates the expected culture and behaviours of the health workforce. The charter would influence how care is delivered in homes, communities and hospitals and help to shape how the system is governed and held accountable for its performance. Health NZ would develop the charter with the Ministry and the Māori Health Authority. It would recognise the importance of maintaining effective relationships with Māori as tangata whenua and reflect the diversity of cultures and people that make up the workforce and use health and disability services.

**Develop long-term system outcomes and related performance measures**

The Ministry is currently responsible for monitoring the health and disability system’s performance; it reports monthly to the Minister of Health (and sometimes the Minister of Finance). District health boards are subject to accountability mechanisms, and financial and non-financial performance reporting requirements. The Ministry also uses the System-Level Measures Framework. It is designed to improve health outcomes by helping DHBs implement specific quality improvements.

Other organisations, such as the Health Quality & Safety Commission (HQSC), are also involved in quality improvement; its HQSC’s Atlas of Healthcare Variation is a well-developed tool that shows variations between DHBs’ services and health outcomes.

Despite the volume and variety of reporting by the sector, there isn’t a clear and accessible way to understand and track performance against population health outcomes.

To improve cohesion within the health and disability system, the Review recommends that the Ministry develops a set of long-term outcomes and related performance measures. These would be set out in the NZ Health Plan and integrated into the system’s planning and prioritisation activities and accountability arrangements. Health NZ would lead different parts of the system to work together to achieve the long-term outcomes, potentially agreeing local targets and priorities for individual DHBs to focus efforts appropriately.

**System leaders are empowered to be effective**

The Interim Report identified the need for values-driven leaders working throughout the system to lead and create a culture that learns, improves performance, reinforces accountability and embraces mātauranga Māori.

Leadership capability is inextricably linked to the design, functioning, purpose and culture of a system and the organisations within it. The institutional changes recommended to provide clearer direction for the system and to establish shared values and behaviours would help to create a climate that enables leaders to work effectively.

This section proposes:

- system changes to support DHB boards to govern effectively
- steps to increase leadership capability.
Enable DHB boards to govern effectively
The New Zealand Public Health and Disability Act 2000\textsuperscript{43} sets out the composition of DHB boards. Local communities elect seven members every three years, and the Minister of Health appoints up to four more members.

Elected boards have led to blurred accountabilities. While DHB boards and board members are accountable to the Minister of Health, locally elected members are often focused on local priorities and issues.

The public’s interest in DHB elections and voting for Board members is declining; less than half of eligible people vote. While DHBs are sometimes considered in parallel with local government there is a fundamental difference; unlike councils DHBs are not responsible for generating revenue to cover their expenditure, so there is no counter balance to the drive to advocate for more services for the local population.

DHBs are complex operational entities and are often the largest employer in their local area. It can be challenging to ensure that a DHB board has the appropriate balance of competence and experience to effectively govern a large organisation. Governance skills, and an understanding of health systems, concepts of population health and equity, cultural safety and financial stewardship are needed (with additional professional expertise provided from the executive leadership team). Effective governance also requires board members to be free of serious conflicts of interest.

This challenge of ensuring an appropriate range and balance of skills is currently compounded by:

- the Minister of Health being limited to appointing only a third of each board
- DHB staff being entitled to stand for their local DHB election, which often presents a real conflict of interest.

The Review concluded that DHB elections are not the best way to ensure boards have the capability to effectively govern. A competency-based approach to identify and recruit board members should be introduced with robust processes to support the Minister appoint board members.

Local communities could nominate appropriately experienced individuals for consideration but DHB employees would be ineligible.

Create a climate for leaders to develop and work effectively
Within a country of just under five million people, there is a limited pool of experienced leaders with high-level skills and experience. This means steps must be taken to build leadership capability from within the health and disability system.

Effective leaders are people who:

- strongly align with the system’s purpose and values
- have extensive health and disability system experience
- can work in environments where responsibilities are distributed across organisations and teams.

Evidence supports processes that identify people with potential leadership from within the system and giving them opportunities to learn from experience and collective development. These opportunities help people gain broader perspectives and a better understanding of different cultures; become more adaptable, empathetic and responsive; and make them better communicators.
Health NZ must create ways to identify emerging leaders and nurture people with leadership capability from within the existing health and disability workforce, in particular, giving them opportunities to learn from broader experience and collective development.

Health NZ must also ensure it provides ongoing training for DHB board members to build and develop the capabilities they require to govern effectively.

There is also a growing expectation that public sector leaders and their staff have a higher level of cultural competence and ability to work effectively with Māori. The recent Public Service Reforms identified Te Ao Tūmatanui – Strengthening the Māori Crown relationship as one of its five focus areas. The proposed new legislation includes a specific clause to ‘support the Crown in its relationships with Māori under te Tiriti o Waitangi / the Treaty of Waitangi’. Public service leaders would be required ‘to develop and maintain the capability of the public service to engage with Māori and understand Māori perspectives’. 44

**Communities and their needs drive the system**

Improving population health outcomes and equity requires the system to truly focus on communities and what they need. The Review considers three changes are required for a responsive system:

- give communities a *real say* in the system
- get people and communities better involved
- partner with other sectors to respond to the economic, environmental and social impacts on health.

The Interim Report noted the system needs to focus more on the communities and people it serves. Elections for DHB board members were intended to give communities a strong say in governing their DHB, 45 but there is limited evidence to show it has been successful. 46 47 48 49 Communities need better ways to guide health and disability service planning and delivery.

International evidence shows that when health systems are open and transparent, and give a *real say* to communities, they achieve better population health outcomes 50 51 and make more progress towards health equity. 52 53

Communities can easily find out about their health and wellbeing and track changes over time. They can formally influence the system, and see what changes are being made and the results of those changes. Communities with a *real say* have influence; this power sharing is especially important for communities with the biggest equity gaps.

**People and communities better involved**

International experience confirms that, while there’s no gold-standard, there are many ways that people, communities and consumer-interest organisations can successfully influence health systems and services. 54 55 56 57 58 59 60

Giving people greater choice in ways to get involved increases the number and diversity of people who do. 61 62 Many people, especially younger people and those with less free time, may prefer non-traditional channels over traditional ones such as elections, committees and formal consultation processes.
Consumer and community input into improving health and disability services and wellness is becoming more widespread in New Zealand. There are already some successful, well-researched models of how this is being done, and these models need to be encouraged. Long-term partnerships are one way that Māori, disability communities and consumer groups have favoured; their success requires health and disability system partners to be open, respond and reciprocate, and be committed long term.

Building learning and capacity in the community are important to develop consumers and communities’ experience and ability to guide system development and service improvement. These approaches are equally important for the workforce and system leaders to develop their experience and ability to learn from consumers and communities, and to maintain effective reciprocal relationships.

**Reo Ora – Health Voice**

Reo Ora is an online platform developed by Waitematā and Auckland DHBs to make it easy for people to be informed, get involved and have a say. People who sign up get an email every month or so with short surveys and information about community meetings, online discussions and ways to get involved. Reo Ora helps people get involved in the things they want to and find out what happens as a result, using smart phones, assisted technology or other formats.

**The DHBs use Reo Ora in different ways:**

- Waitematā DHB has multiple engagement methods and community events to supplement its surveys and respond to community requests. Youth, Māori, Pacific, Asian and migrant communities have specifically influenced results. Examples include information about birthing units as a safe alternative to traditional hospital births, and activity programmes for new parents using individualised text messaging.

- Auckland DHB has detailed community health profiles for its nine local board areas, including results from surveys on community health and quality of health care. The profiles are published online and are used to plan local service improvements.

**Partner with other sectors to respond to external impacts on health**

Health services account for around 20% of all impacts on a population’s health, but only an estimated 10% of impacts on health equity across income groups. The communities that have the poorest population health outcomes usually face multiple economic, environmental and social disadvantages. Changing the health system alone is unlikely to improve health equity enough. To respond to communities with the greatest need, the health and disability system needs to partner with and develop long-term relationships with local government, other public services, businesses and communities.

Effective partnerships would involve:

- the Ministry building its leadership role with other government agencies, in partnership with the Māori Health Authority, to work for community wellbeing.

- Health NZ partnering with government departments and agencies to improve integration and delivery of public services nationally

- DHBs responding better to the health and disability needs of their communities.
System informed by evidence and research

While the New Zealand health and disability system can and does use international evidence and research to inform many decisions, ensuring the system operates most effectively for the New Zealand population requires access to good local evidence, research and evaluation. This is particularly true for issues relating to hauora Māori and Pacific peoples health.

Currently that evidence is not readily available or collected in New Zealand. However there is a recently updated Health Research Strategy that sets out an ambition for a system founded on research that improves the health and wellbeing of all New Zealanders.

New Zealand’s Health Research Strategy

The New Zealand Health Research Strategy seeks a system that is founded on excellent research and improves the health and wellbeing of all New Zealanders.

The strategy’s guiding principles (research excellence, transparency, partnership with Māori and collaboration) are well aligned with the directions of this Review. Its priorities are:

- investing in research that addresses the health needs of New Zealanders
- creating a vibrant research environment in the health sector
- building and strengthening pathways for translating research findings into policy and practice
- advancing innovative ideas and commercial opportunities.

Some of the changes envisaged by the strategy are a more inclusive process for setting research priorities and greater investment in research on health and wellbeing for Māori and Pacific peoples. Stronger community involvement as well as stronger participation in research and innovation across the health and disability sector will be key. Industry partnerships and platforms for commercialising innovations will be important, especially as a population health approach drives large-scale delivery of personally-adapted digital, screening and other innovations.

The Ministry of Health and Ministry of Business, Innovation & Employment and the Health Research Council are partners in leading implementation of the Strategy.

The Review believes this would actively facilitate research, development and dissemination; this is especially important in driving change to achieving equity and embed mātauranga Māori. It would engage all parts of the workforce in research; collecting evidence and making improvements would be core activities throughout the system. Concerted leadership and culture change would be required to achieve a really effective ecosystem for research and development.
Collaborative planning

Health and disability system planning involves understanding a population’s health needs and aspirations and determining what services will best meet them. Organisations must allocate resources to configure and effectively deliver services, monitor progress and identify changes needed.

There are many strategies and plans produced by the health and disability system.

- The Interim Report highlighted that they are disconnected and do not work well to support system improvements. There is currently no single national document that combines the health and disability system’s expected population health outcomes that details how different parts of the system will work together.

Planning requirements are spread across different legislation and accountability documents. There is no coherent nationwide planning framework that describes how things should work and who should do what. Accountability between organisations is unclear and there is no long-term perspective in current planning.

The Treasury’s Living Standards Framework promotes a long-term intergenerational wellbeing approach to improve sustainability of public services. It is essential that planning for today keeps an eye to the future, and organisations must be aware of the long-term impact that today’s decisions make on the health and disability system and future resources.

The system must track and respond appropriately to challenges (such as emerging technologies, population growth, ageing and redistribution, and chronic disease).

The Review recognises that planning is a key lever to transform how the system works, what it focuses on and what it achieves. There is a strong rationale to change the planning approach to ensure that health and disability services are responsive, affordable, viable and can adapt to use new knowledge and cope with today’s and tomorrow’s challenges.

There is also a need to ensure that people, communities and iwi partners have meaningful opportunities to engage with and influence priorities.

Establish a system-wide approach to planning

The Review recommends that there should be a system-wide planning framework to improve how organisations plan and work together.

The framework should:

- define planning responsibilities and requirements and describe how organisations are accountable for their delivery and performance against plans
- clearly define the connections required between plans and support the system to review and learn from its performance through a planning cycle
require the system to give people, communities and iwi partners relevant information about priorities, plans and the results delivered against them, and opportunities to influence them

- provide a firm context and direction to guide and support workforce development and infrastructure planning
- support clinicians to engage in planning activities
- develop and use tools that increase the system’s capability to plan (for example, standardised planning processes and population health data).

The figure below illustrates the strategies and plans that would support the system’s planning activities and shows the connections between them.

Figure 4.2: Overview of strategies and plans supporting the health and disability system
A long-term New Zealand Health Outcomes and Services Plan

A long term plan as set out below is proposed as a pivotal new planning document for the health and disability system.

Outline of the New Zealand Health Outcomes and Services Plan

Purpose
The New Zealand Health Outcomes and Services Plan (the NZ Health Plan) would guide the long-term strategic direction of the health and disability system over the next 10 to 15 years. It would identify the outcomes the Government expects it to achieve and how different parts of the system would work together. There would be a close working relationship between the Ministry, the Māori Health Authority and Health NZ to develop the Plan.

Responsibilities
- The Ministry would take overall accountability for coordinating the development of the plan and would lead the development of the system outcome measures monitoring of the overall system’s performance.
- The Māori Health Authority would lead on Māori health outcomes and monitoring.
- Health NZ would lead on service planning.

Timeframe
The Plan would look out over the next 10 to 15 years and have greater detail on actions in the first five years. The Plan would be refreshed every five years. In the early years, it may need to be refreshed more frequently to allow the Ministry to broaden the Plan’s scope and depth, as it evolves.

Objectives
- Identify the long-term population health outcomes and related performance measures the system needs to achieve to improve health outcomes and health equity.
- Explain how different parts of the system would work together (led by Health NZ) to achieve the long-term outcomes.
- Clarify the actions different parts of the system are expected to take to achieve more equitable outcomes and to shift the focus to prevention and wellbeing.
- Track and interpret the challenges and opportunities to inform planning for changes to models of service delivery to ensure that services are sustainable and can adapt to today’s and tomorrow’s challenges.
- Give national, regional and local services enough context to plan their services, by clarifying which publicly funded services are available and where. Guidance would support optimal ways to configure services locally, regionally and nationally to reduce variation in access between different populations.
- Consider how highly specialised (quaternary and tertiary) services should be configured (and when such changes would need to be delivered).
- Consider the roles of public, private and NGO providers in the delivery of health and disability services, and how the system can ensure the public health system is sustainable.
- Provide context to plan effectively for the system’s workforce, infrastructure and equipment and data and digital technology.
District and regional strategic plans align with the NZ Health Plan

The Review recommends that each DHB should produce a district strategic plan with a 5 to 10-year outlook that is refreshed at least every five years. The Minister of Health would approve these plans, once Health NZ has advised they are consistent with the New Zealand Health Plan and are financially sustainable. A district strategic plan would:

- cover every aspect of a DHB’s remit
- be based on analysis of a DHB community’s health outcomes and needs
- reflect locality plans showing how Tier 1 services would be configured and delivered to each population group to improve health outcomes and to address inequities between groups
- include actions to improve the district’s population health and equity outcomes
- be informed by the views of communities, stakeholders, iwi and consumers in the district, especially those with the poorest health outcomes
- identify how the DHB board would manage engagement with and reporting to its communities
- describe how clinicians are involved in and influence service planning
- describe how the DHB would work with other sectors such as local government, transport and housing to improve health outcomes.

The Review recognises the need to increase regional collaboration. Regional planning should enable DHBs to take an informed, collective view enabling them to consider the relative priorities of challenges and opportunities facing other DHBs and understand the interdependencies that may affect initiatives. Regional planning would also be essential to facilitate the reduction in the number of DHBs.

**Regional strategic plans would:**

- cover services identified by Health NZ that need to be planned at a regional level
- address other regional initiatives identified by local DHBs
- allow DHBs to take a collective view across the region of the relative priorities, and inter-dependencies that may affect initiatives.

The Review recommends that DHBs in each of the four regions work together to produce regional strategic plans with a 5 to 10-year outlook that is refreshed at least every five years. The plans should be consistent with the NZ Health Plan and complement the relevant district strategic plans. (These plans would replace the current requirement to publish regional services plans annually.) As proposed for the district strategic plans, the Minister of Health would approve regional strategic plans once Health NZ has checked they are consistent with the New Zealand Health Plan and are financially sustainable.

**DHB funded annual plans**

DHBs would still be required to submit a Funded Annual Plan, which describe what primary and secondary services communities can expect to see locally and how they would access more specialised services. DHBs would be required to regularly report back to communities on health outcomes. Ministerial approval of the plan would require prior sign off by Health NZ that the plan is consistent with maintaining financial balance in the system over time.
Funding arrangements for an efficient and effective system

While health funding levels are not the major contributor to equity of health outcomes, or the sole cause of DHB deficits, changes to funding arrangements can better support the performance of the health and disability system.

Increase predictability of base funding

Like most areas of government spending, Vote Health has fixed nominal baselines, meaning that there is no guarantee that spending on health will increase in coming years. Increases to health spending must be proposed and weighed against other spending options each year.

This does not deal effectively with the cost pressures the health and disability system continually faces. There are increasing resource requirements due to population growth and changing population needs. The system also faces increases in costs from wage inflation and other price rises (such as medicines, medical devices and other technologies). Improvements in efficiency and productivity gains may mitigate concerns but cannot entirely offset these pressures.

Additional funding is required every year to maintain the current level of health care for the average New Zealander. While Vote Health is usually increased, there have been years where the increase has not been sufficient to maintain services over time. In some years, a large proportion of the increase has been required to fund new initiatives meaning that, in practice, some parts of the system improve while others stagnate.

Figure 4.3: Annual percentage increase in Vote Health, actual versus illustrative minimum, 2000 to 2019

Actual percentage increase (baseline and new initiatives) vs Illustrative minimum percentage (baseline only)

Source: Stats NZ, The Treasury, Ministry of Health, internal calculations
The Review concludes that guaranteed increases in Vote Health would help to maintain the overall quality of the health and disability system. The largest and third largest Votes (Social Development and Education) are not funded on fixed nominal baselines but receive guaranteed increases through legislation, allowing them to meet increased demand and cost of services without the need to compromise quality.

The Review recommends using a similar formula for setting minimum annual increases in funding. This would cover baselines (maintaining the system). Ensuring that baseline services remain funded provides advantages. It guarantees a baseline level of services that all New Zealanders can expect and reduces the requirement for cost pressure budget bids, reducing administrative burden.

The exact formula and what it includes would need to be determined but should account for growing need and growing costs, and so should factor in the increases in the:

- total population and changes in population demographics (e.g., age and ethnicity)
- costs of products and services
- costs of wages.

Funding bids for new initiatives would be entirely separate and would be handled as they currently are (mainly through annual budget bids).

Such a system would provide more certainty to Health NZ and DHBs. This would help in long-term planning and facilitate commitment to multi-year contracts with non-governmental organisations (NGOs). This would have flow-on effects to the workforce: those working for NGOs for the health and disability system would have more stability, enabling NGOs to also have better long-term planning and employment conditions.

Providing more certainty for long-term funding would also assist in the delivery of the NZ Health Plan.

**Simplify flows and reporting**

Changing agencies and setting up new ones, would require changes to appropriations (the funding allocations from Government). The Review recommends simplifying the appropriation structure while, at the same time, increasing the level of transparency in financial reporting (refer Figure 4.4).

The Review proposes that having a single combined appropriation for Health NZ and the DHBs would maximise the flexibility of the system while reducing administration. Having separate service-level appropriations creates barriers to integration.

Transparency would be enhanced through increased reporting on funding and expenditure by population group, DHB and service. This would require some technical changes to how the population-based funding formula is managed and how Health NZ and DHB accounts are prepared. Health NZ would be responsible for consistent accounting standards and performance reporting.

The Ministry and the Māori Health Authority would each have two appropriations: a departmental appropriation for the costs of running the organisation and a non-departmental appropriation for purchasing services. There would still be a small number of additional appropriations for other Crown agencies, such as PHARMAC.
Smoothing funding flows to DHBs

Individual DHB revenue is determined in the most part by the population-based funding formula. The Review supports the ongoing use of population-based funding, but is proposing that it should be enhanced in three areas:

- reducing DHB funding flow volatility
- reducing distortions from new initiative funding
- enhancing the methodology and data sources underpinning the formula, particularly for Tier 1

Reducing DHB funding flow volatility

DHBs all raised concerns with the Review about the volatility of funding caused by population forecast revisions. Such recent revisions have resulted in significant funding changes for some DHBs and have often been unpredictable. They have at times arisen from back dated changes in population estimates that have taken a considerable length of time to be determined.
Unpredictable changes in funding are difficult to manage for a health service which is usually a large employer, with staff costs by far its largest expenditure and facing steadily increasing demands.

While the review supports the continued use of a population-based funding formula as the principal means of funding DHBs, it is proposed that more attention is given to devising a formula for smoothing the transition of funding shares arising from population revisions.

Smaller DHBs can also face significant volatility in their expenditure projections as a consequence of being presented with a case that needs highly specialised and/or long-term treatment not routinely provided by the DHB. The funding system handles these costs through inter district flow (IDF) payments. The volatility which arises, particularly for smaller DHBs, could be smoothed by ensuring high cost services are funded nationally and by DHBs entering into longer term fixed revenue arrangements for regional services (further service planning benefits from such arrangements are discussed in the Tier 2 section).

Reducing distortions from new initiative funding
New initiatives funding, which is currently kept in silos for long periods of time, can undermine a population approach to planning and funding. Further, when a new initiative is developed on the basis of a pilot in a few parts of the country, a problem can be created if funding is continued indefinitely, resulting in long term differences in access between DHB populations. A further issue occurs in situations where funding for a pilot stops, but the DHB cannot realistically stop providing the services. If this is the case, there is an additional call on its baseline funding.

The Review considers that when funding is allocated for new initiatives, the timing of the initiative should be specified as ongoing or temporary. Where funding is ongoing, there should be a clear time period of no longer than four years after which it is incorporated into baseline funding.

Enhancing the methodology and data sources underpinning the formula, particularly for Tier 1
The Review recommends that funding to DHBs be allocated using a population-based funding formula. However, the formula should be amended to better reflect the needs of different population groups.

It is acknowledged that this would require an investment in improving health status information. The development process required is outlined below.

- Ensure all DHBs have costing systems in place and comply with costing standards.
- Improve financial accounts and reporting to more accurately and consistently measure how much is spent on what and for whom.
- Develop a nationally consistent collection of Tier 1 services data, including measures of use, quality, outcomes, diagnosis and health status.
- Analyse other social sector data (eg, from the Integrated Data Infrastructure) to better understand the social determinants of health.
- Research differences in access, outcomes and cost of services in rural areas.
While this information is not likely to be available for the next population-based funding formula review, the Review recommends that to move towards a formula with a stronger needs-based approach in the short run, the funding for the Tier 1 components be immediately rebased as discussed in the Tier 1 chapter.

The Interim Report noted that evidence shows that enhanced Tier 1 services can improve equity and support health and wellbeing for Māori, Pacific peoples and others for whom the current system is not working. The report also outlined data showing a decrease over time in the share of funding for Tier 1 services in New Zealand.

The Review believes that communities need more transparency about how DHBs allocate Tier 1 funding, and how this funding is used to address the needs of communities.

As new funding is applied to enhance Tier 1 services and commissioning is devolved to DHBs, it would be essential that funding was not diverted away from Tier 1 services.

The Review proposes that a ringfence around Tier 1 funding be applied at least for the medium term. It should specify the minimum amount that each DHB would be expected to spend on Tier 1 services. At the locality level, indicative budgets would be published and reported against. This ringfence would provide confidence to the public and to the Government that funding is being used appropriately to develop Tier 1 services.

**Improve efficiency and ability to manage within resources**

While ensuring long-term stability of revenue would go some way towards assisting with better management of finances, revenue is only part of the problem. Spending continues to rise, due to population growth, an ageing population, inflation and management decisions.

Currently, all 20 DHBs are in deficit, spending more money each year than their budgets. In the long term, significant performance improvements are required to improve the sustainability of the health and disability system. Advances are needed in management and in improving efficiency and service design to create a system that can deliver what New Zealanders need within budget.

Collectively, the range of changes proposed in earlier sections (such as the establishment of Health NZ, a coherent system-wide planning framework and changes to both the number of DHBs and how their DHB boards are constituted) would all contribute to a better performing health and disability system.

Health NZ should also lead changes to back office and support functions where a national approach is more appropriate, and, encourage more consolidation of regional services, in order to reduce overall costs in the system.
Rebalancing the system
Changes in the way funding is managed would not however address the fact that the system would be beginning a new regime in significant deficit. These deficits are unfortunately of a magnitude that they cannot be redressed simply by improved efficiency and better management. The Review therefore proposes that the Government provide additional investment to rebalance the system, but that this be provided through, and managed by Health NZ.

If such funding were simply distributed across all DHBs according to a normal DHB population funding basis it would have limited impact on improving system performance. Similarly, it should not be distributed according to current deficits as this would simply reward poor behaviour and give the system the wrong signal.

Deficits, as a proportion of total revenue, are not evenly distributed across the system. The deficits of approximately half the DHBs could reasonably be attributed to underfunding over the past decade or so. The persistent deficits of others represent a more significant performance problem.

While the review is recommending performance management improvements across the board, the group of DHBs with persistent deficits require more intensive intervention.

The Review therefore proposes that:

- additional funding to rebalance the system should be allocated initially to Health NZ with the bulk of this fund to be allocated proportionally across DHBs’ operating expenditure budgets, on a population funding basis, at a level to bring the top half of the DHBs back into a budget-neutral or positive position.
- residual funding would be managed by Health NZ and used to support the interventions required in the other DHBs to address the remaining deficits over time. Once performance issues are addressed, the residual funding would revert to the population funding baseline.

This process would ensure the system as a whole could be kept in balance.

Improve DHB performance
Health NZ should be made accountable for ensuring the health system stays in balance overall, ensuring ongoing financial sustainability. To achieve this Health NZ must be actively monitoring DHBs, coordinating work between them, and requiring actions to address variance in performance.

The Review recommends that Health NZ builds a performance improvement function with the capability to both understand performance variation and offer suitably tailored support.

The intention would be to move beyond the current system of simply publishing performance measures into a system that can analyse performance variance and implement steps to improve performance, working with DHBs including using the experience of high performing DHBs to assist. Such analysis would provide central agencies and the Government with improved understanding of the health and disability system performance and provide more confidence that future funding would translate into more and better services, and outcomes.
Building the future

The Review proposes the following changes

System-level stewardship and leadership is strengthened

- The Ministry of Health should be the chief steward and chief advisor to the Government on health and disability strategy and policy.
- A Māori Health Authority should be established to lead strategic policy with respect to Māori health, to act as kaiarataki for hauora Māori and to ensure the system is committed to achieving equity of outcomes for Māori.
- A new crown entity, Health NZ, should be established to lead delivery of health and disability services across the country. A Charter for Health NZ would be developed that sets out shared values and aims to guide the health workforce culture and behaviours.
- Health NZ should be governed by a board of eight members and a Chair, with 50:50 Crown-Māori representation, with board membership drawn from DHB board members in each of the regions.
- Leadership should be built at all levels of the system, and deliberate actions taken to shape the system culture and capabilities, and provide leaders with the accountabilities, information and tools to lead.

Consumers, whānau and communities are engaged

- Local communities, iwi partners, consumers and whānau, clinical experts and other stakeholders should have meaningful opportunities to influence planning, and be engaged throughout the life of strategic plans to understand priorities, implications for services and outcomes achieved.

District health boards are refocused and accountable

- DHBs should be accountable for both improving the health outcomes and equity among their local populations and contributing to the system’s effectiveness.
- All DHBs should be required to operate as a cohesive system subject to Health NZ leadership. Health NZ would oversee a reduction in DHBs from 20 to between eight and 12, and DHB regions to no more than three.
- All DHB Board members should be appointed by the Minister of Health against a transparent set of competencies, including financial and governance experience, tikanga Māori and specific health sector knowledge. The composition of Boards should reflect te Tiriti/the Treaty partnership. DHB Board members should have on-going training and professional development in the capabilities they require to govern effectively.
- DHBs would be expected to engage effectively with Māori, and build their services capacity and capability to engage with, and understand the perspectives of Māori.

▶ Continued
Building the future – continued

The Review proposes the following changes – continued

Integrated planning connects the system

- The New Zealand Health Strategy should set the overall parameters for all planning in the health and disability system.
- A New Zealand Health Outcomes and Services Plan (the NZ Health Plan) should be developed to guide the long-term strategic direction for the system, outcomes to be achieved, and how different parts of the system would work together. The Ministry should have overall responsibility for coordination of the Plan, and lead on system outcome measures. The Māori Health Authority should lead on Māori outcome measures. Health NZ should lead on services planning.
- Each DHB would develop a District Strategic Plan based on the population health needs of its district, include locality arrangements for Tier 1 services, and be guided by the direction and outcomes for the NZ Health Plan. DHBs would also collaborate regionally, and develop regional strategic plans that take a collective view of priorities.

Funding arrangements drive an efficient and effective system

- The predictability of funding for baseline services is maintained through legislation establishing minimum annual increases, determined by a formula reflecting increasing population, needs and costs. Vote Health appropriations should be simplified to support a single integrated system through having a single appropriation for Health NZ and DHBs.
- The transparency of financial reporting should be improved by requiring regular reporting on revenue and expenditure by DHB, population groups and services.
- The stability of individual DHB annual revenue should be improved by smoothing population revision impacts and changes to ways IDFs are managed.
- New initiatives funding should routinely be for a specified term.
- A dedicated performance support function should be established within Health NZ to drive changes in system effectiveness and efficiency.
- Investment aimed at rebalancing the system should be managed through Health NZ to ensure DHBs with unsatisfactory performance, have their access to additional funding more closely supervised.
- The population-based funding formula should be improved to better reflect needs. This would require an investment in improved information across all health care settings as an input to an improved formula.
- Funding for Tier 1 services should be ring-fenced so that it cannot be diverted to other areas.
Section C:
Services / Ngā Ratonga
5 Services introduction / Ngā ratonga tīmatanga

Introduction

New Zealand’s health and disability system delivers prevention, care and treatment through an extensive range of home, community, and hospital-based services. Services are the touchpoint that people have with the system, directly impacting New Zealanders’ health and wellbeing throughout their lives. What services are delivered, when, why, how and by whom is significant for the health outcomes that are achieved.

Too often in the past however, the system’s focus has been on funding and process, rather than on the needs of people and designing services that will serve them well. If better health and wellbeing and more equitable outcomes are to be achieved, particularly for Māori whānau, Pacific peoples, disabled people and rural populations, the way the system approaches service delivery must change.

Framework and definitions

The Interim Report framed services within four groups: population health, Tier 1, Tier 2 and disability. These groupings have been kept for this report, using the following definitions.

- **Population health services**: The terms ‘public health’ and ‘population health’ are often used interchangeably. In this report, ‘population health’ and ‘population health services’ are used with the understanding that they incorporate the broad definition and meaning of public health. Population health services include population health action, population health policy, surveillance, health promotion activities and preventative services such as screening programmes. As an approach to service design, population health shifts the focus to prevention, influencing the determinants of health, health equity, intersectoral action and partnerships, and understanding needs and solutions through community outreach.72
Tier 1: Encompasses a broad range of services and other activities that take place in homes and communities, in marae and in schools. They are the services that most people need, most of the time. Tier 1 includes, but is not limited to, self-care, mental health services, general practice, maternity services, Well Child / Tamariki Ora, outreach services, oral health services, community pharmacy services, medicines optimisation, health coaching, nursing (eg primary care, district, public health and community nursing), aged residential care, hauora Māori services, community paramedic services, school-based services, home-based care and support, rehabilitation, and palliative care. It also includes laboratory and radiology services and other allied health care that takes place outside of hospital, such as podiatry, physiotherapy and dietetics. Most kaupapa Māori services are located in Tier 1.

Tier 2: The part of the health and disability system focused on delivering public and private hospital and specialist treatment, and specialist diagnostic services. Tier 2 includes services delivered for a local population or regional catchment, those provided for more than one region and, in some instances, all of New Zealand. Tier 2 boundaries are blurred, as specialist services are also delivered in the community or homes and Tier 1 services can be located in hospitals, particularly in rural communities.

Disability: Disability services in this report are those that specifically support and enable disabled people to live well and participate fully in their community. These services are often delivered in Tier 1 settings. This definition does not include all of the services that are accessed by disabled people and their whānau, who are also consumers of other population health, Tier 1 and Tier 2 services.

Global trends: opportunities and challenges
The People and Communities Chapter describes New Zealand’s changing population: age, ethnicity and geographic spread. In addition to demographic changes, the impact of climate change, technological and research advances, evolving consumer expectations, and social and cultural changes, provide both opportunities and pressure for New Zealand’s population and wellbeing.

Many of these changes could have a positive impact, opening up new options for promoting wellness, better self-monitoring, greater access to health services and care coordination, medical breakthroughs, and smart transport and housing. Other changes, however, such as rising sea levels, extreme weather events, global migration, antimicrobial resistance, pandemics and demands on water supply and the natural environment, are creating new and additional challenges to health services.

The challenge for the Review was to look for improvements that can be made to the system as it is now, while also looking ahead to a very different future. While it is not possible to predict exactly what that will be like, there is a strong sense of the attributes of a system that is well placed to respond to change. How services are connected and delivered will have an important part to play.
Figure 5.1: Global trends

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental challenges</td>
<td>Demands placed on resources and health by climate change, food security, global migration, drought, water supply and sanitation, and anti-microbial resistance. Moves toward zero carbon and other policies to tackle climate change, how we consume resources, and environmental sustainability will change.</td>
</tr>
<tr>
<td>Technological innovations</td>
<td>Changes to consumer and workforce expectations and digital service delivery such as an increase in artificial intelligence and machine learning, telehealth, robotics, genomics, precision medicine, wearable technologies, and the types and volumes of health-related data being captured about individuals.</td>
</tr>
<tr>
<td>Infrastructure demands and</td>
<td>The impact on society, health, and disability through smarter housing and transport options, urban design innovations, reconceptualisation of hospitals, the need for high speed broadband, and demand on data infrastructure. Maintaining and updating current physical and digital infrastructure, including new equipment, remains critical.</td>
</tr>
<tr>
<td>Improvements</td>
<td></td>
</tr>
<tr>
<td>Unknown challenges and disruptive</td>
<td>Technological and business disruptors, geopolitical tension and warfare, natural disasters, pandemics and medical breakthroughs.</td>
</tr>
<tr>
<td>change</td>
<td></td>
</tr>
<tr>
<td>Demographic shifts</td>
<td>Continued urbanisation, diversification of population in terms of ethnicity and age, and shifts in resource allocation. Current projections predict a steady rise in obesity, diabetes, cancer, and dementia with increasing co-morbidities.</td>
</tr>
<tr>
<td>Māori future shifts</td>
<td>The Māori population is young and diverse. Cultural identity has been positively associated with improved health and wellbeing outcomes for Māori and Māori cultural renaissance has seen a growth in cultural institutions and revitalisation of te reo Māori.</td>
</tr>
<tr>
<td>Consumer choice</td>
<td>Consumers expect more choice and control over their health and disability services, more accessibility and options to suit lifestyle, greater person- and whānau-centred care options, with a strong focus on prevention.</td>
</tr>
<tr>
<td>New business models</td>
<td>Entry of non-traditional providers, such as tech and digital services, able to take advantage of large customer bases, cloud platforms and algorithms. Working alone or with traditional providers, the new players offer the promise of more proactive and personalised models of health care.</td>
</tr>
</tbody>
</table>

Source: Interim Report
Organising the system to work better together
The following service area chapters each focus on four common themes:

- connected and whānau-centred services
- more services planned locally
- the system recognises different populations and needs
- transparent and evidence based planning.

Connected and whānau-centred services
The Interim Report concluded that services need to be more connected, more varied, simple to access and easy to navigate, and provided in settings, locations and time of the day that values the consumers and whānau that they serve. Services, including Tier 2 services, need to reach out more to where people are at home, school or work, and use population health management to identify where there is unmet need. Services should be connected, working between and beyond traditional boundaries, as a single system to treat the person or whānau.

Key to this vision is shifting from the current, often fragmented, health and disability system to one that is more connected and whānau-centred, with a strong focus on populations and clear accountabilities for improving health outcomes and equity. Service delivery would continue to take place in primary, community and hospital settings, but increasingly, at homes, marae, schools and virtually, for example, using telehealth. Boundaries between different workforces would become blurred, with consumers and whānau interacting with a wider range of clinical and non-clinical workers. Figure 5.2.

In the proposed system, all New Zealanders and their whānau would be a part of a locality (see further detail in the Tier 1 chapter), with access to a connected and whānau-centred network of services, along with digital tools to provide the choice for greater control over their own care.

Services provided at home and in the community would be supported by a network of hospitals with specific roles, locally and nationally.

To connect services and people together would be:

- shared data systems
- a more mobile and multi-disciplinary workforce
- proactive outreach
- telemedicine
- agreed pathways and protocols
- and new funding arrangements.

See the Enablers section for specific discussion on these areas.
Figure 5.2: Services in the future system would be more connected and whānau-centred

1 Includes: Aged Residential Care and Disability Residential Care.
More services planned locally

The challenge for the Review was to determine an organising structure that would enable a connected and whānau-centred system.

The System Settings Chapter outlines the significant structural, planning and funding level changes that the Review is proposing. The most significant change proposed for services is how these would be organised and commissioned and for a population health approach to be embedded.

Specifically, the Review is proposing to bring together accountability for population health outcomes and authority for local commissioning, into next generation district health boards (DHBs). This would include contracting directly for Tier 1 services currently purchased nationally or through nationwide arrangements, such as for general practice services, maternity services and Well Child / Tamariki Ora.

Next-generation DHBs would have the mandate to target resources to particular communities and populations where it is based on evidence and is equitable. This responsibility would be underpinned by a locality planning approach for primary, community and home-based services, discussed further in the Tier 1 chapter.

Within each locality, networks of services, managed by the responsible DHB and comprising non-governmental organisations, businesses and directly provided services, would work together to meet the health needs of the population. Services would be jointly accountable for agreed health and wellbeing outcomes.

Implications for institutions and workforces

Shifting to these arrangements would have significant implications for some providers and workforces delivering these services, and dedicated investment would be needed to support the change. Some might question why the Review have opted to give these powers to DHBs, when their record of performance in the past has not been ideal. The Review has heard many calls to abolish DHBs, to reduce their number, or at least rebrand them.

The Review does recommend that the system has fewer DHBs. But analysing the functions that DHBs were established to perform makes it clear that these functions would still be needed.

Irrespective of their recent performance, the institutional form of what are currently labelled DHBs is critical to a well-functioning health and disability system.

For this reason, the Review has focused on recommending changes to the way DHBs are governed and expected to perform, rather than creating whole new agencies, or simply rebranding them.
The system recognises different populations and needs

A population health approach recognises and responds to differences in population needs. While all New Zealanders should have access to a guaranteed set of services, the Review considers that more services should be defined locally according to the specific needs of the population, and delivered in ways that reflect what matters for individual communities. This means the system accepting differences in service design and delivery where this is evidence based and serves equity. It also means resources should be targeted deliberately to particular populations or services.

It is important that Tier 1 services would be contracted differently than in the past for populations with the highest needs, particularly for, but not only, Māori.

Commissioning

Commissioning is a strategic and ongoing process to translate population health objectives into effective, responsive services. Commissioning involves purposefully planning, developing, sourcing and monitoring service delivery systems to achieve the best outcomes for the population. Commissioning works hand-in-hand with the population health and locality-planning approaches touched on already and discussed throughout the following chapters.

Figure 5.3: The commissioning cycle, including procurement and contracting
Commissioning employs both purchasing and non-purchasing strategies to shape how the health and disability system and services respond to a population’s needs and aspirations. It requires advanced skills in strategy, service design, business analysis and population analytics, as well as expertise in modern procurement and contract management practices such as strategic sourcing, supplier relationship management and innovative contracts.

Commissioning has been widely discussed within the health and broader social sector for more than a decade but has not been implemented in a consistent or structured way within the health system. In recent years, there has been greater attention to the nuances of social services procurement, but so far there appears to have been a relative underdevelopment of this specialist expertise in the health and disability system.

Developing commissioning practices and talent within the system is crucial if future aspirations are to be realised. It would require a clear policy framework for commissioning, providing consistency where this is warranted, guidance for local tailoring, and deliberate investment in the people, skills and technological capabilities to implement commissioning practices.

Health NZ should be responsible for developing the policy framework and capability strategy for commissioning, growing in-house capability in commissioning for particular populations or service areas, and working with the Māori Health Authority and other agencies, building on the following recommendations.

**More commissioning should happen locally**

If services are to be organised locally, the balance of commissioning powers should be weighted towards local decision-making. This would mean shifting more responsibility and capability to regional and DHB level, so that models of care could be commissioned according to the needs and priorities of specific populations.

Services commissioned locally should be those where a higher level of responsiveness is needed to local populations, where there is benefit to the system in investing in local service providers, and where local relationships are important for planning and delivering quality services.

Tier 1 maternal and child health services, mental health and addictions, medicines optimisation, and general practice have been identified as services currently funded through nationwide arrangements, but which the Review recommends be commissioned locally.
Health NZ and the Māori Health Authority should work closely together

Local commissioning would be supported by the guidance and expertise of Health NZ, for example, in commissioning for hauora Māori, mental health and addictions, rural populations and disability support services.

This would be particularly important for Māori communities and contracting for kaupapa Māori services. In the past it has too often been assumed that kaupapa Māori services should ‘comply’ with the same contracting and outcome frameworks as other services. The health and disability system needs to build the expertise to commission and contract to suit the community being served. This means Health NZ and the Māori Health Authority would develop models that work for Māori.

Some services would be commissioned nationally

The commissioning policy framework should also guide when to commission services nationally, either through a joint process by health system entities, or by Health NZ on behalf of the system.

In general, the Review considers that nationally commissioned services should be those where:

- consistency, uniformity of service access and delivery is desirable
- economies of scale mean better terms can be secured through a nationwide agreement
- nationalising a service may be appropriate
- joint purchasing with ACC could be indicated.

To that end, the provisions under the Commerce Act 1986 should not be a barrier to joint purchasing between DHBs (or Health NZ) and ACC where this is in the interests of equity and health outcomes. At present, legislation prohibits joint purchasing with the health and disability system in all but a very few circumstances, as set out in the Accident Compensation Act (2001) (eg, emergency services). The Review is aware that ACC is also developing its own commissioning capabilities and, although there are differences in the drivers and responsibilities of ACC and the public health system, there is value in pooling efforts to build talent and skillsets that can work across the health ecosystem.

Procurement and contracting

A diversity of service models, particularly in Tier 1, is important within the health and disability system to respond to different needs and enable innovation through collaborative efforts. There is a continued and growing role for NGOs, kaupapa Māori services, and different business models such as joint ventures. Procurement and contracting practices would therefore be an important element of commissioning.
NGOs are an integral part of the health and disability system

Interim Report – Phase One Submission

‘The team at Mapu Maia have dual roles – they are health promoters and counsellors. Often these roles are not integrated, and this is mainly because of funding models and service specifications.

‘An integrated role allows counsellors to be in the community delivering health promotion messages and engaging and participating in community groups and projects. This interaction allows the building of rapport and trust with the community which in turn leads to the opening of doors for a conversation to happen (a clinical intervention). We know that clinical interventions don’t need to only happen in an office or a counselling room. Allowing counsellors to be immersed in communities, educating and raising awareness increases access to services and decreases stigma.’

The NGO sector is an integral part of the health and disability system, and the wellbeing of many New Zealanders. Health and disability NGOs include a wide range of organisations that provide flexible, responsible and innovative service delivery, and a voice for consumers and whānau, including those who have been underserved by other parts of the system. NGOs deliver services across primary health care, mental health, personal health and disability support, and include kaupapa Māori services and Pacific providers. NGOs are often also providers of social services and can deliver support with a holistic view of an individual or whānau’s aspirations and needs.

The Interim Report described feedback from the NGO sector that current practices in contracting and performance reporting are constraining service providers to be able to fully support the families for which they are contracted to provide services. Addressing these barriers through changes in funding arrangements, together with commissioning and improved contract management practices are key to ensuring the sustainability of the health and disability NGO sector, and delivering on the proposals in this report.

Procurement and contracting practices should enable health outcomes

Changes are needed in contracting if the health and disability system is to shift in the directions being proposed. The Review has heard that contracting practices and related funding arrangements can create undue transactional burden on service providers and difficulties in financial sustainability for NGOs and smaller providers, can favour larger incumbents, and constrain investment in new service approaches. Organisations that fund services sometimes do not have the capability to assess whether providers are culturally safe and able to meet the needs of Māori. Academic research has also shown that Māori Health Providers have shorter contracts, higher compliance costs and are more frequently audited than non-Māori providers.
Services should be enabled to focus on outcomes and have the incentives and capital to invest in innovation. For example, longer term contracts should be used wherever possible (eg, in line with the proposed five-yearly planning cycle) and seed funding should be available to enable measured risk taking in service design by, for example, Māori Health Providers and other NGOs whose access to capital is limited.

