

# POPULATION HEALTH IN NEW ZEALAND'S REFORMED HEALTH AND DISABILITY SYSTEM: Working definition and approach

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## 1. Purpose

Population health is central to the health and disability system reforms, so it is important to have shared awareness, understanding and consistent use of this term. This paper proposes a definition for population health that can be considered in the context of the health and disability system reforms in New Zealand. It outlines a high-level approach and identifies early actions that can be taken to "embed population health as the driver of preventing and reducing health need" [CAB-21-MIN-0092 refers].

## 2. Summary

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*In the context of the NZ health system reforms, population health means understanding and responding to the distribution of health outcomes within/between populations to achieve pae ora and equity by focusing on:*

- *fulfilling the special relationship under **Te Tiriti o Waitangi** through partnership with the Māori Health Authority (MHA), iwi, hapū and Māori communities and kaupapa Māori partners*
- *achieving **equity** for Māori and all groups experiencing health inequity; and*
- *addressing the wider **determinants** through collaboration with communities and other sectors.*

*Improving population health is the responsibility of the whole health and disability system, including public health. The Public Health Agency has a lead role in partnership with the Māori Health Authority, Health NZ and the National Public Health Service. A renewed focus on population health is a significant challenge for the sector and all levers will need to be utilised and aligned, including reprioritisation of resources, strengthening of enablers such as workforce capability and capacity, and reorientation of services.*

*Te Tiriti o Waitangi provides an overarching kaupapa for an approach grounded in the aspirations, strengths and needs of populations experiencing the greatest inequities, including Pasifika. It will also focus on cross-sectoral collaboration to address the determinants impacting on health and inequities.*

*The approach will inevitably evolve as the reforms progress. In particular, the Māori Health Authority will develop its own perspective on population health. Accordingly, the definition set out here will be reviewed within one year and revised to reflect new insights and collective wisdom.*

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### 3. Background

#### ***The HDSR and Cabinet recognise that a population health approach is critical for achieving the health sector reform objectives***

1. The Health and Disability System Review (HDSR) and Cabinet papers responding to the review findings, highlighted the need for the New Zealand health and disability system to improve its performance to better fulfil the special relationship under Te Tiriti o Waitangi, to achieve equitable health outcomes and overall population health gain.
2. In particular, Cabinet noted equity issues as a key driver in the case for change for the Health and Disability System Reforms [CAB-21-MIN-0092 refers]:

*Outcomes for Māori and Pacific peoples, disabled people and other groups are persistently worse than those for the general population. The system does not operate in partnership or meet the Crown's Te Tiriti o Waitangi obligations, as found in the WAI2575 claim.*

3. To address this persistent inequity, the reforms reorient the health and disability system towards prevention, with population and public health at their heart. Prevention approaches also improve quality of life and reduce the burden on the health system. For example, over a third (39 percent) of health loss is potentially avoidable by reducing modifiable risk factors, which are often related to other determinants.<sup>1</sup>
4. Cabinet agreed that "the vision for the reformed health system will be based on pae ora/healthy futures for all people; where people live longer in good health, have improved quality of life, and there is equity between all groups". The priority outcomes for the reformed health system include:
  - **partnership:** ensuring partnership with Māori in decisions at all levels of the system, and empowering consumers of care to design services that work for them
  - **equity:** tackling the gap in access and health outcomes between different populations and areas of New Zealand
  - **sustainability:** embedding population health as the driver of preventing and reducing health need and promoting efficient and effective care.
5. Cabinet also agreed to establish a Public Health Agency (PHA) within the Ministry of Health to lead population and public health strategy, policy, regulatory, intelligence, surveillance and monitoring functions. The PHA will work in partnership with the Māori Health Authority which is responsible for leading hauora Māori in the health system.

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<sup>1</sup> Ministry of Health. 2020. Longer, Healthier Lives: New Zealand's Health 1990–2017. Wellington: Ministry of Health.

