

# Briefing

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# Draft Cabinet Paper: New medical school – Programme Business Case submission

| Date due to MO: | 2 August 2024  | Action required by:   | 6 August 2024 |
|-----------------|--|-----------------------|---------------|
| Security level: | IN CONFIDENCE  | Health Report number: | H2024047324   |
| То:             | Hon Dr Shane Reti, M   | linister of Health    | C             |
| Copy to:        | Hon Nicola Willis, Mir   | nister of Finance     |               |
|                 | Hon Penny Simmonds, Minister for Tertiary Education and Skills |                       |               |
| Consulted:      | Health New Zealand:  |                       |               |
|                 |  |                       |               |

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### Minister's office to complete:

|                      | □ Decline | □ Noted               |
|----------------------|-----------|-----------------------|
| Needs change         | □ Seen    | □ Overtaken by events |
| See Minister's Notes | Withdrawn |                       |

Comment:

# Draft Cabinet Paper: New medical school – Programme Business Case submission

| Security level: | IN CONFIDENCE           | Date:           | 2 August 2024                 |
|-----------------|-------------------------|-----------------|-------------------------------|
| То:             | Hon Dr Shane Reti, Mi   | nister of Healt | h                             |
| Copy to:        | Hon Nicola Willis, Mini | ster of Financ  | e                             |
|                 | Hon Penny Simmonds,     | Minister for    | Fertiary Education and Skills |

### **Purpose of report**

1. This briefing provides the draft Cabinet paper – New medical school – Programme Business Case submission for Ministerial consultation.

### **Key points**

- The Programme Business Case and Cost Benefit Analysis (CBA) of the University of Waikato proposal for a new medical school has been prepared for consideration by Cabinet.
- The indicative outcomes of the CBA identified that there are several feasible options to train more doctors domestically, and those options achieve the investment objectives and have a positive net present value.
- 4. However, the CBA indicates that establishing a new medical school at the University of Waikato may have the greatest long-term benefits (with the additional capital investment required). The CBA is based on some assumptions (eg, the location of training or number of graduates who end up in general practice) that will be impacted by the detailed design and need further validation.
- 5. The Ministry of Health recommends that you seek agreement to proceed to the development of a Detailed Business Case as further work is required to validate key assumptions made in the PBC and CBA.
- 6. Agencies were consulted on the Cabinet paper, Programme Business Case and CBA, and have provided feedback on:
  - a. the continued need for further development of the proposal to ensure sufficient information is available to support Cabinet decisions
  - b. additional work required to validate assumptions made in the CBA
  - c. the uncertainty and potential impact on the Crown of the contribution to establishment costs from the University of Waikato
  - d. the need to ensure that we consider the wider system opportunities, dependencies, and enablers to ensure the benefits are realised.

- 7. Subject to Cabinet approval, we expect to complete the Detailed Business Cases in Quarter 1 of 2025. Given the tight timeframe and continued need for coordination across multiple parties, we are recommending that the Ministry of Health be responsible for coordination and delivery of the DBC and commission work from areas where the University of Waikato and Health New Zealand are accountable.
- 8. Given the scope of the work required, the University of Waikato and Health New Zealand will need to prioritise and dedicate resourcing to support delivery of the DBC. There will also need to be continued support from the Ministry of Education, Tertiary Education Commission, and Treasury.

### Recommendation

We recommend you:

| 1. | Note  | the the attached Cabinet paper, Programme Business Case<br>and Cost Benefit Analysis have been prepared for<br>Ministerial consultation   | Noted          |
|----|-------|---|----------------|
| 2. | Note  | That your office will commence Ministerial Consultation from 6 August until 20 August 2024  | Noted          |
| 2. | Note  | that following any feedback from Ministerial consultation<br>we will prepare an updated Cabinet paper to be lodged on<br>22 August for Expenditure and Regulatory Review<br>Committee on 27 August 2024 | Noted          |
| 3. | Agree | to forward this paper to joint Ministers (Minister of Finance and Minister for Tertiary Education and Skills)   | Agree/Disagree |

John Whaanga Acting Director-General of Health Te Tumu Whakarae mō te Hauora Date: 2 August 2024

Hon Dr Shane Reti

Minister of Health Date:  $\frac{\sqrt{8}}{2024}$ 

# Draft Cabinet Paper: New medical school – Programme Business Case submission

### Context

- On 27 May 2024, Cabinet agreed that the Ministry of Health will proceed with developing a Programme Business Case, which the Minister of Health will provide to the Cabinet Expenditure and Regulatory Review Committee by Quarter 3 of 2024 (CAB-24-MIN-0183 refers).
- 10. The Ministry of Health has completed the PBC with input from the University of Waikato, Health New Zealand, Ministry of Education, Tertiary Education Commission, and Treasury.
- 11. The PBC incorporates the outcomes of the Cost Benefit Analysis (CBA) which has been completed by Sapere. The CBA was brought forward to align with completion of the PBC [H2024043311 refers].
- 12. The Ministry has also received a report from PwC, commissioned by the University of Auckland and University of Otago, on the current state of medical education and options to address training capacity. The report has helped inform the CBA and PBC.
- 13. A draft Cabinet paper has been prepared to submit the PBC and CBA to Cabinet. We recommend that you consult your Ministerial colleagues on:
  - a. the draft Cabinet paper seeking agreement to proceed to the Detailed Business Case stage
  - b. the Programme Business Case and CBA.
- 14. This report also provides advice from the Ministry of Health on the outcomes of the Programme Business Case, the CBA, and agency feedback on the Cabinet paper.

### Programme Business Case

- 15. As agreed by Cabinet [CAB-24-MIN-0028 refers], the Ministry of Health has developed a Programme Business Case.
- 16. The early indications are that the University of Waikato proposal can achieve the investment objectives, however further work is required to:
  - a. demonstrate that the proposed benefits can be realised through development of the Detailed Business Case
  - b. ensure we have appropriate processes and governance in place during the establishment of the school (where significant and critical components will be developed, eg, the curriculum and admissions criteria).
- 17. A key aspect of this will be development of a high-level Benefits Realisation Management Strategy and Plan and Benefits Register. This will include identification, measurement, and tracking of benefits to ensure that the expected outcomes are realised.

18. The Ministry of Health is progressing work on mapping the dependencies and enablers that sit alongside the proposal and will increase the likelihood of its success, for example work underway to address key challenges within primary and community care and providing an enabling environment for training.

### **Cost Benefit Analysis considerations**

- 19. We received a new version of the CBA on 1 August 2024. We are recommending that further work is required to validate the assumptions in the CBA as part of the development of a Detailed Business Case.
- 20. While all options provide net benefits, the analysis indicates that establishing a new medical school has the highest net present value (sum of economic value of the programme's lifetime, minus the present value), the highest benefit cost ratio the greatest non-monetised benefits.
- 21. The CBA indicates that the New Medical School (Option 3) is the most expensive option but is expected to realise the most benefits. The CBA report notes that the ability of option 3 to realise these benefits is key to its value proposition.
- 22. The results are also very sensitive to key assumptions, as we would expect with a complex prospective analysis of this kind. Key assumptions that drive results include:
  - a. The amount of health benefit (in terms of amenable mortality) that a GP can achieve.
  - b. The extent to which a medical educational model can influence choices of doctors such as propensity to become a GP, to work in a rural area, and to stay in that area.
  - c. That the evidence from other contexts will be broadly applicable, particularly the translation of Australian rural-focussed education models to the New Zealand context.
- 23. There are some risks associated with the analysis including:
  - a. The extent of monetised benefits derived from amenable mortality. The provider has identified a robust evidence base, supporting their assessment of mortality and the other health benefits.
  - b. There is a level of uncertainty associated with the evidence base and how it has been translated into costs and benefits. This is largely due to the limited available evidence on costs and benefits of medical education models internationally.
  - c. There is a risk that the cost estimates may change and are expected to be refined through further design and development, particularly capital expenditure and costs associated with clinical placements. For example, the assessment of Option 2. was based on costings from the 2017 and 2022 proposals from the Universities of Auckland and Otago as well as the July 2024 report they commissioned from Price Waterhouse Coopers that did not have any costings.
  - d. Inclusion of a wider number of options. The CBA options were limited to the shortlisted medical education options, assessed against the investment objectives through the programme business case process.