At the same time, commissioning teams need to have the tools to work with services, workforces and consumers more collaboratively and over longer periods of time to shape a service landscape that would best deliver equity and improved health outcomes.

Used responsibly and with skill, there is a place for a modern approach to relationship management, contractual innovation and sourcing services that should be encouraged rather than inhibited. Guidance exists for public sector procurement of social services that already allows for some of these practices. However, the experiences of service providers shared with the Review suggests this may not be well understood or applied in practice.

As part of developing a commissioning policy framework for the health and disability system, consideration should be given to public sector rules and guidance for social services procurement (or the interpretation thereof) to ensure these allow for pro-equity and population-focused commissioning practices.

**Standard contract terms should support system goals**

In return for public funds, contracts for services should require providers to behave in ways that embed a population-focused, connected and whānau-centred system. These would include:

- providing data to their DHB and/or Health NZ for the purpose of outcomes and measuring performance
- agreeing to accept location and hours defined through locality plans
- meeting the system’s expectations for employment remuneration and conditions.

Within Tier 1 services, this would also include accepting joint responsibility with other providers in the service network for certain health and wellbeing population outcomes.

The priority for these requirements would be services that are entirely publicly funded in the first instance. However, over time all public funding would become contingent on accepting these conditions. Health NZ would have a key role in managing this transition. The Māori Health Authority would have a key monitoring function to ensure that kaupapa Māori services and Māori Health Providers are not systemically disadvantaged by contracting arrangements.

**Growing commissioning and procurement capability**

Commissioning requires bringing together advanced skills across a range of disciplines and the Review has seen no evidence to suggest that this is widespread in the health and disability system. Advanced practitioners in contemporary procurement and contracting skillsets such as strategic sourcing, category management, and supplier relationship management, would also be important for the system to have the capabilities to provide collaborative and outcomes-focused services.
A deliberate strategy and commitment to investment would be required by the health and disability system to acquire this expertise in the short term, ensure it is accessible equitably (eg, located regionally in the first instance), while also investing in growing these skills across the system.

**Transparent and evidence-based planning**

The world is rapidly changing. Not only are new technologies and medicines being released at an unprecedented pace, but how people interact with government, services and their expectations of these has evolved considerably since the current system and its institutions were established. Investment decisions need to be made with sometimes only partial information available or little precedent, responding to new science, natural disasters, pandemics, disruptive innovation, or the promise of life changing therapies.

Almost all decisions made in the health sector are, to some extent, prioritisation decisions. We live in an environment of limited resources; not only money, but also time, space, and available staff all constrain the ability of both the system to provide and people to access, health care services and health promotion programmes. Consequently, these resources need to be allocated in some fashion, and unless we allocate them completely randomly – and arguably even then – we are engaging in prioritisation.79

Invariably, choices need to be made about what and where new investment and disinvestment should occur, whether it be spending, effort or talent. Types of investment decisions include:

- medicines (eg cancer drugs)
- individual new clinical procedures, including clinical devices (eg clot retrieval, left ventricular assist device)
- clinical guidelines (eg lung cancer treatment)
- systems of medical and surgical service delivery (eg new models for early discharge)
- expansion of scope (eg adding adult dental to funded services)
- individual patient access (eg elective procedure thresholds)
- capital (eg facilities and technology – see the Enablers section).

The challenge for the health and disability system is to make these decisions in a way that is evidence-based and transparent so that the right balance is struck between the variety and level of services that are clinically and financially sustainable, while reflecting the system’s wider values and what is important to New Zealanders.
Making investment choices in the future system

‘The system will need to become more transparent and evidence-based, leveraging international thinking where appropriate, to improve decision-making regarding what and where new investment and disinvestment should occur.’ Interim report

Currently, the health and disability system operates without an overall or common prioritisation framework or forum for national decision-making. Decisions about new investments and services are made every day at multiple levels, from nationwide Budget initiatives, to individual services and therapies. However, without an overarching set of principles or framework, these are made without a shared ‘true north’ that can be readily understood by consumers.

While a return to the Core Services Committee / National Health Committee models of the 1990s and 2000s is not recommended, the Review does consider that greater transparency in the framework for planning and investment decisions is needed so that New Zealanders can understand the rationale for where and how services are being delivered.

A clear framework to provide consistency and transparency

As discussed in the Systems Settings section, the proposed system should have a nationwide planning framework with clear decision-rights so that investment (and disinvestment) decisions are strategic, evidence based, and made with present and future demands in mind. The NZ Health Plan would provide this framework and the system priorities, the ‘true north’ that District Strategic Plans, regional plans, and locality plans would need to be consistent with. See the Tier 1 and Tier 2 chapters, and Enablers section for further details about specific planning requirements.

A requirement of the new system would be to give communities, iwi partners and consumers relevant information about priorities, plans and outcomes achieved, and meaningful opportunities to influence them. This requirement would be for planning at each level from the NZ Health Plan down to locality plans and be a key mechanism to improve transparency of the system for all New Zealanders.

Health Technology Assessment

Health Technology Assessment (HTA) is a specific expertise to assist planning and investment decisions about technologies and interventions. In New Zealand, the capacity and capability for HTA is dispersed in different public, private and academic organisations, rather than concentrated within a single organisation or network as it is in some other countries - notably the United Kingdom’s National Institute of Clinical Excellence (NICE).

While greater capability and capacity for HTA should be developed by Health NZ in the future system, a separate agency is not recommended. The mechanisms for HTA, and for developing guidelines and approaches to assist with decision-making about services and interventions, used by leading institutions internationally are well known and established. Appropriate use of international assessments and guidelines should become the norm in New Zealand, as a complement to domestic capacity and locally specific assessments.
6 Population health / Te hauora taupori

Improving population health must become the driver of all planning within the system. Without successful population health strategies, individual treatment services will not be able to achieve equity or significant improvements in the overall health and wellbeing of New Zealanders.

A proactive approach to promoting and protecting health is required, with an explicit focus on equity - understanding which groups are most impacted, recognising the commercial and socio-economic determinants of health that underpin inequities and designing and implementing comprehensive strategies to eliminate or ameliorate them.

Core health protection competence and capacity within the system needs to be strengthened to ensure the system has sufficient resilience to cope with the increasing frequency of incidents that threaten population health.

This would require a determined and ambitious shift towards prevention and promotion of health and wellbeing with strengthened national capacity and capability.

A population health approach drives all parts of the system

The terms ‘public health’ and ‘population health’ are often used interchangeably. In this report, the term ‘population health’ is used with the understanding that it incorporates the broad definition and meaning of ‘public health’.

Population health takes a proactive approach to promoting and protecting health, keeping individuals and populations as healthy as possible and reducing threats to health.
It recognises that the health of populations is shaped by the social, economic, cultural and environmental contexts in which people live, learn, play and work, and that responses are required across the health and disability system, and other sectors, to promote health and wellbeing and create environments that support health and wellbeing.

Core population health functions that are considered necessary for a high-functioning health system include:

- **health assessment and surveillance**: gathering evidence about health status, determinants of health, how illness is distributed across the population and how to improve it
- **health promotion**: working with a range of sectors (including health) and communities to create physical, social and cultural environments that support health and wellbeing
- **preventive interventions**: population programmes delivered to individuals such as immunisation, well-child checks, cancer screening, and help to quit smoking
- **health protection**: organising to protect communities against population health threats and hazards
- **population health capacity development**: enhancing the system’s capacity and ability to improve population health.

These functions are interconnected and, when combined, can deliver comprehensive programmes to address particular risk factors or health conditions.

Population health approaches draw on a broad range of disciplines and skills. These include epidemiology, nutrition, health promotion, infectious disease control, microbiology, vaccinology, risk assessment, oral health, environmental health, toxicology, public health engineering, public health informatics, economics, health law, policy and emergency management.

As with the core population health functions, these skills are most effective when they are well coordinated and are part of a comprehensive evidence-informed approach.

**The case for investing in population health**

The Interim Report set out a compelling case for investing in prevention and applying population health approaches, particularly for health conditions and associated risk factors that contribute to significant health loss and inequity of outcomes in New Zealand.

Like many health systems around the world, New Zealand’s health system is facing new threats and growing challenges. There will almost certainly be new global and domestic threats to health, such as those arising from climate change, terrorism, geopolitical instability, pandemics and antimicrobial resistance.

The current COVID-19 pandemic has demonstrated our vulnerability to international risks and shown once again that we face an uncertain future.
Demographic changes and the increasing proportion of our population living with chronic conditions will place increasing demands on our health system. Non-communicable diseases are the leading cause of health loss and health inequity in New Zealand, yet many risk factors associated with them (such as obesity, poor diet, harmful alcohol consumption, physical inactivity and tobacco use) are largely preventable. The burden of these challenges often falls most heavily on those who face disadvantage and experience discrimination.

**Current configuration of population health services**

The Interim Report described in some detail the broad range of entities currently involved in delivering core population health functions, both within and outside the health system. An overview of the current configuration of services is set out in Table 6.1 below.

**Table 6.1: Current configuration of core population health functions and entities**

<table>
<thead>
<tr>
<th>Ministry of Health</th>
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<tbody>
<tr>
<td>▶ Ensuring compliance with public health legislation and international obligations.</td>
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<tr>
<td>▶ Collaboration internationally and with central government agencies and other sectors to influence health.</td>
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<tr>
<td>▶ Policy advice, strategy setting, guidelines and standards development.</td>
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<tr>
<td>▶ Leading, planning and responding to emerging risks.</td>
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<tr>
<td>▶ Leadership and commissioning for national programmes such as screening and immunisation.</td>
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<tr>
<td>▶ Commissioning national, regional and local population health services.</td>
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<th>DHBs</th>
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<td>▶ 12 public health units, operating within DHBs but contracted directly by the Ministry, deliver core health protection and some health promotion and population health planning services. PHUs vary in size, scope, number of DHBs they cover and size of population served. Designated officers, such as medical officers of health and health protection officers, carry out regulatory roles on behalf of the Director-General of Health.</td>
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<tr>
<td>▶ Commission additional initiatives and services to prevent illness and promote health for their population.</td>
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<th>Crown entities</th>
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<td>▶ The Health Promotion Agency (HPA) has a national role to lead and support activities that promote health and wellbeing, encourage healthy lifestyles, prevent disease, illness and injury, enable environments that support health and wellbeing, and reduce personal, social and economic harm. It also has specified policy advice and research roles in relation to alcohol. HPA is funded from Vote Health and a levy on alcohol.</td>
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<tr>
<td>▶ The Institute of Environmental Science and Research (ESR) provides surveillance, applied epidemiology and reference laboratory services under contract to the Ministry of Health.</td>
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<tr>
<th>Population health service providers</th>
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<tbody>
<tr>
<td>▶ A broad range of population health services are delivered by a range of providers, including non-governmental organisations, schools and universities.</td>
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<th>Primary Health Organisations</th>
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<tr>
<td>▶ Primary Health Organisations are funded through the flexible funding pool to deliver some health promotion services to their populations.</td>
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<th>Primary health care practitioners</th>
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<tr>
<td>▶ As a component of their role, primary health care practitioners deliver some preventive population health services, such as Well Child / Tamariki Ora checks, immunisation and screening.</td>
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</table>
Significant population health functions are also delivered and funded by agencies and entities outside the health sector.

- **Local government:** Under the Health Act 1956 local government has a duty to ‘improve, promote and protect public health within its district’. The Local Government (Community and Wellbeing) Amendment 2019 reinstated local government’s role to promote the social, economic, environmental, and cultural wellbeing of their communities. Key health-related activities include emergency planning and response, waste management, drinking-water, housing, recreation, libraries, transport, environmental health, food safety, alcohol and gambling policies, resilience and community capacity building.

- **Other government agencies:** Several central government agencies and Crown entities hold core population health functions such as the Ministry of Primary Industries (food safety and biosecurity), ACC (injury prevention), WorkSafe (workplace health and safety), Ministry of Justice (alcohol policy, crime prevention), Environmental Protection Authority (environmental safety), Ministry of Housing and Urban Development (quality and availability of housing stock, social housing), Kāinga Ora – Home and Communities (housing), National Emergency Management Agency (emergency management), and the Ministry of Transport and New Zealand Transport Agency (safe roads, active transport).

- **Community organisations and businesses:** These have an important influence on the health of communities and populations. This may include faith-based organisations, schools, marae, cultural groups, arts, sporting and recreational clubs. Some, such as the fitness, food, and alcohol sectors, can either have helpful or harmful influences on health.

### Embedding the change

In spite of the compelling case for a population health approach, the current investment in population health remains low. In 2018/19, the Public Health Services Appropriation within Vote Health was $433 million. In addition to this, DHBs funded a range of population health services.

A recent analysis by a regional collaboration of DHBs estimated that the combined spend by the Ministry of Health and DHBs for population health services in their region was approximately 2% of total DHB expenditure. While there are some caveats on this estimate, it was clear that population health expenditure was a small proportion of overall spend, and that this result is probably replicated around the country.

The Review heard of multiple barriers to the shift to a more population health-focused system. These included:

- focus on measuring the success of short-term impacts or throughput (such as elective surgery targets) rather long-term population health gains
- lack of an independent voice, and filtering of information and advice by decision-makers
- pressure of public demand to access acute services
- siloed funding arrangements
- lack of long-term planning and forecasting
- lack of critical expertise in some areas
- complexities of working in partnership with different sectors.
New Zealand, like other jurisdictions, has struggled to shift the focus from illness and treatment, to improving health outcomes by prevention of disease and promotion of healthy behaviours. The Review believes that the system should focus much more on the population, not just the individual who presents for treatment.

**Population health informs planning**

Population-level information drawn from the systematic collection, analysis and interpretation of health data (and related factors such as risk factors and hazards) must inform the entire system: policy, planning, prioritisation, implementation and evaluation.

**The expectation for the future is that:**

- the system would be well informed by population health data and have the capability to interpret this information, respond decisively to emerging trends and health threats, recognise where there have been successes, and understand where to direct further action
- population data would be readily available for DHB and community health outcomes and needs assessment processes which, in turn, would drive DHB district and regional strategic plans. DHBs would be accountable for reporting progress against these plans and implementing actions to ensure that there is a greater focus on prevention and population health outcomes.

This would be supported by:

- reinstating long-term health outcomes and services planning
- regional and local plans that are shaped through engagement with communities, clinical experts and agencies from other sectors.

**Funding and contracting arrangements**

DHBs have a statutory role under the New Zealand Health and Disability Act 2000 to provide services to improve and protect the health of individuals and communities. However, the Ministry of Health has retained responsibility for planning and funding the vast majority of population health services at national, regional and local levels.

Some have argued that the decision not to devolve funding to DHBs was important to prevent funds from being redirected to personal health ‘treatment’ services, particularly where DHBs may face pressures to meet short-term targets or address deficits. In practice it has:

- slowed population health approaches being fully integrated into DHB planning and service delivery
- added significant administrative costs and contributed to unwarranted variation in service delivery
- limited investment in population health as the only increase to the Public Health Services Appropriation since 2010 has been for specific new services or initiatives.
If population health is to drive the planning and delivery of local services, then funding should be part of DHB revenue. Thus, the Review recommends that funding for district level population health services is devolved to DHBs. It would be the role of Health NZ to monitor DHBs to ensure they invest strongly in population health approaches and services. Health NZ would also have an explicit role to support DHBs to make the shift towards a greater focus on prevention and population health.

It would work closely with the Māori Health Authority, drawing on its population health expertise in the design, monitoring and evaluation of the impacts that population health approaches are having for Māori.

**A focus on equity and the determinants of health**

Inherent in a population health approach is an explicit focus on equity. Working to eliminate systematic inequities in health outcomes requires:

- looking at which groups are most impacted
- understanding how and where inequities are evident
- recognising the upstream factors (the social, economic and commercial determinants that underpin health inequity)
- implementing comprehensive strategies to eliminate or ameliorate upstream factors
- an intelligent, equity driven and data informed health and disability system.

A strong body of evidence shows that tackling the determinants of health and wellbeing improves equity across a variety of societal outcomes. Factors such as cultural identity and language are protective for health and wellbeing. However, there are also negative impacts of racism and colonisation that need to be addressed.

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**Figure 6.1: Factors that influence our health and wellbeing**

Source: Institute for Clinical Systems Improvement 2014.
Around 80% of a person’s health status is determined by factors outside health care services.

These are the conditions in which a person is born, grows, lives, learns, plays, works and ages. These factors are even more important in relation to health equity, where evidence suggests the impacts arising from outside the health sector may be even higher. With the right conditions, people can lead long, healthy and productive lives and potentially reduce demands on the public health system.

The determinants of health are complex, interactive and cumulative. Seeking opportunities for illness prevention and health promotion requires an understanding of how the determinants of health operate and a recognition that many factors impact health outcomes.

**Working in partnership**

As part of the mandate to prevent illness and promote health, the health and disability system has a responsibility to work collaboratively and form partnerships to ensure health concerns are firmly considered alongside economic, social and environmental considerations in key policy and planning decisions.

**Healthy Auckland Together**

Healthy Auckland Together (HAT) is a coalition of partners working together to improve the social and physical environment so that people living in Auckland can eat well, live physically active lives and maintain a healthy body weight. Led by the Auckland Regional Public Health Service, HAT is made up of 26 organisations representing the health, local government and transport sectors, as well as iwi, academia, NGOs and consumer interest groups.

By combining their resources, knowledge, skills and networks HAT works strategically across all key environments – transport, urban planning, food, education and business.

HAT uses its collective voice to advocate and speak out to influence policy and decisions related to food and physical activity related environments at national, regional and local levels. It raises the profile of key issues with decision-makers and the community. HAT also produces annual monitoring reports to track progress and give the public, policy makers and its stakeholders clear information on Auckland’s environment and health outcomes.

Effective action to address the drivers of ill health and to enhance opportunities to promote wellbeing requires multiple interventions at national, regional and local levels. Health promotion offers pathways and tools to connect national policies to local implementation. While there are some excellent examples of successful cross-sectoral approaches throughout New Zealand, there is a need to scale up and expand these if there is to be sustained improvements in population health.

Stronger population health leadership is needed at all levels. Currently, the Ministry has the lead role in working alongside other government agencies to influence policy, funding and prioritisation decisions that impact health and wellbeing. Some issues may be time limited, while others require sustained partnerships and commitment. It may also involve supporting other sectors to understand how their policies or activities impact health outcomes and inequities.
Health in all policies

Health in All Policies (HiAP) is an approach that has been widely promoted by the World Health Organization to ensure that health and wellbeing outcomes are systematically considered in all policy and planning decisions.\textsuperscript{86} 87 International experience has found that without an explicit process, such as health impact assessments (HIA), the availability of technical information on the expected health and wellbeing impacts is unlikely to be sufficient to influence decision-making to any significant degree.

Many countries have embraced HiAP. In New Zealand, HIAs have been carried out on, for example, air quality, electricity supply, urban design and transport planning projects. Some DHB public health units have been particularly active in promoting a HiAP approach, such as Canterbury and Hawke’s Bay, with positive results.

Scaling up health promotion efforts on non-communicable diseases

In 2017, non-communicable diseases were the leading category of health loss, making up over 82% of total disability-adjusted life years (DALYs) in New Zealand. More than a third (38.6 %) of health loss is potentially avoidable by reducing modifiable risk factors. Although tobacco use has been declining for many years, it is still the leading risk factor, contributing to around a 10th (9.7 %) of New Zealanders’ health loss.\textsuperscript{38}

Non-communicable diseases (NCDs) such as cardiovascular diseases, cancers, chronic respiratory diseases and diabetes are the major cause of death, illness and disability, globally and here in New Zealand. Much of this health loss and health inequity is related to common risk factors, such as tobacco use, unhealthy diet, physical inactivity, obesity and harmful use of alcohol.

Looking at current trends, for example increasing rates of obesity, there is an urgent need to accelerate efforts to address these risk factors, and promote interventions to prevent and control them.

Comprehensive and sustained action is required across multiple levels and multiple sectors, including health, transport, local government, housing, education and the natural environment, as well as commercial sectors such as the food and beverage industries. Alongside policy and regulatory levers there is a need to engage and empower local communities to support and promote change.

The system would need to take a greater leadership role in driving these efforts, from setting national policy and strategy through to supporting local community action. This would require population health approaches to be embedded at every level of the system, both inside the system and working in partnership with those outside of it.

This approach would have an explicit focus on addressing the determinants of health – creating more supportive physical and social environments that promote health and wellbeing and make the healthy choice the easy choice. For example, promoting water-only policies in schools, creating safe cycle ways to promote active transport, and community gardens and markets to increase access to healthy food.

Health promotion involves a broad set of actions to foster good health and wellbeing. It is much more than just providing information to people to encourage them to adopt healthy lifestyles.
The 1986 Ottawa Charter for Health Promotion is a global health promotion framework. The five health promotion strategies set out in the Ottawa Charter that are essential to success are:

- build healthy policy
- create supportive environments
- strengthen community action
- develop personal skills
- reorient health services. 89

New Zealand’s approach to health promotion builds on the Ottawa Charter with a strong focus on equity, community development, the incorporation of Māori aspirations and world views te Tiriti o Waitangi. 90 Te Pae Mahutonga91 and Kia Uruuru Mai a Hauora92 are two frameworks for conceptualising Māori health promotion that use Māori world views, beliefs, values, preferences and needs as a starting point and that acknowledge identity and cultural integrity as fundamental components to good health as Māori.

If applied comprehensively and in a sustained way health promotion strategies can change lives, have an impact on the broader determinants of health and make important contributions to the wellbeing of individuals and society. 93 However, sometimes the push for simple solutions can undermine the broad vision of health promotion and focus on changing the behaviours of individuals at risk of disease and illness, rather than looking to address the upstream factors that underpin risk behaviours across communities or populations. Interventions with a downstream focus are more likely to increase inequity. 94

Some have suggested that the Health Promotion Agency (HPA), whilst having a broad brief, has not fully utilised the range of health promotion activities, but instead, has a predominant focus on social marketing. The Review believes that all aspects of health promotion must be strongly led and driven by the agencies that are at the centre of the health system.

**Addressing commercial determinants of health**

Alcohol, tobacco, and unhealthy foods contribute to more than a third of poor health and premature death and disability, but continue to be marketed and made widely available by those with commercial interests, to the detriment of New Zealanders’ health.

Faced with growing challenges from NCDs, the Review is clear that there is a need for much more concerted action at national, regional and local levels to address the commercial determinants of health.

The commercial determinants of health have been defined as the “strategies and approaches used by the private sector to promote products and choices that are detrimental to health.” 95
Approaches to health promotion need to be developed in the context of the comprehensive approach set out in the Ottawa Charter, with strategies for coordinated action across all levels: policy, environments, community, individuals and the health sector. This would require:

- a clear direction to be set by the Ministry, which must utilise all its available levers to influence policy change across numerous sectors
- Health NZ to provide leadership and coordination of evidence-based health promotion activities across DHBs
- The Māori Health Authority to be the source of Māori population health intelligence for the health and disability system
- DHBs to drive evidence-based, context appropriate local approaches at district levels that complement regional and national actions
- active collaboration with research institutions
- engagement with communities and the private sector.

Alcohol is one of the main risk factors for poor health globally and in New Zealand. Yet despite compelling evidence of its serious social and health effects, population health measures to reduce harmful use of alcohol are often judged to be in conflict with other goals like free markets and consumer choice.

New Zealand’s history of tobacco control is a useful illustration of what a comprehensive multi-level health promotion approach can look like. While there is still much more to be done to achieve the 2025 Smokefree vision, experience has shown how a broad policy, regulatory, pricing and community action approach can have significant impacts.

It has also shown us that one approach does not work for all populations - there is still much to be done to improve the health outcomes for Māori that are attributable to smoking. In the future, it is envisaged that the Māori Health Authority would play a key role in prioritising, designing, piloting and evaluating screening approaches for Māori and would partner with Health NZ to ensure services were commissioned in a way that delivers improved outcomes for Māori.

**Population health within Tier 1 networks**

The Review recognises that health promotion and the prevention of illness needs to become a fundamental part of how Tier 1 and locality networks operate. Population level data should be comprehensive, equity driven and outcomes focused to understand community needs and to monitor progress. This includes an explicit focus on improving equity and working with people who are most adversely impacted, with the understanding that doing so would improve overall population health. It would also require genuine community partnerships, working alongside local communities to understand their unique needs and to find appropriate context relevant solutions.

Health NZ would have a major role in leading and supporting this shift in the health and disability system. There would need to be determined effort to build a workforce with the skills to support this and mechanisms in place to share evidence of what works and good practice exemplars.
**Screening programmes make an important contribution to improving population health**

There are currently five national population-based screening programmes in New Zealand and one quality improvement programme.

Three cancer screening programmes:
- BreastScreen Aotearoa
- National Cervical Screening Programme
- National Bowel Screening Programme.

Two newborn screening programmes:
- National Metabolic Screening Programme
- Universal Newborn Hearing Screening and Early Intervention Programme.

Screening for Down syndrome and Other Conditions (DSOC) is provided as a quality improvement programme.

The National Screening Unit, within the Ministry of Health, is responsible for the development, quality, monitoring and oversight of all the screening programmes in New Zealand. Specialist providers are contracted by the National Screening Unit to screen for specific conditions within clearly defined population groups. Providers include DHBs, private radiology providers, public and private laboratories, and community-based providers.

Looking to the future there is a need for screening services to be better integrated into the services that are provided via Tier 1 locality networks.

Technological advances will present options for new and existing population screening programmes. Genomic testing, for example, may provide greater insight into identifying high-risk groups for screening in the future. New understanding of the aetiology of some health problems could require existing screening programmes to be modified.

The National Cervical Screening Programme illustrates these developments. Over time it is estimated that 90% of cervical cancers could be prevented by human papilloma virus (HPV) immunisation alone. Additionally, with the introduction of primary HPV testing (to replace cytology tests), including self-sampling, there is potential to eliminate cervical cancer altogether. New Zealand has lagged behind other countries in introducing primary HPV testing, partly due to the inadequacies of the National Screening Unit’s current IT system.

There remains, however, significant and unacceptable inequity within the coverage of the current screening programmes, particularly for Māori, Pacific and Asian populations and those living in high deprivation neighbourhoods. There is also significant variation in coverage across DHBs for some programmes. The cost of cervical screening is an obvious barrier. Cost is an anomaly in the current suite of cancer screening programmes, which are otherwise free. Other barriers are access, feasibility and acceptability.

Deliberately ensuring equity is at the forefront of all screening programmes is essential if the health and disability system is to improve overall population health outcomes.
He Tapu Te Whare Tangata (the sacred house of humankind): Removing barriers to cervical screening for Māori women

Māori women are more than twice as likely as NZ European women to be diagnosed with, and three times more likely to die from, cervical cancer. This disease is the second leading cause of cancer death for Māori women aged 25–44 years.

- Thirty-four percent of Māori women do not attend regular screening compared to 21% of New Zealand European women. The cost of attending a clinic and perceived invasiveness of a pelvic examination are barriers to screening. These barriers can be compounded for Māori women by services that lack cultural safety.
- A kaupapa Māori research project led by a team at Te Tātai Hauora o Hine, the Centre for Women’s Health Research at Victoria University of Wellington, has shown that with culturally competent HPV self-testing many Māori women who have previously never been, or have been under-screened would be willing to use the self-administered HPV test.

Protecting the population

- A continued focus on the basics, such as clean water, immunisation, and the provision of robust emergency preparedness capacity able to react immediately at the local level, will become more, not less, important as issues such as climate change and antimicrobial resistance, have an increasing impact. | Interim Report

Increasing pressure on health protection services

Health protection is one of the core population health functions. It involves ensuring the safety of food, water, air and the general environment, preventing the transmission of communicable diseases, and managing outbreaks and other incidents which threaten population health. Population health specialists lead the delivery of these functions and fulfil statutory obligations under a number of Acts. Many of these roles are undertaken by designated officers, such as medical officers of health, health protection officers, drinking water assessors, and hazardous substance and new organism (HSNO) enforcement officers.

New Zealand will almost certainly be increasingly impacted by new global and domestic threats to health, which will place immense pressure on the health system. The COVID-19 pandemic is testing health system emergency preparedness across the globe, including our own. It has highlighted the importance of having a critical mass of population health expertise at the centre of the response with strong networks to draw on at regional and district levels and investing in preparedness planning and simulation exercises.

This is not an isolated event. Other recent events that have put the health and disability system under pressure and demonstrated vulnerabilities in the system’s capacity to respond include:

- the 2016 Havelock North campylobacteriosis outbreak, which resulted in approximately 5,500 people becoming seriously ill, several deaths and was estimated to cost the country $21 million
- the 2019/20 measles outbreak affecting more than 2,000 New Zealanders and resulting in serious outbreaks across the Pacific, particularly in Samoa.
Emergency preparedness assessment
As a member of the international community, New Zealand has a shared responsibility to prevent, detect and respond to disease outbreaks and other health security threats. These obligations are explicitly set out in the International Health Regulations and include developing and maintaining the capacities to detect, investigate, manage and report all potentially serious population health events and emergencies. These capacities must be in place locally/regionally, nationally and at borders, such as ports and international airports.

Assessing New Zealand’s health security capability

Two recent assessments of New Zealand’s health security capacities identified gaps and highlighted some vulnerabilities.99 100

- The WHO Joint External Evaluation (JEE) identified that New Zealand needed to further work to address antimicrobial resistance, enhancing surveillance and risk assessment, addressing critical workforce resource needs, and building risk communication capacity. The JEE also noted the importance of maintaining strong preparedness systems to deal with prolonged, multiple concurrent and cascading hazards. This is particularly important for long duration events such as a pandemic, when it is likely that other events will occur, such as an earthquake, infectious disease outbreak or extreme weather event, which would place immense demands on our population health infrastructure.101

- The Global Health Security Index, which assessed the readiness of 195 countries (including New Zealand) to prevent and respond to a significant infectious disease outbreak concluded that collectively, international preparedness is weak and no country is fully prepared for epidemics or pandemics.102

These assessments highlighted the importance of building and maintaining a critical mass of population health expertise. Specifically, core population health expertise (such as epidemiology, public health medicine and emergency response), to lead, inform and sustain responses to health threats and incidents, particularly at a national level.

Building resilience in the system is essential to ensure that the significant human resources required to manage a crisis response for an extended period of time does not adversely impact other important work.

Regional and local capacity and capability should also be strengthened with mechanisms in place to ensure that the system works effectively to quickly deploy additional resources where needed.
Reducing fragmentation
Concerns have also been raised that some population health functions, particularly health protection functions, have become increasingly fragmented across multiple agencies resulting in confused roles, weakened accountabilities and a depletion of critical mass and population health expertise at the centre.

Leadership for food safety, for example, now sits with the Ministry of Primary Industries, and over the next year, responsibility for managing drinking-water safety and regulation is proposed to move from the Ministry and DHBs to the new standalone water services regulator – Taumata Arowai. 103

The Review is not suggesting that these decisions are revisited, but does caution against further fragmentation of core population health functions. Where population health functions are delivered outside the health and disability system, there should be mechanisms in place to ensure decisions that impact on human health are informed by population health evidence and expertise.

Robust surveillance systems to inform action
A strong infrastructure for health protection requires comprehensive population health surveillance systems in place for both communicable and non-communicable diseases. This involves the ongoing systematic collection, analysis, interpretation and dissemination of data to assess health trends, threats, risk factors and influences.

Currently, New Zealand’s public health surveillance services are distributed across several providers under contract to the Ministry of Health, including the Institute for Environmental Science and Research Ltd (ESR), Massey University and the University of Otago and private laboratories. There are also numerous other information and surveillance systems that inform the health system. 104

Now and into the future it would be increasingly important to ensure our surveillance systems are sufficiently robust and well-integrated and that there is capability in the system to interpret and respond to this information in a timely way.

Strengthening the system
Population health is an integral part of the system
For population health to drive the system, all key population health functions need to be embedded in the system. There are very real concerns about building critical mass to ensure New Zealand is well positioned to both protect the population and deliver improved and equitable health outcomes.

The Review has considered these issues closely and is convinced that achieving the transformational shift needed to address the population health challenges of the future cannot be achieved by carving population health off to the side.

Rather, a population health approach needs to be fully integrated into the system. This requires strengthened national capacity and capability – Ministry, Office of the Director of Public Health, Health NZ, Māori Health Authority - and competent population health leadership at regional and local decision-making levels.
The need for all aspects of health promotion to be strongly led and driven by the agencies that are at the centre of the system’s architecture has led the Review to the conclusion that the functions undertaken by the Health Promotion Agency should be established within the Ministry, Health NZ and the Māori Health Authority. This would consolidate population health capability at the centre and provide more coherence to the system. It would enable stronger leadership of the health promotion activities and increase responsiveness to emerging population health issues. The independence currently afforded to the Health Promotion Agency, in relation to the provision of advice on the sale, supply, consumption, misuse and harm of alcohol, would need to be protected in future system arrangements.

**Independent, authoritative advice**

Sustaining a shift to a population approach would require determination and ambition and the public to better understand the significant issues. The Review has therefore considered the need to build additional elements into the system architecture to provide:

- Public facing, independent, authoritative thought leadership on population health that is unconstrained by commercial interests, employment provisions or political constraints
- Scrutiny on government policy and action to hold the system to account to maintain a focus on population health

Within the system there needs to be the ability to provide independent advice to the Minister of Health. The statutory role of Director of Public Health should have the authority and independence to do this when necessary, without prior discussion with the Director-General of Health as is currently required. Similarly, the Medical Officers of Health in DHBs should have the authority to provide advice directly to their Board and to the Director of Public Health on any matter relating to population health that is considered urgent or significant.

In addition, the requirement to have a Public Health Advisory Committee should be reinstated to provide both independent advice to the Minister and a public voice on important population health issues.

The existence of the Public Health Advisory Committee should not however reduce the need for a strong network of population health expertise. Such a network should include the Public Health Clinical Network, academics and non-government organisations that provide important public facing thought leadership, expert advice and advocacy roles, which are fundamental for a healthy democracy and a smart system. Using their independence and credibility would help ensure debate on key population health issues is informed by evidence and can build public support that in turn can influence decision makers for durable effective action. It is also important that, in our rapidly changing information and social media environment, credible, authoritative information can breakthrough misinformation and myth.

**Roles and responsibilities, resourced to deliver population health functions**

To achieve a strengthened health and disability system where population health is embedded throughout the system, a coherent map of roles, functions and accountabilities is needed.

Further work would be required to set out expectations for roles as part of the transition process, but a starting proposal is set out below regarding core national, regional and local population health functions. This builds on the work done by the Public Health Clinical Network over the past few years and which is the subject of ongoing work being led by the Ministry.
National functions

Proposed national functions are set out in Table 6.2 below.

Table 6.2: Proposed national functions

<table>
<thead>
<tr>
<th>Level</th>
<th>Function or service</th>
</tr>
</thead>
<tbody>
<tr>
<td>National</td>
<td>These are functions that, for reasons of authority, leadership, statutory obligation, consistency, effectiveness or efficiency, should be delivered once and not duplicated.</td>
</tr>
<tr>
<td>Ministry</td>
<td>The Ministry would have a strengthened role in setting the overall strategy and direction for the publicly funded health and disability system. It would maintain its key role working closely with other government agencies to ensure issues around population health receive sufficient attention and have influence on policies and actions. There should be strengthened capacity and mechanisms to enable the Director of Public Health to have a more effective line of sight with local and other statutory office holders. For example, ensuring there is a clear avenue for local statutory officers such as medical officers of health to report directly to the Director of Public Health without permission from their DHB board. The Ministry would also need to reach critical mass and have effective systems in place to draw on to lead effective emergency responses and population health thinking.</td>
</tr>
<tr>
<td>Māori Health Authority</td>
<td>The Māori Health Authority would also need population health expertise to focus on improving the health and wellbeing of Māori. It would be the source of Māori population health intelligence for the health and disability system and would play a key role in ensuring population prevention programmes have a strong equity focus. The Māori Health Authority would also: ▶ monitor and report to the Minister on the performance of the health and disability system with respect to Māori health outcomes and equity. ▶ describe and report on Māori health and disability data and provide advice on Māori population health priorities, informed by population data. ▶ ensure and evaluate the use of kaupapa Māori methodologies and whānau rangatiratanga (whānau participation and voice) in Māori health needs assessment.</td>
</tr>
<tr>
<td>Health NZ</td>
<td>Health NZ would ensure the delivery arm of the sector prioritises the achievement of population objectives. To do this Health NZ would need to develop a core population health capability to support DHBs to integrate population health throughout their services. It would have a key role in drawing together best evidence to guide prioritisation and use systems to share examples of good practice and facilitate best practice. It would commission key national population health services, such as health promotion campaigns and lead the delivery of national programmes, such as screening. Regional and district population health services should principally be funded through Health NZ and provided by DHBs local NGOs, Māori and Pacific providers and other providers. Health NZ would monitor DHBs to ensure that district plans and expenditure sufficiently prioritise population health and prevention approaches.</td>
</tr>
</tbody>
</table>
Regional and local functions

Greater regional collaboration and networking will be required to ensure that core population health functions are delivered consistently across DHBs. There is an expectation that there would be more consistency around the country with regard to which services are managed regionally and which by individual DHBs.

Table 6.3: Proposed regional and local functions

<table>
<thead>
<tr>
<th>Level</th>
<th>Function or service</th>
</tr>
</thead>
<tbody>
<tr>
<td>DHBs</td>
<td>▶ DHBs’ statutory functions in protecting and promoting the health of their populations would remain largely unchanged. A stronger line of sight is proposed between medical officers of health to the Director of Public Health to enable more coherent responses to emerging issues.</td>
</tr>
<tr>
<td></td>
<td>▶ DHBs will have the funding and accountability to deliver services to protect and promote the health of their populations. District and regional DHB strategic plans will set out in a more integrated manner how health outcomes and equity will be improved, including an increased focus on prevention, maintenance of wellbeing, and influencing the broader determinants of health.</td>
</tr>
<tr>
<td></td>
<td>▶ The functions currently undertaken by public health units will continue to be the responsibility of DHBs.</td>
</tr>
</tbody>
</table>

Decisions relating to which services are best delivered regionally or locally should build on the work done by the Public Health Clinical Network and the Ministry in regard to this, using the principles summarised below.

**Principles**

- **Regional**: These are functions that for reasons of consistency, effectiveness or efficiency should be delivered across several DHB districts, through either a lead provider or through a regional network of DHBs. This should include functions that are more specialised, or for issues where particular skills or expertise are scarce.
- **Local**: These are functions that for reasons of responsiveness, relationships and flexibility should be delivered locally. It recognises that most population health programmes are provided in partnership with a range of other health and non-health providers. Effective programmes depend on strong local relationships and a deep understanding of local communities and their needs. It also recognises that many functions require a local presence, such as managing communicable disease outbreaks, contact tracing, and investigating and managing environmental hazards.

There is an expectation of greater regional collaboration and networking to ensure that these duties are effectively discharged. DHBs would be expected to develop a plan setting out what services they intend to deliver regionally and locally for approval.
Building the future

The Review proposes the following changes

Population health drives the system

- Population health would drive all strategies and outcome measures and targets are predominantly population rather than treatment based.
- The Ministry should have a strengthened leadership role and capacity for population health.
- The Ministry should increase work with other government agencies on policy that impacts the social and commercial determinants of health.
- The Māori Health Authority should have population health expertise to focus on improving the health and wellbeing of Māori. It would be the key source of Māori population health intelligence for the system. The Māori Health Authority should be proactive in reporting on Māori health and disability issues and providing advice on Māori population health priorities.
- Health NZ should build a strong population health intelligence function to support population health being embedded into service planning, delivery and performance.
- The functions currently performed by the Health Promotion Agency should be transferred to the Ministry, Health NZ and the Māori Health Authority.
- DHBs should provide greater focus on population health through allocating resources, strategic and locality planning, service delivery and population health management functions.
- The funding for population health would be devolved to DHBs rather than being managed through a central appropriation and separate contracts.

The system is prepared and resilient

- Core health protection competence and capacity will need to be strengthened as will connections between the Ministry and other agencies with responsibilities for public health functions.
- The system’s emergency preparedness needs to be better connected, use data and be capable of rapid deployment. The system needs to have sufficient resilience to cope with the increasing frequency of emergencies and outbreaks.

There is an authoritative voice on population health

- The Director of Public Health and medical officers of health should have the authority and independence to advise the Minister and DHB boards directly about urgent or significant population health matters.
- A Public Health Advisory Committee should be mandatory. It should provide independent advice to the Minister and be a public voice on important population health issues.
7 Tier 1 / Taumata 1

To make a difference, particularly for individuals and communities who are currently missing out, Tier 1 needs to become more useful to consumers and their whānau, simple to access and easy to navigate. Services need to be commissioned in a way that enables them to be designed for the wellbeing of the people they serve. More services should be planned locally and be available in places and at times of the day that reflect the needs of local communities.

Services also need to be available on a fair basis, with the system taking a greater hand in ensuring that resources are spent in the communities and on the people with the greatest needs. This is not about making more services free for all, but a targeted expansion in public funding of particular services, and improving how services reach out to consumers, to each other, and to the wider social system.

Introduction

For most New Zealanders, Tier 1 is the entry point into the health and disability system. Regardless of income, location, ethnicity, gender, or age, all New Zealanders interact with Tier 1 services at some point in their lives.

The importance of Tier 1 for reducing the burden of disease, improving equity and health outcomes for Māori and other groups has been espoused for over 20 years. Yet little progress has been made at a system level in strengthening the role that these services play. In many instances, service delivery arrangements have not considered the burden of chronic disease, comorbidities and mental health issues that now exist in communities. Culturally safe services are not yet the norm, disability is treated as an exception and technologies have not kept pace with how New Zealanders expect to access services or health information for themselves.
Tier 1 encompasses a broad range of services and other activities that take place in homes and communities, in marae and in schools, delivering most of the health services that most people need, most of the time. Tier 1 includes, but is not limited to self-care, mental health services, general practice, maternity services, Well Child / Tamariki Ora, outreach services, oral health, community pharmacy services, health coaching, medicines optimisation, district nursing, aged residential care, hauora Māori services, community paramedic services, school based services, home-based care and support, rehabilitation and palliative care. It also includes laboratory and radiology services and other allied health care that takes place outside of hospital, such as podiatry, physiotherapy and dietetics. Most kaupapa Māori services are in Tier 1.

**Tier 1 is important for Māori**

Tier 1 has particular significance for Māori. While health strategies of the last two decades, particularly the Primary Health Care Strategy,\(^\text{108}\) intended to improve equity and Māori health and wellbeing, it is clear that significant inequities remain.

In its recent kaupapa inquiry (Wai 2575), the Waitangi Tribunal found that although the Primary Health Care Strategy provided a strong foundation towards pursuing equity in health outcomes for Māori, it had not been adequately implemented to achieve this goal.\(^\text{109}\) While it is not the Review’s responsibility to respond to the Tribunal’s Hauora report,\(^\text{110}\) its findings were valuable for our analysis.

The Review considers that the major improvements in Māori health outcomes will come from better primary and community services that are culturally safe and accessible for Māori communities. This would require a much greater focus on understanding the health needs of Māori whānau, addressing these needs in a more connected way, and ensuring an expansion of outreach and home-based services in particular.

Many of the changes to the health and disability system recommended in this chapter seek to address issues that were also raised in the Waitangi Tribunal’s *Hauora* report, such as:

- the need to tackle the wider social determinants of health
- investing in kaupapa Māori services to provide cultural options and choice for Māori whānau
- ensuring funding arrangements recognise higher-needs populations are often being served by Māori Health Providers.

The Hauora Māori and Settings sections of this report give more detail on kaupapa Māori services, equity, Māori Health Providers, and the role of the Māori Health Authority in supporting and monitoring the changes to the system.
Refocusing the system on people

The health and disability system is not the main factor in determining health outcomes. If New Zealand does not significantly reduce intergenerational poverty and act on the social determinants of health, little that happens in the health and disability system would have a lasting impact.