## 4. Definitions of population health and the population health approach, including public health

***While there is no agreed definition in New Zealand or internationally, there are some consistent concepts***

6. Population health refers to understanding health outcomes within and between particular populations, including health inequity. It involves addressing the underlying causes of illness and strengthening the enablers of positive health outcomes to reduce inequity and achieve overall health gain, or pae ora. In their seminal paper (2003) "What is population health?" Kindig and Stoddart defined a **population health approach** as:

*An approach that focuses on interrelated conditions and factors that influence the health of populations over the life course, identifies systematic variations in their patterns of occurrence, and applies the resulting knowledge to develop and implement policies and actions to improve the health and wellbeing of those populations.<sup>2</sup>*

7. Since then, various definitions<sup>34</sup> of population health have been proposed by recognised agencies<sup>5</sup> and leaders around the world, mostly adding to Kindig and Stoddart's. While there does not appear to be universal agreement, some consistent concepts are clear. Based on the international literature, population health encompasses (but is not limited to):

- approaches which aim to improve the health of the whole population (e.g. the COVID-19 response), and a focus on improving health outcomes for defined populations to achieve health equity
- using public health knowledge to identify and monitor disparities in health access and outcomes between populations
- establishing and applying an evidence-base (including understanding the determinants of health and wellbeing, and the perspectives of populations) to proactively inform and prioritise responses and system-level changes
- cross-sectoral collaboration to optimise the positive impact of determinants on health outcomes and health equity
- tailored public health approaches, policies and programmes (promotion, prevention and protection) to improve outcomes for specific populations
- action internationally and nationally across the health ecosystem from individuals, to whanau and communities, organisations, and public policy.

8. In New Zealand, the ongoing work of the kaupapa Māori and Pasifika health sectors in particular can provide rich insights and a strong foundation for the development of a definition of population health that is uniquely Aotearoa. Tā Mason Durie has described how population health can be understood as part of the mauri system.

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<sup>2</sup> Kindig D and Stoddart G (2003). What is Population Health? *Am J Public Health*. 93(3): 380–383.

<sup>3</sup> <https://onlinepublichealth.gwu.edu/resources/what-is-population-health/>

<sup>4</sup> Silberberg M; Martinez-Bianchi V; Lyn M J (2019). What is Population Health? *Prim Care*. 46(4)475-484.

<sup>5</sup> [https://www.who.int/health-topics/social-determinants-of-health#tab=tab\\_1](https://www.who.int/health-topics/social-determinants-of-health#tab=tab_1)

From a te ao Māori perspective, this is based on connections within relationships within their contexts. Relationships exist through whakapapa and disruptions in these vital connections (through the impacts of determinants for example) impact on the mauri system, and on health and wellbeing.<sup>6</sup>

9. The definition of population health set out here builds on international concepts and localises it in the New Zealand context, taking account of the reform objectives. Fulfilling the special relationship under Te Tiriti o Waitangi obligations is both an overarching principle and a core component. The new Māori Health Authority (MHA) will look to develop its own te ao perspective on population health, and this will shape our collective understanding of population health as the reforms progress. The definition set out here will be reviewed and revised to reflect new insights and our vision for pae ora and equity.

***Public health is central to achieving population health through assessment and surveillance, delivery of health promotion, protection and prevention programmes, capacity building and empowering community voices and action***

10. Population health as a goal and outcome is achieved through a range of strategies across the health and disability system (from public health, to community, primary, secondary and tertiary care and disability support), and the broader wellbeing ecosystem.
11. A critical strength of population health is the generation and application of science and knowledge to decision-making and action. This can range from early identification of emerging threats, to evidence-based interventions and system-level changes.
12. This is an evidence-based approach, informed by community needs assessments (including the aspirations, strengths and needs of communities), and public health data, intelligence, knowledge and surveillance. The evidence base includes an understanding of the risk and protective factors associated with health outcomes (including international factors such as pandemics), as well as the social, economic, commercial, cultural, environmental (including climate change), occupational and digital determinants of wellbeing.
13. Population health impacts directly on the health system with direct benefits to resourcing and prioritisation when the burden of disease and injury is reduced. And just as determinants influence health outcomes, population health impacts on determinants and sustainability, e.g. poor health outcomes can limit income opportunities.
14. Public health gives effect to population health through its essential functions:
  - health needs assessment, knowledge and surveillance
  - health promotion
  - health protection and emergency preparedness
  - preventive interventions
  - public health capacity development (enhancing system enablers)

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<sup>6</sup> Durie M. (20021) Mauri Ora: The Dynamics of Māori Health. Oxford University Press.