- 24. Much of the detailed programme design work that still needs to be developed will impact on the expected costs and benefits of the new medical school, for example:
  - a. admissions approach and entry criteria
  - b. student support and pastoral care
  - c. placement model
  - d. where we invest in capacity and capability in the health system and how this is managed alongside existing clinical placements.

### Agency feedback on the draft Cabinet paper

- 25. The Cabinet paper, CBA and Programme Business Case has been developed with extensive engagement and input from the Ministry of Education, Tertiary Education Commission, Treasury, Health New Zealand, and University of Waikato. We have also undertaken formal agency consultation with ACC, Whaikaha, Ministry of Social Development, DPMC, Te Waihanga and Te Puni Kokiri.
- 26. Generally, feedback from all agencies expressed the need for a significant amount of further work and information required for the development of the Detailed Business Case.
- 27. Agencies feedback on the draft Cabinet paper generally focused on three key aspects:

# Further development of the proposal and validation of assumptions set out in the CBA and Programme Business Case

- 28. Agencies all noted various aspects of the proposal and assessment of options that could be expanded upon and needed further detail, to ensure that there was sufficient evidence that the preferred way forward can achieve the investment objectives. Additional validation of the assumptions was required, and agencies provided commentary on where further information was needed, for example:
  - a. greater scrutiny of the key benefits identified in the CBA and how assumptions were arrived at
  - b. evidence of how the proposed options achieve certain benefits (eg, retention of graduates in general practice in rural areas)
  - c. expanded explanation of why/how option 3 is preferred despite being the highest cost with the highest implementation complexity and risk
  - *d.* further exploration and independent review and risk assessment of the costs, reliant on further detail around the various components of the proposal (eg, the new campus building or infrastructure requirements in health settings).

# Seeking further clarity of financial contribution from the University of Waikato and risks to the Crown

 Agencies noted the uncertainty around any financial contribution from the University of Waikato and the potential liability this would place on the Crown to cover any shortfall in investment.

- 30. The University of Waikato has noted that it expects much of the contribution will support the outcomes of a new medical school (if established), for example through the provision of scholarships or funding for research. There may also be some contribution towards establishment costs, but without confirmation from Government that they are going to proceed with the investment, this cannot be confirmed.
- 31. Further work is needed to understand the liability for the Crown and potential escalation of costs, if any contribution amount does not materialise. There is also consideration needed of the long-term sustainability and costs of the proposal beyond the establishment phase.

Noting the wider range of benefits that are possible with the establishment of a new medical school

- 32. Agencies noted that the establishment of a new medical school has significant opportunities to provide a wide range of benefits beyond those identified, for example:
  - a. improving outcomes for disabled people, including disability inclusion in medical training and making training pathways to address barriers for disabled people to training
  - b. connections between health and suitable employment the medical system should ideally be joined up to the employment (and wider social) support system. For example, developing a rural medical workforce able to lead work-focused conversations with patients and to consider suitable work as a health outcome.
- 33. It was also noted that the proposal only goes so far to addressing the training gap and other initiatives and a wider programme of work would be required to fully address the shortfall.

### **Detailed Business Case planning**

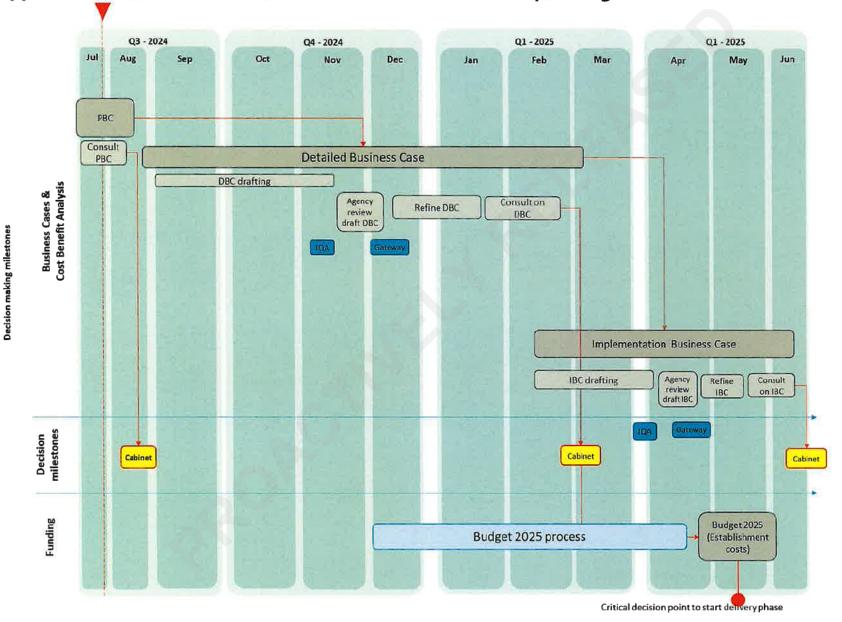
- 34. Subject to Cabinet approval, we expect to complete the Detailed Business Cases in Quarter 1, 2025. This would include an updated CBA, which validates key assumptions made as part of the Programme Business Case. The Detailed Business Case would enable Cabinet to consider whether to proceed with a new medical school. See **Appendix one** for an indicative timeline.
- 35. This gives approximately three months from end of August to December 2024, to complete the first draft of the Detailed Business Case and to undertake assurance processes (ie, Gateway review and independent quality assessment, updated costings) from January 2025.
- 36. We expect to seek Cabinet decision on the final Detailed Business Case in March 2025. These tight timeframes will require strong project management and governance oversight.
- 37. The recommendations from the assurance processes (Gateway and independent quality assessment) given these timeframes were to immediately initiate planning for the Detailed Business Case delivery to ensure sufficient resource, is allocated across key agencies for efficient analysis and drafting of the Detailed Business Case.
- 38. To manage the risks and dependencies with the timeframes and the need for multiple inputs across different stakeholders, we are recommending that:

- a. the Ministry of Health provide a coordinating function holding government responsibility for ensuring delivery of the Detailed Business Case, including commissioning the required inputs and information for the Detailed Business Case, leading the Budget 2025 process, and support for Ministerial decision making
- b. Health New Zealand and the University of Waikato will be commissioned to provide key components of the programme that fall within their accountabilities and to work together to develop a programme of work, to address design of the programme components that develop the new training pathway
- c. existing governance arrangements would be maintained to support delivery of the Detailed Business Case.
- 39. Development of the Detailed Business Case will require dedicated resourcing from Health New Zealand the University of Waikato, given that much of the detailed design on the proposals will need to be developed by them. The Ministry of Health will seek assurance from Health New Zealand that they will be prioritising this piece of work.
- 40. There will also need to be continued support from the Ministry of Education, Tertiary Education Commission, and Treasury.

### **Next steps**

- 41. Officials are working towards the following timelines for submission of the Programme Business Case and CBA:
  - a. Ministerial consultation is expected to run from 6 20 August 2024.
  - b. An updated Cabinet paper will then be provided for lodgement on the 22 of August.
  - c. The Cabinet Expenditure and Regulatory Review Committee would consider the Cabinet paper on 27 August 2024 and it would be signed off by Cabinet on 2 September 2024.

ENDS.