Improving the health and wellbeing of the population would not come from the efforts of any single organisation nor should it be driven primarily from within traditional health services. The health and disability system and its institutions would need to partner across government and with other sectors to address inequity and improve outcomes, particularly for those for whom the current system is not working – Māori, Pacific peoples, disabled people, people living in rural communities or with socioeconomic disadvantage and other vulnerable groups.

Figure 7.1: Delivery partners
**Population health in the driver’s seat**

However, there is also much that the health and disability system can do to give all New Zealanders the opportunities to start and live life in the best possible health.

For many years, the health sector has talked about the need for a population health approach. A population health approach considers the interrelated factors and interrelated conditions that influence health over the life course, identifies systemic variations, and applies this knowledge to improve the health and wellbeing of the population. In terms of services, a population health approach emphasises prevention, the multiple determinants of health, health equity, intersectoral partnerships, and understanding needs and solutions through community outreach.

It is now almost 20 years since the Primary Health Care Strategy was launched, and there have been many developments that can assist a population health approach to be integrated into service design, eg behavioural insights, changing consumer expectations and significant advances in access and use of data and digital technology.

The Review saw examples of a population health approach applied successfully in combination with place-based strategies that organise services around the needs of defined communities.

Organising services around smaller populations in localities (see definition below) makes it easier to recognise what really matters to people, to build relationships across professions and organisations, and work with other sectors to address the wider determinants of health.

The Review has concluded that there is merit in applying a locality model to Tier 1 services in New Zealand.

**Services planned by localities and needs**

The term locality has been adopted to mean a geographically defined area with a population of between 20,000 and 100,000 people, with footprints that make sense for the community being served. Localities could be aligned to council boundaries, iwi, or natural borders. A district health board (DHB) region could include more than one locality, but localities would not generally span multiple DHBs.

**Rohe and localities**

Within a DHB or region, an iwi rohe may be a defined locality. Responsibility for locality planning and monitoring outcomes could therefore be the shared responsibility of the DHB and the Rūnanga.

**District health boards responsible for Tier 1 services**

The Review considered ways that a locality approach could be achieved in New Zealand and concluded that governance would sit most appropriately with DHBs, as they have statutory responsibility for the health and wellbeing of their populations. Although still called district health boards, they would be expected to look and behave very differently to how they do now.
For each locality, DHBs would be responsible for ensuring that the mix of Tier 1 services reflects the characteristics of the community, are culturally safe, and improve access for consumers and whānau. Each locality would have a mix of services and business models, with NGOs and Māori providers playing an integral role. A core group of services, strongly focused on prevention, wellbeing and outreach, would be common across all localities in New Zealand, with a varied delivery model to respond to differences in local needs. Other services in the locality would be determined as part of planning, and may be specific to the health and wellbeing needs of its population.

Having reviewed the lessons of previous health sector reforms, it is clear that for this approach to be successful, these next generation DHBs should not just have accountability, but the authority, funding, purchasing and contracting powers to bring a locality approach to life.

**Locality plans and funding**

As described in the System Settings section, DHBs would be required to develop five-year strategic plans for their regions, approved by Health NZ and the Minister of Health, and supported by intelligence and analytics from Health NZ and the Māori Health Authority. Each locality would have an indicative budget based on age, ethnicity and deprivation of its population. This would be transparent to the public (see funding in this chapter).

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**A locality approach to services in the Ngāti Porou East Coast**

Ngāti Porou is a dynamic, future focused iwi with a proud history of mana motuhake. With around 71,000 people across the country, it is Aotearoa’s second largest iwi, of which 11,000 people live in the Ngāti Porou rohe that includes 48 marae and 58 hapū.

Within the rohe, whānau living in Ngāti Porou East Coast (from Tolaga Bay northwards to East Cape) face the combined challenges of distance and deprivation. More than 90% of the population live in the highest quintile of deprivation in Aotearoa, and household incomes are a third lower than the national average. A third of the population live in rural areas, and infrastructure such as roading, electricity and water supplies are frequently damaged by severe weather events.

The resident population of Ngāti Porou East Coast currently experiences very high morbidity and mortality rates. Amenable mortality rates for the resident population are over twice the national average. Together, geographic isolation and the socioeconomic determinants of ill health are contributing to a high need for health services.

Enabling every Ngāti Porou person to reach their full potential and be socially and culturally empowered is an important aspiration for the Runanganui. Te Runanganui o Ngāti Porou, Tairāwhiti DHB, Ngāti Porou Hauora and other service providers are working together to lift health outcomes and reduce inequities by strengthening the configuration of health services in Ngāti Porou East Coast. The Review believes this area would benefit greatly from a locality-based approach and pro-equity funding for Tier 1 services, as described in this chapter.
Commissioning the right mix and design of services for the population would require effective community engagement to understand the aspirations, capabilities and expectations of the people using the local health system. Understanding and responding to the needs of those who do not access the system, including both Māori whānau and Pacific communities, would be just as important for planning as understanding the needs of those who do access the system. Clinical engagement would also be important for safe and high-quality service design.

Locality plans would show:

- the locality health needs assessment results, including unmet need for different services
- indicative budgets for the locality, based on age, ethnicity and deprivation
- what Tier 1 services would be available to meet these needs, in what settings
- how networks of services would be organised and provided and by whom
- how access would be enabled to suit the community and value the time of consumers and whānau, for example, locations, extended hours, digital services, outreach services and transport options
- how specific populations would be served, for example, kaupapa Māori services to provide choice for Māori whānau, services designed for Pacific fanau, people with disabilities, and rural communities
- the outcomes these activities are expected to achieve for defined populations.

Locality plans would also set out a programme for investment that is transparent to the public, the workforce, Health NZ and the Māori Health Authority about how the service delivery model would be developed over time.

The role of primary health organisations and Alliances

District health board responsibilities for Tier 1 would have particular implications for primary health organisations (PHOs). The Review considered the potential role of PHOs in a locality framework and concluded that split accountabilities between DHBs and PHOs for population health outcomes do not serve the objectives of the future system. While some developments by PHOs, such as the Health Care Home model, are improving service delivery in some places when compared with a traditional general practice model of care,¹¹⁹ at a system level, they still do little to change the paradigm.

It is recommended that DHBs no longer be required to contract PHOs for primary health care services, and that within five years there is a deliberate move away from the National PHO Services Agreement. Alliance arrangements required by the PHO Services Agreement and DHB Operating Policy Framework should also no longer be mandatory.

While a DHB could choose to continue to fund services via a PHO in the interim using the current PHO Services Agreement, DHBs would be expected to take on the responsibility for population data analysis and the management functions currently contracted out to PHOs. Funding for Tier 1 services would also increasingly be managed by DHBs and paid directly to providers through new commissioning arrangements. Health NZ would monitor this transition.
A local network of services to keep people well

For the most part, historic models of service delivery have prevailed with little adjustment to recognise the differentiated needs of the local community. A largely monocultural approach based on a western biomedical model has consistently failed to achieve equity for Māori. Service delivery needs to evolve to be more holistic and directed to the needs of both Māori and Pacific communities.

If the health and disability system is to be genuinely culturally safe, connected and designed for prevention and wellbeing, the breadth of Tier 1 services that consumers have a right to expect in their community should be actively expanded and commissioning done differently than in the past.

Guaranteed and locally specific services

To ensure fair access to services that are equity focused and tailored to local needs, the system should play a more active role in shaping the mix of services available in each locality. As Tier 1 is usually the first point of contact with the health and disability system, the mix of services should consider the cultural, clinical and social determinants of need, recognising that these are mutual determinants of health status.

It is proposed that each locality be served by a network of publicly funded Tier 1 services. Some services would be common across the country and others tailored to meet the health and wellbeing needs of a particular population. The service mix would be developed through the locality planning process, as described earlier. Some workforces or providers would serve more than one locality.

Table 7.1 sets out the proposed list of services that DHBs should guarantee are available and accessible to the population of each locality (although coverage may be differentiated to respond to local priorities). These services have a strong focus on promoting wellness throughout the life course as much as treating sickness. As with other parts of the health and disability system, services would be culturally safe. A mix of service models, including kaupapa Māori services, would be available.
Table 7.1: Services guaranteed for localities

<table>
<thead>
<tr>
<th>Service</th>
<th>General description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care coordination</td>
<td>Team-based activity designed to facilitate the successful navigation of consumers through the health care system, based on their individual needs, preferences, capabilities and support. Intensity of care coordination depends on complexity of need.</td>
</tr>
<tr>
<td>Child and adolescent oral health</td>
<td>Basic dental care, including check-ups, cleaning, preventative treatments, and fillings or extractions, for people up to their 18th birthday</td>
</tr>
<tr>
<td>Community pharmacy services</td>
<td>Pharmacist-led services in community settings, including dispensing, treatment of minor ailments, acute demand triage and referral and relevant population health services.</td>
</tr>
<tr>
<td>General practice services</td>
<td>Services to prevent, diagnose, educate and provide care for patients, and access to other appropriate services in the health system to benefit the patient.</td>
</tr>
<tr>
<td>Maternity services</td>
<td>Services related to the care of women and babies from conception to six weeks after birth.</td>
</tr>
<tr>
<td>Medicines optimisation services</td>
<td>A person-centred approach to safe and effective medicines used to ensure people obtain the best possible outcomes from their medicines. Services are led by clinical pharmacists and take place at home, or other places that meet consumer and whānau needs.</td>
</tr>
<tr>
<td>Mental health services and behavioural support</td>
<td>Support to help people achieve their best possible mental and emotional wellbeing which could include health coaches, health improvement practitioners, counsellors, social workers, youth workers and whānau ora kaimahi.</td>
</tr>
<tr>
<td>Needs assessment for disability and aged-care support</td>
<td>Assessing a person’s level of need and eligibility for health and disability support services.</td>
</tr>
<tr>
<td>Nursing services</td>
<td>The health care and assistance provided to individuals by any qualified nurse across a range of health settings, including in institutions, homes and communities.</td>
</tr>
<tr>
<td>Older people’s services</td>
<td>Health and wellbeing services for older people, including aged residential care and home-based support services, so they can live well, age well and have a respectful end of life.</td>
</tr>
<tr>
<td>Outreach services</td>
<td>Health services provided to people in their homes or convenient locations, often by community health workers, kaiāwhina or social workers.</td>
</tr>
<tr>
<td>Palliative care</td>
<td>Services for people and whānau living with progressive, advanced illness, where the primary goal is to optimise quality of life.</td>
</tr>
<tr>
<td>Population health services</td>
<td>Preventive interventions delivered to individuals aimed at promoting wellbeing and avoiding the development of disease or disability, eg, screening, immunisation, health promotion.</td>
</tr>
<tr>
<td>Well Child/ Tamariki Ora</td>
<td>A package of health and support services for children and their whānau from birth to five years to ensure healthy growth and development.</td>
</tr>
</tbody>
</table>
Coverage of these services is currently variable across New Zealand. The immediate priority should be to achieve coverage within localities with the highest needs. Specific investment would also be required to support the growth of kaupapa Māori services.

Equally, networks would be expected to calibrate their delivery model to the level of need (eg, more frequent dental therapist visits to lower decile schools, more outreach services in areas with higher unmet need), and a shift to localised commissioning would ensure DHBs have the contract levers to achieve this (enabling, for example, more employed lead maternity carers in some locations).

Case study: Tier 1 Services in South Porirua

South Porirua, located in Capital and Coast DHB area and the Ngāti Toa rohe, is a vibrant, young and diverse community of over 30,000 and one of the largest Pacific communities outside of Auckland. It celebrates its culture, the strength of whānau and aiga, and its strong Māori and Pacific identity with most households being multilingual. Unfortunately, the community experiences low incomes, overcrowded housing and intergenerational poverty, resulting in poor health outcomes.

- Over 100 health and social service providers serve the South Porirua community. Some providers, such as Ora Toa and Porirua Union Health Clinic, provide a range of whānau-centred services. However, complex funding arrangements, multiple commissioners, and inflexible national contracts make serving the South Porirua community unnecessarily difficult.

- Taking a population health approach to serving the South Porirua locality would allow services to be designed for the unique needs of the community. For example, one priority for South Porirua is to support whānau and pēpē to have the best start in life.

- DHB-commissioning, rather than national commissioning of services, would enable a whānau wellbeing outreach service, including a mix of midwives, nurses, social workers and kaiāwhina, to support whānau to meet their health and social aspirations.

Note: Quintile 5 (high) deprivation shown in red, quintile 4 in pink, quintile 1 (low) in green. Source: University of Otago. 

Socioeconomic deprivation across Porirua City
**Culturally safe services, including investment in kaupapa Māori services**

Locality plans would include providing culturally safe services. Investment in kaupapa Māori services and embedding mātauranga Māori (see the Hauora Māori section for definitions and further information) into service delivery are central to developing these models of care and pursuing Māori health equity. Planning for localities should engage Māori-centred design thinking so that tangata and whānau needs and delivery models are considered and prioritised in models of care.

The Māori Health Authority would partner with the Ministry, Health NZ and DHBs to develop Māori Health Provider Development strategies and Māori workforce strategies to ensure that there is a Māori workforce (including clinical and non-clinical roles) and range of services to meet the health and wellbeing needs of Māori whānau and communities.

See the Hauora Māori section for further information, including the proposed central role of kaupapa Māori services in the future health and disability system.

**Commissioning services that are not currently funded**

A feature of localities would be the mandate to commission quality services that are not currently publicly funded or that have eligibility restrictions, where there is a clear benefit to equity and the wellbeing of the population. Examples could include rongoa Māori, podiatry, physiotherapy and adult oral health care. These could be funded by prioritising spending across localities within a region, discretionary funds within the DHB, or with the agreement of Health NZ through the health and disability system’s collective responsibilities for outcomes (see System Settings). Joint commissioning with ACC may also be appropriate and should be enabled (see the Services Introduction chapter in this section).

**Tier 1 services connected as a network**

A key objective of the locality approach is for services to be easy to access and simple to navigate by the people who live and work there. Consumers and whānau should experience all Tier 1 services in their locality as though they were a single service. Services would be expected to operate as a single network, enabled by data sharing and digital platforms, referral pathways, shared protocols and commonalities in terms and conditions. There is no expectation that services would be co-located.

The DHB would be responsible for managing the network, with a dynamic mix of partners to support service delivery that addresses the clinical, cultural and socioeconomic determinants of health, ensures responsiveness to different needs and promote innovation in service design.

NGOs, Māori Health Providers and private businesses would be integral, alongside DHB-owned or operated services. In some localities, Tier 2 services, Whānau Ora services or other social services may be included as part of the network.

The network may be Taha Māori or consist of kaupapa Māori services (see the Hauora Māori chapter for definitions). It is expected that networks and localities would share learning to help achieve Māori equity and wellbeing.
Joint accountability for population health outcomes

Services within a network would be jointly accountable to the DHB for agreed locality outcomes through new contracting arrangements. Regular analysis and reporting on population health outcomes would ensure that services are meeting the needs of the population. The network’s performance would be managed by the DHB. The DHB should also ensure clinical governance for services delivered in the community.

Contract terms and funding arrangements for services within the network would enable the workforce to collaborate and practice across their full scope to keep people well. To support this and reduce dependence on throughput for revenue, a deliberate change in how Tier 1 services are funded would be integral for services currently paid on a piece-rate basis. This would be particularly important for services that predominantly serve high-needs populations, particularly Māori Health Providers, who have been disadvantaged by current funding arrangements (see the section on funding in this chapter).

In the first instance, these expectations would apply to the group of services guaranteed in each locality and new contracts. Over time, however, public funding for all Tier 1 services would become dependent on being part of a network and meeting data sharing, access and accountability requirements.

Addressing access

Despite many of the services listed in the previous section already having zero or low co-payment for many New Zealanders, this does not mean they are free of charge. Costs of interacting with health services often have not been addressed and include transport, parking, time off work or away from dependents.

For both Māori and Pacific peoples, there is evidence that additional barriers include location and access to services, lack of childcare support, health care characteristics such as racism and poor relationships with practitioners and providers, and health care structures and practices.

For people living in rural areas, distance, travel and poorly coordinated appointment times are significant barriers to accessing both Tier 1 and Tier 2 services.

For disabled people there is evidence that proactive approaches such as annual health check can make a difference to health outcomes. Poorly coordinated needs assessment processes, care coordination and service delivery also need to be addressed as access issues are particularly challenging for many disabled people.

For services to address inequities, they must be accessible. Better use of technology, clearer obligations on services for availability, for example, location and hours, and using outreach services are three strategies that would improve access.

Locations and hours of services

Services need to be located where they best suit the community and more services need to be open longer.

As part of the planning and contracting process, operating hours for services within the network would be agreed with the DHB. This could mean, for example, some or all services being open earlier or later in the day, providing clinics at the weekend, or participating in outreach. It could mean aligning services’ opening hours and workforce in similar locations and times, so a person or whānau can conveniently meet all their needs at the same time.

New providers wishing to enter the locality, or services intending to expand, would be funded only where it is consistent with the locality plan.
**DHBs would be responsible for ensuring access**

Where existing providers are not available or able to operate in ways, times or arrangements that meet the above, DHBs would be responsible for sourcing or developing new services that address these gaps. This could involve influencing the location of new providers entering the locality, or by providing the service directly. Analysis of gaps in services and feedback from the community, would also inform the next cycle of strategic planning and investment.

**Digital platforms and data sharing**

Consumers and whānau should experience services within their locality as though it were a single service. This includes having the digital tools to access advice, book appointments, communicate with services, receive a referral, order a prescription, access and contribute to their health information and choose who they share it with. New contract terms for Tier 1 services would have a much stronger emphasis on enablers of connected, whānau-centred service delivery. For example, requiring that a digital portal provide consumers the option to access their personal health information from any service within the network, and to carry out activities such as bookings, needs assessment forms and service registration online. Services within a network would be required to facilitate the exchange of health information so that, with consumer and whānau consent, their health information could be readily shared between providers to support, for example, wrap-around service delivery.

**Outreach services in every locality**

The term ‘outreach services’ can be used to describe any or all of the following:

- Services that might otherwise be provided in a health care setting but that are delivered at home (eg, nursing services, medicines optimisation) or at places that are convenient for consumers (eg, marae, church).
- Home-based care and personal support (eg, older people or disabled people).
- Community services that deliberately seek out unmet need within a population, and (with permission) connect people with services that would help keep them and their whānau well.

This section discusses the third type. However, all three are important and should be available in each locality.

**A new model of outreach services**

The purpose of population outreach services is to improve health outcomes for those with unmet and/or complex health needs or risks from multiple socioeconomic determinants of health, by ensuring people are well supported by health and disability services in their community.

DHBs should be required to introduce or embed outreach services that respond to the needs of their localities. Services would be provided by community health workers, such as kaiāwhīna, with a deep understanding of the population they serve and the skills to build trusted relationships with individuals and whānau. The exact model of delivery would reflect the unique local population, service network and community needs.
Case study: Outreach services for Pacific households

An ISA team recently worked with a Samoan household of six who were facing multiple health and social challenges. Mum and Dad were both unemployed; Dad was unable to drive due to sleep apnoea, was considered morbidly obese, and both parents had diabetes. One daughter had a heart condition having contracted rheumatic fever a few years earlier, while another suffered from depression and had diabetes. The family’s house was damp and leaking. The household was also struggling to manage its finances and two older brothers (adolescents) were the sole breadwinners for the family.

The ISA team began working with the household and over a 12-month period:

- A CPAP machine was secured for Dad which he began using to successfully combat his sleep apnoea. He lost 20 kgs as a result of increased understanding of nutrition/healthy eating and the importance of exercise, and the influence of the CPAP machine. He was no longer obese. Dad also secured his driving license, significantly improving the number of GP and hospital appointments that Mum and daughters could attend.
- The daughters were connected with their GP, with one receiving support for depression and the other received increased support for her heart condition. Mum, Dad and the younger daughter all had significant reductions in their HbA1c, with their blood pressure moving into their respective ideal ranges, and their diabetes was better managed.
- The household was connected with a healthy housing provider to reduce the dampness and increase the warmth of their home, while the ISA team worked with the family to secure improved long-term accommodation.
- The family was connected to budgeting services to help them better understand and manage their household costs and reduce credit card payments.

(Source: Adapted from Alliance Health Plus)

In localities, outreach services would work closely with the DHB’s population analysis and management functions to understand the health profile of the community and to identify and connect with people who may have unmet need. For individuals and whānau, outreach services could serve as health educators, help with completing documentation and assessments and assist with health promoting activities.

Outreach workers who observe social situations, living conditions and resilience issues could, with permission, arrange health services for others in the household. Similarly, recognising the socioeconomic determinants of health, outreach services are likely to work closely with other services in the community, and (again, with permission) connect consumers and whānau with these resources.
Funding for the locality would support employment of outreach workers at a ratio appropriate to the needs of the community. This is to ensure there is sufficient workforce to recognise the time needed to build trusted relationships with people, and carry out a mix of tasks including identifying those with unmet need, spending time with individuals and whānau and following up on actions.

**Investing in services that promote health and address inequity**

Investing in services that promote health and wellbeing and address inequity should be the priority for the system. The Review considered the merits of investing to expand service coverage relative to addressing other barriers to access (eg, reducing co-payments on pharmaceuticals or other primary health care services) and concluded that to achieve equity, the first priority should be to improve quality and uptake of preventive services in the network, such as screening and Well Child / Tamariki Ora, for those that the current system does not serve well, and extend outreach services.

Beyond this, discretionary funding should be targeted towards improving the quality and range of publicly funded services for those with the greatest needs.

**Maternal and child health**

*Getting it right for future generations, ensuring more equitable outcomes for Māori and Pacific children*

Child and maternal wellbeing is critical. The first 1,000 days of a child’s life is a crucial time for development that sets the stage for physical and mental wellbeing throughout life. A child who is exposed to negative experiences very early in life is more at risk of physical and mental health problems later in life. Globally, one in three children do not achieve their full developmental potential due to the absence of health and wellbeing in their early years.

As a child grows, there are milestones and behaviours that are instrumental to their future wellbeing. Child wellbeing improves when children are happy and healthy. It starts at the point of conception. A happy, healthy and nurturing environment means children can develop and flourish. It is estimated that children who get the right nutrition and support in their first 1,000 days are 10 times more likely to overcome a life-threatening childhood disease and will go on to earn an average of 21% more in wages as adults.

For these reasons, successive governments have invested in services and programmes aimed at ensuring children have the best start to life. This includes access to:

- free, universal maternity care
- maternal mental health services
- newborn hearing and metabolic screening
- Well Child / Tamariki Ora
- B4 School Checks
- the national immunisation schedule
- oral health care from 0–18 years
- school-based health services
- free access to general practice and funded prescriptions, from 0–14 years.
Services for children are free, yet inequities remain
Maternal and child health care is fragmented and inconsistent. There is no one single agency responsible, at a system level, for maternal and child health or wellbeing. Fragmentation in where and how services are commissioned, who funds them, and where accountability lies for outcomes is a challenge as is ensuring that services are accessible, easy to navigate and make sense to people who need them.

While all the services identified above are technically free of charge, hidden costs exist and inequities remain, particularly for Māori and Pacific children.

The Review is aware that Well Child / Tamariki Ora and the funding model for maternity services are being reviewed. Discussions have also been held with workforce representatives, the Ministry, DHBs and service providers to understand their ideas for how the system could work better for those currently missing out. It is clear that attempting to address these issues would achieve little if done in a piecemeal, programme-by-programme or service-by-service way.

Maternal and child health services would be organised by locality
Maternal and child health must be at the heart of a connected, whānau-centred system, with Tier 1 services guaranteed within localities.

To achieve this requires DHBs to have the contracting and funding mechanisms to commission the models of care and workforce that are most effective locally, particularly for Māori whānau and Pacific families. Barriers between services caused by business or contracting models (eg, between maternity and Well Child / Tamariki Ora) should be removed so that the lead practitioner reflects the needs and preferences of consumers and whānau, not solely providers.

This requires a move away from national level purchasing of Well Child / Tamariki Ora services, and that the funding and decision rights for these services should be vested with DHBs. Service providers would still be able to serve multiple localities and contract to multiple DHBs, but they would need to meet the unique needs of each locality (see the Services Introduction for discussion of commissioning) Further, providers would need to meet contracting requirements for services within the network (eg, data provision and reporting).

DHBs should have the flexibility of funding and authority to source extended services for children or pregnant women where these meet an identified health need, for example, child optometry or oral health.

In the interim, the above expectations would not prevent continued contracting for services and with providers where arrangements are best meeting the needs of populations.

Oral health services
Poor oral health is one of the most common chronic health problems experienced by New Zealanders. Poor oral health effects, and is affected by, poor general health including health conditions such as diabetes and cardiovascular diseases. Yet most oral health conditions are preventable, through for example, water fluoridation, reducing sugary drinks and food consumption and improving oral health literacy. Children’s oral health is particularly important as oral health status early in life predicts later adult oral health status. Protecting the oral health of children can help them maintain good oral health later in life.
Publicly funded oral health services are planned and organised differently from other Tier 1 services, and coverage depends on age.

- Children from 0 to year 8 are served by the Community Oral Health Service (COHS). These are services provided by DHBs and are based in schools or mobile units.
- Adolescents from 13 to their 18th birthday access free, DHB-funded oral health services, primarily from private dental practices.
- Adult services are largely privately funded, with limited government funding for emergency dental care of low income adults, hospital dental services and, in some DHBs, free or low cost care provided directly or through Māori Oral Health Service providers. Work and Income grants can contribute to the costs of urgent dental treatment, but these are difficult to access and restricted to $300 per annum which is generally less than the cost of required treatment.

**Inequities remain in child and adolescent oral health**

Despite being free of charge, significant inequities in oral health outcomes and access remain for children and adolescents. Māori and Pacific children are more likely to have cavities than non-Māori and non-Pacific children\(^1\) and Māori adults are more likely to have teeth removed due to decay.\(^1\)\(^2\)

The table below illustrates the inequities in access to oral health services. It shows Māori and NZ European populations accessing oral health services over the last 12 months, broken down by ethnicity and age.

**Table 7.2: Percent population accessing oral health services**

<table>
<thead>
<tr>
<th></th>
<th>Five-year olds</th>
<th>Year 8</th>
<th>Adolescent services</th>
<th>Adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>Māori</td>
<td>58%</td>
<td>69%</td>
<td>44%</td>
<td>38%</td>
</tr>
<tr>
<td>NZ European</td>
<td>74%</td>
<td>86%</td>
<td>78%</td>
<td>52%</td>
</tr>
<tr>
<td>Difference</td>
<td>-16%</td>
<td>-17%</td>
<td>-33%</td>
<td>-14%</td>
</tr>
</tbody>
</table>

Source: Ministry of Health, NZ Health Survey, Stats NZ

1. Utilisation data for the 5 year old and Year 8 checks are from Ministry of Health published data.
2. Utilisation data for adolescents are based on Ministry of Health payments data, and excludes around 4% of served adolescents.
3. Population data for 5 year olds and Year 8 and adolescents are from Stats NZ population estimates. Utilisation rates for adults are from the NZ Health Survey.
4. Rates for Pacific peoples have quality issues due to inconsistency between utilisation and population data, and are therefore not shown.

The considerable difference between Māori and NZ European children and adolescents in utilisation of free services suggests that non-financial factors also play a role in uptake of oral health care. For example, there is evidence that there are fewer dental clinics in high-needs areas\(^1\)\(^3\) and a lack of culturally safe services reduces service use by Pacific adolescents.\(^1\)\(^3\)

**Localities should include child and adolescent oral health services**

The Community Oral Health Service should be included within local networks. This would allow for better tracking of children enrolled or accessing services, more seamless referrals from maternity and child health services and inclusion of oral health promotion as part of population health services within the locality.
Joint accountability between services within the network may also encourage greater multidisciplinary approaches to improve equity of oral health for children.

Adolescent oral health services should also be incorporated into service networks, with a focus on reducing inequitable access, including ensuring that the model of provision is culturally safe and provides options for Māori rangatahi. The Combined Dental Agreement should remain an option for DHBs where this is working effectively, but there should be no constraints for commissioning adolescent dental services using other means.

**Adult oral health services**

The Review has heard calls for universal coverage of oral health services for adults. However, estimates suggest that the cost of broad population coverage could be very significant (assuming the current model of provision), and needs to be weighed against other opportunities to improve equity. Further policy work would be required. The Review considers that to improve the equity of oral health outcomes for the next generation, the immediate priority needs to be on oral health outcomes for children and adolescents.

There has also been calls to expand coverage into early adulthood. However, with less than half of Māori adolescents accessing services in the current model, extending eligibility without considering the delivery model risks further embedding significant inequities, and would likely benefit, for example, non-Māori young adults more than Māori young adults. The priority should be ensuring that adolescent oral health services are accessible and responsive to populations not well served by current arrangements.

As networks develop, there should be no impediment for DHBs to increase coverage to groups such as young adults, pregnant women, whānau or low-income adults. Whether increasing oral health services is a priority to improve health equity would differ between localities and DHBs would need to consider this when planning and engaging with their communities.

**Medicines optimisation services and clinical pharmacists**

Medicines prevent, treat or manage many illnesses or conditions and are the most common intervention in health care. As the population ages and life expectancy increases, more people are living with more conditions that are being managed with an increasing number of medicines.

Issues in prescribing, dispensing, administration or use of medicines can prevent the desired outcomes being achieved and cause harm to the consumer. As few as 16% of patients who are prescribed a new medicine take it as intended, experience no problems, and receive as much information as they need.\(^{134}\) One study found that a third of people admitted to hospital suffered medicine-related harm, of which around 30% originated in the community.\(^{135}\) People are at greater risk of harm when they are taking multiple medicines (polypharmacy), such as when they have multiple chronic conditions. Due to a range of barriers, Māori are also not able to benefit from medicines in the same way as non-Māori.

**Medicines optimisation services**

Pharmacists are medicines experts and can work collaboratively with consumers and their whānau, prescribers, and other members of a person’s health care team to assess and monitor medicines use. They can recommend changes to achieve the best possible outcomes.\(^{136}\)
Medicines optimisation is a person-centred approach to safe and effective medicines use, to ensure people get the best possible outcomes from their medicines.  

Medicine optimisation helps people taking medicines, and their whānau and carers, to:

- get the best health outcome from their medicine
- have access to an evidence-based choice of medicine
- improve adherence and take medicines correctly
- avoid taking unnecessary medicines
- reduce wastage of medicines
- improve medicines safety.

All of the health workforce is responsible for medicines optimisation, but clinical pharmacists play a key role as medicines experts. Clinical pharmacists have completed additional postgraduate training and can lead medicines optimisation activities across settings, advising and collaborating with consumers, whānau, carers and others in the health care team.

**Clinical pharmacists should be in localities**

Clinical pharmacists have been employed in a small number of primary and community care locations in New Zealand with positive results for consumers’ experience and health outcomes.

The Review considers that medicines optimisation services should become more widely available to support high-need populations (eg, people with complex medical regimens due to mental illness or addiction, comorbid chronic conditions, children with complex medical needs, frail older people, or people transferring from hospital to community-based care) in every locality.

**Case study: Medwise Clinical Pharmacy Service, Bay of Plenty**

**Auckland DHB’s Integrated Services Agreement (ISA) funds three Pacific primary health care providers to deliver a holistic health service combined with elements of social support to Pacific households.**

- “Mrs P was referred following an accidental overdose. She was taking 14+ oral medicines, three inhalers and three lots of eye drops. Her own medicines management plan was to put her oral medicines into old medication bottles to take during the day. One day she selected a container thinking it was one of these doses and accidentally swallowed all her sleeping tablets.

  - Mrs P was seen by a Medwise pharmacist and her medication was organised to reduce the workload associated with her medicines. She found her pain and sleep improved with the change in dosing time and regular administration of her pain medication. Large amounts of excess medication, which had accumulated over the years, was removed which gave her lots of storage space but, more importantly, made her home safer when grandchildren came to visit.”

Source: Medwise.  Medwise is a DHB funded service. Pharmacists visit patients in their home to assess and review medication to ensure it is safe, appropriate and effective.
System-wide actions
Embedding medicines optimisation within the community would require a growth in the pharmacist workforce trained in these speciality functions, and developing skills across all health workers. At a policy level, work would be needed to understand models of care for medicines optimisation that best support health equity and to support commissioning of these services.

Mental health and addiction services
Mental illness and addiction touch many people in New Zealand, with nearly half of the population meeting the criteria for a mental illness diagnosis at some stage during their lives.\(^{140}\) Each year around one in five people experience mental illness or significant mental distress, and there are increasing numbers of children and young people showing signs of behavioural distress and deliberately self-harming.\(^{141}\)

Anyone can be affected by mental illness but some people are more at risk. Socioeconomic determinants, such as poverty, lack of affordable housing, unemployment and unpaid work, family violence and social isolation (especially for older and rural populations) and, for Māori, deprivation and cultural alienation, are risk factors for poor mental health.\(^{142}\)

Alcohol and drug use can make a person more susceptible to mental distress and discrimination and stigma can exacerbate the impacts. There is disparity among populations and Māori and Pacific peoples have disproportionately poorer mental health outcomes.\(^{143}\)

Demand for mental health services is increasing
The number of prescriptions for mental health-related medications increased 50% in the decade to 2018 and continues to grow about 5% each year.\(^{144}\) The number of people accessing mental health and addiction services has grown 73% over the past 10 years.\(^{145}\) The majority of those most severely affected by mental illness are reportedly well served, but the much larger number of people with moderate mental health needs are not.\(^{146}\) The Government Inquiry into Mental and Addiction, *He Ara Oranga*, found that there are unmet mental health needs for Māori, Pacific peoples, disabled people, LGBTQI+ and other vulnerable populations, such as refugees.\(^{147}\)

Significant activity is underway to improve access
A significant programme of work is currently underway to transform New Zealand’s approach to mental health and wellbeing, including investing in Tier 1 services such as:

- virtual health and digital support for mental wellbeing
- support for people experiencing a mental health crisis
- school-based health services (a key access point for children and youth with mental health issues)
- wellbeing support for primary and intermediate children
- support for parents and whānau.

The Review strongly supports this effort and its long overdue recognition of the importance of mental health in wellbeing.
New behavioural support roles are being introduced

The Ministry of Health is leading work to introduce new service models for mental health and wellbeing, including behavioural support roles in the community.

- Peer and cultural health coaches are an unregistered workforce from a range of backgrounds who are usually a member of the local community. Their role is to provide regular support to whānau.
- Health improvement practitioners are health professionals who are trained and have experience in mental health support. They work with individuals and groups to access evidenced-based interventions and actively help people make changes to their health and wellbeing.
- Cultural and social supports vary by population, but it is envisaged that these would include health coaches, NGO community support workers and Whānau Ora services.

(Source: Ministry of Health)

Expanding access and choice in primary mental health and addiction services

Expanding access to and choice of primary mental health and addiction services for people with mild to moderate need is a priority within the above programme of work, so that people can get skilled help in their local communities for free, when they need it.

The first tranche of work has focused on developing a model of integrated primary mental health and addiction services accessed via general practice to ensure peer and cultural health coaches, health improvement practitioners and a competent general practice team is available for anyone whose thoughts, feelings or actions are impacting on their health and wellbeing. These services would also provide access to cultural and social supports and ensure effective links and coordination between primary health care and secondary services. Designing and sourcing kaupapa Māori, Pacific and youth focused services is the focus for the second tranche of activity.

Ensuring access is equity focused and responsive

Improving access to and choice of primary mental health services is much needed and essential for population wellbeing. The programmes and services must be given the time to develop and evolve.

To ensure services are equity focused and responsive to those most at risk of mental distress, primary mental health services and behavioural support (peer and cultural coaches) should be included as guaranteed Tier 1 services within a locality, work closely with outreach services and be accessible from any entry point in the network.

The starting point of access via general practice is well intended, but care is needed to ensure this model does not crowd out the potential for other service designs and access that meet local needs and are culturally safe, or that it embeds existing barriers to access. There is considerable potential for innovation in how these services are developed, led for example, by kaupapa Māori services and other NGOs.
Health NZ should be responsible for further implementation, working closely with the Māori Health Authority and Mental Health and Wellbeing Commission. Over the longer term, funding for primary mental health should become part of the Tier 1 allocation for localities so that services are reflective of what matters to local populations. Developing the skillset for commissioning these services locally would be essential for this transition and, again, Health NZ, the Māori Health Authority and Mental Health and Wellbeing Commission would work together and with people with lived experience to ensure DHBs have the capabilities for this.

Ngāti Hine Health Trust – Te Hononga Hou Mental Health and Addictions Service

Steve* was sceptical that the alcohol and other drug rehabilitation programme would work for him. He had been in many rehabilitation facilities before, ticking the court-ordered boxes, but nothing had changed. Steve’s life began to turn around when he was given the opportunity offered by the NHHT Residential Programme to reconnect with his Māori roots. ‘It was like he was hungry for his whakapapa,’ says one of the staff.

Vital to the success of the programme is the ahua and knowledge of the staff who lead from a kaupapa Māori perspective. Readily absorbing all the ahua and teachings of the programme leaders, he in turn earned the respect of his colleagues as he awhi’d them on their own journeys. The most rewarding indication to staff of his success was when he took charge of organising graduation day, fully engaging in Māori protocol and getting his fellow graduates on board.

The turnaround for Steve was amazing. Two years later Steve is drug free, he is a partner in a successful local business, is a consumer advisor to Northland DHB and has earned a diploma in mental health and addictions.

* not his real name

(Source: Ngāti Hine Health Trust 148)

Older people’s services

New Zealand’s population is ageing and different service approaches are needed

It is predicted that by 2050 around 27% of the population in New Zealand will be over 65, an increase from 15% in 2016. Over the same period, within the 65+ age group it is expected that the percentage of 85+ year olds will grow from 12.5% to 25%. The ethnic mix is also expected to diversify, as the populations of Māori, Pacific and Asian peoples are proportionately younger.

Even though people are living longer, they are not experiencing better health in their later years. Multimorbidity is now seen in almost half of those aged 65–69 and 75% of those over 85 years. Māori and Pacific peoples also have higher rates of chronic disease from an earlier age, leading to disproportionately greater health needs in older age.

As more people live longer with functional limitation or disability, different approaches and more accessible services are needed so that older people and their whānau can continue living as independently and actively as possible.
Connecting Tier 1 services for older people
Most people would prefer to continue living in their own home as they age, with support from whānau and carers, and accessing services as needed. Whānau and carers also need support, information and training to enable caregiving while maintaining their own health and wellbeing.

The proposed changes to Tier 1 should support older people to live independently for as long as possible eg by connecting older people and their whānau more easily to a wider range of health and disability services within a locality network, and these services being more accessible - provided in locations that are comfortable for older people, such as at home, marae and community facilities.

Figure 7.2: Tier 1 services with greater outreach would support older people to live well

| Outreach services |
| Medicines optimisation |
| Care coordination |
| Home-based support services |
| Targeted access to allied health services, eg, physiotherapy, podiatry |
| Nursing in the community |
| Streamlined needs assessments |

Home-based care and support services
Home-based care and support services (HCSS) provide clinical and support services, including patient assessment, goal setting and plans, personal care, household management and equipment to support people to live at home. Each year more than 100,000 people receive support from these services. More than 70% are over 65 and just over 40% are aged 85 plus.

The range of support available varies by provider size, funding model and geographic location. Services are funded by DHBs, the Ministry of Health for disability support and by ACC for injury. Older people can be receiving services funded by more than one of these agencies (sometimes delivered by the same provider).

The Review considers that HCSS has an important role to play as part of enabling older people to live well and independently in their own homes, and it has been included in the guaranteed minimum services recommended for each locality. However, there are a wide range of issues associated with the current model that go beyond the scope of this report. Defining models of care for older people and addressing issues of sector sustainability and service consistency in HCSS needs specific attention, looking across disability support services, aged residential care, and services funded through ACC (see further below).

Aged residential care services and caring for whānau
When older people can no longer live safely in their own or whānau home, aged residential care in a rest home or hospital can provide 24-hour supervision. Aged residential care is available to anyone over 65 assessed as needing it on a means tested, user pays basis subsidised by public funding. These services are also used by some people aged 50–64 with disability or illness who need 24-hour long-term care (see the Disability chapter for more information). While the growth rate trajectory is slowing, the total number of people using aged residential care is still growing, particularly hospital and dementia-level care. Aged residential care residents are among the most vulnerable and frail older New Zealanders.
In recent years there has been a particular focus on aged residential care pricing to determine whether it is accessible and keeping up with New Zealand’s health care needs. It is questionable whether the funding model is sustainable, as there is already a narrowing of choice in the range of service providers. As with HCSS, resolving these issues poses a considerable task in itself, with many different views within and between stakeholder groups.

While the Review considers that aged residential care plays an important role as an option when people need a higher level of care, the inevitability of residential care seems at odds with the aspirations of many older people to live in their own home or with whānau.

Focus groups with kaumātua, for example, have highlighted a preference to live at home with whānau caring for them. However, barriers exist within the current system – from a lack of training and information for whānau carers, to assessment processes, to a lack of options for home-based support for the very frail or for people needing end-of-life care.

The Review concluded that a different approach to older people’s services is needed, and that services for older people should be thought of together, rather than continuing to review individual service types. This is to ensure a continuum of care is designed to best meet the needs of older people as they become frailer and develop models of care that provide options for kaumātua and others wishing to be cared for by whānau at home.

A priority for the Māori Health Authority should be to lead the development of Māori models of care for kaumatua and to work with the Ministry of Health on the shape of older people’s services.

Funding consumer and whānau-centred Tier 1 services

For the system to truly tackle inequities in health outcomes, it must be funded on an equitable basis. Funding needs to encourage providers and workforces to deliver services that best meets consumer and whānau need, rather than what attracts a co-payment.

Locality funding distributed according to health need

The Interim Report noted major concerns in the health and disability system that funding was not being allocated and spent equitably, particularly for Māori populations. The Waitangi Tribunal’s Hauora report strongly echoed these concerns.

Analysis during Phase 1 supported these concerns. Though DHB Tier 1 funding is adjusted for ethnicity and deprivation, it is based on historic primary health care service use as a proxy for need. Historic use often understates the need of some populations because it does not account for financial and non-financial barriers to access services. This results in little additional funding for Māori and Pacific populations and an overall distribution of funding that does not match the needs of communities.

Funding needs to be distributed more towards localities with higher Māori, Pacific, high deprivation and older populations to reflect the higher needs of these communities. Ideally, a sophisticated measure of need would be used as the basis for this distribution. Unfortunately, the system currently lacks the centralised data necessary to produce these measures.
In the interim, Tier 1 funding should be weighted towards high-need populations on the basis of hospital measures of need. This would apply, on average, a 20% higher weighting to Māori and Pacific populations and an even higher weighting for Māori and Pacific peoples in high deprivation areas. While imperfect, these measures do result in a more equitable distribution of funding. This is in line with the findings and recommendations of the Waitangi Tribunal and can be improved over time with new data. This would be used to allocate Tier 1 funding to DHBs and set indicative budgets for localities.

**Better data necessary to measure health need**

During Phase 2, many examples were found of need measures being developed and tracked based on detailed locally held data. Other countries with more developed data systems can develop more sophisticated measures at individual level. However, these measures cannot be developed in New Zealand because either the health and disability system does not collect the necessary data, or because the data is not centrally collated.

The Review believes that Health NZ, working with the Ministry, needs to invest in the research, data collection and analysis necessary to develop more sophisticated measures of health need. These measures are important not just for informing funding allocations, but essential for identifying populations with the greatest needs, understanding how the system can best meet these needs, and demonstrating whether the system is actually improving health outcomes.

This recommendation is not new. For example, the 2015 review of the population-based funding formula noted the need to improve the quality of data collected and research alternative funding models. Developing, analysing and improving these measures would be a core and ongoing function in Health NZ.

The following would be core to this process.