- empowering community voices and action.

15. Public health initiatives often focus on risk or protective factors such as smoking, nutrition or physical activity. A public health response usually involves an integrated set of initiatives which include assessment and surveillance, policy and legislation, building public health capability in communities and enabling community action, creating environments that support healthy choices, and enabling and promoting healthy behaviours. Public health also includes screening healthy populations to offer early intervention services and to protect healthy people from the threat of communicable and non-communicable diseases. Interventions to prevent injury or other harms, including responding to emerging threats such as pandemics or environmental hazards are also components of public health action.

16. The Te Tiriti principles of active protection and equity need to be considered and applied in designing, prioritising and delivering preventive interventions. In Aotearoa New Zealand, Tiriti-led population health must enable mana whakahaere in regard to Māori aspirations for health and wellbeing; mana motuhake so that Māori can live on their terms and according to Māori philosophies, values and practices; and mana Māori including tikanga and kawa and encapsulated within mātauranga Māori. It also means acknowledging, facilitating and strengthening the implicit population health approaches in whanau ora and other Māori models of care.

17. Achieving equitable health access and outcomes will be the central focus of population health. As cited in Ola Manuia Pacific Health and Wellbeing Action Plan 2020-2025, the interim Health and Disability System Review report noted:

*Of all ethnic groups in New Zealand, Pacific peoples are amongst those most affected by inequities in the socioeconomic determinants of health, including living in areas of high socioeconomic deprivation, being unemployed, and having low weekly earnings ... These factors can affect health directly (for example, through damp, cold, and overcrowded conditions, which increase the transmission of infectious diseases) and indirectly (for example, by limiting opportunities to engage in health-promoting behaviours) (HDSR 2019, page 25).*

***Current policy settings already enable population health, but a step change is required for population health to fulfil its potential as the game changer the reforms are seeking***

18. Some current<sup>7</sup> key legislative and policy settings, supported by national health strategies, support a population-based approach. For example:

- The Health Act 1956: provides for identification and management of public health risks (e.g. infectious disease)<sup>8</sup>
- Public Service Act 2020: whole-of-government action, collective responsibility

<sup>7</sup> It should be noted that the more recent policies and strategies were not in operation when the review was undertaken.

<sup>8</sup> Although the Act does not use the term 'population health.'

- Public Finance Act 1989 wellbeing amendment: cross-sector responses for wellbeing
- WAI2575 recommendations: accountability focused on equity and Māori wellbeing
- NZ Health Strategy: overcoming inequities, shifting from treatment to prevention
- Whakamaua Māori Health Action Plan 2020-2025 (Whakamaua): embedding a commitment to Te Tiriti to achieve Pae Ora
- Ola Manuia Pacific Health and Wellbeing Action Plan 2020-2025 (Ola Manuia): reduce inequity for Pacific communities

19. These are key foundations and signal an important direction, but on their own are unlikely to achieve the desired population health outcomes. As reported in the HDSR and subsequent Cabinet papers, these settings have resulted in neither compliance with Te Tiriti o Waitangi obligations, nor have they achieved equity. More consolidated action is needed at every level to achieve improved and equitable population health outcomes.

***Population health needs to be embedded across the whole health and disability system***

20. The Cabinet minute [CAB-21-MIN-0092 refers] identifies sustainability as a priority outcome and describes this as “embedding population health as the driver of preventing and reducing health need and promoting efficient and effective care”.

21. While the PHA has an important leadership role to play, a population health approach and improving population health are the responsibilities of the whole health and disability system. There is a clear expectation that population health will be embedded across the wider system, through personal health and disability support services, including self-care, primary and community care, and secondary and tertiary treatment.