### Appendix One: Indicative timeline for Detailed Business Case planning



# Ministry of Health

New Medical School

# Programme Business Case (PBC)

| Prepared by:      | New Medical School project team |  |
|-------------------|---------------------------------|--|
| Date:             | 9 September 2024                |  |
| Version:          | V.3                             |  |
| Status:           | Final for Cabinet consideration |  |
| Template Version: | March 2023                      |  |

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# **Executive Summary**

### Introduction

This Programme Business Case (**PBC**) seeks formal approval to develop a Detailed Business Case (**DBC**) to grow more domestically trained doctors through the establishment of a new medical school. It follows New Zealand's Treasury Better Business Case methodology and is organised around five case models: Strategic Case, Economic Case, Commercial Case, Financial Case and Management Case.

As part of its commitment to address medical workforce shortages, the Government agreed to explore establishing a third medical school at the University of Waikato. The Coalition Agreement between the National Party and ACT Party states that a "full cost-benefit analysis must be presented before any binding agreement is made with represent to the Waikato medical school."

In February 2024, the Ministry of Health and the University of Waikato signed a Memorandum of Understanding (**MoU**) to progress the development of a programme of work to consider the feasibility of establishing the new medical school. Following the signing of the MoU, the Ministry of Health began developing this PBC, which involved a comprehensive programme of engagement and reporting with Health New Zealand (**Health NZ**), the Ministry of Education, the Tertiary Education Commission (**TEC**), and the Treasury. The University of Waikato has also been involved under the terms of the MoU.

Together, the volume of analysis and engagement provides the evidence necessary to support Cabinet decision making. The PBC presents a preferred way forward, namely the establishment of the new medical school. Although this option is associated with significant additional investment and some implementation complexity, it is a viable approach to grow more domestically trained doctors committed to the delivery of primary care in provincial and rural New Zealand. The PBC seeks formal approval to develop the DBC to increase medical training in New Zealand following the preferred way forward.

### **Strategic Case**

The Strategic Case describes the need for change based on the impact that identified challenges have on the services provided by the medical workforce, particularly in rural and provincial areas and in primary and community healthcare settings.

#### Strategic context and case for change

The Government is focused on achieving timely access to quality healthcare, including both mental and physical health. As part of this vision, the Government expects the health system to have a skilled and culturally capable workforce that is accessible, responsive, and supported to deliver safe and effective healthcare.

New Zealand's health workforce is our greatest asset and the enabler to improving the health and wellbeing of New Zealanders. We have a highly skilled and hardworking workforce, committed to providing the best level of care they can; however, there are not enough doctors to respond to the demands that are being placed on our health system by our growing, aging and increasingly diverse population.

To meet current staffing shortages, Health NZ estimates that an additional 1,700 doctors are needed. This number is expected to rise to 3,400 by 2032 if further capacity is not secured now. We currently have 589 training places available at our two existing medical schools (increasing to 614 in 2025). This is not enough to resolve the capacity problems identified. To meet our projected workforce needs, we need to substantially increase the domestic medical

school intake, alongside other initiatives such as improved retention, international recruitment and task shifting.

While shortages exist in most vocational scopes of practice, they are particularly acute in general practice, especially in provincial and rural areas. General Practitioners (**GPs**) make up less of the medical workforce than they used to (25% in 2023 compared with 37% in 2000) and demand for their services is increasing. This has created a highly pressured service environment for GPs, with 48% reporting they are feeling burned out. These workforce pressures are likely to worsen as approximately one-third of current GPs have indicated their intention to retire in the next five years.

There is a geographic maldistribution of doctors, with most doctors based in New Zealand's urban centres. This is concerning given the differences that exist between rural areas and urban centres in all-cause mortality, amenable mortality (deaths avoided by timely access to healthcare) and other health outcomes. The current medical workforce is also not representative of the population. Ensuring there are more doctors from traditionally unrepresented and underserved communities will improve health outcomes for these communities, as the healthcare provided will be better aligned with cultural principles and practices familiar to the patient.

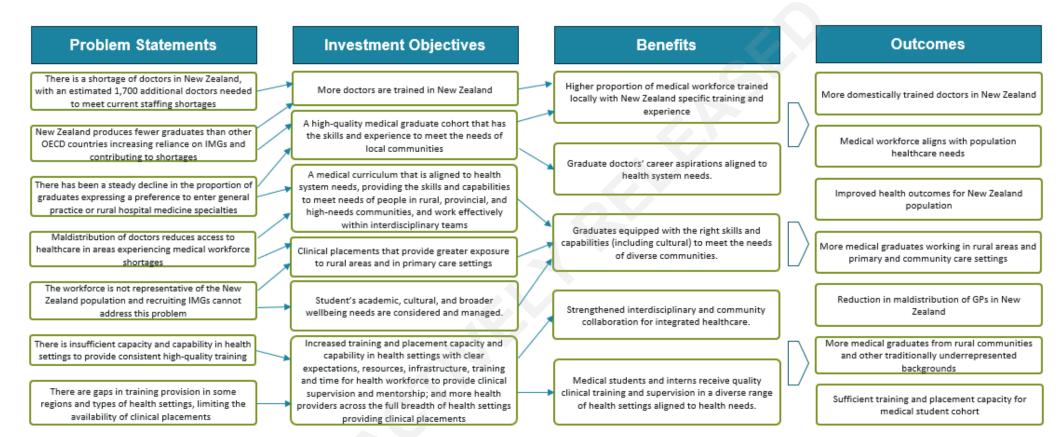
To tackle these issues, we need to ensure there are medical training programmes focused on rural medicine and primary and community care with opportunities for medical students to train in rural and provincial areas. These programmes need to include longer duration clinical placements in such areas as they are associated with a substantial increase in returning to practice in these settings after training. We also need more diverse entry pathways into medical training to help improve the diversity of the medical workforce. Establishing a new medical school focused on primary care and rural health is also likely to positively influence the health, social, economic and research activity of the regions in which it is situated, and students are studying.

Health providers are currently struggling to provide enough clinical training placements to meet existing demand. The lack of access to suitable placements, supervisors and educators impacts the ability of the system to effectively manage increases in the number of trainee places. This creates bottlenecks during medical school, and afterwards when graduates undergo prevocational (PGY1 and PGY2) training and vocational training. Training more doctors requires additional investment to support placements in line with the proposed increase in the funding cap on medical student numbers. This will also involve additional capacity and capability in primary care facilities willing to take on trainees for longer duration placements and a more consistent approach to supervision and training provided to medical students and trainee doctors.

#### Investment objectives that support the case for change

The diagram on the following page shows how we see Crown investment resolving the workforce pressures that we face and delivering the benefits that are anticipated to support the programme's outcomes.

#### Summary of our investment logic



Achieving this requires investment in our tertiary education system to increase domestic capacity for medical training and lift the funding cap to help bridge the gap between medical graduates and workforce needs (the 120 training places referenced in this business case provides a significant step towards the capacity required). Additional investment will also be required to support clinical placements in line with the funding cap increase. Nonetheless, we expect to achieve substantial benefits from this investment, including:

- A higher proportion of the medical workforce has New Zealand-specific training and experience.
- Graduate doctors' career aspirations align with health system needs.
- Graduate doctors are equipped with the right skills and capabilities (including offering culturally safe care and practicing in culturally safe environments) to meet the needs of diverse communities.
- Strengthened interdisciplinary and community collaboration for integrated healthcare.
- Medical students and interns receive quality clinical training and supervision in a diverse range of health settings aligned to health needs.

### **Economic Case**

The Economic Case identifies the preferred way forward for the programme that optimises value for the Government and New Zealand.

#### A short-list of options was established for the way forward.

The short-list of options was developed through an extensive process of analysis and engagement. Workshops with representatives from the Ministry of Health, Health NZ, the TEC and other stakeholders were used to develop investment objectives and critical success factors, and undertake options analysis. Our short-listed options are summarised below.