- Developing a nationally consistent collection of Tier 1 data including measures of utilisation, quality, outcomes, diagnosis and health status.
- Analysis comparing health status and service utilisation to understand the level of unmet need across different populations and in different communities.
- Ensuring all DHBs have costing systems in place and comply with costing standards.
- Improving financial accounts and reporting to more accurately and consistently measure how much is spent on what and for whom.
- Analysing other social sector data (eg, the Integrated Data Infrastructure) to better understand the social determinants of health and potential unmet need.
- Researching differences in access, outcomes and cost of services in rural areas.
Protecting Tier 1 funding

The changes envisioned for Tier 1 are ambitious and would require sustained, growing investment over time. This investment would be supported by the more consistent and predictable growth in Vote Health funding as described in the System Settings section, and by the longer-term contracting arrangements described in the Services Overview chapter.

To further support and grow investment in Tier 1, the Review believes ringfencing around Tier 1 funding is required for the medium term. The level of this ringfence should be set to grow faster than overall funding to provide certainty to planners and providers, and set a clear expectation for all that the system needs to do more to support people in the community.

More flexible arrangements for funding general practice

Contracting arrangements

General practice and general practitioners are a critical part of Tier 1 and would continue to be in the future envisioned by the Review. General practice works on the frontline of the health system and has shouldered a significant burden during a period of low funding increases.

The Review has heard that primary health care funding needs to be reviewed to:

- account for the higher needs and of people aged over 75
- ensure equitable funding for Māori and Pacific peoples
- account for the concentration of complexity in certain areas.

These factors have been considered in the proposed Tier 1 funding allocation to DHBs and localities, and future funding models of general practice should also consider these factors.

However, the persistence of these funding problems reveals a more fundamental problem: the current national process for contracting primary health care services is slow, inflexible and not fit for purpose. The current capitation rates are based, in part, on utilisation rates that are nearly two decades old. Ad-hoc funding streams have been added over time to partially address these issues, but this has created a more confusing funding model.

The Review believes that one nationally negotiated contract with one set of capitation rates and one service specification is not appropriate to cover all general practice services. General practice has a diverse range of different providers (including Māori Health Providers and Pacific providers and nurse-led models) and the role of different providers and workforce would need to be tailored to the needs of the local population.

Across Tier 1, Health NZ should develop minimum requirements for services provided in localities and set commissioning rules and guidance for DHBs. As part of this, Health NZ should develop options for contracting for general practice services. These could include:

- a capitation-based contract with updated weighting for different populations
- modular contracts to allow funding to support expanded primary health care teams
- a contracting framework for working with larger groups of connected providers
- salaried arrangements to support services in high need and rural areas.
Regardless of the option used, all contracts should be informed by nationally agreed salary scales. This would ensure that:

- general practitioners are paid proportionate to their capabilities as medical specialists
- practice nurses are paid equitably relative to their colleagues working in hospitals
- all workforces are paid fairly regardless of where they work in the country.

With an equitable distribution of funding to localities, funding would target need regardless of the contracting option used.

**Co-payment arrangements**

In an ideal world, the system should work towards reducing and removing co-payments for publicly funded services. However, service fees are just one of many barriers to access and removing co-payments would not guarantee equitable access to services, let alone equitable health outcomes. Furthermore, given that children and low income households already qualify for free or significantly reduced fees, extending the reduction of co-payments would disproportionately benefit higher-income households.

Consideration has been given to the fiscal cost of reducing co-payments and alternative uses of this funding. The Review believes the top priority for improving the equity of health outcomes is to invest in prevention, population health management, more outreach services and better care coordination.

The Review believes the health and disability system needs to develop improved contracting arrangements to support new models of care. New technologies and embracing a wider Tier 1 workforce bring great opportunities to better meet the need of consumers and whānau, reduce workforce burnout and improve the efficiency of the system.

The Review recognises that different arrangements would work better in different circumstances. Different approaches have been considered, including:

- subscription models where consumers pay to be enrolled but can access services free of charge
- employed workforce models with national salary bands and residual risk held by the public system
- higher, guaranteed capitation payments in exchange for co-payment revenue being collected by the public system.

The Review believes that Health NZ should lead the development of a range of approaches in consultation with the health and disability sector, and DHBs can decide which of these best meets the needs of their community. A mixture of these and other approaches could be used in different parts of the country. Combined with a secure and growing ringfence of Tier 1 funding, this would better support the adoption of new models of care.
Building the future

The Review proposes the following changes

DHBs have the resources and authority for Tier 1

- DHBs should be fully accountable for planning and organising Tier 1 services on a locality basis for their population.
- Where a rohe is a defined locality, the plan could be the shared responsibility of the DHB and rūnanga.

Tier 1 services are connected as a network and jointly accountable for outcomes

- Tier 1 services receiving public funds should be connected as local networks, managed by the DHB. Services within the network should be jointly accountable to the DHB for health and wellbeing outcomes of the locality’s population.
- A mix of service types and business models should be a part of the network, with NGOs and kaupapa Māori services playing a vital role.
- Contracts for Tier 1 services should, over time, have common requirements that facilitate working in a connected way. These include digital connectivity and data provision for measuring performance and outcomes.
- The default timeframe for contracts should be longer-term to provide greater financial certainty and stability for service providers, encourage investment and a sense of shared ownership of the network and the population served.

Tier 1 services reflect local populations and needs

- Each network should be made up of a mix of publicly funded Tier 1 services that address local needs and include guaranteed services with a strong focus on prevention and wellbeing. This should include outreach services, behavioural support, population health services, care coordination, home-based support and medicines optimisation.
- DHBs should be responsible for ensuring the mix of services is accessible to the population. This would include more services being delivered at home, marae, or schools, at times and locations that reflect the community’s needs, and with transport options that ensure reasonable access.
- If accessibility and availability of services cannot be achieved by existing providers, DHBs should bring in new providers or provide them directly.

A commitment to culturally safe services, including options for Māori whānau to access kaupapa Māori services

- DHBs should engage with Māori in locality planning to ensure that tangata and whānau needs are considered and prioritised in models of care.
- DHBs should include provision for kaupapa Māori services in locality planning.
- DHBs should ensure mātauranga Māori is embedded in all services with the Māori Health Authority providing support and guidance.

Continued
Building the future — continued

The Review proposes the following changes — continued

A locality approach drives commissioning of Tier 1 services

- DHBs should have the flexibility to commission Tier 1 service delivery models that reflect their population’s aspirations and needs.
- There should be no requirement to contract primary care through the national PHO services agreement. Similarly, Well Child / Tamariki Ora and maternity services should be planned and organised at the DHB level.
- Health NZ should develop detailed commissioning guidance for a range of Tier 1 services, including a range of contracting options for general practice.
- Health NZ should have responsibility to ensure consistency in commissioning and contracting protocols.

Equity and prevention is the priority for future funding

- Tier 1 investment should prioritise prevention and addressing inequities by initially expanding service coverage in areas of highest need.
- The first priority should be preventive services and services that ensure children, Māori and Pacific peoples achieve optimal outcomes. Investing in a wider range of mental health services must also continue to increase
- Priority should also be given to introducing medicines optimisation services (eg, for people living with chronic conditions) and new models of care for frail older people and older people with complex health needs.

Equity and ringfenced funding for Tier 1

- Tier 1 funding should be ringfenced, at least in the medium term, to ensure funding is not diverted to other services.
- Each locality should have an indicative budget based on the age, ethnicity, and socioeconomic deprivation of its population, which is transparent to the public. This would ensure services address local needs.
Increasing numbers of people are living with impairments, and more disabilities are being recognised. The principles of Enabling Good Lives (EGL) should drive service design so that the fact that any individual has an impairment is not what defines their life chances. The system needs to respond to disability becoming more of a norm and must be focused on a nondisabling approach to service design and delivery.

Better health, inclusion, and participation of disabled people must be a priority for action across the whole health and disability system. Disability support system should move away from relying on diagnosis for initiating eligibility for assistance, towards providing assistance to live well, according to an individual’s need. Assessment and reassessment processes should be streamlined so that those who require more service coordination support receive this in a timely manner, the need for regular reassessment is reduced, and people gain more freedom to manage their own support. Over time, needs assessment and service coordination services should be integrated into Tier 1 service networks.

Commissioning rules should encourage providers to use more salaried staff with the aim of building a better trained and more secure disability support services workforce and Health NZ should lead a programme of work to engage and support the system to become a leading employer of disabled people in New Zealand.

Disability in New Zealand

An increasing number of New Zealanders are living with a disability. The range of disabilities is diverse and the impacts for people vary substantially. Half of disabled children have had impairments since birth. Throughout life, more people become disabled through illness or injury and many disabled people have more than one impairment or health condition.

The Government has committed to reducing disadvantages faced by disabled people and aspires for New Zealand to be ‘a non-disabling society – a place where disabled people have an equal opportunity to achieve their goals and aspirations, and all of New Zealand works together to make this happen’. The health and disability system has a major role in achieving this ambition.
Disability support and funding
Responsibilities for providing disability supports are divided across the system.

- The Ministry funded $1.4 billion\(^{159}\) in 2018/19 for:
  - disability support services for 38,000\(^{160}\) disabled people, aged under 65 years when they entered the system
  - equipment and modifications (such as to homes and vehicles) - 82,500\(^{161}\) requests from people of all ages, many of whom also accessed other disability supports funded either by the Ministry or DHBs

- DHBs funded more than $1.4 billion of support services for:
  - people aged over 65 years: 75,000 received home and community-based support and 33,000 received aged residential care\(^{162,163}\)
  - people disabled by mental health conditions and associated social and attitudinal consequences.

These groups are a subset of the total population living with disabilities. The 2013 New Zealand Disability Survey\(^{164}\) asked participants about their ability to carry out everyday activities that were associated with specific impairment types. The survey identified one-quarter of the population as having difficulty doing everyday things, even with equipment that helps.

The survey showed that disability rates vary markedly across the population:

- Higher rates of disability are found in families living in high deprivation communities
- Māori have significantly higher rates of disability across all age bands
- People aged 65 or over are much more likely to have disabilities (59%) than adults under 65 years (21%) or children under 15 years (11%).

The proportion of people living with disabilities in 2013 was higher than in previous surveys,\(^ {165}\) with the growth driven largely by an ageing population. This trend is expected to continue as the number of people living with comorbidity and complications associated with age increases. The future system will need to recognise this and ensure that supports are in place to address changing needs as living with disability becomes the norm. The system will need to move away from reliance on a diagnosis, to providing assistance to live well according to the need for support.

Understanding the population
Of the people currently receiving Ministry funded disability support services:

- more than half have an intellectual disability as their principal disability. Many may also have a physical disability.
- Just under one-quarter (23%) have Autism Spectrum Disorder (ASD) as their principal disability.
- Just under one-quarter (23%) have a physical disability as their principal disability.\(^{166}\)
European/Other and Māori are over-represented among people receiving disability support services. Asian people are significantly under-represented but have had the highest recent increase with numbers of people who receive disability support increasing by 60% over the last four years. Māori and Pacific peoples are under-represented when compared to Disability Survey aged adjusted prevalence rates. Māori also have higher rates of impairment and comorbidity.

There are considerable differences in the types of services accessed across different age groups, ethnicities and disability types, as shown in Figure 8.2.
The population receiving Disability Support Services and their service mix is changing. The median age of people receiving disability support services has decreased from 31 years in 2014 to 26 years in 2018 due to the large growth in children (driven by the inclusion of ASD in 2014). The adult population has stayed relatively stable with 8% growth from 2016 to 2018, compared to a 20% increase in the number of children aged 5 to 14 years.\footnote{170} \footnote{171}

In addition, the total mix of people is shifting towards those with higher needs. Between 2016 and 2018, the number of people receiving:

- low and very low packages decreased by 24.7%
- medium packages of care increased minimally by 0.4%
- high and very high packages of support increased by 9.6% and 11.0% respectively.\footnote{172}

**Challenges that need to be addressed**

**Challenges identified in the Interim Report include:**

- greater visibility of disability is needed at a system level so that the health outcomes of disabled people are properly focused on and equity is improved
- more joined-up information, advice, and service delivery within health and across the wider government system
- a focus on wellbeing and an increase in preventative strategies that make this possible
- improved services and workforce development, designed around Enabling Good Lives (EGL) principles
- ensuring whānau and carer needs are an integral part of all aspects of disability service assessment and provision
- the health and disability system leading by example by employing disabled people.

These challenges are discussed below.

**More visibility and integration of disability in planning**

The Review faced many of the same challenges sourcing data that those working in the system encounter when trying to develop policies and improve the performance of the system.

**Improved data collection and use**

Much of the current information on disability is sourced from survey data or contracting and payment systems. Survey information on disability is improving. The Washington Group Short Set questions\footnote{173} that were developed to create robust measures of disability status and promote international comparability in disability data are being used more widely. While useful for understanding disability at a macro level, surveys generally do not provide person-level information.
Data from contract and payment systems can support analysis of disability support services use and expenditure. This data can be linked with health service data through the National Health Index and with wider government datasets through Stats NZ’s IDI data collection. There is potential to use this data better for planning services but only a comparatively small number of people can access and effectively analyse all these datasets.

Currently New Zealand does not have readily available patient-level data to identify if a person has an impairment. If available, it could be used by those involved with service delivery or to inform analysis of health outcomes. Some jurisdictions have introduced a disability flag across all health data collections to help improve service delivery and inform analysis of health outcomes. The Review considers it a high priority to improve data collection and sharing of disability data across the health and disability system and with other government agencies. Technological advancements already exist to facilitate this but the lack of investment in data analytics and digital systems has been a barrier to progress. Building an improved national dataset and analytics capability is an essential next step, with consideration being given to whether this should include a disability flag.

Australia developed a ‘standardised disability flag’, which is intended to be used in all mainstream services data collections (e.g., health care, housing, education) to identify people with disabilities or long-term health conditions. The flag is determined through a set of questions that are based on the International Classification of Functioning, Disability and Health. The flag is designed to provide consistent and comparable information on the interactions of disabled people with mainstream services to understand the gap in health and social outcomes between disabled people compared to the wider population. This is essential for measuring the effectiveness of services in improving outcomes for disabled people, to ensure visibility of disability issues and improve the performance of mainstream services in addressing the needs of people with disability.174

Engaging with disabled people (both as a consumer and community)

Data is important to inform planning but, equally important, is the lived experience and views of disabled people and their whānau. As emphasised in the Interim Report, the Review considers that:

- ‘greater inclusion and participation of disabled people through all levels and parts of the system [...] are fundamental’.

Consistent with the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) (2006), engaging disabled people and their whānau is a valuable way to inform and improve long-term planning, policies, service design and delivery.

Disabled Person’s Organisations (DPOs) currently work with government to promote and protect the rights and interests of disabled people. District health boards engage with disabled people through disability reference or advisory groups. At a national level, the Ministry has established a disability sector strategic reference group and Māori advisory group Te Ao Mārama. The cross-government Enabling Good Lives governance and leadership groups are further examples of national and community partnerships.
Some of these engagement approaches are working well, while others have limited influence on planning, decision making and service design. Enabling disabled people to be partners in service design and delivery requires expertise in a wide range of inclusive practices.\textsuperscript{175} For example, engaging with tāngata whaikaha and their whānau must come from a Māori world view and there needs to be a commitment to establish and maintain good partnerships with tāngata whaikaha and their whānau, hapū, iwi and Māori communities.\textsuperscript{176}

A continued shift in culture is needed to give disability communities a real say in the system so they have formal ways to influence, see the changes made because of their input and the results of those changes. Creating more ways for disabled people, their whānau and carers to get involved would be an important element of DHB strategic and locality service planning.

**Improving equity and health outcomes for disabled people**

The Interim Report signalled a strong commitment to improving health outcomes for disabled people.

- ‘A focus on living well and preventing the exacerbation of disability should be a priority. This will require more integration both within the system and across other parts of government. Promoting living well for everyone, with and without disability, and preventing different abilities and health conditions from becoming disabling, need to be a focus.’

Disabled people, regardless of their age or disability, are high users of the health system. Data suggests that their use of health services is generally at least double that of the non-disabled population.\textsuperscript{177} In addition, people receiving disability support services are high users of other government services. For example, disabled people are more likely to receive benefit and employment support from the Ministry of Social Development and use learning support services from the Ministry of Education.\textsuperscript{178} (refer Figure 8.3.)

Evidence shows that disabled people have more frequent contact with the health and disability system but do not achieve equity of health outcomes when compared with the rest of the population. They report poorer health than their non-disabled peers and may experience multiple barriers in accessing health services.\textsuperscript{179}

Research has found that ‘physically disabled adults experience a higher prevalence of chronic diseases including arthritis, asthma, cardiovascular disease, diabetes, high blood pressure, high cholesterol and stroke’.\textsuperscript{180} National and international research identifies higher rates of chronic illness and early death for people with learning and intellectual disabilities.\textsuperscript{181} \textsuperscript{182} \textsuperscript{183} Tāngata whaikaha and Pacific peoples also report higher levels of unmet health need.\textsuperscript{184} \textsuperscript{185}

Most DHBs have developed disability responsiveness plans with recommendations for change, following in-depth engagement with disabled people and their whānau in their local communities. These plans do have similarities but lack coherency between DHBs.\textsuperscript{186}
Figure 8.3: Interface with health services and other agencies

<table>
<thead>
<tr>
<th>Age band</th>
<th>0-4</th>
<th>3-14</th>
<th>15-19</th>
<th>20-24</th>
<th>25-84</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Health Services</strong></td>
<td>~26% had ambulatory sensitive hospitalisations</td>
<td>~18% had ambulatory sensitive hospitalisations</td>
<td>15% (15-24) had ambulatory sensitive hospitalisations</td>
<td>15% (15-24) had ambulatory sensitive hospitalisations</td>
<td>~23% had ambulatory sensitive hospitalisations</td>
</tr>
<tr>
<td></td>
<td>cf</td>
<td>cf</td>
<td>cf</td>
<td>cf</td>
<td>cf</td>
</tr>
<tr>
<td><strong>Ministry of Social Development</strong></td>
<td>~37% supported by main benefit</td>
<td>~33% received main benefit during period</td>
<td>Similar (15-17) household profiles to other child cohorts</td>
<td>~95% received main benefit during period</td>
<td>~92% (25-44)</td>
</tr>
<tr>
<td></td>
<td>cf</td>
<td>cf</td>
<td>cf</td>
<td>cf</td>
<td>cf</td>
</tr>
<tr>
<td><strong>Ministry of Education</strong></td>
<td>~50% received learning support from the Ministry of Education’s ORS</td>
<td>~1% received learning support through OPF</td>
<td>~38% enrolled in tertiary education and training</td>
<td>~24% enrolled in tertiary education and training</td>
<td>~24% (25-44)</td>
</tr>
<tr>
<td></td>
<td>cf</td>
<td>cf</td>
<td>cf</td>
<td>cf</td>
<td>cf</td>
</tr>
<tr>
<td><strong>Oranga Tamariki</strong></td>
<td>~18% involved in reports of concern</td>
<td>~20% involved in reports of concern</td>
<td>~28% reported employment income</td>
<td>~17% reported employment income</td>
<td>~10% (25-44)</td>
</tr>
<tr>
<td></td>
<td>cf</td>
<td>cf</td>
<td>cf</td>
<td>cf</td>
<td>cf</td>
</tr>
</tbody>
</table>

**NOTES:**
1. The statistics are based on incidence rates over three years to June 2018, except for health indicators which are for the 3 year period to 30 June 2017 due to limited data availability at the time of analysis.
2. It is important to note that actual learning support is higher than this once MOE funded services linked to schools (but not individual children) are included, eg funding for teacher’s aides. Schools may also provide support not funded by MOE.


In some instances, the plans are high level with limited evidence of measurable, evidence-based improvements. Other initiatives under way in New Zealand, such as health passports, annual health checks and specialist disability coordinators are showing signs of success and should be considered further across the system.
Health NZ should use its national role to improve health outcomes and track progress in reducing the disparity in health outcomes for disabled people. DHB strategic planning processes should have a specific focus on what is required for disabled people and include tāngata whaihaha in their planning processes. Progress should be tracked against strategic and locality plans from the point of disability identification through to population health outcome assessments.

**Delivering services that address inequity and better meet people’s needs**

If the system is to meet the needs of disabled people, it needs to ensure disability support services fulfil the principles of Enabling Good Lives (EGL): that the fact that a person has an impairment is not what defines their life chances.

**Enabling Good Lives**

The EGL principles are as set out below:189

- **Self-determination** – disabled people are in control of their lives.
- **Beginning early** – invest early in families and whānau to support them; to be aspirational for their disabled child; to build community and natural supports; and to support disabled children to become independent, rather than waiting for a crisis before support is available.
- **Person-centred** – disabled people have supports that are tailored to their individual needs and goals, and that take a whole life approach rather than being split across programmes.
- **Ordinary life outcomes** – disabled people are supported to live an everyday life in everyday places; and are regarded as citizens with opportunities for learning, employment, having a home and family, and social participation – like others at similar stages of life.
- **Mainstream first** – Disabled people are supported to access mainstream services before specialist disability services.
- **Mana enhancing** – The abilities and contributions of disabled people and their whānau are recognised and respected.
- **Easy to use** – Disabled people have supports that are simple to use and flexible.
- **Relationship building** – Supports build and strengthen relationships between disabled people, their whānau and community.

The three Enabling Good Lives initiatives in Waikato, Christchurch and, most recently, MidCentral (Mana Whaikaha) are demonstrating a new approach that has been positively received by the disability sector.

Disabled people and their whānau are making decisions (with assistance as needed) about what supports would work best for them. People who had not previously accessed the system are now accessing services and, with more information about services, some are choosing options that they previously did not think were possible; for example, a group of families pooling funding so their young disabled family members can flat together with support. Some are holding and managing budgets, but the option of individualised funding packages is being used by more participants of the EGL Waikato initiative. In MidCentral, the majority are continuing to access services through traditional approaches.
The role of the tūhono/connector has been particularly valued by disabled people and their whānau.

- Some successes are that whānau identified that they felt safe and supported, particularly in comparison with previous systems they had engaged with. In addition, whānau reported having positive relationships with Tūhono/Connectors and were appreciative there were Tūhono Māori, noting that they “love that they are Māori, it makes a big difference”. It was also clear in the interviews that open and ongoing communication is critical and strengthens relationships between Tūhono/Connectors and participants.”

The Review identified some changes within the health and disability system that have the potential to make a real difference for disabled people. Some of these relate to disability support services and some to health services.

**Better access to disability information and advice**

Given the varied nature of disability it is not surprising that people, particularly those new to the system, often find it challenging to know where to find information.

While the health and disability system currently spends $9 million to fund more than 100 organisations to provide disability information advisory services (DIAS), there is no central point to access information about disability and wider community supports. Instead, multiple sources exist with the potential for disjointed and confusing information and advice. Significant numbers of people, particularly Māori and Pacific peoples, struggle to find out about or access disability supports and entitlements.

While some variation in information sources and channels is helpful in meeting people’s needs, greater consistency and coordination would ensure quality and reliability of the range of information available.

The following changes are proposed to improve access to information:

- Health NZ should take overall accountability for ensuring that nationally-consistent information and advice about impairments and disability-related supports and services is available and easily accessible through a variety of channels for disabled people, family and whānau. The recommendations in a recent report for ‘national branding of disability in New Zealand’ should be considered further.
- DHBs and, particularly, Tier 1 service networks should play a greater role in providing advice. The proposed integration of needs assessment and coordination services into these networks would facilitate this.
- All information and digital and data standards should meet accessibility requirements.

**Accessing information – what the future could look like**

- A fully accessible website, app and helpline provides consistent information and advice to disabled people and whānau. The website and app are linked to information from other government agencies, as well as to local and specialist information.
Diagnosis and early intervention

Families and carers often experience lengthy delays in obtaining a diagnosis and accessing supports. While this cannot always be avoided, there is considerable scope to improve outcomes by investing in early intervention.

For example, research has demonstrated the benefits of early intervention for children with autism spectrum disorder (ASD). Evidence-based practices in early intervention for autism spectrum disorder has the potential to improve children’s developmental trajectories and address family needs. [...] Early intervention is a critical component to any ASD service design.\(^{196}\)

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**Early intervention in ASD can improve outcomes**

- Children who are part of an early intervention programme before they are three years old experience significantly improved outcomes. When children and young people with ASD receive coordinated support and interventions at home, early childhood education and school there is a greater likelihood of them completing their education,\(^{197}\) gaining employment and/or having meaningful life outcomes.\(^{198}\)
- Currently, however, many children are not diagnosed early enough, resulting in critical learning and development time being lost. Access to early intervention programmes for young children is also not readily available.

A lack of data and research, limited long-term planning and the current purchasing model for disability support services has contributed to limited focus and investment in early diagnosis and intervention. Changes that are required include:

- identifying opportunities to extend the focus of current health checks to support early diagnosis (eg, extending Well Child/ Tamariki Ora checks to include behavioural checks that may assist with early diagnosis of conditions such as ASD)
- improving information sharing and care planning across the health and disability system to better support early identification and diagnosis
- increasing the capacity and capability of the workforce and services that undertake the diagnostic and intervention processes.

These changes cannot happen overnight. However, the case for investment should be developed with a view to having improved early diagnostic and intervention pathways in place within five years.

Needs assessment and service coordination

Needs assessment and service coordination services are delivered by 12 needs assessment and service coordination providers (NASCs). Five NASCs cover 13 DHBs (and about 70% of the population) although their coverage is not always contiguous. Also, the scale of coverage varies significantly, from 44,000 to 1.6 million people.

The Ministry of Health’s 2013 and 2018 demographic reports show a 19% increase in the numbers of people accessing NASCs over this time period, or around 5% growth per annum.\(^{199} 200\) However, funding for NASCs has been largely unchanged. This is one of the factors making it increasingly hard for NASCs to fulfil their role.
Issues with the current NASC system include:

- the one-size-fits-all NASC system is inefficient, too invasive for many, and slows down outcomes for people
- people find it difficult to navigate the disability system and wider system(s)
- some people require service coordination that is more intensive to ensure their needs are met.\textsuperscript{201}

A recent review found that scheduled NASC reassessments accounted for 92\% of service coordination events and may be putting pressure on the system, potentially for little purpose. An analysis of annual client reviews indicated that for 68\% of people, this did not lead to any change in the number, type, or volume of services allocated. Similarly, there was no change for 63\% of people at their full three-yearly assessment.\textsuperscript{202}

This suggests there is considerable scope to reduce multiple reassessments when impairments and support needs are stable. Resources could be better directed towards providing a greater level of support for those who need more assistance to navigate the system.

Disabled people also raised significant concerns about inconsistencies between NASC assessments and the challenges associated with leaving one NASC and enrolling with another if they move.

Significant improvements in the NASC processes are proposed. They include the following.

- Ensuring that:
  - a nationally consistent needs assessment and funding allocation framework is in place and is used consistently across all NASCs
  - information is shared (with appropriate consents) between NASCs and the requirement to re-enrol is removed when a person moves between NASCs
  - evidence of impairment only needs to be provided once and then updated if it changes.

- Assessment and reassessment processes should be streamlined so that those:
  - with stable impairment and support needs engage with the system on an as-required basis, rather than having regular assessments
  - who want to, can essentially self-manage by accessing an online portal, where people could decide the supports they require and request these through the portal
  - who need or request more hands-on service coordination can access this in a timely manner. In time this service would be integrated into Tier 1 localities as many of these people may also have high health needs. In Motueka, a similar approach is being trialled where people with complex health needs are connected to services using planned and integrated locality-oriented models of coordinated care.

Streamlining access to supports – what the future could look like

Casey is a graphic designer and has a physical impairment, which is stable. When he first registered on the portal, he uploaded a photo of a letter from his GP as evidence of his impairment and completed a self-assessment.

The portal offered options including speaking with a coordinator online or meeting a local coordinator face to face. Casey didn’t need this level of assistance and was pleased he could do everything online. His assessment was processed quickly and he received exactly what he requested – funding for three hours’ housework and gardening a week. Casey’s funding is paid to him directly and rolls over each year. He understands the process for initiating another assessment if things were to change in his life.
System improvements need to be designed in a way that works for Māori. This includes the growth of kaupapa Māori services and mātauranga Māori models of care.

Current barriers to kaupapa Māori services include inflexible funding models that do not recognise different levels of need and a focus on the individual without acknowledging the needs of whānau. Historical provider arrangements and a lack of system-wide knowledge and capability may be prohibiting the development of services that Māori and Māori communities want.

Disability support services
Around $1,358 million is spent annually on disability support services.

Figure 8.4: Disability support services - cost and client numbers

- **Community care**
  - Personal care: 8,300 people, $159m
  - Supported Living: 4,000 people, $66m
  - Home support: 7,400 people, $48m
  - Respite: 4,100 people, $40m
  - Caregiver support: 15,600 people, $35m
  - Community Day services: 900 people, $30m

- **Residential care**
  - Community Residential: 6,600 people, $573m
  - Hospitals: 500 people, $35m
  - Rest homes: 200 people, $8m

- **Other services**
  - Child Development Services: n/a, $14m
  - Behaviour Support: 2,800 people, $22m
  - Rehabilitation: n/a, $11m
The trend towards using home-based services is expected to continue. However, there is likely to be an ongoing requirement for residential services for many people already in residential care and for some people with complex health needs.

The changes required to better meet current needs are not so much about the range of services available, but more about the design and delivery of them. The EGL pilots have demonstrated that a comparatively small number of people want to budget and manage services themselves. For some, individualised funding packages have provided an opportunity to manage or part manage services in a way that better meets their needs. Access to a coordinator also helps people to plan and change supports as they need to.

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**Getting more assistance when things are difficult – what the future could look like**

Afa and Langi are Tongan and live in Wellington. They have two teenagers living at home and three adult children living nearby. Because Langi has multiple health and disability needs, she works with a coordinator to ensure her wellbeing and that of her kāinga is maintained. Langi was given the choice of having a Tongan coordinator who liaises with the hospital and all services on their behalf.

The coordinator is currently working on getting an accessible bathroom and van with hoist funded for them. The coordinator keeps in close contact with Afa and Langi to plan ahead and ensure any issues are quickly resolved.

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More focus needs to be placed on achieving consistent national service coverage, recognising that services may be delivered differently in rural and urban settings. It is also essential that services are culturally responsive (eg, kaupapa Māori services) and focus on improving outcomes for disabled people and whānau.

In addition to the disability support services set out above, around 82,500 requests, from around 58,000 people, are received annually for access to environmental support services.

**Figure 8.5: Environmental supports - cost and client numbers**

<table>
<thead>
<tr>
<th>Environmental supports</th>
<th>Cost</th>
<th>Client Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment</td>
<td>$52m</td>
<td>55,000 people</td>
</tr>
<tr>
<td>Housing modifications</td>
<td>$13m</td>
<td>3,000 people</td>
</tr>
<tr>
<td>Vehicle modifications</td>
<td>$1m</td>
<td>400 people</td>
</tr>
</tbody>
</table>
Around 90% of referrals are for equipment, with the balance being for housing or vehicle modifications. Expenditure on this service is growing rapidly, with a 31% increase over the last five years. The option to streamline requests for equipment so that straightforward requests are processed in a more automated way should be considered, particularly where this supports people to live independently. For example, investing in environmental supports can improve outcomes for the individual, family and whānau. It may also result in lower downstream costs for government: if a person can live a more independent life and complete tasks that they previously needed support workers for.

**ACC interface with the health and disability system**

As discussed in the Interim Report, submitters raised concerns about the inequities between people whose impairments result from injury compared to those whose impairments result from other causes.

ACC provides income compensation and a wide range of services and support, including up to 24-hour home-based support, childcare, and any aids or assistive technology that supports increased independence, including housing and vehicle modifications. Services can be accessed irrespective of income.

In contrast, Ministry-funded disability support services tend to be more restricted and complex to access, particularly for housing and vehicle modifications. Disability support services also provide home-based support services, but anyone requiring 24-hour care will likely be referred to residential services. Some supports are means-tested, such as household management.

The Review acknowledges that some differences in the levels of assistance provided will continue to exist, as ACC is an entitlement-based scheme that compensates people for their injury and loss of earnings.

Calls for all disability supports to be included in the ACC scheme fall outside the scope of this Review and the recent move to a Disability Insurance Scheme in Australia has illustrated the complexity and risks of making such changes.

There are, however, opportunities to learn from ACC’s approaches.

- **Long-term planning and early intervention:** ACC projects lifetime costs for all injury claims which assists with long-term planning. While an actuarial type approach is not suggested for health, the case for early intervention for long-term benefit needs to be given more prominence in future planning and decision-making.

- **Case management:** ACC is launching a new case management model that gives clients greater control, with much of it being managed online. A dedicated case manager supports those with more intensive support needs. The case management approach is holistic and client directed. It aims to be an agile system that ensures people receive support according to their level of need, with no one being under- or over-serviced. ‘Serious injury’ clients can also opt for the ‘Living My Life Service’ where ACC provides a case manager but a community-based service provides the day-to-day service and can coordinate services from a variety of providers to provide seamless support for the client.

Other actions could include more collaboration between ACC and the health and disability system to develop best practice guidelines for service providers. Joint purchasing with shared service specifications for disability support services could also be considered to ensure that services are delivered with the same standards and quality, whether purchased by ACC or the health and disability system.
To that end, provisions under the Commerce Act 1986 should not be a barrier to joint purchasing between DHBs (or Health NZ) and ACC where this is in the interests of improving health outcomes and equity. At present, legislation prohibits joint purchasing with the health system in all but very few circumstances, as set out in the Accident Compensation Act (2001) (e.g., emergency services).

**Funding and contracting to provide services**

**Funding flows**

Funding arrangements in the disability system are complex. Government agencies, including the Ministry, ACC, Ministry of Social Development and Ministry of Education, fund disability supports using varied assessment criteria, processes and delivery methods.

Disability support services for people under 65 years are funded mostly by the Ministry. This is inconsistent with other health and disability services, which are largely devolved to DHBs. For example, aged care, long-term support for chronic health conditions and mental health-related disability supports are funded and purchased by DHBs.

The diagram below illustrates the funding flows from the Ministry and DHBs to different service types in 2018/19.

**Figure 8.6: Funding flows to different service areas, 2018/19**

*Note that some of the mental health service types are excluded from the flow diagram.*

Source: Ministry of Health, Oracle Payments System, FY 18/19
While similar services (e.g., home and community support services (HCSS), community care and residential care) are purchased by the Ministry and DHBs, there are often variations of service specifications and pricing. In addition, the high number of providers delivering services, contributes to the complexity of the provider landscape.

Funding for disability support services has not kept up with need. There has been an increase in overspend each year, but no serious attempt to forecast future demand and service requirements, or assess the funding required to deliver these services. Rather, the funding path has been informed largely by spend in the previous year with some adjustment for inflation.

The Review considers that data analytics and better planning is a critical first step to assessing what level of investment is likely required to better meet future requirements for disability support services. This work should be completed before disability support services are rolled into the DHB baseline and funded via the population-based funding formula.

**Sustainability of services**

The health and disability system should be accountable for ensuring that services are available to people right across the country to meet their support needs. This requires an ecosystem of providers who are paid a fair price for delivering services to the quality and service specification standard set out in contracts. For providers of residential services with five or more beds, certification standards also need to be met.

The current model of service delivery relies on non-governmental organisations (NGOs) to provide many of these services. The disability sector has had regulatory changes in recent years, including settlements for sleepovers, in-between-travel, and pay equity for care and support workers. While funding from the Ministry and Ministry of Social Development has increased over the past 10 years to account for the increasing number of people accessing supports, it has not kept up with cost pressures.

Overall, analysis shows that provider sustainability is becoming increasingly fragile. There has been a consolidation of the provider market, generally resulting in larger providers taking over small, often unsustainable providers.

The Review considers that a sustainable, consistent and transparent funding and pricing model should be developed to ensure sufficient services are available and enable providers to deliver high quality and innovative services.

**Purchasing and contract terms**

The current contracting and pricing model for disability support services is based on historic arrangements which have been largely unchanged in the past 25 years. An example of this is Ministry-funded residential care, which has different funding models around the country.

Providers that operate around the country may receive different rates for the same service as funding arrangements vary depending on the geographic location and funders (e.g., Ministry, ACC and DHBs). This results in a significant administrative burden for both funders and providers.
In addition, a large proportion of disability support services are funded on a fee-for-service basis. While this is easy to administer, it lacks flexibility to address changing needs and provides no incentive to discharge or reduce services for people that no longer need them. It also makes it difficult for providers to introduce new ways of meeting people’s needs.\textsuperscript{207}

Various attempts have been made to move towards outcomes-based contracting and reporting for NGO-led services, most recently the introduction of a streamlined contracting framework and outcome agreements for contracted providers. Current analysis suggests there is still a way to go to deliver outcomes through contracting, as the quality of what is requested, data inputs and how it is used for planning purposes has room for improvement.

The Review considers that funding for disability support services should be devolved to DHBs so that it can be managed with primary and community services. It is expected that there would be only a small number of contracts managed nationally for highly specialised services (eg, secure facilities for those under the Intellectual Disability (Compulsory Care and Rehabilitation Act) 2003).

Health NZ should develop a consistent commissioning framework for disability support contracts that aligns with the Tier 1 framework. This should specify core components that must be nationally consistent, while allowing DHBs the flexibility to contract for services that would best meet their population’s needs.

**Leading by example in employment**

**Employing disabled people**

Many disabled people want to work, and some methods that support disabled people into work have demonstrated success.\textsuperscript{208} \textsuperscript{209} Good work has many benefits – income, social connections, achievement and purpose all enhance wellbeing and lead to better health outcomes. Despite this, employment rates for disabled people are low in New Zealand, at 23\% compared with 70\% for non-disabled people.\textsuperscript{210} The number of disabled people employed within the health and disability sector is also low. Analysis of DHB and Ministry select committee answers suggests the proportion of disabled people working in the health sector is between 1\% and 3\%.\textsuperscript{211} However, this data is weak, with most DHBs not having this information.
As set out in the Interim Report, the Review considers that:

‘as the largest employer in many regions, the system should lead in employing people with disabilities. Boosting employment of disabled people overall may be the single biggest contributor to improving wellbeing of disabled people. Bringing their skills to the workforce in health will also make the sector more responsive, adaptive, inclusive, and reflective of the community’.

The Draft Disability Employment Action Plan is a call to action and states: ‘The Government’s Employment Strategy aims to make sure all New Zealanders can reach their potential to learn skills and find a good job’. Health NZ should lead a programme of work to engage and support the health and disability system to become a leading employer of disabled people in New Zealand. This work needs to draw on the expertise of disabled people in the design, implementation and review phases, as it would require improvements in flexibility and inclusiveness for both education and workplace environments and cultures.

Factors that increase employment of disabled people include:

- leadership – a senior executive who is a disabled person or an ally of disabled people, and disabled people in senior roles
- employment practices – recruitment, induction, career development, tailored support, and retention practices that are inclusive and accessible
- accessibility – requirement that all buildings and facilities are accessible to and usable by all people and that employees’ requirements for access are met
- engaging with disabled people – having formal programmes in place to learn from and address the needs of the disability community and for disabled employees.
Health NZ should learn from international successes. The DXC Dandelion programme, designed to build valuable information technology skills and careers for people on the autism spectrum, and Project SEARCH in Ireland are two examples that could be adapted for New Zealand. Developing a career path for disabled people from school into employment in the health and disability sector would be particularly beneficial and start these young people on a positive life trajectory.

There are opportunities to increase the number of disabled Māori in the health and disability system workforce by extending DHB Māori health workforce programmes, which don’t currently have a disability focus.

Project SEARCH’s primary objective is to secure competitive employment for disabled people. It was first developed at Cincinnati Children’s Hospital Medical Center, which began training people with learning disabilities to fill entry-level posts at the hospital.

Since its inception, Project SEARCH has grown from a single programme to a large and continuously expanding international network. In Ireland, a programme at Naas General Hospital offers young people with learning disabilities an internship programme. Participants rotate through various departments to learn about administration, patient care, customer interaction, catering, housekeeping and general communication skills. The programme has a high success rate in securing paid employment for the interns.

**Developing a valued workforce**

In the disability support system, the demand for a skilled and caring workforce is expected to increase significantly, due to an ageing population with increasingly complex needs. Retaining and upskilling staff will be critical, as well as attracting new workers with appropriate skills and ensuring that the workforce is delivering culturally responsive services.

This is particularly relevant for home and community support services (HCSS). These services have been delivered by a semi-trained workforce with low wages, low qualification levels and poor working conditions. Despite recent regulatory changes that include in-between-travel, pay equity for care and support workers and provisions for guaranteed hours, workers are still faced with irregular hours and a lack of job security. In addition, the current system is complex and bureaucratic, as different top-up rates exist for travel times, guaranteed hours and pay equity.

**Addressing casualisation – an example of home-based support services**

This issue is not restricted solely to those providing home-based support services. To promote the overall growth of a better trained and fairly paid workforce, Health NZ’s commissioning rules throughout the health and disability system should specify that the workforce should be predominantly on secure salaried contracts. This would also simplify the current payment system for both providers and the workforce. Simulating this scenario for home and community support services shows that costs and expected gains from moving to secure salaried contracts may be offset, and therefore may not substantially increase costs for the sector.
Having secure salaried contracts is expected to help grow a skilled workforce by improving staff retention and attracting new people to the sector. This would help meet future demand. A skilled workforce can better support disabled people using an Enabling Good Lives approach, as well as whānau and wider society. It is expected to improve wellbeing for workers, including the Kaiāwhina workforce, which has a high representation of Māori and Pacific peoples, by providing more job security.

**Supporting independence**

The workforce should be trained in how to maximise opportunities for people to do things for themselves. The traditional model of care has focused on providing hands-on care with a limited focus on maintaining or building skills. While some providers do promote self-determination and work in a mana-enhancing way, others create dependency that results in a reliance on workers and an ineffective use of the workforce. For example, cooking for someone rather than teaching them how to cook and promoting their independence. There are also opportunities to adopt digital skills and use mobile devices, which has the potential to be transformative in how they enable people to be in control of their daily lives.

Delivering these skill improvements would require more flexible models. Modular training modules that are accessible online and provide group learning support can fit with earn-as-you-learn models and improve health literacy, inclusion and promote independence for all staff.
Building the future

The Review proposes the following changes

**Strong focus on improving equity and health outcomes for disabled people**

- Health NZ and DHBs should engage with disabled people including tāngata whaikaha and their whānau as part of the planning and design processes, nationally and locally using a range of inclusive practices.
- The disability support system should move away from relying on diagnosis for initiating eligibility for assistance, towards providing assistance to live well, according to an individual’s need.

**Better data collection, analytics and meaningful engagement of disabled people**

- Increased capability and use of data analytics to ensure better disability data collection and sharing that would underpin planning and services delivery.

**Improved information, advice and early intervention**

- Health NZ should have overall accountability for ensuring that nationally consistent information and advice about disabilities, and disability-related supports and services is available and accessible through different channels; this should be linked into the Tier 1 networks.
- Well Child / Tamariki Ora or other health checks could be extended to support early diagnosis and early intervention with improved information sharing and care planning across the health and disability system.

**Accessing disability support services is an easy process for disabled people and whānau**

- Health NZ should ensure there is a consistent needs assessment framework in place and used across the country.
- Assessment and reassessment processes should be streamlined so that those who require more service coordination support receive this in a timely manner, the need for regular reassessment is reduced, and people gain more freedom to manage their own support.
- Service coordination support should work more closely with other agencies to ensure disabled people receive more joined-up services.
- Over time, needs assessment and service coordination services should be integrated into Tier 1 service networks.

> Continued
Building the future – continued

The Review proposes the following changes – continued

Disability support commissioning and funding transitions to Health NZ and DHBs

- Health NZ should develop a consistent commissioning framework for disability support contracts that aligns with the Tier 1 framework and supports the integration of purchasing of these services. The framework should specify core components that should be nationally consistent, while allowing DHBs the flexibility to contract for services that best meet their population’s needs.
- Funding for disability support services should, over time, be devolved to DHBs so that it can be managed with Tier 1 services.
- Health NZ commissioning rules should aim at building a better trained and more secure disability support services workforce.
- Health NZ commissioning rules should specify that the majority of services should be supplied by workforces on a secured salary basis and that salary rates should be consistent.