22. The PHA, MHA (in its role leading hauora Māori), and Health NZ (including the National Public Health Service (NPHS)) will need to work closely together. An integrated approach across all entities in the new system will be required - from strategy and policy, to commissioning and service delivery; and at national, regional and local levels.

23. While the public health sector’s role (through delivery of the core public health functions) will be central to achieving this priority outcome, it will not be sufficient. The wider health and disability system’s response has a significant impact on equity<sup>9</sup> (both positive and negative) and the challenge is to reorient the whole system towards positive, pro-equity impacts.

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<sup>9</sup> Curtis E, Jones R, Tipene-Leach D, Walker C, Loring B, Paide SJ, Reid P. (2019) Why cultural safety rather than cultural competency is required to achieve health equity: a literature review and recommended definition. *Int J Equity Health*:18(1):174.

## 5. Population health in the reformed NZ health sector

### ***Population health framed around Te Tiriti o Waitangi, equity and determinants will be at the centre of the reformed health and disability system***

24. The term “population health” is not consistently understood, used in legislation or across the sector. It is often confounded with public health. Consequently, the approach to population lacks a strong, cohesive and strategic approach.
25. There are examples of well-established and effective population health approaches within communities - though these approaches (such as whānau ora) may not be acknowledged as “population health” interventions. Similarly, there are examples of public health programmes for particular populations which aim to address equity, and examples of cross-sectoral collaboration on key determinants such as housing. Overall, however the approach is fragmented, and levers to influence population health are under-utilised. (A more detailed analysis of the current state is set out in Appendix 1.)
26. A more clearly defined and intentional approach to population health is required to foster common purpose, alignment and best use of resources. The definition builds on the generally accepted concepts of population health and takes account of the reform intentions and the context in Aotearoa New Zealand. It is framed around three elements: Te Tiriti o Waitangi (as the overarching kaupapa) and Māori aspirations, equity and determinants.
27. To highlight the shifts that are required, Table 1 considers some high-level implementation approaches to achieve the shifts required for each of these elements. These approaches are inter-linked and mutually reinforcing.

**Table 1: Population health elements and approach to implementation**

<b>Population health elements</b>	<b>Approach to implementation</b>
<p><b>Te Tiriti o Waitangi:</b> The overarching kaupapa of population health. Accelerating equity for Māori and supporting Māori aspirations by fulfilling the special relationship under Te Tiriti o Waitangi obligations.</p>	<p>Accelerating equity for Māori and supporting Māori aspirations are the responsibilities of all agencies in the reformed health and disability system. The <b>MHA will lead hauora Māori in partnership with the other health agencies including the PHA and Health NZ/NPHS</b>, and with iwi, hapū and Māori communities.</p> <p>The approach to implementation of Whakamaua and transforming population health initiatives includes:</p> <ul style="list-style-type: none"> <li>- Acting as a kaitiaki and steward of population health, with the responsibility to enable Māori to exercise authority over their health and wellbeing to achieve equitable health outcomes that enable Māori to live, thrive and flourish.</li> <li>- Enabling Mana Whakahaere, Mana Motuhake, Mana Tangata, Mana Māori</li> <li>- Guided by the principles of tino rangatiranga, equity Equity, active protection, options, partnership</li> </ul>