#### Option 0: Status quo (Do minimum)

In accordance with Treasury guidelines, we have included a status quo option. This option is described as a 'do minimum option" (rather than a 'do nothing' option) to reflect agreed initiatives to address workforce capacity pressures (such as raising the medical training funding cap by an additional 25 places in 2025). No changes would be made to the entry pathways for admission into medical school, the focus of the medical curriculum, or the arrangements for clinical placements.

# Option 1: Increase current intake at existing medical schools and expand rural immersion programmes.

This option involves increasing the cap on the number of government-funded medical school places by 120, with the ability to add further places over time. The additional places would be spread across both existing medical schools, with the expectation that they would proportionally increase the intake of their rural immersion programmes. This option assumes the existing approach to student selection continues to be the basis for entry into medicine.

Accommodating the proposed increase in student numbers may require changes to teaching facilities at one or both medical schools, the costs of which would be met by reprioritising existing budgets. It is assumed the proposed increase in student numbers would occur in 2028 (although this option could be introduced incrementally on an earlier timeline). There would be no changes to the geographical reach of clinical placements for each medical school, training approaches, or existing agreements between the medical schools and health providers; however, additional investment would be required to ensure there are sufficient placements and supervision capability.

# *Option 2: Create a specialised medical training programme focused on rural health, jointly delivered by the existing medical schools.*

Under Option 2, a specialised medical programme focused on rural health would be created. This option would see students in Years 2 and 3 split across the existing medical schools, following which students would spend the remaining three years at teaching hubs in provincial and rural locations. The programme would be jointly delivered by the existing medical schools, supported by other medical and community stakeholders. The medical curriculum would build on the existing accredited training programmes, with an increased focus on primary and rural health (including GP-based content).

Changes may be needed to the teaching facilities at one or both medical schools to accommodate the proposed increase in student numbers while they are learning on campus, the costs of doing so would be met by reprioritising existing budgets. A moderate and scalable quantum of capital expenditure would be required to develop the rural teaching hubs, expanding on existing network of rural placements where possible. While it is assumed the proposed increase in student numbers would be introduced from 2028, this option could also be introduced incrementally on an earlier timeline subject to available teaching capacity.

### Option 3: Establish a new medical school focused on primary and rural health.

Option 3 establishes a new medical school with a specific focus on primary and rural health. Entry pathways and student selection criteria would be substantially differentiated from those of the existing medical programmes, and designed to closely align with health workforce outcomes that address our greatest areas of shortage.

There would be an initial cohort of 120 medical students per annum, with the ability to scaleup subject to clinical training placement availability. The medical curriculum would be delivered over four years and focused on rural, primary and community care. Year 1 of the programme would be offered on campus at the new medical school, diversifying the locations where medical training currently takes place. Years 2 to 4 would consist of year-long placements in rural health settings, including one year in a general practice in a rural community. Capital funding would be required to meet the costs to construct and equip the teaching facilities and develop the required curriculum. Additional funding would be required to enhance the capacity and capability of clinical placement training providers.

# The short-listed options have been assessed against the programme evaluation criteria.

All options satisfy each of the investment objectives and critical success factors. How this is achieved is consistent across the options and based on best practice. For instance, the options:

- increase training capacity by 120 students
- have a training pathway focused on placing students for a longer duration in a rural and primary and community care settings
- increase health system capability and capacity.

The short-listed options differ in the scale of investment required, and the scale of impact e.g., option 1 would not see a significant impact in the number of trainees going through existing rural training pathways, as it primarily focuses on increasing the training cap. Options 2 and 3 provide a dedicated and full-scale programme for the 120 trainees to enter a rural programme, although only Option 3 reduces locational barriers to studying medicine and provides an innovative approach to student selection to diversify the medical workforce.

The assessment of the short-listed options against the programme evaluation criteria identifies that there are feasible options to grow more domestically trained doctors committed to the delivery of primary care in provincial and rural New Zealand.

# An independent Cost-Benefit Analysis (CBA) was commissioned to evaluate the effectiveness of each of the short-listed options.

The Cost-Benefit Analysis **(CBA)** identifies the costs and benefits of each option, including both measurable and (where possible) monetisable costs and benefits, and non-monetisable benefits.

While all options provide net benefits, early indications are that establishing a new medical school has the highest net present value and benefit-cost ratio. Although Option 3 provides greater benefits than other options, it achieves this with the additional investment required for establishment.

The results are highly sensitive to key assumptions, as we would expect with a complex project of this kind. Key assumptions include the amenable mortality reduced as a result of the intervention, the retention of students and whether they go into (and stay in) rural practices. The results are also sensitive to assumptions relating to labour productivity. Further work is required to validate the assumptions in the CBA as part of the development of a DBC.

All options are expected to produce a significant increase in the number of additional doctors by 2042, ranging from  $\frac{s 9(2)(f)(iv)}{1}$ . Options 2 and 3 have a greater impact on GP numbers and those likely to work in rural areas.

Having a larger increase in the number of GPs working in rural, provincial and under-served communities will make it easier for people living in such areas to see a doctor, leading to a reduction in amenable mortality (premature death). It will also lessen the pressure on emergency departments, freeing up resources that can be used elsewhere, and reducing the need for patients living in rural areas to undertake long journeys to access healthcare, ensuring they have faster access to medical attention. The increased number of GPs will also reduce vacancies and, subsequently, recruitment costs.

In terms of non-monetised benefits, all options improve health outcomes for New Zealand although Options 2 and 3 are likely to have a bigger impact on currently underserved communities. They would also promote better continuity of care, as patients would be in a better position to see the same doctor in primary care settings on an ongoing basis, and lead to increased competition in the health services provided. The introduction of new medical school will add a new market participant. This is likely to increase competition between providers, improving the quality of education which may lead to better health outcomes for society.

#### The preferred way forward

The assessment of the programme evaluation criteria and the indicative outcomes of the CBA identify that there are feasible options to grow more domestically trained doctors committed to the delivery of primary care in provincial and rural New Zealand. It appears that there are greater long-term benefits associated with establishing a new medical school, although this option is associated with significant additional investment and some implementation complexity. The CBA is highly sensitive to certain assumptions (for example, amenable mortality, the location of training or number of graduates who end up in general practice) that will be impacted by the detailed design and need further validation. While we recommend that the option to establish a new medical school is taken through to the DBC, the underlying assumptions in the CBA will need to be developed further.

### **Commercial Case**

The Commercial Case identifies a range of capabilities needed to establish a new medical school. The programme of work is likely to involve many procurements over its lifetime as work shifts from capex to operational expenditure. To source these capabilities, procurement needs to cover:



The DBC will explore in greater detail the commercial risks associated with procuring the required capabilities and provide an assessment of viability. Approaches to managing supplier limitations will be considered. A procurement strategy outlining the principles, methods, practices and accountabilities for relevant procurement activities will also be developed. It will comply with te Tiriti o Waitangi obligations, contribute to the achievement of the Government's broader outcomes and comply with Government procurement principles and rules. Detailed procurement plans will be developed for each project in the programme of work, as required.



### **Financial Case**

The PBC signals a multi-year funding requirement. Like other education infrastructure investments, committed funding is needed to ensure the right resources can be sourced to enable the effective delivery of the programme.  $\frac{s 9(2)(b)(ii)}{s 2}$ 

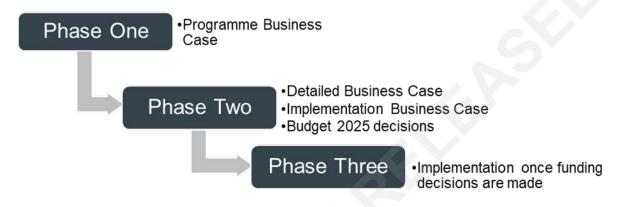
For the purposes of this business case, the cost modelling covers the period from 2024/25 to 2036/37. This comprises five years of capital costs with incremental operating costs over the modelled period.