The system is a leading employer of disabled people

- Health NZ should lead a programme of work to engage and support the system to become a leading employer of disabled people in New Zealand.
While changes to models of care should support more care being delivered in the community, hospitals will always be needed to treat complex conditions and acutely unwell patients. It is expected that for the foreseeable future, growth in demand will continue to outstrip population growth.

Tier 2 services in the future should be supported by technology and focus on caring for more patients with complex conditions and providing virtual and outreach specialist advice.

They should be organised as a cohesive network of providers, working across settings and closely with Tier 1 to deliver care for all New Zealanders. Streamlined planning, design and funding arrangements should enable a cohesive service delivery system, and rural communities should be specifically planned for.

The challenge for the health and disability system is to make the changes required to ensure that hospital demand is stemmed to the greatest extent possible, while investment planning addresses the state of current assets, capacity pressures and workforce needs.

**Delivering Tier 2 services**

Tier 2 services play a significant role in health and disability service delivery and make up a significant proportion of health spending. Tier 2 encompasses public and private hospital (excluding aged residential care) and specialist treatment and diagnostic services. Services are provided for local populations, as well as regional and sometimes national catchments. Tier 2 boundaries are blurred as specialist services are also delivered in the community and Tier 1 services can be located in hospital facilities, particularly in rural communities.
DHB expenditure on Tier 2 services

In 2018/19 around $8.8 billion of DHB expenditure was for Tier 2 services. The majority (63%) of spending was on personnel, as shown in Figure 9.1 below.

Figure 9.1: Share of DHB spending by category, 2009 and 2018

Between 2009 and 2018, the proportion of DHB expenditure on:

- medical personnel increased more than other personnel categories
- management and administrative personnel, infrastructure and non-clinical supplies decreased.

Almost all DHBs are spending more than they receive, leading to financial deficits. Much of this is attributed to demand and wage pressure growth in DHB provider arms that largely deliver Tier 2 services. Deficits as a percentage of revenue are now at the highest level since the mid-2000s, the forecast deficit for 2019/20 is $559 million.
Current Tier 2 service delivery arrangements

Most Tier 2 services are delivered by DHBs. All have at least one hospital that provides a core set of local services, including an emergency department. In larger urban centres DHBs may have more than one campus.

In total, there are around 90 public or community-owned hospitals that vary considerably.

- **Size and complexity**: large urban hospitals have from 650 beds to more than 1,000 (Auckland City Hospital), mid-sized provincial hospitals have 200 to 400 beds and smaller community hospitals have fewer than 100 beds. The complexity of services able to be provided tends to increase with hospital size.

- **Service range**: Some hospitals provide a full range of services while others provide only one service; for example, only maternity services, mental health services or elective services.

Private hospital providers also have an important role in the health care system. They provide extra capacity to the public system for planned care and provide around 100,000 privately funded hospital discharges each year. There are about 75 private surgical hospitals and a wide range of specialists working in private practices.

**Figure 9.2: Snapshot of Tier 2 services 2016/17 and 2017/18**

<table>
<thead>
<tr>
<th>IN AN AVERAGE YEAR, THE SYSTEM DELIVERS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>60,000 births</td>
</tr>
<tr>
<td>1,200,000 public hospital discharges</td>
</tr>
<tr>
<td>3,100,000 public hospital bed days</td>
</tr>
<tr>
<td>200,000 elective surgeries</td>
</tr>
<tr>
<td>1,300,000 Emergency department visits</td>
</tr>
<tr>
<td>1,700,000 Public hospital medical and surgical first and follow up visits</td>
</tr>
<tr>
<td>480,000 Ambulatory cancer visits and treatment</td>
</tr>
<tr>
<td>100,000 Privately financed discharges</td>
</tr>
</tbody>
</table>

Source: Interim report, Ministry of Health private hospital discharges, NNPAC, NMDS

**Current patient flows**

There are a core of around 12 to 13 personal health hospital services including general medicine, general surgery, emergency departments, paediatrics and maternity services offered by all DHBs. As DHB populations grow, the range of services offered by the DHB increases (refer to Figure 9.3), but all Boards rely on another board to provide some services for their domicile population.
Further analysis of current patient flows, using inter-district flow (IDF) data, (refer Figure 9.4) shows that on average:

- DHBs provide 84% of inpatient services for the population in their district.
- Less than 2% of patients are required to travel outside their region for treatment.

Source: Ministry of Health inter district flows

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**Figure 9.3: Personal health admitted events: number of services by DHB**

Source: Ministry of Health inter district flows analysed by HDSR review team

**Figure 9.4: Regional comparison of IDFs by value year 2017/18**

Source: Ministry of Health inter district flows
The need for small volumes of patients to travel for high complexity inpatient services is likely to always be necessary given New Zealand’s comparatively small population, but there are many examples of services that were initially provided in one or two hospitals now being routinely provided in most DHBs. There has also been a steady stream of new, highly complex services being offered at a restricted number of hospitals. This is expected to continue.

**Demand for Tier 2 services**

**New Zealand’s population is changing**

Population growth and changing demographics will have a significant impact on hospital services. People are living longer, and they are living longer in poor health. An increasing number of people are living with long-term health conditions and multi-morbidities. This is particularly so for Māori, Pacific peoples, refugees, disabled people, and people living with a mental illness.

As the proportion of the population aged over 65 increases, so too will the demand on services. People aged 65 and older are more likely than younger people to be diagnosed with cancer or have a stroke, diabetes, heart disease, chronic pain or arthritis. This, coupled with frailty and multi-morbidities, contributes to greater complexity and longer lengths of stay when older people are admitted to hospital (refer to Figure 9.5).

**Figure 9.5: Hospital discharges per capita by age 2016/17**

![Diagram showing hospital discharges per capita by age 2016/17]

Sources: Discharges from Ministry of Health publicly funded discharges 2016/17, Population data from Statistics New Zealand

In 2018, people aged over 65 accounted for 15.8% of the total population, 34.5% of all hospital discharges and 53.0% of acute bed days. If this trend continues over time with nothing done to ameliorate demand growth, around 38% more capacity (around 4,000 more beds) would be required in 20 years.
The Northern region has completed detailed modelling of bed requirements as part of the development of their long-term investment plan. Figure 9.6 below shows the growth trajectory of beds in the Northern region assuming a range of growth paths and demonstrates that even with the highly ambitious lower growth rate, a significant increase in capacity is required. Adding 1,000 beds is the equivalent to a very large new hospital.

Figure 9.6: Bed demand forecasts in Northern region

![Bed demand forecasts in Northern region](image)

Source: Reproduced from Northern Regional Alliance. 2018. Northern Region Long Term Investment Plan, Figure 14, p71.

The Northern region’s analysis considered how adopting more preventive and community models of care might slow the demand for hospital services. It also assumed that it would take time for changes in models of care to flow through to hospital volumes, with the potential for activity to increase as current unmet demand flows through the system.

**Hospital discharges and bed days**

Over the last 15 years, hospital discharges have increased by 49% compared with 20% population growth. The growth rates have varied by specialty group (refer to Figure 9.7), with the highest growth rates happening in surgery and medicine.
While there has been a steep increase in hospital discharges over the last 15 years, there has been much slower growth in bed days. Changes in technology, clinical practice and models of care have resulted in more care being delivered on a day case basis and in community settings and reduced lengths of stay in some services.

At the same time, there has been limited investment in additional acute hospital capacity, so hospital bed numbers have not increased in line with population growth.

This growth has been accommodated by:
- operating hospitals at higher than optimal occupancy rates
- using capacity that was intended primarily for surges in demand (eg, winter peaks, disease outbreaks)
- continuing to use facilities that are no longer fit for purpose.

This has resulted in many hospitals being stretched to a point where emergency escalation plans for managing excess demand are routinely being used. This is especially the case for major acute hospitals where there is very little surplus capacity to provide the buffer that is required for unplanned short- or medium- to long-term demand pressures.
The future role and delivery of Tier 2 services

While demand for hospital services will grow due to population changes, this is only part of the picture. The future role of hospitals and delivery of Tier 2 services will also be heavily influenced by changes in technology. They include:

- virtual specialist, telemedicine and other virtual health support that will reduce the need for patients to travel and support rural communities to deliver more local services
- greater use of robotics in a range of activities, from ancillary services such as linen delivery through to surgical procedures
- improvements in productivity through increased use of digital processes such as patient scheduling, workforce rostering
- greater use of artificial intelligence and deep learning-based algorithms to improve clinical decision-making processes
- increasing the quality and efficiency of patient care through the improved sharing of data within hospitals, between providers and with patients
- advances in medical care including precision medicine based on patient genomics and personalised medicine based on the combination of pharmaceuticals paired with a diagnostic test
- using real world data to assess and improve service models, treatment and technology.

The hospital of the future should be better supported by technology, be focused on caring for more complex patients, and provide virtual and outreach specialist advice. The expectation is that it would also be better integrated into the community so that people could access specialist expertise without needing to visit hospital. As some services move out of the hospital the services that remain are likely to be more highly technical and cater for increasingly complex and frail older populations.

Addressing current demand, while shifting to future models of care

While changing models of care should support more care being delivered in the community, hospitals would still play a key role for patients with complex conditions and those who are acutely unwell. To continue to provide high quality specialist health services, the workforce would also continue to grow, and increased investment would be required.

It is unrealistic to expect all growth for tier 2 services to be addressed solely through efficiency gains, technology changes or by devolving services to the community.

The challenge for the health and disability system is to make the changes required to ensure that hospital demand is stemmed to the greatest extent possible, along with planning that recognises significant investment in hospital facilities would be required to address capacity issues. Investment would also be required to replace facilities that are either in poor or very poor condition or are not fit for purpose, as discussed in Chapter 13: Facilities and equipment.
Planning and designing a cohesive system

New Zealand Health Plan would set the direction

There was a consistent view from those working in the current health and disability system that the short-term and fragmented nature of planning and the requirement for DHBs to meet zero or low deficits every year negatively affects how the sector works.

There has been very little work done recently on national Tier 2 services planning and there is limited guidance available to support any systematic analysis and decision-making about what services should be provided where or with what other services. The health and disability system does not have a coherent services planning framework or a national overview of the configuration of publicly funded services.

New Zealand needs a highly functioning hospital network to continue to deliver world-class health care and to deal with a growing and ageing population. The hospital network would need to manage current delivery, respond to growth, have the resilience to manage crises and work to reduce inequalities in health outcomes and treatment. The Interim Report outlined concerns over access and fragmentation of services that impact on health outcomes and on the sustainability of the system.

Responding to these pressures would require a smart network able to plan and deliver high-quality services and make good prioritisation decisions. The New Zealand Health Plan (described in the Governance and funding chapter) would set out what Tier 2 services are required to meet the future needs of New Zealanders. It would also set out how these are best delivered across the Tier 2 network, balancing considerations of access, clinical viability and financial sustainability. It would establish what services should be delivered where in the country, with equity being paramount to the decision-making about access to services.

The NZ Health Plan would provide a blueprint for service delivery arrangements over the next 10 to 20 years, rather than making wholesale changes in where services are delivered in the short term. The NZ Health Plan would, in turn, inform the regional and DHB strategic plans that include more detailed Tier 2 service planning for the short and medium term. It is expected that all plans would map out a cohesive service delivery system. By setting the direction for Tier 2 service delivery, the NZ Health Plan would also provide the information required to develop national facility, equipment, workforce and digital plans.

A clinical services capability framework should guide Tier 2 services planning

To develop the Tier 2 components of the NZ Health Plan, internationally developed clinical services capability frameworks (also called role delineation models) should be used as the starting point for analysis.

Australian Role Delineation Models (RDM) are examples that could be considered. They have been adapted previously in New Zealand when long-term planning work was last done.
Prior planning work and role delineation models

The Long-term Systems Framework (LTSF) was an extensive piece of work done between 2007 and 2009 that developed thinking around a longer-term, more joined up health and disability system. While the LTSF contributed to new thinking and tools, a full services plan was not completed. Disagreement on what services should be provided where has since led to many delays in planning new hospitals.

The LTSF developed a New Zealand Role Delineation Model. This categorises services along a six-level continuum from community services (level 1) to supra-complex services (level 6). General acute and elective hospital services are level 3. Complex services at level 4 and above are generally grouped together because of the complex infrastructure needed to support them.

<table>
<thead>
<tr>
<th>DHB</th>
<th>Facility name</th>
<th>Emergency Medicine</th>
<th>Medical service</th>
<th>Oncology &amp; Haematology</th>
<th>Surgical services</th>
<th>Maternity &amp; Neonatal</th>
<th>Paediatric services</th>
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- For each level of service, the model describes the minimum support services, workforce, the hours of access and other requirements for clinical services to be delivered safely. A full assessment of DHBs against an RDM framework was last done in 2009.
- This assessment showed that the smallest five DHBs provided local services from a level 3 facility, supported by several rural facilities operating mainly at level 2 (discussed in more detail later in this chapter). Regional lead hospitals provided a wider range of services at a mix of level 5 and 6. Individual DHB assessments will have changed since the last assessment, for example, increased local provision of oncology services, but level 5 and 6 services being concentrated in 6 to 8 hospital is expected to be largely the same.
- Although the New Zealand RDM has not been updated, Australian models have continued to develop into more comprehensive expectation setting frameworks (also called clinical services capability frameworks).

Adopting a framework such as the RDM would help develop a blueprint for what services would be best delivered, nationally, regionally or in all DHBs, and in how many locations within a DHB.

National services planning

Very highly specialised services are offered by a few DHBs. From the analysis of service flows described in previous sections these represent a relatively small proportion of all services. Currently, planning and funding for these services is spread among DHBs and the Ministry.
Planning for these services should be led by Health NZ and aim to:

- ensure equity of access for everyone to highly specialised services
- ensure the best possible clinical outcomes within the funding available
- provide more certainty about the total funding that would be provided for current highly specialised services and to develop new national services
- reduce unnecessary duplication, thus promoting clinical quality and cost effectiveness
- share the costs where incidence is sporadic, and treatment involves specialist skills or expensive equipment.

The sorts of services that are likely to be the focus of national services planning work in the near term are set out below in Figure 9.8.

**Figure 9.8: Analysis of DHB personal health services funding ($ millions) specialist services**

![Figure 9.8: Analysis of DHB personal health services funding ($ millions) specialist services](image)

Some service examples for each level of specialist services:

**Current national services**
- RDM level 6
  - Paediatric Cardiac
  - Paediatric Metabolic
  - Paediatric Rheumatology
  - High Cost Burns (adjuster only)
- $162m
  - Clinical Genetics
  - Heart Lung Transplants
  - Hyperbaric Services

**Very highly specialised services**
- $162m
  - All services where there are out of region transfers to lead DHBs for high level care. For example renal transplants, ECMO (extracorporeal membrane oxygenation), all national burns

**Highly specialised services**
- $740m
  - Services provided by a regional lead not available from a mid-sized hospital.
  - Services provided by a regional lead not available from the smaller 7 DHB hospitals. For example cardiology, lower complexity cancer services.

**Other specialist**
- $688m
  - Services provided by a regional lead or mid-sized DHB but not available from the smaller 7 DHB hospitals. For example cardiology, lower complexity cancer services.

Source: Ministry of Health inter district flows analysed by HDSR review team, data mix of 2017/18 and 2018/19 information
The intention of national service planning is not to see services centralised to one location but, rather, to ensure equity of access and the clinical and financial sustainability of these services. Specialist services planning should not only set expectations about the inpatient service requirements but should also set expectations about how outreach services would be provided and the respective roles of the referring and treating DHBs.

**Funding for national services**

As discussed in the Governance and funding chapter, Health NZ would fund the majority of secondary Tier 2 services using a population-based funding formula. However, for highly specialised services where a small number of providers would deliver these on behalf of multiple DHB populations, funding should be from a Health NZ service agreement, with clear service expectations set. Such agreements would be negotiated on a three- to five-year basis and would include a transparent analysis of costs of service provision.

Some high-need and high-cost patients access multiple services and drugs and, in these cases, a risk pool for a patient group could be more effective than national service planning and funding.

**Regional services planning**

Regional services planning would provide an opportunity for DHBs to consider what service configuration would best meet needs of their collective populations. Regional plans would include the mix of services that the region considered would be best delivered in different hospital settings including major hospitals, specialist hospitals (eg, mental health, elective surgical hospitals), levels 3 and 4 hospitals, and local community and rural hospitals.

DHBs should engage with iwi, communities, local government, social sector agencies, NGOs, private providers and communities when developing these plans.

Over time, this planning process would likely lead to agreed shifts in service delivery arrangements as decisions are made to:

- deliver services in more settings where the technology or clinical practice changes mean this can be done safely and cost effectively, and where this is important for patient access
- consolidate services where there is an opportunity to improve quality, safety and outcomes of care and to deliver services more cost effectively.

**Contracting for regional services**

Improved regional planning would also support improved regional services contracting and should reduce volatility with longer-term contracts. Where regions agree that a lead DHB would provide services for other DHBs, they may agree to do this via a ‘regional top slice’ rather than an inter-district flow (IDF) model. In the medium term, the volume of unplanned IDFs would decrease substantially as the combination of national services funding, regional longer-term contracts and DHB mergers happen. These changes should reduce volatility and support longer-term operational planning. However, IDFs would still continue for patients treated outside their own DHB where no national or regional agreements are in place.
Operating as a cohesive system

It is expected that hospital and specialist services would operate as a cohesive network working across all care settings and locations, and work collaboratively with Tier 1. The focus would be on providing care in the most appropriate setting with the right team of people engaged in delivering that care, to improve access and deliver more equitable health outcomes for New Zealanders.

For Tier 2, this would mean making services local where increased access would improve equity and population health (eg, chemotherapy). It would mean consolidating or continuing to provide services from a small number of hospitals for quality, clinical sustainability or cost effectiveness reasons (eg, paediatric surgery, major burns, acute spinal cord impairment, clot retrieval).

Working across settings and geographic boundaries

Geographic boundaries between DHBs are meaningless for patients and should become less important in the day-to-day delivery of care. So too should the boundaries created by the terminology used between service settings. The workforce needs to be able to work across these boundaries in a more collaborative way, supported by technology that enables them to share information and engage with patients and clinicians located in different parts of the health and disability system.

The proposed changes to Tier 1 are an opportunity for DHBs to rethink patterns of care for local services. This should build on and encourage quicker adoption of initiatives that many DHBs are already trialling.

Case study: Kāpiti see-and-treat service

- Capital & Coast DHB has collaborated with local general practices, the Kāpiti Health Advisory Group and Wellington Free Ambulance to provide emergency and after-hours care closer to home for Kāpiti residents.
- Following clinical assessment by Wellington Free Ambulance paramedics, patients can receive free urgent care from their GP at their local centre from 8am until 10pm. Prior to this initiative, more than 6,200 Kāpiti residents travelled to Wellington Hospital emergency department every year seeking after-hours treatment. More than half travelled by ambulance and fewer than 50% ended up requiring hospital admission.
- Reducing the number of patients who travel from Kāpiti to Wellington Hospital alleviates the strain on available resources, benefiting the hospital and ambulance system, and patients and their whānau.231

The Interim Report noted the potential use of pathways to reduce variations in service and ensure greater coordination between care settings. Pathways are a tool that DHBs can use to improve integration and coordinate care across the network. Care pathways aim to link evidence to practice for specific health conditions and can be used within a DHB to connect hospital and Tier 1 services or connect local and regional hospital services. All providers should operate collectively to ensure that effective care pathways improve access, equity and patient experience.
Service development should be clinically led and use local and international evidence to more systematically determine investment (including health technology assessments) and disinvestment decisions. Clinical networks that operate across the health and disability system should play an important role in developing pathways that ensure there are:

- strong connections between Tier 1 and Tier 2
- transparent processes in place for standardising access across the health and disability system
- protocols in place for providers to access facilities where they are not directly employed
- pathways extended to services that have not always been included, such as palliative care.

In the same way as a significant change is proposed in how Tier 1 engages with consumers and whānau, so too must change occur in Tier 2. This should include engaging patients more in their care plans, ensuring that transfers of care are more seamless and coordinated, and ensuring that planned care is delivered at times and in ways that are more accessible for the population using them.

**Improving access to Tier 2 services**

Improving access to hospital services would improve patient care and address equity issues. Hospital services are free but there are costs involved in attending care: time off work, child care, parking and travel. Problems with access are higher for high-needs populations: rates of ‘did not attend’ are significantly higher for Pacific peoples and Māori.

Analysis of patient flows shows that about 80% of out-of-district treatment is for ambulatory care that does not require an overnight stay. Many patients also have to travel long distances to get to their local hospital. Most of this activity is for outpatient attendances and treatments or procedures associated with this.

**Figure 9.9: Non-admitted activity, 2017/18**

<table>
<thead>
<tr>
<th>Frequency of events</th>
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</thead>
<tbody>
<tr>
<td>Surgical</td>
<td>Medical</td>
</tr>
<tr>
<td>Allied Health</td>
<td>Cancer</td>
</tr>
<tr>
<td>Other</td>
<td>Maternity</td>
</tr>
</tbody>
</table>

Source: Ministry of Health inter district flows analysed by HDSR review team
The quality of data captured in the non-admitted datasets is not as complete as the inpatient datasets and there are inconsistencies between how DHBs record activity. This makes it hard to develop an accurate picture of service utilisation patterns or trends. Nonetheless it is reasonably clear that the time and travel costs associated with these attendances falls most heavily on people living in rural areas. Even when services are within a local DHB, there can still be considerable patient time and travel costs involved.

Analysis suggests that on a weekday, every hour, there are around 2,000 people waiting for an appointment somewhere in our health and disability system. Assuming there is three hours of time per visit (which is conservative), this amounts to 11 million hours of time per year that patients are just travelling or waiting.

The magnitude of this time cost alone demonstrates why future service planning should prioritise reducing travel and time costs by offering virtual options where possible and by ensuring that coordinated appointments or ‘one-stop clinics’ become the norm when face-to-face visits are required.

There are a number of strategies to reduce travel for ambulatory care:

- using telemedicine for advice and appointments
- coordinating appointments across different specialties
- specialists visiting smaller DHBs, localities and rural facilities
- using paramedics to perform health care interventions on site, reducing the need for the patient to travel to hospital.

**Virtual care delivery**

Many of the strategies to reduce travel for ambulatory care are beginning to be adopted but need to be more widely delivered. The requirement for national and regional services plans to set out how access would be equitable would require consideration of how to reduce the burden for patients and their whānau. Service design processes will need to ensure the needs of their communities are best met.

This would likely include specialist advice and support being provided via telemedicine. The barrier is no longer technology; what is now required is to recognise that clinical rosters should routinely include virtual sessions as well as face-to-face sessions. It is unrealistic to expect the increased level of virtual access to specialists to happen unless it is built into rosters.

**Transport costs**

The transport and accommodation costs to attend specialist services are a barrier for many people. The national travel and accommodation policy supports access by recompensing patients and whānau for some of the costs associated with travelling for treatment.

The Review supports further analysis that considers travel and accommodation within the goal of improving access.
Scheduling appointments
Access can also be improved by allowing patients to book their own appointments and there being extended clinic hours. This would minimise the need for time off work or the need to find child care. Longer opening hours could also use costly resources such as diagnostic equipment and outpatient clinics better.

The following case study demonstrates how Auckland DHB tackled did not attend/was not brought cases using a combination of patient-focused bookings, referrals to Tier 1 and outreach services. The outcomes were improved access for Māori and Pacific children.

**Case study: Reducing Starship Did Not Attend (DNA)/Was Not Brought (WNB) – A whānau-centred approach boosts successful child outpatient care**

Starship Hospital has implemented changes to reduce the number of outpatient appointments that Māori and Pacific children were missing. Analysis had identified that on average around 12% of total outpatient appointments were being missed and that rates for Māori and Pacific children were double this.

Starship talked with parents and caregivers to find out what the issues were from their points of view. Many had children with multiple medical problems and coordinating appointments with different Starship departments was a big issue for them. Inefficiencies such as data and address errors, and missed follow-up were also identified, all contributing to difficulties.

Starship has adopted a new patient and whānau-focused scheduling service that works with those who have not attended, talking directly and scheduling appointments to work better for caregivers: where possible at community locations that are easier to get to, with transport assistance provided and multiple appointments grouped together.

A Pacific social worker supports aiga whose children need to attend the club foot clinic, so they can understand the value of the care and have help with practical issues that can get in the way of coming. Extra support may be coordinated with schools, community health teams or NGO cultural and social workers.

The new whānau-friendly approach is being phased in across Starship’s departments. The diabetes, endocrine and respiratory clinics where it first started have seen significant improvements. There has been a marked decrease in missed appointments rates, with:

- rates for missed appointments in the diabetes service dropping from:
  - 23% to 7% for Māori children
  - 27% to 10% for Pacific children
- rates for missed appointments in patient focused booking services dropping from:
  - 26% to 18% for Māori children
  - 31% to 14% for Pacific children.

These are early results as the programme continues to roll out across all services.
Services designed for rural communities

There are approximately 45 rural facilities that are either DHB owned or owned by the local community. They are part of a local network of services and meet three broad functions.

- They minimise the need to travel to a main hospital by providing some local hospital-level services.
- They provide a local base for DHB-provided community services.
- They fill gaps in the network, for example, GP services, palliative care, aged care.

Larger rural facilities provide 24/7 emergency and acute medical services, elective general surgery, specialist medical and surgical consultations, primary maternity, maternity consultations, allied health services, community care and nurse-led clinics. Other facilities provide aged care and palliative care. Smaller facilities offer limited emergency cover and GP managed beds. About a quarter of facilities have no overnight services but provide community and nursing services. The arrangements that are in place have in many instances not been deliberately planned but rather have evolved. Some are serving their communities well, others not so well. The Review considers that a more deliberate approach should be taken to planning for rural services.

Rural practitioners have different roles, often with broader scopes of practice compared to their urban counterparts. To acknowledge this the clinical services framework should have a separate section for rural facilities that would describe their specialist roles. This would provide an opportunity to develop a best practice rural hospital model based on examples already in place in New Zealand and overseas.

As noted previously, a major concern for rural communities is distance and travelling costs and time. For example, as shown in Figure 9.10, the Wairarapa population travels out of their DHB more often than the average, with most for short outpatient visits and treatments.

Figure 9.10: Wairarapa population’s travel out of DHB area compared to the national population 2017/18

Source: Ministry of Health inter district flows analysed by HDSR review team
The Review noted many instances where rural services provide good examples of local adaptation, with models of care using different workforces to ensure local requirements are met and initiatives in place to reduce patient travel. However, there is also acknowledgement that more should be done to prioritise initiatives (such as telemedicine and coordinated outpatient visits) that would improve access for rural communities.

Most DHBs either own or contract with one or more facilities to provide local services to support their rural communities. Some rural facilities may be at the heart of a community’s rural Tier 1 network while providing some Tier 2 services.

The challenges faced by each rural community are determined by local population characteristics and geography, so the solutions would need to be local. However, there are opportunities to learn from each other and from overseas. The Review recommends that Health NZ works alongside existing rural health groups to support nationwide collaboration to share local and international innovations in rural health care delivery.

**Emergency transport**

Emergency transport services are a core part of service delivery and a well performing ambulance service is a prerequisite for ensuring patients are transferred to care as quickly as possible.

**Ambulance services in New Zealand**

Table 9.1 provides an overview of ambulance services in New Zealand. The majority of funding for these services comes from the Ministry and ACC, with the remainder from DHBs, co-payments, sponsorships and donations.

Road ambulance is provided by Wellington Free Ambulance (WFA) and St John, who also manage the three communications centres and provide staff, including for telephone triage (outside of Healthline), call and dispatch, the air desk and clinical desk.

Air ambulance is currently organised in three regions, with one contracted provider in each region, and nine local providers. Aeromedical staff for most emergency missions are primarily St John and WFA trained paramedics, with DHB staff deployed for inter-hospital transfer.235

The National Ambulance Sector Office (NASO), currently operated from within the Ministry, manages funding and service agreements for ambulance communications centres, emergency road ambulance services and air ambulance services, on behalf of both the Ministry and ACC. Over the last few years NASO has been working with its parent agencies and the ambulance sector to develop more consistent and sustainable joint funding approaches.

NASO also has a broader, strategic role, in progressing the Ambulance Services Strategy and providing a ‘single voice for the Crown on strategic and operational matters regarding the Emergency Ambulance Services’236.
Table 9.1: New Zealand ambulance services

<table>
<thead>
<tr>
<th>Service</th>
<th>Details</th>
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</table>
| **Road ambulance**       | ▶ **Emergency response:** Ranges from immediately life-threatening or time critical (eg, serious injuries, cardiac arrests) to potentially serious but not immediately life-threatening incidents. Ambulances with at least two crew members bring clinical care to the scene. Patients are transported to emergency departments or other facility (eg, GP, A&M clinic) if needed, based on patient condition and available options.  
▶ **Low acuity/non-urgent response:** Patients who do not require transport (eg, gastrointestinal illness, influenza) are attended by an ambulance crew or other specialist staff and are provided with care at the scene. They may then be referred to their GP or another clinical pathway.  
▶ **Patient Transfer Service (PTS):** Transports patients (planned and urgent) between facilities for higher level care or interventions and returns patients back to their communities.  
▶ **Primary Response in Medical Emergencies (PRIME):** Uses specially trained GPs and nurses to support ambulance services in rural areas. Fills need where response times may be longer than usual, or where more specialised medical skills are needed. |
| **Air ambulance**        | ▶ **Pre-hospital (emergency) service:** Used when patients cannot be accessed by road, timeliness of care or transport is critical, or when there is a large number of patients. Mostly uses helicopters.  
▶ **Inter-Hospital Transfer (IHT):** Transports patients from a less specialised hospital to more specialised care. Mostly uses planes. |
| **Telephone triage**     | ▶ **Over-the-phone triage:** by a registered nurse or paramedic, or the caller is connected with Healthline. Responses include advice on self-care, referral to a GP or private A&M centre, or sending an ambulance or other vehicle to treat on site or transport. |
The future role of ambulance services

While the predominant role of ambulance remains transfers to hospital, this is changing. There are a number of programmes already underway where ambulance staff provide a broader role such as providing treatment at home, treating at the accident location, and following up low acuity patients at home. The Kāpiti ‘see-and-treat’ service, described earlier in this chapter, is an example of a community based model of care, using the paramedic workforce differently to avoid unnecessary hospital admissions.

Within rural areas, ambulance services play a particularly important role, and new roles and ways of working that are being led by ambulance services should be encouraged.

In the future, DHBs would be expected to have transport plans in place to better support patient and whānau transfers where required. Where capacity allows, new models of care involving ambulance services and the paramedic workforce should continue to be developed in the community.

The Review was made aware of issues and challenges in the current arrangements for air ambulance. These included challenges associated with appropriately planning for the two types of air ambulance services, differing specifications between providers making it challenging for the fleet to be optimised nationally and the impacts of sharing workforce between road and air ambulance. These issues were exacerbated during the roll out of new contracting arrangements.

The planning for ambulance services is complex as it is an integral part of many areas of service delivery, ranging from low acuity non urgent responses, to Tier 1 emergency responses, through to inter hospital transfers for paediatric intensive care patients and multi trauma patients. Ensuring access to the appropriate fleet and the effective deployment of this fleet and the workforce delivering care, requires vast clinical and operational experience and close working relationship with the Tier 2 services that are the recipients of most of the transfers.

The Review considers that ambulance services should be planned together and nationally managed. Road ambulance services should be managed to consistent national standards. NASO should continue its role, although in the future this would shift to Health NZ and there should be a more collaborative engagement with Tier 2 and Tier 1 providers in delivering these services.
Performance improvement embedded in the system

Performance management should be more holistic, bringing together outcomes, services, financial and consumer assessments to improve quality and clinical excellence in a system underpinned by continuous learning.

Equity issues and unwarranted variation need to be addressed

Reducing unwarranted variations in access to services and health outcomes that currently exist across multiple areas, including ethnicity, socioeconomic deprivation and locality must be a focus of the system in the future.

Māori experience of hospital services is characterised by poorer access, poorer outcomes and being exposed to institutional racism. The Health Quality & Safety Commission recently reported on Māori health equity.\textsuperscript{238} They found inequities in health outcomes and access and quality of care. For example:

\begin{itemize}
  \item for Māori, diseases of old age start earlier, life expectancy is lower by seven years than non-Māori and deaths preventable by health care are 2.5 times as frequent as for non-Māori, non-Pacific peoples
  \item hospital appointments are not accessible for more Māori adults than non-Māori adults
  \item sixteen percent of Māori adults did not attend a specialist appointment between 2011 and 2014, compared with 6 percent of non-Māori
  \item specialist appointments have unacceptably long wait times and happen less frequently for Māori
  \item Māori have twice the number of hospital bed-days following an acute admission than non-Māori
  \item the percentage of Māori having an operation for their hip fracture on the same or next day of admission to hospital following a fall has decreased steadily since 2013, whereas the percentage for non-Māori has consistently improved (best practice is to treat as soon as possible).
\end{itemize}

The Review considers that improvements in Māori health outcomes require hospital and specialist services to be provided in ways that are culturally safe, and for Tier 1 and Tier 2 services to operate as a single system that ensures specialist services are more accessible for Māori communities.
Strengthening hospital performance and quality improvement

The triple aim provides a framework for assessing the performance of the health care system on three dimensions.

- Improve health and equity for all populations.
- Improve the quality, safety and experience of care.
- Ensure best value for public health system resources.

Our hospitals generally perform well against key indicators, and ultimate outcomes such as life expectancy continue to improve. There are, however, concerns about unwarranted variation in health outcomes by population group and concerns with financial sustainability.

The Health Quality & Safety Commission plays an active role in monitoring and improving performance. It provides analysis and commentary on the variation in the outcomes and quality of health care in several reports, including the Atlas of Healthcare Variation.

The Health Quality & Safety Commission also collects inpatient experience surveys across DHBs. The results suggest wide variation between DHBs, particularly with communication and medications, which are essential for patient safety.

While the Health Quality & Safety Commission is well respected for the function it provides, it is not accountable for ensuring that these variations are addressed. The Ministry provides some targeted hospital performance support, for example, in supporting improvements in the delivery of planned care, but lacks a holistic approach to supporting poor performance such as through using analytics, guidance and hands on support. Feedback from DHB quality managers supports the current quality work programme of the Health Quality & Safety Commission but would like to see the following additional support:

- a consolidation of resources on hospital standards and service quality expectations into a national policy framework available as an online toolkit for all DHB staff
- national quality standards and improvement training materials available for DHBs to use that are delivered locally
- a stronger national commissioning approach to the role delineation of facilities and services.
The Health Quality & Safety Commission has facilitated a number of improvement programmes that have demonstrated the benefits of close attention to best practices and learning from larger groups of clinical teams across DHBs. Improving safety and quality has also led to more equitable care, quality and results.

One example is lessening infections after hip or knee surgery. In 2014, Māori were more than twice as likely to experience a surgical site infection than non-Māori. An intensive national programme with multiple clinical teams delivered improvement activities that by 2018, had led to lower infection rates across all patients and dropped rates for Māori to equal the new, improved rates for non-Māori. Nationwide, improvements tracked closely with uptake of the programme activities. An evaluation found the risk profile of patients did not change and the programme improved patient outcomes and reduced costs to the system.

Reduced orthopaedic surgical site infections for Māori and non-Māori 45 years and over 2014 to 2018

![Graph showing reduced orthopaedic surgical site infections for Māori and non-Māori 45 years and over 2014 to 2018.]


The Atlas of Healthcare Variation allows people to examine hundreds of indicators across 23 domains, looking at geographic and ethnic spread. The dashboard of health system quality allows anyone to see an overview of DHB performance across a selected group of indicators. DHBs can compare their results with those across the country and look into where improvement is needed.
Focusing on performance of hospital and specialist services

The Review is recommending greater focus on performance and delivery across the health and disability system. Health NZ would need to strengthen performance management functions and hold DHBs accountable across a more holistic performance management framework that brings together outcomes, services, financial and consumer assessments with the aim of supporting quality improvement and clinical excellence in a system underpinned by continuous learning. Strong clinical engagement would be essential.

Given current DHB financial pressures, driven largely from DHB provider arms, the initial priority for Health NZ should be the performance of hospital and specialist services.

The Ministry and DHBs collectively develop national reference prices each year that are used for hospital services IDF payments. There have been several issues raised by both payers and providers about the accuracy and fairness of these prices and the robustness and timeliness of current national pricing.

Improved costing information is required for national, regional and local purchasing. It is also an input to DHB hospital performance management and is used as an input for any other analysis that needs to know the cost of hospital outputs.

To support better costing and pricing, all DHBs should contribute the financial and cost data required under the Operating Policy Framework. There should be increased investment to curate and use this data to inform costing, national pricing (which may include tertiary and secondary prices) and performance management. This would allow Health NZ to set fair prices and also provide some of the information required to support the analysis of hospital performance.

DHBs would be expected to routinely submit all performance management information currently required by the Operating Policy Framework. Robust systems should be in place to provide consistent, timely information that could then be consolidated into a meaningful national view. Health NZ should develop platforms that provide open and collaborative sharing of hospital cost and performance data, and improve the quality of reporting and analysis.
Building the future

The Review proposes the following changes

Hospitals and specialist services operate within a national plan, and have clear regional and local plans

- The NZ Health Plan should provide a system-wide view of Tier 2 services and identify national and specialist services, where these would be provided and how equitable access would be ensured for all New Zealanders.
- Regional and district strategic plans would provide more detailed service plans for short-medium- and long-term timeframes.
- Health NZ should fund most secondary Tier 2 services using a population-based funding formula. Where there is agreement that services would be provided nationally funding should be via a top slice negotiated on a three- to five-year basis.
- Where a region agrees that a lead DHB would provide services for other DHBs, this may be funded via a regional top slice.
- The IDF process should be streamlined so that service changes are incorporated more quickly and there is greater transparency of IDF flows.

Hospitals and specialist services operate as a cohesive network

- Hospital and specialist services should be delivered through a network that works closely with Tier 1. Boundaries between DHBs and care settings should become less distinct.
- The majority of Tier 2 services should continue to be delivered in each DHB, but complex services should be led by agreed providers consistent with the national services plan or regional agreements.
- Rural services planning should recognise the unique challenges of geography and distance. Service delivery should be integrated (and may be delivered from the same facility) with Tier 1 services and be routinely supported by using telemedicine and telemetry links with Tier 2 service providers.
- Service development should be clinically led and use local and international evidence to systematically determine investment and disinvestment decisions.
- Enhanced integration and seamless transfers of care should underpin service design. Technology should support enhanced access to specialist advice, and admission and discharge planning should routinely involve a care management focus from both Tier 1 and Tier 2 perspectives.
- Tier 2 services should be delivered for extended hours to improve efficiency and consumer access and clinical rosters should routinely include virtual sessions as well as face-to-face sessions.
- DHBs should have transport plans to better support patient and whānau transfers where required. Air ambulance services should be nationally managed and road ambulance services should be managed to consistent national standards.

Continued
Building the future – continued

The Review proposes the following changes – continued

Effective performance management systems are focused around high-quality, cost-effective service delivery

- Health NZ should work collaboratively with the sector to address unwarranted variation and drive sustained, better-quality care and better value for money.
- The Health Quality & Safety Commission should continue to monitor and improve the quality and safety of health and disability support services; and help providers across the health and disability system to improve the quality and safety of health and disability support services.
- Health NZ should enforce the open and collaborative sharing of hospital cost and performance data and improve the quality of reporting and analysis.
- DHBs should have robust systems in place to routinely provide data specified in the OPF that can be consolidated into a meaningful national view, and provide additional information when required.
Māori Commissioning - An alternate view /
He Mana Kōmihana Whakae Tino Rangatiratanga Pou Tarawhao
– Tō Tātou Mana Kōwhiri

Introduction
Commissioning is a strategic and ongoing process using purchasing and other strategies to translate population health objectives into a responsive system and services. The purpose of the Alternative View is to provide analysis and commentary on the future of Māori commissioning within the health system. The Alternative View is included in the report because the members of the Review Panel did not reach consensus on Māori commissioning and the authors of this section are committed to providing a vision of the future that they believe gives practical expression of Te Tiriti o Waitangi principles, rangatiratanga and mana motuhake through Māori commissioning roles that are embedded within and throughout the health system.

Māori commissioning
The findings in the interim report were clear that, overall, Māori have not been served well by the system. It has not consistently delivered on the development of commissioning talent; nor has it delivered the services and practices required to create the change or performance improvements needed to address Māori health inequities and wellbeing.

This report provides examples of system changes that should benefit Māori, but it does not recommend a fully empowered commissioning role for Māori. The report recommends, amongst other proposed changes, that the role of the Māori Health Authority includes commissioning Māori workforce development programmes and Māori provider development programmes, and the managing of innovation funds to improve Māori health outcomes. The report also envisages a role for the Māori Health Authority to advise on commissioning in partnership with HNZ and DHBs to ensure that the whole system is accountable for Māori outcomes.

These proposed changes are limited in their scope. The equity challenges that Māori face demand more than a clearer mandate for Māori policy development, more than the simple identification of strategy execution failures, and more than the identification of the systematic disadvantaging of Māori and Kaupapa providers by contracting arrangements. Similarly, the equity challenges demand more than a partnership role for Māori in the commissioning process because, in the worst case scenario, this would mean that Māori have little more than an advisory role.

In summary the changes proposed in the report are positive and would be beneficial for Māori. The Alternative View argues that the vision should be more ambitious. The recommendations, as they stand, do not provide the opportunity for Māori expertise to be fully empowered, they perpetuate universalist approaches that have not worked for Māori, and they fail to give expression to tino rangatiratanga because the Māori Health Authority has only a limited commissioning role and holds what is, relatively speaking, a small and marginal budget.
The Alternative View envisages a potentially transformational future where the Māori Health Authority has a role to commission health services as well as enabler services for Māori using an indigenous-driven model within the proposed system to achieve equity. The Alternative View is that, over time, substantial Māori commissioning roles should be incorporated within an integrated health system. This would provide the capacity and leadership required to alter the trajectory of Māori health inequities. In this view of the future, the Māori Health Authority would be established as a kaupapa Māori entity (Māori owned, governed and operated). An example of this type of approach is a recent model associated with revitalising te reo Māori (Te Mātāwai). The Māori Health Authority would be a full commissioner in its own right, operating within a coherent and unified system, as well as being required to support national, regional and local commissioning and workforce developments.

Consideration needs to be given to establishing a more consistent and focussed funding stream that prioritises Kaupapa Māori services and does not necessarily depend on DHB priorities. Such a funding stream would recognise the multi-sectorial nature of Kaupapa Māori services and the importance for Māori of early intervention coupled with better management of health-specific, social and cultural determinants of health.

As well, a Mātauranga Māori commissioning frame, which builds on the Whānau Ora Commissioning model and recognises the inseparability of health, education, housing, income, and civic responsibilities, warrants further consideration and would enable Mātauranga Māori to be prioritised and led by Māori experts.243

**Conclusion and recommendation**

As outlined in the interim report, there is significant evidence that universal health systems have not improved health outcomes for Māori, and existing health services design, purchasing and contracting approaches have increased inequity. The findings of the Hauora Report (Wai 2575) highlight the systemic bias in our health system and amongst those who determine health priorities and funding matters.