<p><b>Equity<sup>10</sup>:</b> Focusing on the aspirations, strengths and needs of populations experiencing health inequity, and working with them to improve their health outcomes.</p>	<p>Embed a pro-equity <b>population-led approach</b> across public health and the wider health and disability system at all functions and levels (national/regional/local), recognising that different populations require different approaches to achieve equity.</p> <p>Understand where the burden of disease lies (which populations are experiencing inequity) and the underlying causes - noting that there is a well-established evidence base for Pasifika, and other groups.</p> <p>Ensure this knowledge informs strategy, priority-setting and service delivery, while moving to a strengths-based and capability-building approach with consumers, whānau, hapu, iwi and communities.</p> <p>An equity approach would include:</p> <ul style="list-style-type: none"> <li>- identifying the populations experiencing the greatest health inequities in specific contexts (Māori, Pasifika, disabled, rural and others)</li> <li>- understanding their aspirations, strengths and needs</li> <li>- building relationships based on respect, reciprocity and trust and working in partnership with them (and the relevant government agencies)</li> <li>- developing strategic and operational approaches to achieve equity, including delivery of population-specific public health programmes.</li> </ul>
<p><b>Determinants of health and wellbeing outcomes:</b> Understanding the social, economic, commercial, cultural, environmental (including climate change) occupational and digital determinants of health, and collaborating with other agencies to optimise the positive impact of determinants on health outcomes for everyone, particularly populations experiencing health inequities</p>	<p>Identify the determinants with the biggest impact on equity, and health and wellbeing outcomes<sup>11</sup> (e.g. housing, or obesogenic environments), and opportunities for <b>cross -sectoral collaboration</b>.</p> <p>Include a focus on determinants across the public/health system at all levels and functions from strategy to service delivery.</p> <p>Examples of cross-sectoral collaboration include:</p> <ul style="list-style-type: none"> <li>- Nationally – all of government, providing advice on policy and legislation, developing strategy with shared outcomes</li> <li>- Regionally – co/commissioning to achieve equity, shared outcomes, participating in working groups</li> <li>- Locally – participating in planning and service delivery, e.g. local government consultation processes</li> </ul> <p>Other collaboration could include:</p> <ul style="list-style-type: none"> <li>- Sharing public health intelligence and articulating the health impacts to strengthen the evidence-base for other agencies</li> <li>- Joint monitoring, reporting and evaluation of determinants.</li> </ul>

The Ministry of Health’s definition of equity is:

*In Aotearoa New Zealand, people have differences in health that are not only avoidable but unfair and unjust. Equity recognises different people with different levels of advantage require different approaches and resources to get equitable health outcomes.*<sup>10</sup>

<sup>11</sup> Note that determinants impact on everyone’s health outcomes, with differential impacts for some populations. Determinants interact and compound so that the impacts are more concentrated in particular populations.



28. It is important to note that in relation to health and wellbeing determinants, the new public health entities will not be responsible for overall wellbeing or the domains of other agencies but would work collaboratively to influence and support their work which contributes to health equity. There will be opportunities to align with the Treasury's Living Standards Framework<sup>12</sup> and He Ara Waiora<sup>13</sup>, and to collaborate through established mechanisms such as social sector Chief Executive and officials' groups.
29. To ensure effective prioritisation and use of resources, the **scope** of the population health approach to equity and determinants will need to take into account available resources. It will also be informed by:
- identifying the populations experiencing the greatest health inequity (through analysis of the evidence-base and community engagement). These will include Māori and Pasifika, and are also likely to include disabled people, people living with mental illness, rural and low-income communities;
  - identifying the determinants that have the greatest impact on health and wellbeing outcomes, and where there are opportunities to collaborate with agencies that have synergies such as shared objectives; and
  - identifying opportunities to move towards interventions which aim to address multiple public health issues and achieve a range of positive health and wellbeing outcomes, wherever possible.

## 6. Next steps

30. The Ministry of Health's Public Health Transformation Taskforce approved this definition of population health on 14 November 2021, as set out in Appendix 2.
31. This definition of population health will be considered in the design of the new public health and wider health and disability system operating models. This involves clarifying the distribution of relevant population health functions across the new public health entities and wider health and disability sector, and how they will work together.
32. A primary consideration is how the special relationship under Te Tiriti o Waitangi can be fulfilled by enabling the four mana goals and taking guidance from the five principles, to support and enable the aspirations of the MHA, iwi, hapū, Māori communities and kaupapa Māori partners.
33. The roles of other agencies in population health (such as localities, World Health Organisation (WHO), the Institute of Environmental Research (ESR), universities, central and local government, non-government organisations (NGOs) and philanthropy) will also need to be considered as part of the overall public health operating model.