# s 9(2)(b)(ii) f

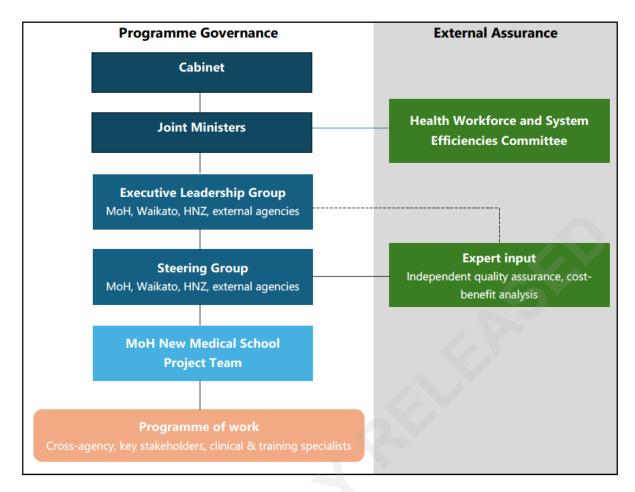


### **Management Case**

The Management Case explains the planning arrangements required for successful delivery. The programme of work will be delivered over three phases:



Completing each phase of the programme of work requires alignment between multiple parties with different responsibilities (for example, across different Votes, Ministerial portfolios and tertiary education delivery). The programme governance and management approaches provide the structures to govern and deliver the agreed outcomes in an ecosystem of complex interdependencies and relationships. Accordingly, a tiered approach to governance has been implemented:



The Ministry of Health is the Project Sponsor for the PBC, with accountability for delivering the investment objectives. A tailored project management approach is being used (rather than using a single approach such as agile, waterfall or PRINCE2). The Ministry of Health's project team leads the day-to-day operational delivery and works closely with officials from the TEC, the Ministry of Education, the Treasury and Health NZ. It has also engaged with the Universities of Waikato, Auckland and Otago. These provide data inputs, clarify issues related to their portfolio areas and provide review services. External specialists are involved when independence or specific skills are required. 9(2)(b)(i)

In Phases One and Two, members of the ELG and Project Steering Group provide access to decision-making and clinical leadership governance inputs.

A comprehensive project plan has been developed and is monitored on a weekly basis. Risk management processes (including a comprehensive risk register) are integrated into the project plan with clear escalation pathways articulated. Because of the significance of the investment across the health and education systems and its nature as a large major project, the Treasury recommended an assurance pathway that includes internal quality assurance by the Project Steering Group, independent quality assurance (IQA) and Gateway reviews. An independent, fully costed CBA is required. Feedback from the IQA, Gateway 0 (Strategic Assessment) and the CBA are incorporated into this PBC.

Because of the programme of work's ambitious but achievable timeframe, work is underway to prepare for the DBC process. This also includes considering significant health and tertiary education system interdependencies. Other agencies (including Health NZ, TEC and the Ministry of Education) and the University of Waikato will own associated projects related to system capacity, resourcing and infrastructure. These are critical to the ability to establish a

new medical school as well as broader systems projects that further support benefits realisation.

Because of the significance of the investment across the health and education systems and its nature as a large major project, the Treasury recommended an assurance pathway that includes internal quality assurance by the Project Steering Group, independent quality assurance (**IQA**) and Gateway reviews. An independent, fully costed CBA is required. Feedback from these projects is incorporated into this PBC.

Thorough sector engagement for this programme of work is necessary given the complexity and number of stakeholders who are involved in training the medical workforce, the breadth of stakeholders who have the expertise required to design a proposal that meets the programme of work's investment objectives and the owners of land upon which any new facilities might be built. A stakeholder engagement plan has been prepared for Phases One and Two.

### Next steps and work deferred to the Detailed Business Case stage

This PBC seeks formal approval from Ministers to commence development of the DBC, based on the preferred way forward and the short-listed options above. The DBC will form the basis for further advice on the establishment of a new medical school and the way it will be procured and financed. Practical next steps include:

- strengthen the detail on clinical training settings, including infrastructure requirements
- confirm and expand on the expected benefits (including monetisable and nonmonetisable benefits), including the impact on traditionally unrepresented and underserved communities
- prepare a full procurement plan, detailing the procurement approach and criteria, payment mechanisms, contractual arrangements, as well as key delivery dates
- identify any leasing arrangements required for the development of the new medical school as well as the appropriate delivery entity for the build, including whether the services of the Crown Infrastructure delivery agency (Rau Paenga) should be utilised
- review the initial programme estimates and complete affordability analysis, including whether existing assets can be utilised to reduce capital expenditure
- establish monitoring and evaluation approach.

# Feedback incorporated into this Programme Business Case

As part of the PBC process, previous drafts of this document were reviewed by Health NZ, the Ministry of Education, TEC, and the Treasury, as well as the University of Waikato. All comments have been considered carefully and appropriate changes have been made to this document to reflect the feedback received.

# **Abbreviations**

| BEFU      | Budget Economic and Fiscal Update                         |
|-----------|---|
| CAA       | Clinical Access Agreement                                 |
| Capex     | Capital expenditure                                       |
| СВА       | Cost-benefit analysis                                     |
| DBC       | Detailed Business Case                                    |
| DDG SPL   | Deputy Director-General, Strategy, Policy and Legislation |
| ECI       | Early Contractor Involvement                              |
| EFTS      | Equivalent full-time students                             |
| ELG       | Executive Leadership Group                                |
| GP        | General practitioner                                      |
| GPEP      | General Practice Education Programme                      |
| Health NZ | Health New Zealand Te Whatu Ora                           |
| IMG       | International medical graduate                            |
| IQA       | Internal quality assurance                                |
| MCNZ      | Medical Council of New Zealand                            |
| MoU       | Memorandum of Understanding                               |
| Opex      | Operational expenditure                                   |
| PBC       | Programme Business Case                                   |
| PGY1      | Postgraduate Year 1 (prevocational training)              |
| PGY2      | Postgraduate Year 2 (prevocational training)              |
| PML       | Programme Manager Lead                                    |
| PwC       | Price Waterhouse Coopers Limited                          |
| RMIP      | Rural Medical Immersion Programme                         |
| RNZCGP    | Royal New Zealand College of General Practitioners        |
| SA        | Student allowance   |
| SLS       | Student loan scheme                                       |
| SRO       | Senior Responsible Officer                                |
| TEC       | Tertiary Education Commission                             |
| ТІ        | Trainee intern (Final year of medical school)             |
|           |   |

## 1. Introduction

New Zealand does not train enough doctors to meet its current workforce needs. The shortage of doctors is particularly acute in rural and provincial areas and in primary and community care settings. The demands of our growing and aging population will exacerbate these workforce shortages. We need to grow more domestically trained doctors committed to the delivery of primary care in provincial and rural New Zealand.

In 2017, the University of Waikato prepared a business case to establish a new graduate entry medical school at its Hamilton campus. While their proposal was not implemented, the business case canvassed many issues that are relevant to this Programme Business Case (**PBC**). Since then, the University of Auckland and the University of Otago have collaborated to prepare an additional mechanism for growing the number of New Zealand trained doctors through their fledgling primary care training programme (aspects of which are also discussed in this PBC).

As part of its commitment to address medical workforce shortages, the Government agreed to explore establishing a third medical school at the University of Waikato. The Coalition Agreement between the National Party and ACT Party states that a "full cost-benefit analysis must be presented before any binding agreement is made with represent to the Waikato medical school."

In February 2024, the Ministry of Health and the University of Waikato signed a Memorandum of Understanding (**MoU**) to progress the development of a programme of work to consider the feasibility of establishing the new medical school. Following the signing of the MoU, the Ministry of Health began developing this PBC, which involved a comprehensive programme of engagement and reporting with Health NZ, the Ministry of Education, TEC, and the Treasury. The University of Waikato has also been involved under the terms of the MoU.