A comprehensive indigenous commissioning framework should be developed, which uses every enabler and lever, at every level, to ensure the system successfully delivers improved health and wellbeing outcomes for whānau. The commissioning framework should be Tiriti compliant and designed by Māori as an active expression of rangatiratanga and mana motuhake, in a way that is not possible within mainstream organisations, such as HNZ and DHBs, with broader population responsibilities. The time is right for action around a broader indigenous commissioning framework in Aotearoa/New Zealand, that could be world leading in addressing inequity at system and service levels.
### A potential Indigenous Māori commissioning framework

#### Local

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<tr>
<th>Appropriation</th>
<th>Commission/Co Commission</th>
<th>Notes/examples</th>
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</thead>
</table>
| Devolved to DHBs with decision-making authority shared between the DHBs and iwi/Māori | Local iwi/Māori are supported by Māori Health Authority in 50/50 governance arrangements to oversee and co-commission with their DHB partners all health services to their population. | - A 50/50 governance model has recently been confirmed by the Minister of Health in the Northern Region. This includes ADHB, WDHB and NDHB partnering with their respective iwi. A new partnership has been established called “Northern Iwi-DHB Partnership Board”.
- The Partnership Board has legally delegated authority to determine Māori health equity priorities and outcomes; lead, advise and guide Treaty of Waitangi compliance, and oversee resource allocation and investment for Māori wellbeing.
- These new models will require increased support for iwi / Māori to develop skills in population health, commissioning tools and strategy.
- They will also need to be informed by local health needs analysis, long term service plans and Māori health strategies.
- They will be enabled further by the proposed new investment and ring-fenced Tier 1 funding.
- The commitment to a 50/50 local DHB and iwi governance model aligns with the proposed HNZ Board configuration model.
- Future commissioning role to be considered. |

#### Regional

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<th>Appropriation</th>
<th>Commission/Co Commission</th>
<th>Notes/examples</th>
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</table>
| Devolved to DHBs with decision-making authority shared between the DHBs and iwi/Māori | Regional iwi/Māori are supported by Māori Health Authority in 50/50 governance arrangements to oversee and co-commission regional equity strategies that are planned collaboratively, at scale and with greater specialist Māori expertise. | - Regional collaboration and planning with clear investment strategies.
- Te Manawa Taki in Midland is an example of regional equity planning.
- All Midland DHB Chairs have entered into a MOU to partner with their Iwi equivalents and develop a Regional Equity Plan to drive regional services planning and delivery.
- The 50/50 regional DHB and iwi governance model aligns with the HNZ Board model.
- They will be enabled further by the proposed new investment and ring-fenced Tier 1 funding.
- The regional equity plan priorities range from a common Māori outcomes framework, equitable funding strategies, Māori provider, service and workforce development through to exploring Māori commissioning approaches and shared DHB/iwi governance of Midland system performance.
- Future commissioning role to be considered. |
### A potential Indigenous Māori commissioning framework – continued

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<tr>
<th>National Appropriation</th>
<th>Commission/Co Commission</th>
<th>Notes/examples</th>
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| Māori Health Authority holds central appropriation of funds | Māori Health Authority initially commissions for:  
- Māori innovation funds  
- Māori provider development funds  
- Māori workforce development funds  
- Scaling and extending Kaupapa Māori providers  
- Capital grants for Kaupapa Māori services | - Māori Health Authority engages in Māori-informed planning, procurement and monitoring of health services, enablers or other.  
- Greater ability for Māori to influence the whole system and execute pro-equity strategies.  
- Māori providers are assets and a critical building block for system wide success.  
- Supported by MoH partners and increased population health intelligence function.  
- To influence the system, Māori Health Authority needs levers such as the ability to co-approve HNZ investment plans and system-level levers which are risk and reward based.  
- A racism free system – the Māori Health Authority could more effectively tackle institutional racism via its commissioning role. |

### Phased commissioning roles over 2-3 years:  
- Innovative cross-government place-based initiatives for high needs groups tackling root causes of inequity  
- Full commissioning of Kaupapa Māori services and Integration of Whānau Ora Commissioning  
- Commissioning national population, prevention and screening initiatives and services targeted at Māori  
- Commissioning Tier 1 services aligned with local and regional approaches |

### Authors
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Section D: Enablers / Ngā rawa e tika ai te pūnaha
10 Enablers introduction / Ngā rawa e tika ai te pūnaha tīmatanga

Introduction

The future health and disability system proposed in this report is intended to improve equity and health outcomes by being fairer, more connected, more responsive, more population focused and more consumer and whānau-centred than the system is now. To achieve this a strong infrastructure is needed that can:

- adapt to changing health needs
- be resilient to new circumstances and threats
- make full use of data and digital technologies, and leverage new technology
- ensure financial and clinical sustainability.

Three key system enablers are needed:

- **Workforce** – kaiāwhina, surgeons, nurses, lab technicians, cleaners, managers and the hundreds of other categories of workers employed throughout the health and disability system, without which it could not function.
- **Data and digital technologies** – the ways of working and platforms required for a digitally enabled, information rich, data-driven system, and tools that are easy to use, inclusive and provide confidence to consumers and clinicians.
- **Facilities and equipment** – from hospital campuses and buildings, to equipment such as linear accelerators and MRI machines that enable care to be provided safely and effectively.

Common across all three of these is the need for cohesive, coordinated and longer-term planning across the system, new ways of working, and investment in long-term capacity and capability. The enablers are also deeply interrelated. For example, unless a new hospital campus is properly digitally enabled and encourages new ways of working, the investment would not be effective.

The detailed proposals for the system enablers are set out in the following chapters.
System-wide planning for workforce, assets, digital and data

The health and disability system will only function well if the right foundational elements are in place, starting with cohesive and coordinated planning. Currently, decisions about workforce training are made without reference to an overall plan and, partly as a result of this, the system is facing severe workforce shortages for some professions. Capital planning has not been managed as a long-term, robust pipeline and DHBs have not been doing a good job of maintaining assets and equipment. Data and digital proposals are currently not prioritised according to a long-term investment plan and DHBs and other organisations are often investing in fragmented and incompatible systems. What planning does take place currently is not well integrated across the three enablers, despite the interrelationships.

A cohesive planning framework to align actions across the system

The proposed changes to the system should make planning simpler and more coordinated. There would be greater stakeholder engagement to better inform and improve the quality of planning and decisions, and Māori would have more input.

The preceding chapters have described the proposed planning framework that would enable the system to act and be managed as a single, integrated system: from the New Zealand Health Strategy, through the NZ Health Outcomes and Services Plan (the NZ Health Plan) and across local and regional planning by DHBs and by other decision-makers.

The NZ Health Plan should reduce inconsistency and the amount of planning needed by individual organisations. It would encompass capital, facilities and major equipment, modern ways of working and models of care, data and digital technologies, and workforce.

The following chapters describe how better planning for the three enablers would complement and complete a cohesive system. This includes developing the following interconnected plans.

- **A workforce plan** to enable a longer-term view of the health and disability workforces, and collective, innovative thinking about how to make best use of available skills. More detailed planning, such as a Pacific workforce plan, would also enable better system-wide planning.
- **A national asset management plan** to support DHB asset management practices (building on and expanding work to date), set asset performance standards, monitor performance and prioritise key capital investments.
- **A digital and data plan** to set out actions and responsibilities for building digital capabilities and implementing data standards, systems interoperability, and cybersecurity standards as well as data and digital governance and stewardship.

New ways of working

To improve the equity of health outcomes, the Review considers that significant changes are needed in how services are planned and delivered, the workforces that are needed and the types of technology they use. New models of care and different ways of using all workforces are also needed for the system to be more sustainable.

New technologies such as genomics, artificial intelligence and digital therapeutics are already opening the way to new types of health care services and other digital technologies such as mobile, social media and the cloud are changing the way services are delivered and used. For example, artificial intelligence and
machine learning for cancer screening; simulation for remote training; genomics and targeted treatments for chronic diseases; through to simple remote clinics and better evidence-based practice using a fuller picture of a person’s health history.

Used well, with a deliberate emphasis on equity and inclusivity, digital services and technologies could reduce barriers to access and improve accuracy and safety, free up staff to focus on caring for patients, and deliver more consumer and whānau-centred service experiences. Similarly, effective use of data, analytics and research would support better and smarter care, such as:

- personalised medicine
- evaluated and regulated tools for self-management
- opportunities to provide services at home, in the community and other non-traditional settings
- proactive use of prediction and better use of prevention to keep people well
- differentiated and targeted services to those that need it most.

Just as more culturally safe and aware care would be needed to flow through the whole system to improve the equity of health outcomes, data and digital technologies should flow through the whole system to improve outcomes for everyone. This would require a staged approach with service providers, starting with getting the basics right for effective data sharing for providers using processes that are still largely paper based or who have low levels of confidence and expertise, while enabling those with high digital maturity and expertise to be innovative and make best use of data and digital.

For the workforce, deliberate strategies would be needed to ensure there is the digital literacy, skills, capability, capacity and support available to make full use of data analytics and technological advances. Progress is already being made, such as through the Clinical Informatics Leadership Network and Waitematā DHB’s Digital Health Academy, but a system-wide approach is needed. Different training would also be needed for decision-makers, planners, those in dedicated data and digital roles and the clinical and non-clinical health and disability workforce.

### Investing in capacity and capability for the long term

To enable the proposed changes to the system, considerable investment would be needed in both data and digital technologies, and facilities and equipment. Given under-investment in both areas, and the need for cohesive prioritisation decisions, the Review recommends that the capital decision-making processes for both these enablers be integrated (see discussion in relevant chapters).

Delivering services to a growing and ageing population with more complex needs, and improving equity and outcomes for people that have not been well served by the current arrangements, would require greater capacity and capability in the system. This includes facilities and equipment that are safe, fit for purpose and able to accommodate growth in demand. Investment in data and digital technologies and the capabilities, skills and new roles required to support new ways of working would enable the way services are provided to be transformed.

Investment should be supported by robust decision-making, good governance and best practice procurement, and project and programme management. These capabilities would be essential, and are discussed further in the Facilities and equipment chapter.
11 Workforce / Te tira kaimahi

The people who make up the health and disability workforce are the backbone of the system. No health service can be delivered, no person cared for, no health outcome achieved without the input from a large group of workers whether they are kaiāwhina, surgeons, nurses, lab technicians, cleaners, managers or any of the other hundreds of workers employed throughout the health and disability system.

In line with worldwide trends New Zealand is experiencing growing clinical workforce shortages. The system will not be sustainable unless models of care and workforce roles change. This should include more learn-as-you-earn options and shorter cumulative training courses to encourage non-traditional participation and, particularly, to facilitate more participation from rural trainees. Regulatory authorities should ensure workforce competency and safety but should also work more collaboratively to support changes in models of care.

The focus of workforce planning and development needs to widen to include all people working in the system, not just those directly employed by DHBs. A diverse and representative health workforce is critical to deliver equitable health services that improve health outcomes. It will take time and considerable effort and investment to grow the health workforce to match the population. Increasing the number of Māori and Pacific people in clinical, non-clinical and governance roles at all levels should be supported by system-wide workforce planning, modelling and investment across the pipeline, and pay equity.

Commissioning and contracting policies should be used to encourage more secure employment, particularly for the workforces involved in home-based care and other outreach services. All parts of the system should be encouraged to become disability confident, drawing disabled people into a variety of roles and supporting them to thrive.

The workforce should also be well supported by technology and business processes so that it can work to its potential, to release time to care and to work in more team-based and flexible ways.

Strategic employment relations management needs to be centralised, drawing on better data and aligning with workforce plans.
The workforce is key to improving outcomes

There are approximately 220,000 people in the New Zealand health and disability workforce, making it the largest single industry. Volunteers and unpaid whānau carers also play an important role in the system (refer Figure 11.1).

Figure 11.1: People in the New Zealand health and disability workforce

~220,000
THE HEALTH AND DISABILITY SECTOR IS THE LARGEST SINGLE INDUSTRY EMPLOYER
~8.5% OF THE NEW ZEALAND WORKFORCE

~145,000
PEOPLE NON-DHB

~75,000
PEOPLE DHB

Total Health and Disability workforce

- Nursing and Midwifery
- Personal care and assistants
- Allied and scientific
- Medical
- Non-clinical

The DHBs are often the largest employer in their locality. DHBs employ 34% of the total health and disability workforce. The remaining people work in non-DHB roles. More networked service delivery will require workforce planning, modelling, training, regulation and employment relations changes across the system.

While the workforce is passionate, hard working, highly skilled and many people go above and beyond what is asked of them, it is a workforce under pressure and stress levels are high. Persistent shortages already exist in a number of workforces and rural areas generally find it more challenging than urban areas to recruit and retain staff.
The workforce supply challenge should not be underestimated. Conservative modelling suggests an additional 6,500 to 8,600 people will be needed in the workforce annually, on top of replacing those who retire or leave the system (an estimated 4% of the workforce annually). There are global shortages for many health workforces, which are forecast to increase. This will place further stress on the system as New Zealand relies heavily on overseas-qualified health practitioners, particularly doctors (42% are overseas trained – the second highest percentage in the OECD) and nurses (26% are overseas qualified – the highest in the OECD). The current workforce model is not sustainable.

The future workforce will need to work differently with more teamwork between professions and greater cultural diversity. The pace of change in clinical practice means roles will alter rapidly and more technology such as artificial intelligence will be used.

Institutional racism must be acknowledged and addressed. Cultural safety that supports diverse world views will need to be embedded in all service delivery models. Services need to be much more person and whānau focused and be open for extended hours. More services will be delivered virtually and in more diverse settings.

The current health and disability system is inherited. The types of regulation, professional silos, provider-based system, treatment, and highly medical model that has evolved will not meet future needs.

There is a need to:

- develop a comprehensive workforce plan
- improve the training environment
- encourage the regulatory environment to evolve to become more flexible
- adopt a more constructive approach to employment relations
- increase accountability for the system to be a good employer.

**A strategic approach to grow, train and regulate the workforce**

**A Workforce Plan to guide action across the system**

As a priority, a health and disability sector workforce plan should be developed that is both informed by the NZ Health Plan and enables delivery of the NZ Health Plan. Strong central leadership will be required to:

- turn both plans into action
- leverage different skill mixes and workforces across the whole health and disability system
- develop a workforce that better reflects New Zealand’s diverse communities.

While the Ministry would be responsible for developing the workforce plan, it will need to involve unions, employers, Health NZ, the Māori Health Authority, the Health Workforce Advisory Board, the Tertiary Education Commission and the key entities being established through the Reform of Vocational Education (RoVE). Specific plans for particular workforces including Māori, Pacific and disabled people and, possibly, rural people will be needed to complement the workforce plan. DHBs will also be expected to develop their own workforce plans that align (refer Figure 11.2 overleaf).
Expanding the workforce is not just an issue for tertiary and vocational education. The health and disability system should be actively attracting secondary school students into the workforce and supporting them to be successful.

Taking a strategic approach to expanding and developing the kaiāwhina workforce over the next five years will be necessary to achieve the changes needed to deliver services.

Better workforce data
Developing workforce plans will require more comprehensive and accurate data than is currently available. Sector-wide workforce data is not routinely collected, accurate or consistent, making it difficult to access and use this information. More is known about some workforces than others. For example, there is much better data for the DHB, medical and regulated workforce, but not for the non-regulated or non-DHB workforce. Ethnicity and disability data is patchy.

Investment will be required in systems that enable up-to-date and readily accessible data. Priority should be placed on gathering data in areas where less is known (e.g., non-regulated workforces and allied health) before adding more depth in areas where there are comparatively more detailed views. The Ministry is taking steps to improve data collection about the non-regulated workforce but it will take some time before this is sufficiently robust to use for long-term planning and modelling.

Comprehensive long-term planning and modelling
Planning and modelling should initially focus on looking 10 to 15 years out and then work back to identify short and medium-term actions needed to grow a sustainable workforce. The workforce plan must provide clear direction, guidance and actions.

Modelling should explore:
- alternative ways of working – the impact of deploying alternative workforces and working differently in teams under new models of care rather than assuming the status quo
- demographic and geographic linkages – how the future New Zealand and overseas workforce will impact supply modelling
- targeted growth – how targets for Māori, Pacific, rural and disabled workforces might be achieved and how long this might take
- retention and re-entry – actions to improve retention, encourage re-entry and how much investment could be justified.
Planning and modelling should also incorporate:

- international trends on best practice and technological innovation and its impact on future skill needs in New Zealand
- increased focus on population health, prevention and wellbeing
- changing needs for the non-clinical workforce, for example, data scientists, change management and commissioning capability
- the support needed to measure, shift and improve workplace culture and staff engagement.

**More influence over health and disability workforce training**

Concerns were raised during the Review about the apparent autonomy of training organisations and providers and the lack of influence that employers have to shape the work-readiness of new graduates, the courses offered or the number of places available. This is an issue for a sector where many clinical staff (who make up 66% of the workforce) receive their initial training from universities, polytechnics and other training providers. While some courses, such as medicine and dentistry are offered only at universities other courses, such as nursing and physiotherapy, are offered at universities and polytechnics.

The large numbers of organisations and providers has made it hard to determine where decisions are made and who is accountable for training the workforce that New Zealand will need in the future. There has also been a traditional focus on training for particular professions, rather than on the competencies needed to fulfil particular roles and functions. Universities and other training providers are making decisions about programmes without reference to the rest of the system. With the absence of a health and disability workforce plan and associated plans this is perhaps not surprising.

There is considerable scope to improve the training system to influence how and where students are trained, how many are trained and what skills they will need.

The Tertiary Education Strategy does not currently have a formal position on tertiary training for the health workforce. In future, it should have a more explicit plan to grow the health workforce, in line with the health and disability workforce plan, as it has done for other workforces such as engineering. Government should determine course numbers where students are being offered guaranteed employment on graduation.

The recent Reform of Vocational Education recognised the growing need for work-integrated learning to align training with the changing needs of workplaces and allow students to learn-as-they-earn. The reforms will bring together on-the-job and off-the job training. All institutes of technology and polytechnics will be replaced by a single organisation - currently named the New Zealand Institute of Skills & Technology (the Institute). Workforce Development Councils will assume responsibility for leadership and standard setting. Regional Skills Leadership Groups will provide advice about the skills needed in their region.
The changes set out in RoVE provide an opportunity for more consistency and clarity of direction for vocational training and a good platform for the health and disability system to engage with at national, regional and local levels. Integrating off-the-job and on-the-job training also aligns with the system’s need to explore different pathways for training and growing its future workforce.

Source: Summary of Change Decisions, RoVE

Training to support system objectives
The primary objective of education and training is to provide the right number and mix of appropriately skilled and competent health and disability workers. Under the Health Practitioners Competence Assurance Act 2003 (HPCA Act) regulators ensure health practitioners are competent and safe to practice. They also have inherent flexibility to adjust scopes of practice, and change standards and competencies with changing needs. This creates opportunities to work collaboratively and look beyond traditional professional boundaries to focus on the competencies the community needs and enable flexibility as to who is best placed to meet them.
Developing a workforce plan and more effective central engagement with the Tertiary Education Commission and New Zealand Institute of Skills & Technology has the potential to make a significant difference in growing the right pipeline of future workers, but this will not be enough. Other issues consistently raised during the Review need to be addressed and are summarised in Table 11.1 below.

Table 11.1: Summary of key training issues that need to be addressed

<table>
<thead>
<tr>
<th>Curriculum development and course duration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Issue</strong></td>
</tr>
<tr>
<td>There are lengthy training requirements for some professions, particularly when compared with other countries.</td>
</tr>
<tr>
<td><strong>Opportunity</strong></td>
</tr>
<tr>
<td>▶ The Ministry (working closely with the Tertiary Education Commission, Responsible Authorities, the Institute, DHBs, other employers and other stakeholders) should take the lead on giving a health perspective on setting and changing course curriculums.</td>
</tr>
<tr>
<td>▶ Workforce training pathways and scopes should be more consistently aligned across professions and internationally.</td>
</tr>
<tr>
<td>▶ Course completion timeframes should be more flexible to reflect different training pathways. For example, a three- to five-year bachelor’s degree apprenticeship is being trialled in engineering to reduce workforce shortages and support those with family and financial constraints to pursue a degree while earning money. Different approaches like this could be used for courses like midwifery where completion rates are currently low.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interdisciplinary training, modular learning and micro-credentialing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Issue</strong></td>
</tr>
<tr>
<td>Future service delivery models will rely more on teamwork and a mix of specialist and generalist roles. Training pathways need to support this change and help personnel build a greater understanding of the skills of their peers.</td>
</tr>
<tr>
<td><strong>Opportunity</strong></td>
</tr>
<tr>
<td>▶ Explore opportunities to structure courses differently to facilitate interdisciplinary learning that allows students to gain a broader understanding and trust of other disciplines and reduce professional silos.</td>
</tr>
<tr>
<td>▶ Adopt a more modular approach to training, supported by micro-credentialing which:</td>
</tr>
<tr>
<td>▶ has the potential for students to share common content</td>
</tr>
<tr>
<td>▶ can better recognise prior learning and shorten some training pathways by allowing people to work to partial scopes until further training is completed.</td>
</tr>
<tr>
<td>▶ offers an easy and quick way for people to retrain, upskill, or return to the workforce, via small, stand-alone credentials that certify the achievement of specific skills, experience or knowledge</td>
</tr>
<tr>
<td>▶ can support learners to access specific knowledge and skills and to meet an immediate need in a cost-effective and timely way.</td>
</tr>
</tbody>
</table>

In 2013, the Ministry proposed a multidisciplinary education framework for more than 40 allied health, science and technical workforce professions. This allowed students to complete an initial qualification in health sciences and/or technology, then complete the specific occupational domain skills and/or specialised learning through on-the-job experience or additional study. Some countries have taken novel approaches to address service gaps where they have insufficient highly qualified health workers. This can include combining shorter training courses, internships and technology to increase quite different and cost-effective workforces. For example, in South Africa and in Malawi, clinical officers who can perform some surgical procedures. It may not be appropriate to replicate this in New Zealand, but there is a need to think differently about how the workforce can be trained and used.
Table 11.1: Summary of key training issues that need to be addressed – continued

<table>
<thead>
<tr>
<th>Workplace-based and staircasing training</th>
<th>Opportunity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Issue</strong></td>
<td>The health system will need to broaden its use of learn-as-you-earn training if the future workforce is to grow at the pace and scale required to meet future demand. Experience from other countries demonstrates that effective initiatives include:</td>
</tr>
<tr>
<td>Growing workforces at the pace required to support demand and to better reflect New Zealand communities will require different training pathways</td>
<td>▶ workplace-based and apprenticeship models that lessen the financial burden of training</td>
</tr>
<tr>
<td></td>
<td>▶ retaining trainees in their own community</td>
</tr>
<tr>
<td></td>
<td>▶ promoting greater workplace relevance and readiness on completion of training.</td>
</tr>
<tr>
<td></td>
<td>There is considerable scope to increase workplace roles that allow the workforce to specialise or extend their capabilities and scope over time while in paid employment and, at the same time, adding value to their communities. For example, the potential for kaiāwhina to become nurses while maintaining employment.</td>
</tr>
<tr>
<td></td>
<td>Staircasing is an approach that enables people who did not initially pursue higher education to flexibly create and enter a pathway to complete higher education. It can have multiple points of entry and exit, and allows integration of vocational courses with academic degrees.</td>
</tr>
<tr>
<td></td>
<td>Building on the learn-as-you-earn concept, some employers could provide the initial training programme for some staff. Health NZ may have the scale and resources to provide in-house training and development for relevant roles (eg, laboratory assistants and technicians).</td>
</tr>
<tr>
<td></td>
<td>For example, in New Zealand, dental assistants can gain on-the-job skills while completing a one-year modular online correspondence certificate, working alongside a dentist. Providing a smaller scope of activities than dentists, dental assistants can work efficiently and effectively to support oral hygiene and care.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Training settings</th>
<th>Opportunity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Issue</strong></td>
<td>Traditional placement models are unlikely to keep pace with student numbers. Alternative training settings will need to be explored to ensure work-readiness on graduation.</td>
</tr>
<tr>
<td></td>
<td>▶ Virtual training and simulation can augment on-site workforce capability development. For more specialised workforces which serve multiple communities, training using virtual and telehealth technology enables more timely and efficient services to be delivered.</td>
</tr>
<tr>
<td></td>
<td>▶ Training placements where people are needed can improve work readiness and workforce retention. Training in rural areas can improve retention in those communities.</td>
</tr>
</tbody>
</table>
A safe, competent and flexible regulatory system

The training system works closely with the regulatory system to ensure the health and disability workforce is clinically and culturally safe, competent, and able to meet high quality standards.

Responsible Authorities and professional bodies

The principal purpose of the HPCA Act is to protect the health and safety of the public. It includes mechanisms to ensure that practitioners are competent and fit to practise their professions for the duration of their professional lives and it restricts some activities to registered health professionals. Currently, 17 Responsible Authorities are responsible for the 24 regulated professions.

Table 11.2: Profile of Responsible Authorities, 2018

<table>
<thead>
<tr>
<th>Responsible Authority</th>
<th>Professions served</th>
<th>APS ²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dental Council</td>
<td>6</td>
<td>4,073</td>
</tr>
<tr>
<td>Dietitians Board</td>
<td>1</td>
<td>697</td>
</tr>
<tr>
<td>Medical Council of New Zealand</td>
<td>1</td>
<td>16,346</td>
</tr>
<tr>
<td>Medical Sciences Council of New Zealand</td>
<td>2</td>
<td>4,435</td>
</tr>
<tr>
<td>Midwifery Council of New Zealand</td>
<td>1</td>
<td>3,033</td>
</tr>
<tr>
<td>New Zealand Chiropractic Board</td>
<td>1</td>
<td>640</td>
</tr>
<tr>
<td>New Zealand Medical Radiation Technologists Board</td>
<td>1</td>
<td>3,268</td>
</tr>
<tr>
<td>Optometrists and Dispensing Opticians Board of NZ</td>
<td>2</td>
<td>1,133</td>
</tr>
<tr>
<td>New Zealand Psychologists Board</td>
<td>1</td>
<td>2,800</td>
</tr>
<tr>
<td>Nursing Council of New Zealand</td>
<td>1</td>
<td>56,356</td>
</tr>
<tr>
<td>Occupational Therapy Board of New Zealand</td>
<td>1</td>
<td>2,589</td>
</tr>
<tr>
<td>Osteopathic Council of New Zealand</td>
<td>1</td>
<td>519</td>
</tr>
<tr>
<td>Paramedic Council of New Zealand (to be established)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Pharmacy Council</td>
<td>1</td>
<td>5,133</td>
</tr>
<tr>
<td>Podiatrists Board of New Zealand</td>
<td>1</td>
<td>439</td>
</tr>
<tr>
<td>Psychotherapists Board of Aotearoa New Zealand</td>
<td>1</td>
<td>546</td>
</tr>
<tr>
<td>Physiotherapy Board of New Zealand</td>
<td>1</td>
<td>3,787</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>105,794</td>
</tr>
</tbody>
</table>

Notes
1. Paramedics are formally recognised and registered under the HPCA from 1 January 2020.
2. Annual practising certificates
Responsible authorities:

- describe scopes of practice
- accredit training programmes and providers
- register local and international members
- manage annual practising certificates
- set standards for clinical competence, cultural competence, and ethical conduct
- investigate complaints and run disciplinary processes.

In addition, the regulated workforce has many voluntary professional bodies (eg, societies, associations and colleges) that provide advocacy and influence over setting standards, training requirements and, in some cases, the supply of graduates. Most have a high degree of autonomy and focus on their own profession without broader consideration for other professions or system needs.

There are also Māori organisations that have a national coordination role for the Māori health workforce for example, Te Ohu Rata o Aotearoa – Māori Medical Practitioners Association (Te ORA), Nga Maia Māori Midwives Aotearoa, and Te Rau Ora aim to strengthen health workforces, decrease Māori inequity and increase Māori wellbeing and potential.

The large number of organisations, the focus on individual professions and inflexibility regarding scopes of practice have been cited as hampering teamwork, innovation, and impacting service delivery for the regulated and non regulated workforce.

In addition there are concerns that New Zealand’s professional bodies, Responsible Authorities, and training organisations have created higher training and entry barriers than other countries as illustrated in Figure 11.3 below.

New Zealand has a comparatively long training duration (three years) to become an anaesthetic technician with a narrower scope of practice than other countries. There are plans to increase training duration to four years and become degree level. Australia’s anaesthetic technicians have a similar scope but shorter training timeframes, and the UK’s operating department practitioners have greater scope and the possibility of shorter training.

Similarly, as shown in Figure 11.4, New Zealand MRI technicians have a relatively long training duration compared with Australian and overseas trained technicians who are required to complete more hours of clinical experience before they can practice in New Zealand.
Figure 11.3: Comparisons of sample training and registration requirements

**Pathway to become a practising anaesthetic technician / operating department practitioner**

**New Zealand** | (Anaesthetic technician)
- 3 year diploma in Applied Science
- On-the-job and distance learning
- Pass registration exam
- Compulsory registration
- Time to complete training: 3 years
- Scope of operating theatre activities

**Australia** | (Anaesthetic technician)
- 2 year diploma of Anaesthetic Tech
- Full-time placement in hospital or clinic
- 360 hours of placement
- Voluntary registration (not regulated)
- Time to complete training: 2 years
- Scope of operating theatre activities

**United Kingdom** | (Operating department practitioner)
- 2 year diploma or 3 year Bachelor
- >40% course clinical placement
- Compulsory registration
- Time to complete training: 2-3 years
- Scope of operating theatre activities

**Sources:**
UK: [https://www.healthcareers.nhs.uk/career-planning/course-finder?field_leading_to_a_career_in_tid=192&field_qualification_type_tid=All&field_study_mode_tid=All&field_region_tid=All&field_provider_name_tid=All&temp=All](https://www.healthcareers.nhs.uk/career-planning/course-finder?field_leading_to_a_career_in_tid=192&field_qualification_type_tid=All&field_study_mode_tid=All&field_region_tid=All&field_provider_name_tid=All&temp=All)
Self-regulation

Over half of the workforce that support the system with a broad range of health and disability related activities are not regulated under the HPCA Act. Kaiāwhina, traditional Māori health practitioners, practice managers, receptionists, counsellors, policy advisors, data analysts, cultural advisors, nutritionists, and dental assistants are just some of the workforce that play a critical role in the system.

Some of this workforce voluntarily self-regulate under professional associations to promote quality, safety, and credibility of their members. The associations can also provide professional leadership, advocacy, manage consumer complaints and discipline for their members, and can set minimum qualifications or experience requirements. However, there is variability regarding the strength or degree of self-regulation. Some occupations have multiple associations, each with their own requirements, or in some cases there is no clear entity that performs self-regulation activities.
As many of this workforce are involved in the delivery of health and disability services directly to consumers, including those who are vulnerable, it is important that the public are confident that the non-regulated workforce is competent and supported to deliver safe and high-quality services. The system needs growth in this workforce and higher levels of skills, scope and competence to address service gaps that cannot be met by the regulated workforce. This requires coordinated workforce planning with key stakeholders and may require strengthening of self-regulation in areas of higher public risk.

**An opportunity to change**

The regulatory system needs to take a cohesive and strategic approach to the future workforce that is less bound by professional scopes of practice and is more flexible to meet the diverse needs of New Zealanders, while maintaining quality standards. It is important that the future workforce represents the communities it serves, is safe and competent, works in a culturally safe way, and can work well as a team to provide high-quality person and whānau-focused care. There should be a systematic response to changing workforce needs, and regulators and trainers should be more accountable to the health and disability system.

Other countries have managed to train and deploy their workforce into roles traditionally done by other workforces. For example, surgical care practitioners in the United Kingdom can perform end-to-end surgical care for minor surgeries (such as facial skin cancer excisions and skin grafts). They are experienced non-medically trained healthcare professionals (such as nurses and Operating Department Practitioners) who have completed a two year master’s degree and clinical programme accredited by the Royal College of Surgeons.

New Zealand is progressing the development of some new or more flexible roles and learning pathways as illustrated below. Registered nurses are supporting anaesthetists following a workplace-based learning and supervision programme, giving hospitals more flexibility in how they use staff and giving nurses more variety and opportunities for development. Figure 11.5.

**Figure 11.5: Learning pathways**

![Learning pathways for registered nurses to improve flexibility and capacity — New Zealand](image)

There are however issues with doing this at scale and in a sustainable way which the system will need to find ways to address in the future.
Alternate ways of delivering regulatory functions

Other countries have taken different approaches to increase the system’s influence over regulatory functions: from quasi-regulation to co-regulation and legislation. Options that other countries have adopted include:

- strengthening self-regulation
- introducing pan-professional regulatory structures and functions
- merging Regulatory Authorities.
- While these options may have merit in the longer term, focusing solely on reshaping the oversight of the regulated workforce would likely delay the foundation work that needs to be done on developing the workforce plan for the entire health and disability system and identifying gaps that need to be addressed.

Capability frameworks such as the Calderdale Framework should be adopted to align existing and new competencies with patient need and foster collaborative working, role flexibility, cultural safety and career development. The frameworks should cover a range of domains and could leverage work already done for the wider public service (eg, the Māori Crown Relations Capability Framework) and internationally (eg, the NHS Simplified Knowledge and Skills Framework - a locally adaptable tool designed to make it easier for staff to identify the core skills needed to do their jobs and their career development needs). International frameworks will need to be adapted to fit the New Zealand cultural context.

The Review proposes that while this foundation work is being done, no additional Responsible Authorities should be established and the current regulators should be encouraged to work more collaboratively in a way that is consistent with the workforce plan and to better support agreed health and disability system objectives. The ongoing arrangements for managing the regulated workforce should be reconsidered in three to five years’ time to determine whether further changes are required. It is envisaged that over time there would be fewer Responsible Authorities, rather than more.

Strategic employment relations

The health and disability employment relations system is complex with 20 DHBs, many large unions and numerous multi-employer collective agreements with varying pay and conditions for different groups of staff. A tripartite accord, the Health Sector Relationship Agreement, has been in place for many years but has been largely ineffective in recent times.

Discussions with both unions and management representatives acknowledge that the current state of employment relations in the public health system is not producing the best health system that New Zealand can afford. The system was also disrupted by a significant number of strike days in 2019.

Unions expressed concern that change is being driven by a desire to cut costs, potentially to the detriment of their members. Employers express concern that protracted or persistent strike action imposes real costs on patients, significantly increasing some waiting lists and adding to the stress of staff.

The Review is not in a position to resolve such differences but notes that the chances of building a more robust employment relations environment would be enhanced by having a more professional and centralised employment relations function within Health NZ. This function would draw on more consistent
data from around the health and disability system and would have a longer-term vision in line with the workforce plan derived from the NZ Health Plan.

The health and disability sector will need to facilitate more differentiated job descriptions and an ability to see change as the norm, not a threat. All parties agreed that the Health Sector Relationship Agreement should be reinvigorated so that there can be more engagement between the parties outside multi-employer collective agreement negotiations.

Along with driving more differentiated commissioning and contracting models within agreed parameters, the system needs to have a clearer strategy on relative salary scales and employment terms and conditions across the sector. This should include working with unions on the best ways to encourage the flexibility needed to facilitate new roles and responsibilities and the employment model that will best suit the development of the future workforce.

It will also mean that the system should seek to address pay parity issues for professions working in different parts of the system, for example, nurses working in Tier 1 and staff of Māori providers should expect pay parity with Tier 2 staff.

**Increasing accountability for being a good employer**

The health and disability system could have a significant impact on the health and wellbeing of the entire population both by being a good employer and by ensuring the system workforce properly reflects the population it serves. Leveraging the system’s ability to create employment opportunities for those who have traditionally found it hard to find employment (particularly those with mental health conditions and disabled people) and growing the Māori and Pacific workforce is a must.

**Growing the workforce to better represent communities**

A diverse and representative health workforce is critical to deliver equitable health services that improve health outcomes. Māori make up 15% of the New Zealand population, but only 12% of the workforce and 8% of the DHB workforce. Pacific peoples make up about 8% of the New Zealand population but only just over 4% of the DHB workforce. Māori and Pacific people are underrepresented in medical, nursing and midwifery, allied health and scientific, and many other roles. Refer Figure 11.6 below.

**Figure 11.6: Māori and Pacific workforce populations**

| MĀORI AND PACIFIC PEOPLES CLINICAL WORKFORCE |
|-----------------|-----------------|-----------------|
| MĀORI            | PACIFIC PEOPLES |
| 9%               | 3%               |
| 16.6%            | 1.8%             |
| 15%              | 3%               |
| 13%              | 9%               |

It will take time and considerable effort and investment to grow the health workforce to match the population. Increasing the number of Māori and Pacific people in clinical, non-clinical and governance roles (including in key agencies) at all levels should be supported by system-wide workforce planning, modelling and investment across the pipeline, and pay equity.

**Māori workforce**

Increasing the number of Māori working in the health and disability system and providing them development and leadership opportunities are crucial components of the strategy to improve outcomes for Māori.

Developing and implementing the Māori Workforce Plan should be a key function of the Māori Health Authority. The proposed role of the Māori Health Authority in developing the Māori workforce and some case studies were discussed in the Hauora Māori section.

While work has been done in the past to expand and develop the Māori workforce, by various parts of the sector, work has often been piecemeal, has not been connected to any agreed national plan and there is no consistent information to support it. While some Māori workforce intake and student numbers are increasing, it is not at the pace or scale needed to drive real change.

Activity is needed across the pipeline, in line with the Māori Workforce Plan that will be developed including:

- **Training**
  - Working with the Ministry of Education and supporting local initiatives to encourage Māori and Pacific students to achieve in primary school and high school and take health, science and maths-based subjects at high school
  - Exposing Māori and Pacific students to potential careers and linking them with mentors and internships
  - Making it an expectation that more Māori and Pacific people are accepted into tertiary, polytechnic and other courses and making those courses welcoming for Māori and Pacific students and supporting timely completion and balancing of other commitments
  - Offering learn-as-you-earn training and development opportunities (eg to upskill kaiāwhina), flexible, low-cost, closer to home and rural training opportunities
  - Investing in more kaupapa and matauranga Māori training opportunities.

- **Recruitment, retention and development**
  - Reviews of recruitment policies to remove any biases and ensure they value the cultural and other skills that Māori staff can offer
  - Considering targets for employment of Māori staff
  - Māori provider development and pay equity
  - Providing mentoring, leadership training and development for Māori and involving them in developing, monitoring and evaluating solutions
  - Opportunities and encouragement to return to the workforce after a break.

The Māori Workforce Plan should build on the national, regional and local initiatives that have been shown to be effective in building the Māori health and disability workforce.
Examples of Māori Workforce Programmes

- Māori and Pacific Admission Scheme (MAPAS) at the University of Auckland supports timely completion of tertiary study.
- Ngā Mataapuna Oranga, a Whānau Ora collective, runs a regional clinical and non-clinical practice education and support service in the Western Bay of Plenty as part of a strategy to build whānau prosperity and wellbeing.
- Tumu Whakarae (the National DHB GM Māori Strategic Reference Group) provides leadership and guidance to grow the Māori workforce and realise cultural competence throughout the entire workforce to accelerate health gain for Māori and reduce health inequities.
- Ngā Manukura is a Māori health leadership programme that hundreds of front line staff have been through over the last 10 years.
- Otago University’s Mirror on Society Selection Policy, funding, and the supporting Te Whakapuawai programme is increasing the number of students from underrepresented groups such as Māori and Pacific people studying health sciences.
- National Kia Ora Hauora Māori health workforce development programme.

Partnerships with iwi groups will be important, as will engaging Māori families and communities, improving the information base, identifying and addressing barriers, developing solutions that are framed within Māori worldviews, demonstrating commitment to equity, identifying best practice examples, and evaluating, monitoring and building up a solid understanding of what works. The workforce measures included in DHBs’ Māori health scorecards could continue to be used to track progress.

Pacific workforce

There are a relatively low number of Pacific peoples working in most fields in the health and disability system, which also restricts numbers in leadership positions. For example, as shown in Table 11.3 below, the Pacific medical workforce remains well below population representation at 1.8% despite an increase of 21 more Pacific doctors between 2012 and 2016.

Table 11.3: Pacific health workforce change from 2012 to 2016

<table>
<thead>
<tr>
<th></th>
<th>2012 count (proportion)</th>
<th>2016 count (proportion)</th>
<th>Change in proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pacific medical workforce</td>
<td>250 (1.8%)</td>
<td>271 (1.8%)</td>
<td>0.0%</td>
</tr>
<tr>
<td>Registered nurses</td>
<td>1,469 (3.1%)</td>
<td>1,742 (3.6%)</td>
<td>0.5%</td>
</tr>
<tr>
<td>Nurse practitioners</td>
<td>1 (1.1%)</td>
<td>3 (1.9%)</td>
<td>0.8%</td>
</tr>
<tr>
<td>Midwives</td>
<td>69 (2.2%)</td>
<td>65 (2.2%)</td>
<td>0.0%</td>
</tr>
<tr>
<td>Dentists</td>
<td>20 (0.9%)</td>
<td>20 (0.8%)&lt;sup&gt;^&lt;/sup&gt;</td>
<td>-0.1%</td>
</tr>
<tr>
<td>Pharmacists</td>
<td>24 (0.7%)</td>
<td>32 (0.9%)</td>
<td>0.2%</td>
</tr>
<tr>
<td>Kaiāwhina</td>
<td>5,226 (8%)*</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

<sup>^</sup>latest report only goes to 2015  <sup>*</sup>latest report only goes to 2013
Achieving a representative Pacific workforce to improve health equity and ensure Pacific health perspectives, knowledge and practices are available and accessible, will take concerted effort and investment across health and education systems to achieve. Workforce development will also bring economic and health literacy benefits for Pacific peoples and improve the cultural competency and safety of the broader health and disability workforce. Increasing the number of Pacific peoples in leadership and senior leadership roles will also ensure Pacific views, needs and aspirations for health are included at the governance level of the system. The Aniva Postgraduate Nursing Programme is an example of a programme that has considerably enhanced the leadership capacity in this workforce.

An updated Pacific Health Action Plan is being developed by the Ministry to replace ‘Ala Mo’ui: Pathways to Pacific Health and Wellbeing. It is likely to include workforce actions. These actions should align with the overall workforce plan and the Pacific workforce plan.

Examples of Pacific workforce programmes

- The Taeao o Tautai: Pacific Public Health Workforce Development Implementation Plan (2012–2017) was developed by the Ministry to upskill and retain the Pacific health workforce, strengthen Pacific leadership, support effective practice and enhance cultural competency.\(^{268}\)
- In 2016, Le Va reviewed the results of its efforts to develop the Pacific public health workforce in line with the Implementation Plan. They pointed to more Pacific peoples going through public health and leadership programmes and more people completing Pacific cultural competency programmes - raising awareness of Pacific public health issues.\(^{269}\)
- Scholarships, such as those provided by the Ministry of Health, Le Va and the Ministry for Pacific Peoples, to support uptake of science, technology, engineering and maths (STEM) subjects should continue and be enhanced to increase the number of students with the pre-requisites needed to study health subjects at tertiary level and to build interest. Scholarships should be combined with appropriate mentorship, coaching, cultural and pastoral care, as well as giving support in identifying employment and career pathways.\(^{270}\)
- The Futures that Work Scholarship Programme has awarded 521 scholarships over the past 11 years and has contributed to growing the size and skills of the Pacific workforce.
Pacific leaders should be involved in developing and reviewing the workforce plans and activity that occurs under them. As an early priority, the plans should lead to increased investment for Pacific peoples to develop the skills needed to become leaders of the system. The plans should also lead to an investment in nursing, kaiāwhina and other outreach roles to better meet the needs of communities that are not currently well served by the system. This could include leveraging the RoVE changes that support the development of different training pathways, including more learn-as-you-earn options, funding and/or on-site training at night. To ensure services are appropriate for Pacific peoples, and because the Pacific health workforce is currently small, there is a need to enhance the cultural safety of the general workforce. The current competency of the non-Pacific workforce in relation to Pacific cultural safety, perspectives, approaches and methods is lacking and needs to be improved.

Reducing barriers and creating employment opportunities
The health and disability system can reduce barriers and create employment opportunities for those who have traditionally found it hard to gain employment, such as people with mental health conditions and disabled people; and help support people to thrive at work and stay connected to their workplaces if they do face challenges. This will benefit employees and their whānau, improve workplace diversity, reduce workplace stigma and may have economic benefits.

Demand-side approaches that are focused on making employers ‘disability confident’ have been found to be most effective in pulling disabled people into the workforce. It is one of the goals of the New Zealand Disability Strategy 2016 to 2026.271

Programmes could be used to raise awareness in the health and disability system and present the value of employing disabled people and provide guidance on disability confidence that helps ensure employment practices and workplaces are inclusive and accessible. This should be supported by Health NZ or a lead DHB that could share what they learn with other DHBs and employers.

A talent pool could help match disabled people to roles and be supported by programmes. For example, the DXC Dandelion programme finds and trains people with autism for specific roles, removes barriers to recruitment and helps employers support staff.