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<sup>12</sup> <https://www.treasury.govt.nz/information-and-services/nz-economy/higher-living-standards/our-living-standards-framework>

<sup>13</sup> <https://www.treasury.govt.nz/information-and-services/nz-economy/higher-living-standards/he-ara-waiora>

34. As the reforms progress, early work to embed a population health approach as the driver of preventing and reducing health need can be led by the PHA in partnership with the MHA and Health NZ/NPHS, focusing on:

- articulating and engaging on the definition of population health and how it contributes to pae ora and equity to build shared understanding, awareness and commitment across the new public health entities, and wider health and disability system
- incorporating population health in strategy and policy directions such as the Government Policy Statement, the National Health Plan, and Public Health Strategy
- analysing public health intelligence and engagement with stakeholders, whanau, hapu, iwi and communities to identify populations experiencing the greatest inequity, and determinants with the greatest impact on health and wellbeing
- identifying how gaps in system enablers can be strengthened, including workforce capability, capacity and culture required to deliver the population health functions
- developing and sharing tools and methodologies (including Kaupapa Māori, Health in All Policies” and “Health Impact Assessments”) that support population health
- strengthening the population health evidence base as part of the public health knowledge<sup>14</sup> and surveillance system, and
- developing a monitoring and reporting framework to determine how success will be measured, including evaluation of the impact of the population health approach.

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<sup>14</sup> Noting a range of agencies, including the Ministry of Health will be part of the public health knowledge system.

## Appendix 1: Population health – analysis of current state

Population health element	Current state
Overall	<p>The term “population health” is not consistently understood and lacks a cohesive, strong strategic approach across the health and disability sector. It is often confounded with “public health”. There are examples of well-established and effective population health approaches within communities - though these approaches (such as whānau ora) may not be called “population health”. Public health also provides a strong foundation including regulatory frameworks, a broad range of health promotion, protection and prevention programmes, and inter-sectoral collaboration on key determinants such as housing.</p> <p>Community-based models are often not acknowledged or understood, and other levers to influence population health are under-utilised.</p>
Te Tiriti o Waitangi	<p>The Wai2575 claim found the primary health care sector (and by implication, public health services) were not Te Tiriti compliant. It noted that “the legislative and policy framework of the primary health care system fails to address adequately the severe health inequities experienced by Māori”<sup>15</sup>, and therefore that Māori health inequities have persisted.</p>
Equity	<p>While there is generally a good understanding of where the burdens of disease lie, overall the equity focus across the system is inconsistent and often confined to public health. Community efforts which aim to achieve equity are often not recognised.</p> <p>There are indications that some elements of the health and disability system contribute to increasing inequity.</p> <p>In addition, relationships and engagement with the populations experiencing the most inequitable access/outcomes are often under-developed, and not fully supported.</p>
Determinants	<p>While there is generally a good understanding of the determinants of health, cross-sectoral collaboration to improve determinants is not a systematic or consistent part of the health response.</p> <p>Many potential collaboration and influence levers are under-resourced and under-utilised.</p> <p>Limited, or random collaboration means that opportunities to influence wider determinants are missed.</p>

<sup>15</sup> [https://forms.justice.govt.nz/search/Documents/WT/wt\\_DOC\\_152801817/Hauora%20W.pdf](https://forms.justice.govt.nz/search/Documents/WT/wt_DOC_152801817/Hauora%20W.pdf)

## **Appendix 2: Public Health Transformation Taskforce Decisions**

35. The Taskforce agreed that this definition of Population Health should be:

- a) Submitted to the Director-General and ELT
- b) Shared with the Transition Unit, and the incoming boards of Health NZ and the Māori Health Authority
- c) Used to inform the design and establishment of the new public health operating model (including the PHA) and wider health and disability system reforms
- d) Shared with stakeholders as part of engagement on the reforms, including uploading to the Ministry of Health's website as a "working definition and think piece"
- e) Reviewed and updated within 12 months to reflect early lessons and to align with the direction of the health sector reforms.