In May 2024, the Cabinet agreed to proceed with the development of a PBC and identified a suite of investment objectives against which possible options are assessed [CAB-24-Min-0183 refers].

### 1.1. Business case approach

This PBC outlines the proposed approach, capital and operational costs and timeframes to deliver on the Government's commitment to address the shortage of doctors, which has built up over many years. It seeks formal approval to invest in the next steps of the Detailed Business Case (**DBC**) to grow more domestically trained doctors through the establishment of a new medical school. The PBC is informed by a cost-benefit analysis (**CBA**) as well as a report from PwC (commissioned by the Universities of Auckland and Otago) on existing medical education pathways, and an assessment of future options and identifies items that need further exploration in the DBC.

This PBC:

- *confirms* the strategic context, the case for change and the need for investment in more domestically trained doctors
- *recommends* a preferred way forward for further development of the investment proposal
- *seeks* the Cabinet's approval to develop the DBC to grow more domestically trained doctors through the establishment of a new medical school.

This PBC follows the Treasury Better Business Cases guidance and is organised around the five-case model. The following agencies have been engaged throughout the development of this PBC: Health NZ, the Ministry of Education, TEC, and the Treasury. The University of Waikato has also been involved under the terms of the Memorandum of Understanding. The format and approach are as agreed with agencies and documented in accordance with the requirement of the Better Business Case process.

## 2. Strategic Case

This section sets out the strategic case for the establishment of a new medical school. The investment is intended to increase the number of doctors trained and practicing in New Zealand, and to support the diversification of the way medical training is provided. To support these objectives, we need to build health system capability to provide quality clinical training placement across a range of health settings.

In May 2024, as part of its consideration of whether to proceed with the development of this PBC, the Cabinet considered that the investment logic for the proposal outlines the need to further invest in medical training to ensure our health system has the capacity, skills and capabilities it needs to improve health outcomes for New Zealanders. The Strategic Case describes the need for change based on the impact that identified challenges have on the services provided by the medical workforce, particularly in rural and provincial areas and in primary and community healthcare settings.

# 2.1. Government health workforce priorities and strategies to deliver

The Government is focused on achieving timely access to quality healthcare, including both mental and physical health. As part of this vision, the Government expects the health system to have a skilled and culturally capable workforce that is accessible, responsive, and supported to deliver safe and effective healthcare.

New Zealand's health workforce is our greatest asset and the enabler to improving the health and wellbeing of New Zealanders. The workforce is highly skilled and hardworking and is committed to providing the best levels of care. Over the past five years, health agencies have worked hard to strengthen the health workforce, but there is more to do. The workforce faces persistent challenges, including shortages of New Zealand trained doctors and maldistribution of our medical workforce. This has significant impacts on the delivery of healthcare. The Government Policy Statement on Health 2024-2027 notes that a key priority area for the Government is addressing critical health workforce shortages and gaps in cultural competency.<sup>1</sup> This can be done by introducing more domestic training pathways and developing a workforce that is more representative of the New Zealand population.

In July 2023, six health strategies were published to provide direction for health in New Zealand over the next 10 years. The Government's priorities for the health workforce are reflected in these strategies. The overarching Health Strategy emphasises the need to value the workforce by ensuring that, among other things, it reflects New Zealand's diverse communities and has the skills and capabilities required to meet community needs. Pae Tū: Hauora Māori Strategy and Te Mana Ola: The Pacific Health Strategy discuss the need to ensure the health workforce is representative of the people it serves. The workforce needs the necessary skills and competencies to deliver culturally safe and responsive health services and must keep pace with projected population growth and community needs. The Rural Health Strategy focuses on developing a valued and flexible workforce. This includes improving the wellbeing of the workforce by valuing rural roles through better recognition in professional frameworks and better support for rural pathways and ongoing training. More support needs to be provided to those that host rural placements and, similarly, medical students need to be supported to take up such placements.

<sup>&</sup>lt;sup>1</sup> Available at http://www.health.govt.nz/publication/government-policy-statement-health-2024-2027

The Ministry of Health is the chief steward of the health system. As kaitiaki of the health system, the Ministry sets the strategic direction for the workforce and supports health agencies to address long-standing workforce challenges. This includes determining funding priorities and ensuring the right legislation is in place.

To ensure the health workforce is valued and delivers the health services that communities need, the Ministry of Health developed the Health Workforce Strategic Framework in 2023. The Framework sets out the priority issues for New Zealand's health workforce including addressing challenges such as workforce shortages, a health workforce that is not representative of the New Zealand population and a health workforce that is not distributed in a way that supports access to health services for all New Zealanders, particularly those living in provincial and rural communities.

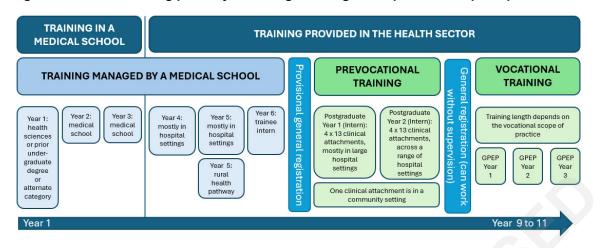
Health NZ has also developed a health workforce plan to meet the government's workforce strategies. The Health Workforce Plan 2023/24 outlines the steps that need to be taken to create a sustainable, sufficient, representative, supported and thriving health workforce. It identifies a range of initiatives across six focus areas to improve the workforce. The Plan acknowledges that it will take at least a decade to address all shortages and pressures across all health professions, given the time it takes to train people in New Zealand. Medical workforce initiatives focus on growing the size of the workforce, improving the level of exposure medical students have to primary and community healthcare settings (including in rural areas), ensuring that the workforce is representative of the New Zealand population and increasing the number of clinical training placements in primary and community health settings.

### 2.2. Current pathway for training doctors

Training to become a doctor consists of three distinct phases. The first of these phases is managed by the tertiary education sector, whereas the remaining phases are managed in the health sector:

- 1. Primary medical education (currently, at least five years following entry).
- 2. Prevocational training (usually two years).
- 3. Vocational training (at least three years depending on vocational scope of practice).

There are currently two medical schools in New Zealand that offer a single model of medical education: one at the University of Auckland and one at the University of Otago. The overall duration of training depends on the length of the medical school programme, the time taken to complete prevocational training and achieve registration in a general medicine scope of practice and the choice of vocational training (if taken). The current medical training pathway for the general practice scope of practice is outlined below in Figure 1Error! Reference source not found.. Parts of this section are informed by the PwC report into medical education in New Zealand.



#### Figure 1: Medical training pathway including for the general practice scope of practice

The existing training pathway has been accredited by the Australian Medical Council on behalf of the Medical Council of New Zealand (**MCNZ**). It is designed to expose medical students to a wide range of medical specialties and health settings to lay the foundation for graduate doctors to complete prevocational training in a diverse range of settings. Full registration as a doctor (general medicine scope of practice) occurs at completion of Post-graduate Year 2 (**PGY2**). The primary medical programme does not offer specialty-specific pathways. Students may participate in rural immersion schemes (which are described below), although they are not required to pursue this speciality after graduation.

#### Early theoretical learning (Years 1, 2 and 3)

Crown funding of medical school enrolments is subject to a cap to manage the high costs associated with training medical students and the capacity of the health system to provide clinical placements. The number of places across the two medical schools is currently limited to 614 domestic students (from 2025) and entry is highly competitive. Admission requires completion of either the first-year of biomedical or health science, or an undergraduate degree, and each year over 1,750 students who meet these requirements apply.