Best practice recruitment, onboarding, development and retention
To support improved and sustainable health service delivery, employers will need to continue to focus on adopting best practice recruitment, onboarding, development and retention. Some examples of opportunities are set out in Table 11.4 below:
Table 11.4: Opportunities to strengthen best practice employment processes

<table>
<thead>
<tr>
<th>Stage</th>
<th>Opportunity</th>
</tr>
</thead>
</table>
| Recruitment | ▶ Programmes that engage young people in science, maths and health-based subjects in school and link into training and employment to widen the pool of candidates.  
▶ Recruitment processes should value different skills and experience and be more open to considering ‘fit’ as being critical when trying to grow a workforce that better reflects the communities being served (eg, approach taken by Nuka in Alaska).  
▶ Actively managing a talent pool database of candidates.  
▶ Graduate programmes to attract students whose skills could be applied in any industry to the health and disability system, eg, data scientists and accountants. |
| Onboarding | ▶ The Health NZ charter will set out the culture and behaviours for all workforces in the health and disability system. Embedding these values from the outset and ensuring that onboarding clearly defines the role, sets expectations about supervision and autonomy, and supports this with materials and mentoring, will enhance workplace readiness. |
| Development | ▶ Salaried models of employment signal a greater commitment to retaining and developing employees. The expectation is that there will be greater use of salaried models, rather than piece rate employment contracts, particularly where vulnerable workers are working with vulnerable populations.  
▶ Staff development in areas such as digital and data literacy, evidence-based decision-making, better commissioning, change management, and other emerging areas.  
▶ Programmes to upskill kaiāwhina, in line with the Kaiāwhina Workforce Action Plan and to staircase into other roles such as nursing, Well Child/Tamariki Ora, social work, medical practitioners and management roles.  
▶ Career paths are mapped out with system-wide rotation in urban and rural locations. |
| Retention  | ▶ Active evidence-based strategies to reduce staff burnout and improve wellbeing eg, increasing employee control and opportunities for flexibility or different roles.  
▶ Alumni system to actively encourage staff to remain in and return to the health and disability system.  
▶ Develop mechanisms that allow more movement and secondments between DHBs, or between DHBs and NGOs. |
In addition, the right enablers will need to be in place. As a large employer, the health and disability system should have core workforce systems that effectively support workforce development and day-to-day activities such as rostering and leave management. The system should provide robust information about staff numbers, training, ethnicity, iwi affiliations and disability status. This information could be used internally and linked with resource scheduling, and with appropriate de-identification by Health NZ, the Māori Health Authority, the Ministry and others for planning, modelling and research.

**Working effectively to improve equity**

**Cultural safety and competence**

Cultural competence and safety needs to be a core requirement of the entire workforce. All staff must develop cultural safety and competence to work effectively with Māori, Pacific peoples and others. Embedding cultural safety is one approach to eliminate institutional racism in the system.

The workforce plan should set an expectation for all leaders to develop and maintain the Māori cultural competence and capability of the workforce (including the international workforce working in New Zealand) to:

- engage with Māori and to understand Māori perspectives
- understand and respect te Ao Māori concepts, knowledge, values and perspectives
- understand and, where appropriate, use tikanga Māori
- develop some te reo Māori (Māori language).

Each person entering the workforce should either have, or quickly gain, a base level of cultural safety and competence to work effectively with Māori, Pacific peoples and people from other cultures and backgrounds, and refresh their capabilities continuously. To improve cultural safety and the equity of health outcomes, reflective self-assessment is necessary for all the workforce. This should consider relative power, privilege and biases in relation to their role, the role of the system, and broader socio-economic factors. There are some good examples of efforts to build cultural safety capability. The Nursing Council made it a requirement in 1992 and the Medical Council of New Zealand introduced new cultural safety standards in 2019. Progress is being made but needs to continue.
Teamwork and adapting to change

Changing demographics along with increasing comorbidities and technology will continue to increase the demand for all parts of the system to act in more multidisciplinary, collaborative ways. Providing services where they are most needed by consumers and in ways which are most accessible will require flexibility on the part of the workforce. Ensuring such behaviours are the norm rather than the exception will require the workforce to look beyond traditional professional scopes of practice and work together in different ways. This will include the following.

- **Increasing dependence on teams** – a growing number of health and disability services will need to be delivered by interprofessional teams that provide integrated, person/whānau-focused care. Scope flexibility needs to be encouraged to enable cost-effective, person-focused and safe care, while training needs to expose professionals to other types of practitioners and team-based practices. Technology should facilitate communication and provide opportunities to involve and access virtual team members with the right skills to support peoples’ diverse needs.

- **Change management** – Organisations will benefit significantly when change is well planned and managed. Pathways should exist to develop and recruit change and project management capabilities to bring contemporary service design, project and change management approaches that can help the system implement more person and whānau-focused services. There is also an opportunity for health to learn from and adopt approaches to managing change that have worked well in other sectors.

- **Greater adoption of technology** – Working differently to adopt advances in technology such as artificial intelligence and machine learning (when systems use a large number of data points for decision-making) will streamline workflow, reduce clinicians’ time spent on administration and lead to more accurate diagnoses and more personalised treatment. The workforce should be encouraged and trained to use these advances to enable more precise and targeted interventions and capitalise on time efficiencies. The culture should embrace technology, data and digital change that releases time to care.

- **Developing digital skills and competence throughout the system** – The challenge for the sector is to ensure the workforce has the skills to make full use of potential advances. The competencies needed by the New Zealand workforce should be defined, and NHS and Canadian examples provide some direction. Training should be coordinated by Health NZ, with lead DHBs and partnerships with training organisations. Foundations of digital and data literacy should be included in initial training and should be developed further during employment. The workforce plan could define core digital capabilities and set minimum capability expectations across the system to be updated regularly with input from key stakeholders. A system wide approach is needed to join up activity and help the workforce keep pace with technological advancements.

- **Leadership development pathways** – Leaders are exposed to different ways of working, in different environments and supported to develop and apply their leadership skills through deliberate career planning and pathways. Greater emphasis needs to be placed on leaders’ roles to prepare their organisation for innovation and constant change by facilitating a culture that embraces it. Potential leaders should be developed early, for example rangatahi youth.
Building the future

The Review proposes the following changes

**Workforce Plan**

- The Ministry should lead the development of a workforce plan with input from unions, employers, Health NZ, the Māori Health Authority, the Health Workforce Advisory Board, TEC, the NZ Institute, regulators, professional associations and other training providers. The Ministry should also work closely with stakeholders to develop specific workforce plans for Pacific peoples, disabled people and rural communities.

- The Māori Health Authority should develop and lead the implementation of the Māori workforce plan and manage the associated funding.

- The Workforce Plan should take a 10- to 15-year view. It should incorporate plans to increase the representativeness of the workforce, increase accountability for being a good employer, gather better workforce data and a present system-wide view of required workforce competencies.

**Training**

- The Ministry should work with TEC, Health NZ, the NZ Institute and other regulatory authorities and training establishments to ensure training is consistent with achieving the goals of the NZ Health Plan and accompanying strategies.

- Training providers should be encouraged to develop shorter-term training modules and micro-credentials; provide more development opportunities to kaiāwhina; offer more online training courses; deliver more training in rural locations; support more Māori, Pacific and disabled students; and develop more learn-as-you-earn pathways.

- Where there is a guarantee of employment on the completion of training, the workforce plan should stipulate the numbers of available training places.

- The Ministry should work with the Ministry of Education to promote clinical and non-clinical health and disability careers and increase the uptake of science, maths and health-based subjects in secondary schools, with a particular focus on increasing the numbers of Māori, Pacific and disabled students.

- All parts of the health and disability system should be cooperating to develop more learn-as-you-earn options and shorter cumulative training courses to encourage more non-traditional participation, and particularly to facilitate more participation from rural trainees.

*Continued*
Building the future – continued

The Review proposes the following changes – continued

Regulation

▶ The regulatory system should support the NZ Health Plan and associated workforce strategies. It should be encouraged to move towards more interdisciplinary, flexible, consumer-focused and competency-based approach to regulation, over a profession-based focus.
▶ The effectiveness of voluntary changes by regulatory bodies should be reviewed after five years.

Strategic employment relations

▶ Health NZ should manage strategic employment relations, drawing on better data and aligning with the workforce plan and the NZ Health Plan.
▶ The tripartite accord should be reinvigorated and commit all parties to working constructively to achieve the long-term objectives of the system, fostering more effective dispute resolution and developing a clearer strategy on relative salary scales and employment terms and conditions.
▶ The workforce should reflect the community it is serving, and all parts of the system should be accountable for implementing specific Māori, Pacific and disabled workforce strategies.
▶ Health NZ should prioritise developing better and more consistent workforce intelligence from all parts of the system.
▶ The system should be encouraged to become disability confident, drawing disabled people into a wider variety of roles and supporting them to thrive.
▶ Employers should be expected to adopt best-practice staff recruitment, onboarding, development and retention practices, including more flexible learning options and developing staff in leadership roles.
▶ Commissioning and contracting policies should be used to encourage more secure employment and, therefore, more opportunities for career development, particularly for the workforces involved in home-based care and other outreach services.
To enable a data-driven, digitally-enabled ecosystem that supports modern models of care, investment is required in more than just technology. The system needs to work differently to accelerate the digital transformation toward safer, more productive care delivery resulting in better experiences and more equitable outcomes for people.

People should be more empowered with more trusted access to and control over their health data. Sector stakeholders should be able to more readily share and access health data using newer, nationally consistent approaches, supported by more streamlined procurement. Decision-makers and researchers should have better access to data and digital technologies to support decision making and innovation. This should be enabled through a more centrally-led approach, particularly with regard to standards, data governance, Māori Data Sovereignty and common national systems. Building system-wide digital literacy capability also needs to be accelerated.

What digital means for the health and disability system

Achieving the future direction proposed by the Review would be heavily dependent on modern and effective use of data and digital technologies across the health and disability system.

Digital is a way of working and many of us interact with businesses, organisations and governments through digital means. It is becoming the ‘new normal’ for managing our lives. New Zealand businesses and consumers have generally been fast to adopt new technologies and there is relatively high internet use and uptake of mobile devices.
Digital is a large part of people’s day-to-day activities. To date, the health and disability system has not rapidly adopted digital technologies and modern ways of working and needs to accelerate the implementation of solutions to find effective, sustainable and modern ways to do things that are now typical for other businesses and organisations.

Many people expect to be able to manage and update their personal details and conduct transactions online. However, in the health system people cannot even update the address that is linked to their National Health Index (NHI) number. A barrier to this is authenticating the individual. Other New Zealand organisations have overcome the challenge of proving identity online, as demonstrated by the Department of Internal Affairs electronically processing 60% of adult passport renewals.

Large volumes of data are transacted securely and in reusable digital formats that can be used across businesses. For example, around 150 million EFTPOS transactions are processed monthly between industry partners with different systems and consumers with different banks. In addition to the transactions completed, data associated with these transactions becomes part of industry partners’ financial systems, and part of consumers’ banking records. The health and disability system currently does not have platforms in place to support equivalent reliable data exchanges happening.

Many commentators have discussed the transformative role that data and digital technologies could play in the health and disability sector. Some see these technologies as a natural business-as-usual progression for a sector that is clinically driven. Others are concerned about the disruption and the ethical and governance challenges that may result. Many are optimistic:

“If any industry has more to gain and less to fear from robotics, cognitive augmentation, digital disruption, and artificial intelligence, it is health care. The powerful combination of data and analytics is fuelling precision and personalised medicine and pushing genomics to new scientific frontiers.”

New Zealand’s health and disability system is large and complex and it is one of the largest users of information technology in the country. It is not realistic to think that one system, either nationally or across all aspects of service delivery in a locality, would be possible given the current data and digital technology environment. Neither would the answer be the continued use of thousands of standalone applications that are often heavily customised. If people are to take more control of managing their health, if services are to be more connected and decision-making better informed, a deliberate and staged plan would be required to transform the system.

As the health and disability system becomes more reliant on data and digital technologies it would be important to

► ensure there is good connectivity between systems
► have sufficient resilience in the system and have robust business continuity planning to ensure that digital systems do not become a point of failure.
Moving the health and disability system to a point where it can adopt digital technologies and data to deliver more equitable health outcomes would require a well-planned and staged transformation. The Review has proposed that all planning should derive from the NZ Health Plan and digital and data is no exception. The system needs a clear long term digital and data strategy and plan to ensure a cohesive, effective modern health and disability system. Continued piecemeal approaches will not be sufficient. Regardless of the details of the plan, implementation should start with a focus on getting the basics in place across the system rather than aiming to excel in a small area of the system.

**Using digital and data to enable a connected system**

**Interoperable, connected and shared health data and information**

The Interim Report identified good data as a foundation, signalling that:

- ‘The system needs to be better informed at every level by robust and timely data that is readily accessible to all who work in the system and all who use the system. Better data and more use of digital solutions is not only a necessity, but it also provides an opportunity to free up clinician time to focus on more caring and to support those people who wish to use technology to help take greater control of managing their own health and wellbeing.’

Throughout the Review, the need for ready access to reliable, up-to-date, joined up data was a consistent theme endorsed by consumers and everyone engaged in ‘the ecosystem’. The importance of data and the obstacles faced is set out below.

<table>
<thead>
<tr>
<th>Quality standardised data is critical for:</th>
<th>Current challenges:</th>
</tr>
</thead>
<tbody>
<tr>
<td>▶ Consumer empowerment: supporting consumers to actively manage their own health by accessing their own health records to gain information and contribute to them, to support targeted wellbeing and education advice, research information and choice</td>
<td>▶ Most patient information is in inconsistent machine-readable formats, so it is difficult to access and share</td>
</tr>
<tr>
<td>▶ Better patient safety, care and outcomes that enable clinicians to see complete, up-to-date patient data, across the continuum of care</td>
<td>▶ Privacy is cited, often incorrectly, for withholding patient information and other data that would help inform patient care, performance improvement, policy and funding and investment decisions</td>
</tr>
<tr>
<td>▶ New models of care that require multiple clinicians in different locations to access real-time patient data to support multidisciplinary care</td>
<td>▶ Many contracts do not clearly set out data or interoperability requirements. Organisations generally understand their responsibilities regarding clinical data, but do not see it as a requirement to routinely share data</td>
</tr>
<tr>
<td>▶ Decision-making and research that require timely access and analytical capacity to extract meaningful information from large datasets</td>
<td>▶ Some compliance requirements are costly and burdensome, sometimes requiring system upgrades and lost productivity</td>
</tr>
<tr>
<td>▶ Effective data and information flow through the health and disability system.</td>
<td>▶ There is no national agreement on consistent implementation of standards.</td>
</tr>
</tbody>
</table>
A first step to address these challenges would be to ensure that appropriate data governance and stewardship arrangements are in place.

<table>
<thead>
<tr>
<th>Description</th>
<th>Why it matters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data governance</td>
<td>Leadership and rules on how data and information is collected, managed, shared, accessed and used.</td>
</tr>
<tr>
<td>Data stewardship</td>
<td>Management and oversight of data assets.</td>
</tr>
</tbody>
</table>

Adopting a more deliberate approach to developing national collections, setting data and data sharing standards and the architectural design of systems, would also be important, as discussed further below.

**Development and use of nationally standardised datasets**

Collecting data and information should be designed to benefit all stakeholders across the health and disability system. Data and information standards should enable data collection to be in meaningful, useful formats and the system should aim to, where possible, adopt the principle of ‘collect once, use many times.’ It should also be clear in contracts with providers that the expectation is that data should, with the appropriate approvals, be more routinely and consistently shared with consumers, other providers, policy makers and those responsible for ensuring the system performs well and meets population health needs. This type of approach would also apply to national registries.

While there are a number of existing national collections, this data is generally only used for ‘statistical information, clinical benchmarking, and planning and funding’. The collections are not granular enough for the purpose of sharing data and information for clinical care provision, or clinically led research and improvement.

There is a comparatively high degree of compliance for submitting data into some national collections (e.g. National Minimum Inpatient Dataset) that are curated and used quite extensively. In other instances, there is less visibility of a collection and lower compliance with submitting data, which lessens the usefulness of the collection.

**Prioritise a minimum or core Tier 1 dataset**

There are also significant gaps in the coverage of our national collections. For example, there is currently no mandated standard primary health care dataset, let alone a wider Tier 1 dataset. While nearly all primary providers use computer systems, the sector is made up of many independent providers all using different information technology systems. Systems and data are not sufficiently joined up to support provider collaboration or provide an upwards flow of consistent primary health care data to inform research, policy or service development.
Work is being progressed on a National Primary Care Data Set (NPCDS) and Primary Care Digital and Data Strategy, but the focus appears to be on secondary uses of primary health care data (reporting and statistics) with limited sector engagement. Limited progress has been made in improving primary health care data and information sharing to support clinical care and to promote innovation and research. Given the emphasis on more networked and accessible Tier 1 services, it must be a priority to agree what data should be collected at the point of care.

The breadth of Tier 1 services is wide, so a pragmatic first step might be to focus on agreeing a dataset and data standards for general practice, community pharmacy, community diagnostics and other high volume digitised datasets that could be more easily, and most usefully, shared.

Developing a mandated Tier 1 dataset could be accelerated by using learnings and resources from current data sharing approaches, for example, the GP2GP provider-to-provider solution used in New Zealand to transfer records when consumers change GP practices, and by using and adapting international approaches and resources developed in Australia, the United Kingdom, the United States, Europe and elsewhere. Over time the dataset should be extended to incorporate a broader range of Tier 1 services.

Māori data governance and sovereignty

Internationally, there is increasing recognition of the interests and rights of indigenous people regarding data. In the Interim Report, gaps were identified surrounding this issue and regarding the central leadership and responsibilities of governance and sovereignty relating to Māori data.

<table>
<thead>
<tr>
<th>Description</th>
<th>Why it matters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data sovereignty</td>
<td>Data about people is subject to the laws and governance structures within the jurisdiction it is collected. ▶ ✓ Collection, representation and use of data about indigenous people.</td>
</tr>
</tbody>
</table>

It is important that the process of developing and determining national data and information strategies is done in partnership with Māori.

There are Māori data governance structures in place within government and the health and disability system. Networks of researchers and practitioners such as Te Manu Raraunga should be used to ensure that responsibilities of Māori data governance and sovereignty are fulfilled.
Te Mana Raraunga

advocates for Māori data sovereignty at a national level. Te Mana Raraunga is open to participation from Māori and iwi data users, ICT providers, researchers, policy makers and planners, businesses, service providers and community advocates.

 This network aims to support discussions about Māori data sovereignty at governance and operational levels and has developed a charter and framework (mana mahi) to guide this work.

 The work that has been done to develop a charter could be useful in developing and implementing data and digital standards across the system.

Source: [www.temanararaunga.maori.nz/](http://www.temanararaunga.maori.nz/)

It is anticipated that the Māori Health Authority would partner with the Ministry and Health NZ to ensure that Māori data and digital interests are represented and that Māori-specific issues are appropriately addressed. These approaches would also extend to Māori population health analysis and capabilities.

**Data sharing, interoperability and standards**

The Health Information Standards Organisation (HISO) was established within the Ministry in 2003 and has developed and published a range of data standards. While these standards are well defined, they are not widely, consistently or easily implemented and are poorly maintained resulting in inconsistent data quality and accuracy. HISO’s role would need to be strengthened to deliver the work programme likely to be required in the immediate future.

**National identifier data**

New Zealand already has a good foundation to support interoperability and data sharing across the health and disability system, using the National Health Index (NHI) and across agencies via the Integrated Data Infrastructure (IDI).

However, the value that could be derived from the NHI is not maximised. Some of the data standards within the NHI are either poorly implemented or insufficiently defined for specific population groups. The NHI could be strengthened by improving ethnicity data standards and disability data standards. This would help make data about underrepresented population groups more visible and better inform the development of policy that is aimed at addressing inequities.
Identity management

A fundamental building block for the health and disability system is robust identity management processes that identify and authenticate who (or what) wants to access the requested information and ensure they have a legitimate purpose and authority.

<table>
<thead>
<tr>
<th>Description</th>
<th>Why it matters</th>
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<tbody>
<tr>
<td>Identity management</td>
<td>▶ Ensuring that the right people have the right access to systems and information. Also having a single identity across systems so people don’t need lots of different usernames and passwords.</td>
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Verified digital identities are needed for consumers, whānau and workforce and these need to be linked to the context in which information can be accessed and shared. When identity is stored in different ways in different applications, in a system that has thousands of applications, a workforce of more than 200,000 and a population of nearly 5 million people, it is complicated and unwieldy.

As the number of consumers wanting to access their information from multiple systems increases, it would become important to have a single credential that proves their identity and associates it with their NHI number. The solution would also need to support consent and delegation for each information request.

A single credentialing process for consumers would reduce the number of:

▶ places that identity information needed to be updated
▶ systems in which changes would need to be made when, for example, data standards are updated.

This challenge is similar for providers whose identity is managed through the Health Provider Index (HPI). Currently, most providers (especially clinicians working in DHBs that have thousands of applications) have different usernames and passwords for different systems. Many cite managing these (and logging on and off a dozen or more systems at a time to find and enter information) as being a major overhead. Having a single credential and a mandate that all provider systems support single sign-on has the potential to generate a significant productivity gain and improve staff engagement.

The Department of Internal Affairs is progressing its digital identity trust framework that will allow trusted partners such as the Ministry to establish their own digital identity management solutions which, if they support the agreed identity standards, would federate into the overall ecosystem. The health and disability system should draw on this work and, in parallel, progress the additional health-specific elements that are required to ensure robust identity management is in place across all systems.

Effective data sharing

Data and information should follow and be easily available for people’s needs. The current design of existing systems, registries, warehouses and collections makes it difficult to aggregate or access data and information in a meaningful way that assists in decision-making.
Lack of investment and leadership toward a nationally consistent approach to achieving interoperability has resulted in a poorly connected health and disability system. Legacy systems that are non-standard with poor interoperability lag behind the current agreed standards. This results in poor consumer and user experiences, clinical safety and quality issues and poor health outcomes. A standards-based approach, supported by strong central leadership, governance and stewardship would enable a more connected health and disability system.

Processes and systems that need to be in place to support improved data sharing are set out below.

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<th>Description</th>
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<tr>
<td><strong>Data standards</strong></td>
<td>▶ Rules that define how data and information is captured in computer systems.</td>
</tr>
<tr>
<td></td>
<td>▶ Ensures complete and consistent data across the system.</td>
</tr>
<tr>
<td></td>
<td>▶ Enables data sent by one system to be captured in a digital format in another system so that it can be more readily used.</td>
</tr>
<tr>
<td></td>
<td>▶ Enables advanced technologies (eg, AI and genomics) to more easily make sense of data.</td>
</tr>
<tr>
<td><strong>Interoperability</strong></td>
<td>▶ Systems can access and share information.</td>
</tr>
<tr>
<td></td>
<td>▶ Enables the flow of data across systems to support joined-up business processes.</td>
</tr>
<tr>
<td></td>
<td>▶ Enables access and sharing data between people and systems, eg, clinicians collaborating on shared care plans; consumers accessing all their data from one place.</td>
</tr>
<tr>
<td><strong>Application Programming Interface (API)</strong></td>
<td>▶ Connects applications and systems</td>
</tr>
<tr>
<td></td>
<td>▶ Enables improved data and information connection, improving secure access and sharing to inform decision-making.</td>
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The challenges of solving interoperability for health care are internationally recognised and, while good adoption of recognised open standards is required to achieve this, it must not be to the detriment of safe, quality health care and outcomes, or the usability and utility of systems.

Appropriate and secure exchange of health information must become a consistent characteristic of the system. This would enhance decision-making at all levels.

**Consumer access to information**
There is a need to provide consumers with easy access to all their own health information allowing them, where appropriate, to manage, update and contribute to their own data and to consent to their data being shared with whānau and caregivers.
Benefits to providing consumers with access to their health records include:

- improved consumer satisfaction and convenience
- more patient-centred care delivery and improvements in effectiveness, safety and efficiency
- behaviour change and more active self-management, particularly where consumers can contribute their own data and information to their records.

Access to and controlling their own data and information is a common expectation for many people in many aspects of their lives (eg, banking, travel, education). To deliver on a truly person-centred approach to health, this needs to be enabled within the health and disability system.

Providing consumers access to their records is contributing to changes in provider behaviour. OpenNotes is an international movement which aims to allow consumers to access all the notes that providers enter into systems about them. Uptake of this by providers is increasing and represents a positive culture shift of health providers becoming more open and transparent during treatment and care of people. This transparent approach to providing care is endorsed and should be encouraged by central functions and health professional regulators.

Progress has been made using patient portals in primary health care. However, there has been inconsistent uptake and use of portals across the country. A concerted focus and application to enable consumers and whānau easy access to their own health data and information would be a significant step in the staged transformation of the system. While a number of technical changes and approaches can facilitate access, changes to strengthen the Health Information Privacy Code (HIPC) could reinforce consumer and whānau access as a basic requirement within the system.

**Cybersecurity**

Increasing digitisation and data sharing requires consumer confidence and trust that their information is being stored securely and viewed only by people with appropriate need and authority. Also, as the health and disability system becomes more reliant on digital technologies to operate effectively, it is critical that technology cannot be exploited to disrupt the system. But there are cybersecurity issues across the health and disability system including ageing and fragile infrastructure, and lack of resources to maintain good security hygiene and robust practices for security operations management.

The lack of a centralised identity management solution means most systems do not have audit capabilities to monitor and report on inappropriate access to information. Getting this right would be critical to build whānau and community trust to improve data accuracy and sharing across the system.

<table>
<thead>
<tr>
<th>Description</th>
<th>Why it matters</th>
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</thead>
<tbody>
<tr>
<td><strong>Cybersecurity</strong></td>
<td>▶ Protecting physical assets (networks and systems) and information from unlawful access, theft, disruption or damage.</td>
</tr>
<tr>
<td></td>
<td>▶ Maintaining confidentiality of consumer and business data.</td>
</tr>
<tr>
<td></td>
<td>▶ Ensuring consumer information is safe and can be confidently trusted to inform decision-making.</td>
</tr>
<tr>
<td></td>
<td>▶ Ensure systems cannot be disrupted or damaged.</td>
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To prevent cybersecurity incidents that could paralyse the health and disability system and to maintain legal compliance and consumer confidence, all organisations should maintain cybersecurity practices that are appropriate to their size and scope and the data they handle. This issue is not unique to health. There is considerable work being done across government that the health and disability could draw on, including:

- the New Zealand Information Security Manual, which is the Government’s manual on information assurance and information systems security
- National Cyber Security Centre (NCSC) bulletins that provide practical guidance and timely advice
- Cyber Emergency Response Team (CERT) updates. This is part of a global network of CERTs that tracks cybersecurity threats and incidents and provides practical advice, including a list of 10 critical controls that would prevent or, at least, detect and contain most incidents.

Managing cyber risk is challenging in our current digital ecosystem that includes many legacy applications and aged infrastructure. It is also particularly challenging for small organisations like community providers, who often lack the resources and the knowledge to manage cybersecurity effectively.

It is expected that Health NZ would play a key role in developing and mandating approaches to better manage cybersecurity and would assist with the implementation of consistent cybersecurity throughout the health and disability system.

**National reference architecture**

Core infrastructure that supports new ways of working and health care delivery is currently not centrally defined or provided. A nationally standardised reference architecture and common design and accessibility standards would help ensure that as new systems are added, they work together and improve service delivery and performance.

<table>
<thead>
<tr>
<th>Description</th>
<th>Why it matters</th>
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</thead>
<tbody>
<tr>
<td>Reference architecture</td>
<td>▶ A system-wide blueprint of common systems and how they all fit together. ▶ Provides clarity over what the overall system looks like, what the component systems are and how data flows between them. ▶ Streamlines procurement by pre-defining system components. ▶ Common system-wide view supports future consolidation and rationalisation of systems to improve data flow.</td>
</tr>
<tr>
<td>Design and accessibility standards</td>
<td>▶ Ensuring that systems are built in a way that is useful and easy to use. ▶ Systems need to support people to do their jobs and focus on consumers, not computer screens. ▶ Equity of access for all users.</td>
</tr>
</tbody>
</table>
Establishing clear consistent design standards and accessibility standards would also be an important step in ensuring that in the future interoperability between systems is enhanced and that systems better meet user and consumer requirements. The National Health Information Platform (nHIP), discussed below, supports a national reference architecture approach.

Virtual networks
Design and accessibility standards would also be important in shaping virtual platforms (such as telehealth) and tools that will be required to enable networks of service providers to work effectively together and support rapid improvements, particularly in Tier 1.

Capabilities supporting telehealth and virtual care – whether it’s clinician led or consumer self-service – currently have significant gaps, both technically and in terms of the health and disability system’s preparedness. Mechanisms for funding and incentivising providers to offer these services (e.g., telehealth, virtual appointments, and virtual waiting rooms) need to be designed, implemented and sustained.

Provider job descriptions, scopes of practice, performance metrics, codes of practice and so on would need to be recalibrated to support the increasing use of telehealth. None of this is technically challenging but would require a significant shift in mind set and behaviour from parts of the system. It would require collaborative re-design of service provision and subsequent change management for providers and consumers.

National health information platform actions
Mandated standards for data and interoperability would take years to fully implement across the health and disability system. Upgrading or replacing the tens of thousands of different systems in current use would take several years, possibly up to a decade or more for some of the larger DHB systems. However, better systems interoperability and data sharing could be achieved relatively quickly by using technology to source and connect data from across different non-compliant source systems and present it in a coherent, standardised way.

As noted in the Interim Report, the Ministry is leading the National Health Investment Platform (nHIP) that would provide a powerful platform for data integration and systems interoperability across the health and disability system.

There is no question that this investment is urgently required. Since the Interim Report, the Ministry has further developed a programme business case that was shared with the Review. The programme is based around delivering capability in flexible value-based tranches that seek to solve specific user (consumers, providers and decision-makers) problems. To ensure that value is delivered quickly, the implementation has been phased into tranches and, within each tranche, the intention is to design and deliver a minimum viable product (MVP) quickly then make iterations from testing and piloting the MVP with users.
Tranche 1 of this work programme is focused on connecting demographic, medicines and immunisation data and sharing it with providers and consumers so that consumers can see all their data in one place, as can providers when making clinical decisions. The proposed Tranche 1 scope is summarised in the following figure.

**Tranche 1: nHIP – Launch (July 2020 to July 2023)**

Tranche 1 would design and build the nHIP data service and foundation enablers, and other necessary activities, including sourcing of foundation capabilities. Access to initial datasets for demographics, medicines and immunisation would be delivered and key sector exemplar services would be identified and supported to aid service uptake, with a focus on consumer access. Developing standards, targeted digital health literacy initiatives, data governance and a privacy framework would be implemented.

**Figure 12.1: Summary of the Tranche 1 scope**

The value created by Tranche 1 would be:

- improved connection and communication between service providers, leading to more accurate and timely information sharing
- reduced risk of errors due to improved medicines information
- better provider workflows owing to better information for decision-making at the point of care.
- Consumers could view and update their relevant demographic information, view their immunisations history, and medicines prescribed and dispensed by multiple providers. Tranche 1 would also deliver improved preventive health capability, through improved immunisation data sharing across the system.

Source: Ministry of Health, nHIP Programme Business Case

This tranche aligns well with the Review’s proposed direction, from both a digital perspective and from its early focus on Tier 1 implementation. Investment to accelerate this programme of work should be supported.
Addressing equity through data and digital

The Interim Report noted that the health and disability system lacks integration and systems thinking. This means there are areas where it fails to meet population needs. As medical technologies advance, data becomes more widely used and more sophisticated interventions become available. So too does the risk of introducing more inequity due to factors such as a person’s ethnicity, socioeconomic status, age, and where they live.

The same is currently true of health care but done well, population-level, data-driven policy and planning and individualised, digitally enabled service models offer a way to reduce inequity, improve outcomes and improve individual consumer experiences into the future health and disability system. As this future state is built, it is critical that Māori are engaged around data sovereignty, solution design and deployment to minimise the risk of digital exacerbating inequitable outcomes.

Improving digital access

While 81% of New Zealand adults use a smartphone, affordability of cellular data is a challenge for many. The Ministry is involved in a Department of Internal Affairs led collaboration which, in partnership with New Zealand’s telecommunications companies, is piloting zero-rated data (to consumers) for five websites and is exploring how to develop a permanent solution based on this pilot. The Ministry is taking the lead on this and has built it into the nHIP business case. Notwithstanding a more formal evaluation, approaches like this have shown a considerable impact as well as return on investment overseas. Serious consideration to expanding this approach within New Zealand should be considered.

Coverage remains an issue for some consumers. Network provider estimates of population coverage are set out below.

Figure 12.2: Estimated population coverage of mobile voice and data services

<table>
<thead>
<tr>
<th></th>
<th>SPARK</th>
<th>VODAFONE</th>
<th>2 DEGREES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coverage</td>
<td>97%</td>
<td>98.5%</td>
<td>98.5%</td>
</tr>
</tbody>
</table>

It is estimated that currently there are up to 75,000 people without access to mobile data. These are areas and people that are typically also underserved by health care services so alternative solutions need to be found for these consumers.

The Ministry of Education has rolled its Network for Learning out to 98% of the country’s schools and, in partnership with technology companies and community trusts, now provides connectivity to students outside of the school grounds in many areas.
The health and disability system should work with the Ministry of Education and other parties to develop a similar model. This is likely to be particularly relevant for Tier 1 networks in rural areas, where connectivity to schools, marae and other community facilities could also be used by the health and disability system to better serve local community needs.

There are many other barriers to access and reasons for digital poverty so it is also critical that, wherever possible, health and disability services are also available in non-digital form or, where this is not possible, assistance is available to help consumers use digital services.

**Māori**

Barriers for Māori accessing equitable health care have been noted throughout the Review. The Interim Report noted that it is vital that Māori data is fully incorporated into the evidence used to develop genome-based interventions and algorithms. To fail to do so has the potential to increase inequity in health outcomes for Māori. It is important that principles, such as those set out in the Te Mana Raraunga charter, underpin the development of digital policy and the design and implementation of data and digital standards and services.

It is proposed that the Māori Health Authority would partner with the Ministry and Health NZ in the digital and data domain to ensure that Māori interests are represented and that Māori-specific issues are appropriately addressed. These approaches would also extend to Māori population health analysis and capabilities.

**Pacific peoples**

There are difficulties with the way health data is collected, governed and analysed that impacts on the ability of the system to achieve equity for Pacific peoples. Current approaches to Pacific health analysis involve homogenising diverse Pacific populations into one group, or in some cases results for Pacific are not reported at all. This results in broad assumptions of Pacific health outcomes and system responses needed to support action, where specific and targeted action could be better placed.

The new health system would need to address the issues identified for Pacific health data if it is to make headway towards achieving equity. This would need to include developing capabilities to perform high quality data analysis and sophisticated data reporting of Pacific health data to support equity actions. The pathway to making changes needs to be developed in collaboration with Pacific health researchers and analysts to ensure Pacific health data is treated respectfully, with standards being accepted and normalised throughout the health system.

**Other population groups**

The Digital Inclusion Blueprint also offers valuable insights into how to overcome digital inclusion challenges for disadvantaged populations. This cross-agency work should be prioritised.
Digital service models offer many opportunities to increase access and equity for different groups.

- Older people and people with chronic and complex conditions can benefit from remote monitoring, telehealth, shared care planning and management and digital therapeutics to get better access to services and help them manage their conditions better and avoid hospital admissions.
- Pacific peoples and other groups where there are cultural needs that are not met by the current system can benefit from personalised and culturally adapted digital services through apps, websites and platforms, and can have easier access and greater choice of providers they are comfortable speaking with through telehealth services.\(^{309}\)
- Disabled people can enjoy greater independence and access to services through remote monitoring and telehealth. Accessing appropriate health services can also be enhanced through digital enablement. Digital services must be accessible to meet individuals’ needs.\(^{310}\)

### Case Study: Le Va - Aunty Dee online wellbeing tool

Auntie Dee is an online wellbeing tool targeted at young Pacific and Māori people.\(^{311}\) It is also freely available for everyone to use. Developed using co-designed approaches and based on Cognitive Behavioural Therapy techniques, it is a tool aiming to help improve coping mechanisms and problem-solving capabilities of younger people managing stressful experiences. Evidence for this approach has been proven to minimise symptoms of depression in both adults and younger people and has also shown to work well with helping young people cope.\(^{312}\)

For these benefits to be realised, appropriate, standardised ethnicity and disability data needs to be collected and available across the health and disability system in a way that permits disaggregation and identification of need.

### Tier 1 focus

#### Digital foundations required for Tier 1 networks

While nearly all Tier 1 providers use Tier 1 networks, the thousands of independent providers use different systems and even where they are using the same system, there are different versions and customisations that add to the complexity of getting these systems to work together. This component of the health and disability system lacks overall coherence. The systems and data are not sufficiently connected to support a service delivery model that centres on consumers. Nor does it readily support the appropriate flow of data extracts to inform decision-making or monitor system performance.

Digitally enabled Tier 1 service networks would provide face-to-face and virtual services\(^{313}\) to consumers with a joined up consumer experience, new ways to access services, and increase the availability and efficiency of Tier 1 services to improve access and address equity.
Networks would need to use a variety of digital tools to support new ways of working, including:

- telehealth platforms with virtual waiting rooms to enable booked and ad-hoc virtual (chat, voice or video) consultations
- virtual health platforms to support planning and managing shared care
- secure messaging tools
- peer and community support platforms, self-service and self-care platforms.314

The suggested approach has an initial focus on Tier 1, but applies to the whole system. Establishing virtual networks and platforms that support new ways of working and greater integration between Tiers 1 and 2 would help address barriers that are often cited as contributing to poorer health outcomes for some populations. Of particular importance would be the ability to access Tier 2 specialist advice and services remotely in community settings. This would enable earlier intervention where needed and reduce the travel and time cost burden for consumers and their whānau.

**Case study – The Ontario Telehealth Network (OTN)**

The Ontario Telehealth Network (OTN) is an independent not-for-profit organisation funded by the Government of Ontario. Its focus is telemedicine or virtual care across networks of providers covering urban and rural areas. Services include secure text, audio or video conference visits between patients and providers, remote patient monitoring and coaching, remote collaboration between providers and digital therapeutics.

‘Virtual care makes accessing health care more convenient, minimises time spent travelling and provides better support for people living with chronic disease. The result is better outcomes and less time spent away from the people and things that really matter.’315

Overall, OTN claims more effective delivery of services and better distribution and use of resources which improves availability of services and reduces inequity for underserved and disadvantaged populations. Achievements set out in OTN’s FY18/19 annual report316 include:

- use of Telehomecare to deliver remote monitoring and intensive, motivational coaching to 3,372 patients with congestive heart failure and chronic obstructive pulmonary disease (COPD), avoiding an estimated 3,007 emergency room visits and 2,792 hospital admissions over the 2018/19 financial year
- an eVisit (virtual visit) primary care pilot enabled patients to securely message their own primary care provider with health questions and issues. The providers could respond through return messaging or escalate to an audio or video call as needed. The pilot involved 278 primary providers serving 32,000 patients. Of the surveyed patients, 98% felt that virtual care was the same as or better than in-person care and 99% said they would use virtual care again. Ninety percent of interactions were through secure messaging only, without the need for a voice or video call. Sixty-seven percent of eVisits replaced in-person visits, 15% replaced walk-in clinic visits and 4% replaced emergency department visits. Patients preferred to use the messaging service because it provided the most flexibility and convenience.
New Zealand evidence

Pilots and trials of virtual health appointments are under way in different areas of New Zealand. One was conducted in Waitematā DHB by an outpatient service. Early results show improvements in consumer satisfaction, decreased waiting times and cost savings to both consumers and providers.

‘Over 80% of these patients that chose a telehealth appointment described their experience as the same or better than a traditional in-person visit, with 88% said they would book more telehealth appointments in the future. By eliminating travel, telehealth users saved $9,500. In addition, the group also eliminated a potential loss of earnings of $5,300.’

Supporting Tier 1 locality service delivery

The Review is recommending developing connected locality-based networks for Tier 1 services but it is not proposing one single pathway to achieve this connectivity. It would be important to build on the technology that already exists. Accordingly, a mix of implementation approaches would be required, including the following.

- **Leverage existing systems** – Where there are existing data sharing, information exchange platforms or collaboration tools in place, these should be leveraged and extended or expanded as necessary to improve consumer access, bring additional or new providers into the data sharing framework and onto collaboration platforms.

- **Greenfields approach** – If the baseline assessment shows no existing services that can be leveraged, then a DHB-led and funded greenfields approach would be proposed, including potential industry partners to enable rapid deployment.

- **Hybrid approach** – This would expand existing capabilities but leverage DHB leadership and bring in aspects of the greenfields approach as required.

The nHIP programme of work would support the deployment of solutions within Tier 1. Health NZ should ensure that the deployment of solutions for Tier 1 networks are consistent with requirements and standards to operate within the nHIP.
A digitally capable system with strong leadership

Investment in digital and data is typically directed toward more tangible technology assets such as hardware and infrastructure. For the health and disability system to maximise value from investment in digital transformation, investment would be needed in people, processes and technology. Investment in building human capability is one of the most important areas to drive digital change.319

There is a need to:

- increase digital literacy and capability
- grow digital leadership and support new ways of working.

Increase digital literacy and capability

The health and disability system is not the only sector working to increase the digital literacy of its consumers and workforce. While the system would need to develop health-specific approaches, it should actively participate in all-of-government approaches to lift digital and data literacy and capability. The early focus of this work, being led by the Department of Internal Affairs, has been increasing the pace of digital transformation and attracting and retaining digital talent in the public service. With the recent release of the Digital Inclusion Blueprint, this work is now being extended to consumers and whānau, which is also a focus for the health and disability system.

While local initiatives are emerging, there is currently no clear framework or definitive strategy, goals or approaches to building digital literacy and capability across the health and disability system. Internationally, more concerted effort, particularly in the NHS, is being taken to build these capabilities.

Grow digital leadership and support new ways of working

As set out in the Interim Report, there is some scepticism in the workforce about digital change and some concerns that rather than releasing time to care it slows them down.

As digital technologies become more ubiquitous in health care delivery, they can augment and enhance their ways of working.

‘A digital transformation is a complex, system-wide change that requires leadership as well as sustained investment. However, investment need not be in hardware or infrastructure. The most pressing areas include building human capital and expertise, adapting processes and workflows, and modernising policy and governance frameworks. It also means reshaping fundamental policy settings such as payment models, which influence incentives and behaviour across a health system.’320.
Accelerating digital transformation would require strong clinical, technical, project and change management leadership. New Zealand should learn from international approaches to growing digital leadership, but would need to localise these approaches. There would need to be some dedicated clinical and digital roles but, in many cases, digital leadership would be part of wider leadership roles. Consideration should also be given to the extent to which New Zealand wants to introduce standard workforce education programmes and certifications which are emerging internationally.

It should be an early priority in the digital and workforce planning processes to determine the competencies and leadership skills required and consider how international and current local approaches could be adapted to develop the leaders that would drive digital change throughout the health and disability system.

A recent assessment by one DHB chief information officer using the Skills Framework for the Information Age (SFIA)\(^1\) – an internationally recognised framework used to describe IT and digital skills and competencies – has shown that their current team’s skills and capabilities are in traditional IT and they lack many softer, more ‘digital’ skills such as design thinking and user experience design, as well as capabilities in newer and emerging technologies such as cloud, data science and artificial intelligence. Anecdotally, this situation is replicated to some extent across all DHBs and across public sector organisations that often struggle to recruit and retain digital skills and capabilities nationally. While there is awareness of the gaps across the system, there is currently no clear framework or definitive strategy that highlights goals or approaches to build digital capability.\(^2\)

Training in new skills and ways of working would need to be embedded in a workforce strategy and development plan. New roles, such as data scientists and user researchers would be required and the health and disability system would need to make these roles attractive, as demand is significant across the economy. Complementary strategies that build capabilities at all levels of the system would need to be defined and prioritised. Work being done by the Ministry, Health Informatics NZ and the Clinical Informatics Leadership Network should be accelerated, with strong leadership from Health NZ.