First-year entry is the most popular route although approximately one-third of medical students enter as graduates of other disciplines. For instance, between 2017 and 2023, the level of graduate entry was approximately 35% at Auckland and 27% at Otago. Acceptance into medical school is based on an applicant's grade point average, University Clinical Aptitude Test for Australia and New Zealand performance and the results of an admission interview that assesses non-academic qualities and capabilities. Alternate entry pathways are available for a small number of students each year.

Medical school commences at Year 2. This acknowledges the role of Year 1 health sciences and/or papers in other health science degrees. Years 2 and 3 of medical school occur in tertiary education settings based on campuses in Dunedin and Auckland. Training consists mainly of lectures, tutorials, labs and some clinical experience.

#### Early clinical learning (Years 4 and 5)

Learning in Years 4 and 5 occurs predominantly in health settings, mainly in hospitals in Auckland, Hamilton (University of Auckland), Dunedin, Christchurch, and Wellington (University of Otago). Medical students rotate between specialities, are assessed throughout and sit a final exam at the end of Year 5.

There is exposure to rural health settings for up to 35 medical students per annum who can opt into the University of Otago's Rural Medical Immersion Programme (**RMIP**) and spend Year 5 living and learning in small groups in one of nine regional communities across the

South and lower North Islands (for example, Wairoa, Tararua, Wairarapa, Marlborough, West Coast, Ashburton, Queenstown, Alexandra or Clutha). The University of Auckland has developed a similar one-year programme which is intended to start in 2025 and will offer training initially for up to 12 Year 5 medical students. The four initial sites will be Wellsford (Waitemata cohort), Hauraki-Coromandel and Te Kuiti (Waikato cohort) and Hāwera (Taranaki cohort). Entry to both RMIP programmes is limited by available clinical training placements.<sup>2</sup>

Medical students can undertake clinical placements in primary and community care settings in Years 3 to 5, but placements are of short duration (between two and six weeks long each).

#### Trainee interns (Year 6)

In Year 6, trainee interns (**TI**) learn in an apprenticeship style model based in a wider array of hospitals including in Whangārei, Palmerston North, Timaru and Southland. TIs are not considered employees but receive a medical TI grant paid either in 12 monthly instalments throughout the year or one instalment at the start of the year, acknowledging the service they provide.

Gaining a Bachelor of Medicine and Bachelor of Surgery degree after completing all five years of medical school (Years 2 to 6 inclusive) and passing the New Zealand Registration Examination enables medical graduates to apply for provisional registration with the MCNZ.

**Table 1** shows the number of graduates who have been provisionally registered as a doctor after completing medical school over the past five years.<sup>3</sup>

| Year | Number of new doctors registered with a NZ-based qualification |
|------|--|
| 2019 | 513  |
| 2020 | 524  |
| 2021 | 529  |
| 2022 | 572  |
| 2023 | 553  |

Table 1: Number of new doctors registered with a New Zealand qualification 2019-23

#### Prevocational training (PGY1 and PGY2 intern roles in the clinical settings)

Following provisional registration, interns undertake a minimum of two years prevocational training. This is known as postgraduate Year 1 and Year 2 (**PGY1** and **PGY2**). This part of the training pathway is like an apprenticeship. Interns are employed by Health NZ and trained on the job. Health NZ clinical attachments are accredited by the MCNZ to ensure that intern positions are in environments where appropriate clinical learning and capacity for senior quality supervision are in place. The existing medical school are not involved in PGY1 and PGY2 training, which is the responsibility of Health NZ.

Prevocational training is not mapped to a specific medical speciality. Prevocational training provides exposure to a wide range of clinical areas through four 13-week clinical attachments in each of PGY1 and PGY2. Most clinical attachments occur in hospital settings.

Since November 2021, the MCNZ's Prevocational Medical Training policy requires that one of the clinical attachments must be community based. However, since those with provisional

<sup>&</sup>lt;sup>2</sup> Since 2007, the University of Auckland has offered Year 5 medical students who are based at Whangarei Hospital the opportunity to undertake a seven-week general practice and integrated care placement in a rural setting.

<sup>&</sup>lt;sup>3</sup> Available at https://www.mcnz.org.nz/about-us/our-data/new-doctor-registrations-entry-pathway/

registration (PGY1 and PGY2) are relied on for service delivery in hospitals, the ability for Health NZ districts to release interns into community care settings is dependent on their ability to employ enough staff to meet service delivery needs. In 2022/23, only 50% of PGY1 and PGY2 students completed a clinical attachment in a community care setting with the largest gap being in the Auckland districts.

Completion of PGY2 results in the ability to apply to the MCNZ for full registration in a general medicine scope of practice and to begin vocational training (if desired).

#### Training to qualify in a vocational scope of practice

Once registered, doctors are eligible to enrol in a vocational medical training programme. The length of time training takes varies by the vocational scope of practice and can be anywhere between three and seven years. Vocational training is delivered by the relevant medical college and can be funded by the Ministry of Health. There are 36 vocational scopes of practice including general practice and rural hospital medicine. The standard pathway to complete the General Practice Education Programme (**GPEP**) is three years; the standard Rural Hospital Medicine scope of practice pathway takes four years.

Most doctors remain in New Zealand immediately after graduation. The 2023 MCNZ workforce survey indicated that the retention rate for New Zealand-trained medical graduates was high, with at least 90% of graduates from the 2015, 2016, 2017 and 2018 cohorts remaining in the workforce for five years after provisional registration.<sup>4</sup> This figure is an improvement on previous cohorts, which averaged just under 80% retention. The MCNZ attributed the increase to initiatives such as the Ministry of Health's Voluntary Bonding Scheme, although this may be attributed to the COVID pandemic as graduates had less opportunities to travel during that time.

Most New Zealand-trained doctors practising outside of New Zealand are in Australia (2,137 in total in 2022). This is not surprising given Australia's proximity to New Zealand and its recognition of New Zealand's medical qualifications. Other countries where New Zealand-trained doctors practice include the United Kingdom (177 in 2021), Canada (94 in 2021) and Ireland (20 in 2021). <sup>5</sup>

### 2.3. Population context

# Our growing, aging and increasingly diverse population has a significant impact on our health system.

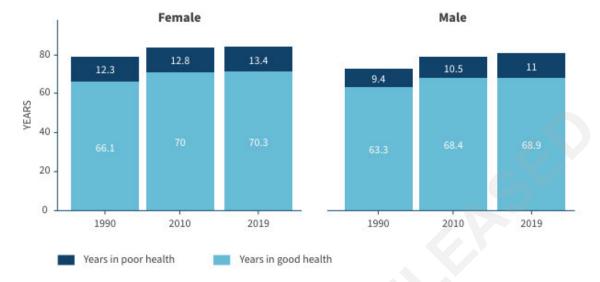
From 2013 to 2023, New Zealand's population grew in all 16 regions, increasing by 18% or approximately 780,000 people. Population growth from net-migration and longer life expectancy increases demand on health services and health funding.

New Zealanders are living longer lives and life expectancy is projected to continue rising for all demographic groups. Increases in life expectancy lead to more unhealthy years of life with falls, cardiovascular disease, diabetes, dementia and other long-term conditions acting as major and growing contributors to poor health and premature death. On average, New Zealanders spend over a decade in poor health and this period is slowly increasing. **Figure 2** (over the page) shows life expectancy and the years spent in poor health.<sup>6</sup>

<sup>&</sup>lt;sup>4</sup> New Zealand Medical Workforce in 2023, MCNZ (2023), available at https://www.mcnz.org.nz/assets/Publications/Workforce-Survey/Workforce-Survey-Report-2023.pd

<sup>&</sup>lt;sup>5</sup> OECD, Health Workforce Migration – Foreign trained doctors by country of origin – Stock (http://stats.oced.org/).