**Clarifying system roles and procurement and investment management processes**

While innovation has occurred in pockets,\(^3\)\(^4\)\(^5\) progress towards implementing more robust data and digital technologies has been slow. Strong leadership would be required to support the design, development and implementation of data and digital standards that supports the models of care and new ways of working that are being proposed. This would require strong national leadership, mandated standards and timelines set to adopt these standards.
There has been confusion over roles and who has decision rights over what. Different countries have taken quite different approaches to centralised or decentralised decision-making, mandated standards and systems and formal splits between setting standards, design and delivery roles. There does not appear to be one right answer, rather it appears to be very context specific and, on some occasions, based on historic rather than current contexts.

There are few who dispute that decision-making processes for digital and data are cumbersome and delay progress. Further work is required to determine what functions should be undertaken by who in the proposed new system arrangements, but should mirror those being proposed for the overall health and disability system.

This would, for example, mean that:

- the Māori Health Authority would take a leadership role on Māori data sovereignty, Māori population health analysis / analytics and ensure that the digital plan includes priorities that would help address equity issues for Māori
- the Ministry would continue to be accountable for national collections and the Health Information Standards Organisation
- Health NZ would focus on those aspects of digital that are required to manage and support improved delivery and performance of the system. This would include activities ranging from developing and implementing the digital plan, accelerating and driving the adoption of standards, through to ensuring that appropriate cybersecurity management is happening and providing support to organisations that require support to achieve this.

Given the increasing role that digital and data is expected to play in the future, key processes associated with it would increasingly need to be integrated into and follow the same processes used for procurement and facilities and equipment management. Some observations of what this would mean for digital and data are discussed below.

**Contracting with service providers**

Many of the contracts that are currently in place with service providers do not explicitly set out what data needs to be collected and shared with who or in what format. In future, any provider that enters into a publicly funded contract should expect it to include specific data obligations.

Including these requirements in contracts can ensure providers adopt a minimum set of standards. Other countries have found that some initial funding has been required to support provider investment in systems that meet minimum standards. Incentives to adopt standards in a timely manner could also include phasing out current contract terms over an agreed period of time, after which contracts may not be renewed.
Digital procurement processes

Similarly, industry partner procurement processes also provide a mechanism to improve compliance with various standards. Approval to procure a new system could be made contingent on complying with standards, with any exceptions requiring explicit approval by Health NZ.

Adopting a digital procurement framework that aligns procurement processes with the scale and risk associated with the investment would streamline system procurement. For example, systems that comply with the reference architecture, data and interoperability standards, and that present lower financial and commitment risk (e.g., cloud-based services) should be subject to a far less rigorous process than core infrastructure (e.g., a DHB-level Patient Administration System) that involves multi-million dollar capital investment and a multi-year commitment. The procurement framework should support the relevant delegated authorities being put in place to streamline the procurement process.

This approach would need to be supported by architecture and conformance testing processes for new systems that are procured using public funding. This should be led nationally, but may be supported by regional resourcing to work with DHBs and other providers to undertake conformance testing, and product and service certification. International examples include the UK’s Health Systems Support Framework (HSSF),\(^{326}\) ONC Health IT Certification Program\(^ {327}\) and Canada Health Infoway’s approaches.\(^ {328}\)

Common asset management and capital investment processes for digital and data

Planning and standards development

An early priority for Health NZ would be the development of a Digital Plan that is informed by and enables the delivery of the NZ Health Plan. Health NZ should draw on international best practice as a starting point. Many of the industry partners and application developers working internationally would also be part of the New Zealand digital ecosystem.

Some examples that could be leveraged are outlined below.

- **Governing principles**\(^ {329}\) – outline responsibilities and expectations for those developing, deploying and using data and digital health technologies. An example is the UK Government’s Code of Conduct for data-driven health and care technology.\(^ {330}\)

- **Standards and interoperability** – International examples include US ONC,\(^ {331}\) Canada Health Infoway,\(^ {332}\) NHS digital, data and technology standards framework,\(^ {333}\) NHSX’s mandate to set standards,\(^ {334}\) the Australian Digital Health Agency’s Framework for Action\(^ {335}\) and Draft Interoperability Roadmap, the Global Digital Health Partnership\(^ {336}\) and other OECD countries\(^ {337}\) leading strong mandates for accelerating standards adoption.

- **Implementing health data and information strategies, governance and stewardship** – International examples include recommendation of the OECD Council on Health Data Governance,\(^ {338}\) NHS Digital,\(^ {339}\) US ONC\(^ {340}\) Great North Care Record.\(^ {341}\)
Investment and asset management processes
The Interim Report noted significant under-investment in data and digital, citing an estimate by NZHIT that only 2.3% of the total health spend goes into IT, compared with the global health industry average of 4.6%.342

‘OECD countries typically invest only under 5% of health budgets on managing information. In other sectors investment is four times higher.’ OECD Report - Health in the 21st Century

To lift digital capabilities and achieve the required digital transformation in the health and disability system, additional funding is required,343 especially for Tier 1 networks, remediation or replacement of aged and fragile infrastructure, as well as system-wide leadership and workforce development over the next three to five years.

There is a clear need for digital applications and asset management plans to be developed and for a long-term investment plan to be developed, with prioritised investments identified that can inform future allocations of capital funding.

This is consistent with the landscape for facilities and equipment, discussed in the following chapter. Given the under-investment in both areas, some challenging prioritisation decisions would need to be made between digital investments, and between digital and facilities and equipment investment proposals.

Accordingly, the Review is recommending that the capital decision-making processes for these enablers should be integrated. There would need to be specialist digital knowledge and expertise to ensure that there is a good understanding of all digital investment proposals. Also, given the weight that the Review is placing on implementing digital and data system changes it is recommended that some capital funding is dedicated to digital investments in the short to medium term to enable investments to be accelerated and legacy systems replaced with systems that better support proposed new ways of working.
Building the future

The Review proposes the following changes

Connected and shared health systems, data and information

- A national reference architecture should be defined and agreed to support consistency across the system.
- National standardised datasets and interoperability standards should be agreed and implemented so that data flows across the system and supports better clinical outcomes, empowered consumers, and data-driven decision-making.
- The Ministry should be responsible for determining data policy, strategy and setting standards; Health NZ should be responsible for implementation and ongoing stewardship.
- Health NZ should invest in data collection, research and analytics capabilities to understand need, prioritise resources, and measure benefits using clear data ethics frameworks.
- Researchers, decision-makers and innovators should have secure access to public datasets provided by Health NZ to inform the development of new products, services, care models and treatments.
- The Ministry, Māori Health Authority and Health NZ should ensure high levels of trust in privacy and security of data are maintained.
- Consumers should be able to control access to their own health data and information. Changes to the Health Information Privacy Code (HIPC) should be considered to facilitate this.
- A pragmatic approach to using existing databases such as the National Health Index (NHI) and Health Practitioners Index (HPI) should be adopted and enhanced to drive interoperability. A change to the HIPC should be considered to narrow the meaning of the word ‘assign’ to enable health care organisations to use the NHI more.

Tier 1 services connected as a network

- Consumer data should be shared across Tier 1 within provider networks if approved by consumers.
- Providers within networks should have collaboration tools to enable delivery of consumer-centred shared care.
- A Tier 1 standardised reporting dataset should be developed over a two- to three-year period.
- Consumers should have the tools to manage their own health and navigate the system.
- Virtual (telehealth) services should be established to provide consumers with greater access to services.
- Services should be built that enable seamless interaction between Tiers 1 and 2 and supports long-lining of specialist Tier 2 services into Tier 1 networks.

A commitment to ensuring equitable access to services

- The Māori Health Authority should partner with the Ministry, Health NZ and DHBs to ensure that Māori interests are represented and that Māori-specific issues are addressed in the design of digital standards, services and data strategies. These approaches would also extend to Māori population health analysis and capabilities.
- Digital standards and service models should be designed to meet the access and equity needs of other groups, including older people, people with chronic or complex conditions, Pacific peoples and others with specific cultural needs, and disabled people.
- Services should be designed to reduce inequities using methods and data that is representative and unbiased.

> Continued
Building the future – continued

The Review proposes the following changes

Strong leadership and system-wide digital literacy, capability and maturity

- Decision-making capability of executive-level leaders should be strengthened by building improved data and digital literacy and capability, and encouraging enhanced partnerships with clinicians, consumers and digital leaders.
- The workforce should have the capability, tools and resources needed to effectively transition to and deliver modern models of care.
- Consumers should have trusted, flexible access to a range of services via accessible, inclusive digital channels.
- A long-term plan should include modern ways of working with data and digital technologies as core to enabling a sustainable, adaptable, future-proof health and disability system.
- The Ministry and Health NZ should set governing principles and responsibilities regarding expected behaviours for those developing, deploying and using data-driven technologies.

Clearer decision-making and procurement and investment processes

- Core national digital infrastructure criteria should be more consistent and should be centrally sponsored.
- Procurement and contracting models should support agility and speed to value by differentiating between types of products and services, and applying only as much process as is needed for the level of risk involved.
13 Facilities and equipment / Ngā rauhanga me ngā taputapu

The state of current assets and the lack of integrated forward planning for investments has left the system with a significant challenge. While additional investment is needed, for it to be effective, changes are proposed in how capital planning is linked to outcomes and services planning, how investments are prioritised and how projects are managed.

There should be central prioritisation of nationally significant investments and business cases should not proceed unless there is prior agreement.

The design and construction of the hospital buildings the health system is currently undertaking and planning for the next 10 years is considered to be the largest and most complicated vertical construction programme that New Zealand has ever undertaken. Programme and project governance should be streamlined and standardised to ensure expertise is used strategically and project and programme governance is strengthened at all levels in the system.

The Review supports the establishment of the Health Infrastructure Unit (HIU) and proposes that HIU continues as part of Health NZ providing centralised expertise and support for investment management, asset management and delivery of major investment programmes.
Introduction

Safe, fit-for-purpose facilities and equipment are essential for a well-functioning health and disability system. The location, size and design of facilities can either hinder or help new ways of working for decades.

The system currently faces significant need for investment with the Ministry of Health estimating more than $14 billion (excluding repairs and maintenance) will be required over the next decade. This level of investment is due to the age and condition of the current estate, combined with the demands generated by a growing and ageing population. Figure 13.1 shows a projected scenario for future capital investment based on current information.

**Figure 13.1: DHB capital expenditure forecast on a cash-flow basis**

![Diagram of capital expenditure forecast](image)

NB: The above Forecast represents expected cash flows in an ‘unconstrained environment’. In reality, due to supply constraints for construction and capacity to run multiple large scale projects, it is expected that the capex spend on large projects would effectively slide/defer into out years.

Source: Ministry of Health DHB capital modelling, September 2019

This level of investment may be daunting, but it also presents an opportunity. The health and disability system could look at replacing ageing facilities with ones designed and planned for the future. New facilities can use technology to support new ways of delivering specialist services, embrace the shift of services closer to home and be a great place for the future health workforce to work in.

Realising this opportunity would require integrated services and investment planning, combined with modern facility design and using new technologies.
The challenge noted in the Interim Report

- The Interim Report noted there was considerable frustration with current processes, including concerns about drawn-out decision-making, the impact of the capital charge regime and a lack of capacity and capability to manage and deliver major health capital investment projects.  

Update on recent steps

Recent changes made by government that impact well on the health and disability system include the following.

- Improving the information base for capital decision-making by starting to develop a National Asset Management Plan (NAMP), which has required all DHBs to improve their transparency about the state of their assets. The first stage of that process has been completed and describes the current state of DHB-owned assets.

- Establishing a central Health Infrastructure Unit (HIU). The HIU has four main functions: national asset management planning and prioritising capital funding; monitoring capital projects; developing national design standards for hospital facilities; managing the delivery of major projects and providing support to DHBs to deliver projects.

- Supporting longer-term planning by allocating Crown capital funding over multiple years instead of one year.

- Mitigating a downside of the capital charge regime by matching the higher capital charge expense of new facilities with increased operational funding.

The Review endorses these changes and proposes that the HIU continues as part of Health NZ.

Challenges still to be addressed

Some challenges remain, including:

- Linking capital planning to long-term service planning and ensuring a streamlined prioritisation process.

- The lack of good long-term maintenance of assets arising from the under allocation of depreciation.

- The process for developing business cases.

- The variability of programme and project delivery and governance.

The capital cycle

A good capital cycle is built around three functions.

- Capital planning that links to service planning and sets the direction for change.

- Investment management that makes the case for and delivers change.

- Asset management that monitors and reports on the condition and effectiveness of assets.
Capital planning

Capital planning should be an integrated part of long-term system planning

Capital planning needs to be derived from the integrated NZ Health Plan to ensure that investments in facilities, equipment, ICT and new workforces are complementary and aligned with future service requirements.

The Interim Report noted the issues with the current approach, including the lack of a long-term services plan and that the health and disability system has not done a good job of measuring or accurately reporting its infrastructure needs. The planning section earlier in the report, sets out the national, regional and local approaches to planning recommended by the Review.

A critical component of the planning process is a credible, prioritised pipeline of major health sector projects. Such a pipeline would:

- give the government a more credible estimate of future capital funding requirements under different scenarios
- allow DHBs to more effectively plan minor facility works and service delivery around major projects
- help the HIU to plan business case support and project delivery
- inform procurement planning and the construction sector of the scale and location of future projects to enable a better chance for the construction sector having the capability and capacity to deliver.

With a clear long-term plan for major health sector projects, individual DHBs would be better positioned to plan investments for their local area. Local investment plans would be expected as part of DHB and regional strategic plans.
Health capital planning also needs to be integrated with other national and local government planning. Connected planning of facility locations, transportation links and future housing developments can ensure services are conveniently located for both consumers and the system’s workforce. A credible pipeline of major health sector projects would support such integrated planning.

An important connection also needs to be made with the New Zealand Infrastructure Commission – Te Waihanga, the infrastructure body established to ensure New Zealand gets the quality infrastructure it needs to improve long-term economic performance and wellbeing. The Review’s recommendation for integrated long-term planning is strongly aligned with the Commission’s goal of lifting infrastructure planning and delivery to a more strategic level.

**Supporting investment in Tier 1 services**

As set out in the Tier 1 chapter, the Review envisions ambitious changes for Tier 1 that would require sustained, greater investment over time. This would require DHBs to give much more consideration to Tier 1 services when making decisions, including capital investment decisions.

Access to capital for Tier 1 services was raised as an issue throughout the Review, particularly for Māori health providers. DHBs can access Crown capital for Tier 1 services but this has previously not been prioritised. In future this would be expected to be considered as part of each DHB’s investment plan.

**Capital charge and depreciation concerns**

The Review heard considerable frustration with the previous capital charge regime, which meant that after any major hospital redevelopment was completed, the capital held by a DHB increased significantly, leading to a sharp increase in both capital charge and depreciation requirements. Because of the large and infrequent nature of hospital redevelopments, this results in a steep jump in expenses that are difficult for DHBs to manage and can force DHBs into deficit.

In 2019, the government took a significant step towards addressing this by providing additional funding to cover the capital charge associated with new investments. This does not, however, address the issue of lumpy depreciation costs when large new buildings become operational, nor does it address the fact that boards have been diverting depreciation expenses to other operating expenditure.

There is an opportunity for Health NZ to manage this volatility across the system. Nationally, Health NZ could be positioned to manage changes to capital charge and depreciation, which might otherwise push individual DHBs into deficit. The Review believes a balanced solution could be found that avoids DHBs moving into deficit as a result of requiring a significant rebuild or new capacity, but still ensures that DHBs have enough capital for business-as-usual asset replacement. The Treasury is currently working to refine and improve capital funding, and the Review expects the health system to work collaboratively with them to develop solutions.
The recommended changes to DHB governance, articulated in earlier sections should also improve investment decision-making and encourage more longer-term thinking locally.

**Investment management**

Investment management is the step following capital planning and involves:

- developing business cases
- designing facilities
- programme and project governance.

**Developing business cases**

The Interim Report noted the need to streamline business case and decision-making processes. Business case development is often time consuming and resource intensive, in part due to lack of effective capital planning. For example:

- business cases are often started without proper service and asset planning being completed
- business cases too often are developed locally for projects that are not high priority nationally and, subsequently, do not get funded
- low approval thresholds and delegations across the board can be inappropriate for DHBs with billion-dollar balance sheets and high capability.

To address these issues, the Review proposes that:

- Health NZ should be responsible for developing a prioritised nationally significant investment pipeline so that unless a project has been prioritised, business case development would not proceed
- delegation levels be reviewed with the objective of providing more flexibility in the rules.

In addition, developing a health facility business case requires expertise and skills that are in limited supply in New Zealand. There is an opportunity for the HIU to help develop these skills across the sector by providing health-specific guidance, consistent datasets and modelling assumptions, templates and training.

An outline of the proposed process for development and approval of business cases for major investments that would require health capital envelope funding is set out in Figure 13.3 below.
Health NZ would be expected to consult with CIC on prioritisation and planning and CIC would continue to provide independent advice to joint Ministers on business case approvals.

Final decisions on major investment approvals would remain the responsibility of joint Ministers or with Cabinet, as appropriate. The new arrangements should deliver more timely, robust and investment-ready advice to the Government.

The business case process should be designed to make well informed decisions effectively, in a more timely manner and with lower transaction costs than are associated with current processes.

This set of changes should give local system leaders:

- clarity on when business cases should start
- the support to do them
- a faster and more rigorous process to get major investments approved.
Designing facilities
One reason for the high cost of hospital developments is that each facility is a bespoke design. This increases costs in design, procurement and construction. Having bespoke designs can also mean that each project is ‘redesigning the wheel’ and might lead to poorer design outcomes, and is unlikely to share best practice designs.

Environmental and financial sustainability can be improved through standardisation, leading to a consistent grade of better-quality facilities and by making continuous improvements through every new build and redevelopment. For example, facilities that are more efficiently built and higher functioning in terms of green sustainability, deliver a reduced carbon footprint and lower running costs.\(^353\)

An important function of the HIU would be the development of national design standards. New Zealand is part of the Australasian Health Infrastructure Alliance that develops the Australasian Facility Guidelines. The HIU would have the opportunity to increase New Zealand’s contribution to these guidelines and develop further guidance on areas not covered. For example:

- New Zealand-specific guidance on digital
- New Zealand green sustainability guidance
- Māori design perspectives and whānau views
- More detailed design standards to support clinical, workforce and financial sustainability.\(^354\)

The Review supports the development of stronger guidance and standards to benefit and better enable delivery of the forecast capital pipeline.

Programme and project governance
The Interim Report and Figure 13.1 noted the large level of investment now forecast for health infrastructure.\(^355\) It also noted the limited capability and capacity to deliver health infrastructure projects.

The complexity of delivering the investment plan was further amplified in discussions with the current Chair of Capital Investment Committee.

- The design and construction of the hospital buildings that the health system is currently undertaking, and planning for the next 10 years, will be the largest and most complicated vertical construction programme that New Zealand has ever undertaken.‘

Evan Davies, Chair of the Capital Investment Committee and Managing Director
Todd Property
There is considerable variability in the quality of governance arrangements for current project and programme delivery. Current programme governance arrangements are fragmented, including:

- the Capital Investment Committee (CIC) provides independent advice to Ministers on capital prioritisation and business case approvals. CIC also has the role of developing the NAMP, supported by the Ministry.
- for major facility redevelopments that are managed by the Ministry, projects are overseen by Ministerial-appointed partnership groups, with each project and programme having their own partnership group. The Ministry has contractual liability for all work on these projects, and the individual DHB has accountability for change management and benefit delivery.
- DHB-managed projects are governed by individual DHB boards or delegated steering groups, with monitoring by the Ministry.
- the CIC receives updates on DHB projects during the delivery phase but has limited ability to change decisions in this phase.

These complex arrangements make the already difficult task of managing the capital investment programme harder. Standing up new partnership groups for each project does not make for efficient use of scarce expertise, makes it harder to transfer knowledge from one project to the next and makes it harder to oversee the overall investment programme.

To consolidate, build expertise and ensure the timely delivery of projects, Health NZ would be expected to have responsibility for the delivery of an increasing number of major projects through the HIU. Programme delivery would be governed by a Health NZ board sub-committee. This should house the best expertise at a health infrastructure governance level. Individual projects managed by HIU would be governed by separate steering groups, which would all report to the board sub-committee. Where DHBs are delivering large projects, the Health NZ sub-committee would provide an independent monitoring function to take advantage of the limited capability and capacity that has been centralised.

This would ensure that the planning and delivery of projects are properly aligned and that programme governance can be more directly accountable through to the Health NZ Board.

Asset management

The Interim Report included comments from both the Office of the Auditor-General and The Treasury raising concerns about asset management practices. It did note some positive steps have been taken but these were not widespread or comprehensive.

Since the Interim Report, important progress has been made towards developing the NAMP for DHBs. A draft current state assessment has been completed that, for the first time, gives a comprehensive and nationally consistent view on the 1,200 facilities, supporting infrastructure (such as pipes) and major IT systems that DHBs own.

Preliminary results from the initial assessment of the current state of major assets on hospital campuses are set out in the figures below.
Figure 13.4: Proportion of buildings that have an earthquake risk

- Low risk: 258 (21%)
- Medium risk: 463 (45%)
- High risk: 206 (11%)
- Not Assessed: 238 (22%)

Figure 13.5: Condition of supporting site-wide infrastructure over 30 hospital campus

Condition score:
- 5 Very poor
- 4 Poor
- 3 Average
- 2 Good
- 1 Very Good

Figure 13.6: Average score of design principles for mental health units
The draft current state assessment:

- confirms the need for investment to replace or upgrade ageing facilities
- confirms concerns with some DHBs’ asset management practices
- provides an initial view of the relative need for investment.

The Review recognises the importance of good asset management practice at DHB level and the requirement for a NAMP as a core component of the NZ Health Plan. Next steps should include developments such as future capacity planning and the modelling of investment scenarios.

The further development of the NAMP, setting asset performance standards, monitoring performance and support for DHB asset management practice would be functions of the HIU. The Review expects the HIU to build on work done to date, including the creation of a robust and transparent asset monitoring framework. As the HIU develops, there may be opportunities of regional asset management support to be provided for smaller DHBs.
Building the future

The Review proposes the following changes

Capital planning

- Health NZ, through the Health Infrastructure Unit (HIU) should be responsible for developing a long-term investment plan for facilities, major equipment and digital technology derived from the NZ Health Plan.
- Health NZ should develop a prioritised nationally significant investment pipeline so that unless a project has been prioritised, a business case is not developed.
- Each DHB should have a longer-term rolling capital plan based on a prioritised, robust pipeline that would deliver the medium-term and longer-term service requirements in their area.

Investment management

- The HIU should develop central expertise to provide investment management leadership to support and speed up business case development and standardise the way capital projects are designed and delivered.
- The Capital Investment Committee should continue to provide independent advice, both to Health NZ with respect to prioritisation and to Ministers with respect to business case approval.
- Programme and project governance should be streamlined and standardised to ensure expertise is used strategically and project and programme governance is strengthened.

Asset management

- The National Asset Management Plan should be developed and regularly refreshed so it can form a basis for ongoing capital planning.
- There should be further work on refining the capital charge and depreciation funding regime for Health NZ and DHBs to ensure that a significant rebuild or new development in one DHB is properly accounted for in the system, but does not starve the DHB of capital for business-as-usual capital replacement.
- More financial and governance expertise on DHB boards, together with system and district accountability, should ensure better long-term asset management decision-making. More explicit asset performance standards and a strong central monitoring function from the HIU would reinforce this.
Section E: Recommendations / Ko ngā tūtohinga
14 Recommendations / Ko ngā tūtohinga

This report discusses a range of detailed proposals regarding all the elements that need to change for the New Zealand health and disability system to produce more equitable health outcomes and to become more financially sustainable.

The recommendations here are more general and should be read with the detailed explanations and proposals contained in the body of the Final Report.

**Ensuring accountabilities, structures and functions match**

The health and disability system needs a clear accountability framework with stronger leadership at all levels, more distinct focus and a better reflection of te Tiriti principles.

The Review recommends the following.

**Ministry of Health**

- The Ministry of Health retains responsibility as the chief steward of the health and disability system and, in particular, is responsible to the Minister for:
  - being the principal advisor to the Government on health strategy, policy and legislation
  - developing, monitoring and updating the New Zealand Health Strategy and population or service strategies derived from it
  - developing long-term system outcomes and performance measures to integrate into planning and accountability arrangements and for the Ministry to use to monitor performance
  - building population health capacity to rebalance the health and disability system
  - leading the Vote Health Budget process.
**Māori Health Authority**

- A Māori Health Authority is established as an independent departmental agency, reporting directly to the Minister of Health with responsibility for:
  - advising the Minister on all aspects of Māori health policy
  - monitoring and reporting to the Minister on the performance of the health and disability system with respect to Māori health outcomes and equity
  - partnering with the system to ensure that mātauranga Māori and other Māori health issues are appropriately incorporated into all aspects of the system
  - managing the development and implementation of the Māori workforce strategy and plans
  - managing investment in workforce and Māori provider development and in initiatives to develop innovative approaches to improving Māori health outcomes.

**Health NZ**

- A new crown entity (provisionally called Health NZ) is established to:
  - ensure consistent operational policy and lead the delivery of health and disability services across the country. All DHBs would be required to operate cohesively subject to Health NZ leadership
  - be accountable to the Minister for the overall financial balance of the system
  - ensure continuous clinical and financial improvement and address unwarranted variation in performance
  - take on common services roles for the system, for example, strategic employment relations
  - develop and support new commissioning frameworks, ensuring that it partners with the Māori Health Authority to include specific provisions for commissioning Māori health services

- Health NZ should be governed by a board of 8 members and a Chair, with 50:50 Crown–Māori representation, with board membership drawn from DHB board members in each of the regions.

**District health boards**

- DHBs should be refocused and fully accountable for achieving equitable health outcomes for their population and should also be accountable for contributing to the efficiency and effectiveness of the nationwide health and disability system.
- In particular DHBs should assume full accountability for ensuring Tier 1 services are planned and delivered appropriately for their communities.
- The number of DHBs should reduce to between 8 and 12 DHBS within five years of Health NZ being established.
- The provision to elect board members should be repealed and boards should comprise eight appointed members and a Chair, appointed against a transparent framework to ensure board members’ experience covers an appropriate range of governance and health sector competencies, and reflects te Tiriti partnership.
Regional entities

- Regional entities should be managed directly by Health NZ to provide:
  - population health expertise guidance and coordination to DHBs,
  - expertise in planning and engagement and other operational functions
- Regional entities should also lead the development of regional plans and facilitate other collaborative efforts on behalf of DHBs. The number of regional entities should be reduced from four to two or three as the number of DHBs is reduced.

A system with shared values

While the structures above are designed to ensure clearer accountabilities for different functions, no individual part of the health and disability system will be effective unless all parts of the system work together. This will be equally true at all levels, from provider networks within tier 1 localities through interprofessional teams in hospital settings, to the Māori Health Authority working closely with Health NZ to design better commissioning protocols to guide the commissioning of kaupapa Māori services.

A charter for the system

The Review recommends that:

- legislation requires a health and disability system charter be developed setting out shared values and guiding the culture, behaviours and attitudes expected of all parts of the system
- all providers funded with public money should be expected to abide by the charter, and other provisions of the commissioning framework.

Changing the driver of the system

Population health

For the health and disability system to be more effective, population health needs to be a foundational element for the entire system. Population health capacity will need to be increased and better integrated across the system; and the system will need to operate more effectively with other sectors.

The Review recommends that:

- the Ministry of Health assumes a stronger leadership role in population health, ensuring all strategies and national plans are developed from this perspective and that outcome measures and targets for delivering the system are predominantly set around population health outcomes
- Health NZ builds a strong central and regional, population health intelligence capability to support DHBs integrate population health activities throughout their planning and service delivery
- the Māori Health Authority would be the source of Māori population health intelligence for the health and disability system
- all service development and in particular Tier 1 services, should be designed with a population health focus and an emphasis on strengthening prevention and outreach services
- the functions currently performed by the Health Promotion Agency should be transferred to the Ministry, Health NZ and the Māori Health Authority
- core health protection competence and capacity should be strengthened
- the Public Health Advisory Committee should be mandatory and provide independent advice to the Minister and a public voice on important population health issues.
Ensuring the system is focused and engages communities

To improve the equity of health outcomes, the way the system decides what and how services are delivered must be driven by the needs of local communities, and resources must be directed to areas of greatest need.

The Review recommends that:

- the system should be guided by a Long Term Health Outcomes and Services Plan (NZ Health Plan), which is derived from the New Zealand Health Strategy, sets the overall parameters for planning in the system and is the basis for capital, digital and workforce planning
- the Ministry should have overall responsibility for coordination of the development of the NZ Health Plan and lead on system outcome measures. The Māori Health Authority should lead on Māori outcome measures and Health NZ should lead on service planning.
- DHBs should be required to:
  - develop five-year strategic plans which include locality plans, are based on detailed population needs analysis and are consistent with the NZ Health Plan and relevant regional plans
  - ensure that comprehensive community engagement strategies are in place to continually refine the configuration of services within a district, and regularly report to the community on progress towards achieving the agreed outcomes
  - build their capacity and capability to understand Māori perspectives and engage effectively with Māori.

Hauora Māori

Te Tiriti relationship needs to be reflected throughout the health and disability system and improving the equity of health outcomes for Māori requires the system to embed mātauranga Māori. To ensure hauora Māori is prioritised in the system and that Māori are recognised as te Tiriti partners, structural, governance and legislative changes are proposed. Improving equity will also require that resources are directed to where they are needed most and that services are designed to suit the needs of whānau.

The Review recommends that:

- a Māori Health Authority (see above) is established with independence to advise the Minister and monitor system performance with respect to Māori health outcomes
- the provisions that relate to te Tiriti principles and equity in health legislation are updated
- DHB iwi partnership arrangements are strengthened and DHBs are required to specifically address improving equity of Māori health outcomes in their strategic and locality plans. All locality plans should provide for kaupapa Māori services
- population-based funding formulas should include ethnicity and deprivation factors to better reflect unmet needs, and Tier 1 services in particular should be focused on finding and addressing the unmet need in the community.
Creating a new networked approach to primary and community services (Tier 1)

Applying a population health approach to developing the health and disability system and being committed to improving the equity of health outcomes requires a greater focus on improving the accessibility and effectiveness of Tier 1 services.

The Review recommends that:

- the provision of Tier 1 services should be planned on a locality basis, from a population health perspective with a focus on addressing identified need and achieving equitable outcomes
- the population-based funding available for Tier 1 services should be better weighted according to need and relevant ethnicity weightings should be included.
- DHB funding for Tier 1 services should be ringfenced to ensure it is not diverted to other services
- DHBs should be clearly accountable for ensuring appropriate services are available in all localities and for the achievement of health outcomes
- Tier 1 services should be organised as a connected network of service providers, including public, private, NGO and kaupapa Māori providers with joint accountability for achieving health outcomes
- it should no longer be mandatory for DHBs to contract primary health organisations (PHOs) for primary health care services. Similarly, alliance arrangements required by the PHO Services Agreement and the DHB Operating Policy Framework should no longer be mandatory
- there should be a wider range of services (from maternity, general practice and nursing services, through mental health and behavioural, medicines optimisation, home based support and outreach) managed as part of the locality network and there should be a requirement that patient information can, with their permission, be shared within the network
- priority should be given to incorporating the commissioning of Well Child / Tamariki Ora and maternity services into local networks, along with increasing home care services and expanding outreach.

Tier 2 operates cohesively across DHBs and integrates with Tier 1

Efficient and effective hospital and specialist care needs to be available to all New Zealanders regardless of post code. Given the constraints of resources and expertise inherent in catering to a population of only 5 million people, the system will need to get better at delivering services in ways that best use all the skills of the workforce and new technologies as they become available.

The Review recommends that:

- the NZ Health Plan should provide a system-wide view of Tier 2 services and identify national and highly specialised services and where they should be provided
- most Tier 2 services should continue to be delivered by every DHB, but more complex services should be led by agreed providers, consistent with the NZ Health Plan and should be funded through top slicing rather than via inter-district flows
- regional and district plans should encompass more detailed service planning for short, medium and long-term horizons
- rural services should be specifically planned for, recognising the unique challenges of geography and distance
- hospital and specialist services should operate as a cohesive Tier 2 network and also work in an integrated and collaborative way with Tier 1
service development should be clinically led and use local and international evidence to more systematically inform investment and disinvestment decisions

- Tier 2 services should be delivered for extended hours to improve efficiency and consumer access, and clinical rosters should more routinely include virtual sessions as well as face-to-face appointments

- transport plans should be in place in each DHB to better support patient and whānau transfers where required. Air ambulance services should be nationally managed and road ambulance services should be managed to national standards

- Health NZ should have a clear mandate to improve coordination of quality initiatives with strong clinical engagement

- Health NZ should be accountable for embedding performance management initiatives throughout the system and addressing unwarranted variation in performance between DHBs.

### Improving the wellbeing of disabled people

Managing disability support should use the Enabling Good Lives principles so that an individual’s disability does not define their life chances. As the population ages and the prevalence of neurological conditions increases, the proportion of the population living with some form of disability is likely to grow. The system must be more focused on ensuring a non-disabling approach to service delivery.

The Review recommends that:

- Health NZ and DHBs should engage with disabled people and their whānau as part of local and national planning and design processes using a range of inclusive practices

- funding for most disability support services should ultimately be devolved to DHBs. In the meantime, contract management should transfer to Health NZ

- the provision of highly specialised disability services should be identified in the NZ Health Plan and funded through top slicing like other significant tertiary services

- Health NZ should develop a consistent commissioning framework for disability support contracts. The framework should specify core components that need to be nationally consistent, while allowing DHBs the flexibility to contract for services that best meet their population’s needs

- the disability support system should move away from relying on diagnosis for initiating eligibility for assistance, towards providing assistance to live well, according to an individual’s need

- assessment and reassessment processes should be streamlined so that those who require more service coordination support receive this in a timely manner, the need for regular reassessment is reduced, and people gain more freedom to manage their own support.

- over time, needs assessment and service coordination services should be integrated into Tier 1 service networks.

- Tier 1 networks should be expected to identify people with disability support needs and ensure that services minimise adverse health consequences (eg, increased hospitalisations) associated with disability

- Health NZ should have overall accountability for ensuring that there is nationally consistent information and advice about impairments and disability-related supports and services available and readily accessible through a variety of channels

- Health NZ commissioning rules should encourage providers to use more salaried staff with the aim of building a better trained and more secure disability support services workforce.
Effectively managing system funding and improving operational effectiveness

This report does not propose a specific funding level for the health and disability system. These funding levels will always be a policy decision for the Government to make. But the report does note that, while funding levels in the health and disability system is not the biggest factor that impacts on the equity of health outcomes or the sole cause of DHB deficits, the system is significantly underfunded and changes to both the level and how the system is funded is needed to support improved system performance.

The Review recommends that:

- legislation provides for a guaranteed annual adjustment to the Vote Health non departmental appropriation according to a formula that allows for changes in the size and make-up of the population to reflect changing needs and costs
- the number of separate appropriations be reduced to provide more flexibility and less administrative cost
- all elements of population-based funding formulas should include an ethnicity factor to better reflect unmet need particularly for Tier 1 services
- funding for Tier 1 services is ringfenced so that it is not diverted to other areas
- a dedicated performance support function is established within Health NZ to manage changes in system effectiveness and efficiency
- Health NZ should be made accountable for ensuring the system delivers financial balance
- Health NZ should manage the funding that is injected to ‘rebalance’ the system, to ensure that poorly performing DHBs are subject to closer supervision of their deficit reduction plans.

Ensuring the enablers are in place

Any health and disability system needs strong infrastructure if it is to adapt to changing circumstances, produce effective health outcomes and ensure that it is financially and clinically sustainable.

Workforce

No health service can be delivered, no person cared for, no health outcome achieved without the input from a large group of workers whether they are kaiāwhina, surgeons, nurses, lab technicians, cleaners, managers or any of the other hundreds of workers employed throughout the health and disability system. The future system will not be successful unless the workforce is planned and managed more effectively than has been the case in the past.

The Review recommends that:

- the Ministry, working with the Māori Health Authority and Health NZ, should lead the development and implementation of a sector-wide workforce strategy designed to deliver on the goals set out in the NZ Health Plan and should ensure that specific workforce strategies for Pacific peoples and disabled people are also developed
- the Māori Health Authority should lead the development and implementation of the Māori workforce strategy
- the Ministry should work with the Tertiary Education Commission (TEC), Health NZ, the new New Zealand Institute of Skills and Technology (NZIST) and other regulatory authorities and training establishments to ensure all relevant training is consistent with achieving the goals of the NZ Health Plan and accompanying strategies
all parts of the system should cooperate to develop more learn-as-you-earn options and shorter cumulative training courses to encourage non-traditional participation and, particularly, to facilitate more participation from rural trainees

commissioning and contracting policies should be used to encourage more secure employment and, therefore, more opportunities for career development particularly for the workforces involved in home-based care and other outreach services

Health NZ should manage strategic employment relations, drawing on better data and aligning with the workforce plan and the NZ Health Plan

the tripartite accord should be reinvigorated and commit all parties to working constructively to achieve the long-term objectives of the system, fostering more effective dispute resolution and developing a clearer strategy on relative salary scales and employment terms and conditions

all parts of the system should be encouraged to become disability confident, drawing disabled people into a variety of roles and supporting them to thrive.

Digital and data
Achieving the future of the health and disability system proposed by the Review depends heavily on the effective use of data and digital technologies. Moving from an ecosystem of tens of thousands of systems that do not easily connect, to a system that routinely shares data and more effectively supports all those working in or using the system will require a staged approach.

The Review recommends that:

- the Ministry should continue to be responsible for national data collections and the Health Information Standards Organisation
- Health NZ should focus on aspects of digital that are required to manage and support improved delivery and performance of the system, such as developing and implementing the digital plan and ensuring appropriate interoperability and cybersecurity management
- the Māori Health Authority should take a leadership role on Māori data sovereignty, Māori population health analysis and analytics, and ensure that the digital plan includes priorities that will help address equity issues for Māori
- priority should be given to developing data and interoperability standards that ensure data flows across the system and supports better clinical outcomes, empowered consumers and data-driven decision-making
- consumers should be able to control and access their own health data and information
- given the importance of Tier 1 services for improving equity, priority for digital investment should be given to initiatives that will accelerate interoperability between Tier 1 services. nHIP initiatives are one option for this
- digital systems in both Tier 1 and Tier 2 should support more delivery of virtual care and this should be prioritised to serve rural and other communities with access challenges
- procurement processes for service providers and suppliers of digital systems should be encouraged to adopt agreed digital and data standards. A digital procurement framework that aligns procurement processes with the scale and risk associated with the investment should be adopted and decision-making rights clarified throughout the system.
Facilities and equipment
Safe, fit-for-purpose facilities and equipment are essential for a well-functioning health and disability system. As noted in the report, ‘the design and construction of the hospital buildings that the health system is currently undertaking, and planning for the next 10 years, will be the largest and most complicated vertical construction programme that New Zealand has ever undertaken’, yet the systems for planning, designing and constructing this programme is piecemeal at best.

There needs to be more transparent planning and better governance.

The Review recommends that:

- Health NZ, through the Health Infrastructure Unit (HIU) should be responsible for developing a long-term investment plan for facilities, major equipment and digital technology derived from the NZ Health Plan
- Health NZ should regularly develop a prioritised nationally significant investment pipeline so that unless a project has been prioritised, a business case is not be developed
- each DHB should have a longer-term rolling capital plan based on a prioritised, robust pipeline that will deliver the medium-term and longer-term service requirements in their area
- the HIU should develop central expertise to provide investment management leadership to support and speed up business case development and standardise the way capital projects are designed and delivered
- the Capital Investment Committee should continue to provide independent advice, both to Health NZ with respect to prioritisation and to Ministers with respect to business case approval
- programme and project governance should be streamlined and standardised to ensure expertise is used strategically and project and programme governance is strengthened
- the National Asset Management Plan should be developed and regularly refreshed so it can form a basis for ongoing capital planning
- there should be further work on refining the capital charge and depreciation funding regime for Health NZ and DHBs to ensure that a significant rebuild or new development in one DHB is properly accounted for in the system, but does not starve the DHB of capital for business-as-usual capital replacement
- more financial and governance expertise on DHB boards, together with system and district accountability, should ensure better long-term asset management decision-making. More explicit asset performance standards and a strong central monitoring function from the HIU will be needed to reinforce this.
Section F: Notes / Kupu āpiti
Notes

8. LGBTIQA+ is an umbrella term for people who are lesbian, gay, bisexual, trans, intersex, queer, asexual, and other diverse sexual orientations and gender identities


New Zealand Public Health and Disability Act 2000, ss 3, 4, 23


Links to these initiatives are provided below:

78 https://www.procurement.govt.nz/procurement/specialised-procurement/social-services-procurement/


85 http://www.healthyaucklandtogether.org.nz/


94 Ibid.


103 https://www.dia.govt.nz/Three-waters-review#Background

105 As a Crown Agent the HPA is required to give effect to Government policy when directed by the responsible Minister, except in relation to its alcohol-specific functions where the HPA must have regard to government policy


110 Ibid


112 Ibid

113 For example, the Nuka system, First Nations serving indigenous communities, and examples such as CityBlock Health (New York) working with underserved populations within a defined neighbourhood.


121 National Institute of Clinical Excellence. 2015. Medicines optimisation: the safe and effective use of medicines to enable the best possible outcomes.


128 1000 days. 2015. Gazing into the 1,000 Days Window. https://thousanddays.org/updates/gazing-into-the-1000-days-window/


Source: Ministry of Health communication


168 Ibid.


172 Ibid.


177 Analysis based on Ministry of Health administrative datasets

178 EY. 2020. Ministry of Health Mana Whaikaha program evaluation. (unpublished information)


Source: Ministry of Health inter district flows analysed by HDSR review team.

Source: Ministry of Health inter district flows analysed by HDSR review team, volume data is 2017/18 but values are in 19/20 dollars.

Source: Discharges from Ministry of Health publicly funded discharges 2016/17, Population data from Stats NZ

Source: Reproduced from Northern Regional Alliance. 2018. Northern Region Long Term Investment Plan, Figure 14, p71.

Source: Ministry of Health communication.

Ministry of Health communication.


Health Quality & Safety Commission. Dashboard of health system quality


https://jointheconversation.scwcsu.nhs.uk/rollback

Ministry of Health communication

Disability System Review].

Health in the 21st Century, Putting Data to Work for Stronger Health Systems


Reform of Vocational Education. 2019. Summary of Change Decisions.pdf


Health Quality & Safety Commission. Dashboard of health system quality


Ministry of Health Framing the Future - phase two report. 2013.

https://doi.org/10.1186/s12913-018-3362-9

Ministry of Health communication

Ministry of Health communication

Ministry of Health communication


Comprehensive Medical School Rural Programs Produce Rural Family Physicians. Howard K. Rabinowitz et al. (2011).

May, J, Brown, L & Burrows, J 2018, 'In-Place Training: Optimizing Rural Health Workforce Outcomes through Rural-Based Education in Australia', Education Sciences, vol. 20, no. 8


BERL Economics. 2014. Health and Disability Kaiahwihana Worker Workforce 2013 Profile.


278 National Digital Health Workforce and Education Roadmap - Australian report 2019


283 A Spencer, K Horridge, and D Downs. 2015. Empowering clinical data collection at the point of care. Archives Of Disease In Childhood, 100(9), 815-817. https://doi.org/10.1136/archdischild-2014-307972


285 GP2GP Electronic Medical Record Transfer https://www.patientsfirst.org.nz/services-products/gp2gp/

286 CSIRO Primary Care Data Quality Foundations Terms of Reference https://confluence.csiro.au/display/parkcitydata/TermsOfReference


288 INTEROPen https://www.interopen.org/


290 European Health Data Evidence Network https://www.ehden.eu/

291 Health Level 7 (HL7) International Patient Summary http://international-patient-summary.net/


296 P Davies 2012. Should patients be able to control their own records?. BMJ, 345(jul30 1), e4905–e4905. https://doi.org/10.1136/bmj.4905


298 National Cyber Security Centre https://www.cert.govt.nz/


Vote Health received a two-year allocation in Budget 2019 as a result of this policy.

Office of the Auditor-General. 2017. Reflections from our audits: Investment and asset management


Office of the Auditor-General. 2016. District health boards' response to asset management requirements since 2009


ibid.