<sup>&</sup>lt;sup>6</sup> Health Strategy, Ministry of Health (2023)



#### Figure 2: Healthy life expectancy and years in poor health by sex at birth from 1990 to 2019

By 2053, the population aged older than 85 years is projected to more than triple for both males and females. The population aged 65 to 84 years is projected to increase by nearly 60%. This will add nearly 640,000 people to the population aged over 65 years. An aging population places more demand on the health system as older people usually use more health services compared with younger people. **Figure 3** shows the population aged over 65 years and aged over 80 years continuing to grow towards 2053.<sup>7</sup>

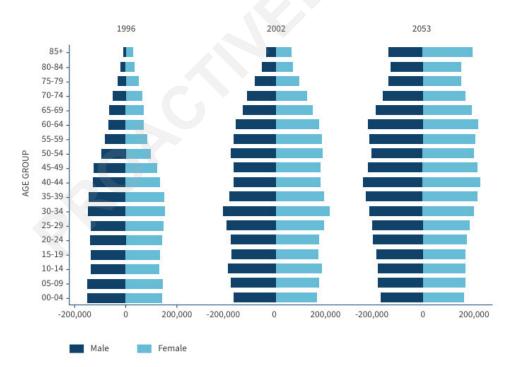


Figure 3: New Zealand population pyramids for 1996, 2022 and 2053

New Zealand's population is increasingly ethnically diverse with faster-growing Māori, Pacific and Asian populations. Between the 2018 and 2023 censuses the Middle Eastern, Latin

<sup>&</sup>lt;sup>7</sup> Health Strategy, Ministry of Health (2023)

American and African populations grew by 31.9%, Asian by 21.8%, Pacific peoples by 16.0% and Māori by 14.4%. The European population only increased by 2.6%.

Diverse ethnic groups may have different preferences and ways of offering, accessing and using health services. The health system needs to adapt to the future health needs and aspirations of all groups of New Zealanders. It needs to support the provision of culturally safe care that is responsive to the needs of those different communities.

The demand for healthcare among some ethnic groups is increasing faster than the population as a whole. For instance, Māori and Pacific people have a younger demographic age structure and have higher health needs than the New Zealand European population, which presents an opportunity for more health initiatives early in life to support these populations to stay healthier for longer.

New Zealand's medical workforce needs to respond to the demands that are being placed on the health system by increasing complexity of need, people living longer and requiring more support from health services alongside evolving models of care for people with more than one condition, as well as a greater focus on community services and preventative care to avoid hospital admissions.

### 2.4. Medical workforce context

We need to grow the size of our medical workforce to better respond to the changing needs of our growing, aging and more diverse population. This requires close alignment between health and education so that the medical student cohort supports our workforce needs, recognising that health system capability to offer clinical training placements and supervision also needs to be tackled to increase medical training capacity.

### 2.4.1. Need for increasing training capacity

There are not enough doctors to respond to New Zealand's growing healthcare demands, in part because New Zealand produces fewer medical graduates than other OECD countries.<sup>8</sup> To meet current staffing shortages, Health NZ estimates that an additional 1,700 doctors are needed. This number is expected to rise to 3,400 by 2032.<sup>9</sup>

We currently have 589 training places available at our two existing medical schools (increasing to 614 in 2025). However, this is not enough to resolve the capacity problems identified. In their Health Workforce Plan 2023, Health NZ estimated that a substantial increase in the medical student cohort is needed. In their view, we need to increase the domestic medical school intake by another 285 places to meet the projected workforce needs, alongside other initiatives such as improved retention, international recruitment and task shifting.

While shortages exist in most vocational scopes of medicine, they are particularly acute in general practice, particularly in provincial and rural areas. Increases in the number of general practitioners (**GPs**) are not keeping up with population growth and, proportionately, GPs make up less of the medical workforce than they used to (25% in 2023 compared with 37% in 2000).<sup>10</sup> Demand for primary care is increasing. Between 2008 and 2021, demand increased by nearly 12% (from 11.8 million visits to around 14 million visits per annum). The

<sup>&</sup>lt;sup>8</sup> Information available at <u>https://www.oecd-ilibrary.org/sites/9a48414c-</u> en/index.html?itemId=/content/component/9a48414c-en#indicator-d1e32583-c306e547a9

<sup>&</sup>lt;sup>9</sup> See Health Workforce Plan 2023/24, Health NZ (2023) available at https://www.tewhatuora.govt.nz/publications/health-workforce-plan-202324/

<sup>&</sup>lt;sup>10</sup> New Zealand Medical Workforce in 2023, MCNZ (2023)

types of issues that GPs manage are also becoming more complex (such as managing moderate to high psychological distress and those with complex conditions on secondary waiting lists).<sup>11</sup> This creates a highly pressured service environment for GPs, with 48% of GPs stating that they are burned out and a further 31% are somewhat burned out.<sup>12</sup>

Capacity issues in the GP workforce are likely to worsen over time as approximately onethird of current GPs intend to retire in the next five years. The volume of those entering general practice is not enough to replace those who leave or to provide sufficient additional coverage by hours performed per week.<sup>13</sup>

There is a geographic maldistribution of doctors, with most doctors based in New Zealand's urban centres, which is not surprising given most medical training occurs in these locations. This is concerning as differences exist in all-cause mortality, amenable mortality (deaths avoided by timely access to healthcare) and some health outcomes between rural areas and urban centres in New Zealand.<sup>14</sup> Some of this difference is due to lower access to care that prevents or identifies issues early caused, in part, by the distance to and availability of health providers. New Zealand's main urban centres have almost four times more doctors per head of population than rural areas.<sup>15</sup> This impacts the ability of patients to access healthcare and leads to longer wait times in many rural settings. There are some rural areas where access to key specialists is limited.<sup>16</sup>

The current medical workforce is not representative of the population. A medical workforce representative of the community it serves is likely to improve care if the care offered aligns to cultural practices familiar to the patient. While the number of doctors who identify as Māori or Pacific has been steadily increasing over the past 20 years, Māori and Pacific doctors are still under-represented compared to the proportion of these ethnic groups in the population.<sup>17</sup> For communities that are traditionally underrepresented in the medical workforce, addressing the issue involves recruiting more doctors from these communities and identifying those who have tangible connection to their communities as well as language skills and cultural understanding.

To mitigate the shortage of New Zealand trained doctors, New Zealand relies heavily on international medical graduates (**IMGs**) to fill gaps in the medical workforce and to offer knowledge and experience in healthcare techniques and practices that New Zealand trained doctors may not be regularly exposed to or able to complete training in. Movement of doctors between countries is normal and is not a one-way flow; however, relying on IMGs to fill gaps in the medical workforce is not sustainable. New Zealand is vulnerable to the growing global medical workforce shortage and global labour movement and expects to struggle to recruit

<sup>&</sup>lt;sup>11</sup> New Zealand Health Survey – Ministry of Health

<sup>&</sup>lt;sup>12</sup> Te Rangahau Ohu Mahi The Workforce Survey 2022, RNZCGP (2023).

<sup>&</sup>lt;sup>13</sup> Te Rangahau Ohu Mahi The Workforce Survey 2022, RNZCGP (2023); and New Zealand Medical Workforce in 2023, MCNZ (2023)

<sup>&</sup>lt;sup>14</sup> See Nixon, G., Davie, G., Whitehead, J., Miller, R., De Graaf, B., Lawrenson, R., ... & Crengle, S. (2023). Comparison of urban and rural mortality rates across the lifespan in Aotearoa/New Zealand: a populationlevel study. *J Epidemiol Community Health*, 77(9), 571-577; and Eggleton, K., Watts-Henwood, J., & Goodyear-Smith, F. (2024). Development of a rural strategy for an urban-based medical program: a pragmatic reality. *Rural and Remote Health*, *24*(1), 1-8.

<sup>&</sup>lt;sup>15</sup> New Zealand Medical Workforce in 2023, MCNZ (2023)

<sup>&</sup>lt;sup>16</sup> See https://www.racp.edu.au/news-and-events/media-releases/workforce-data-shows-physician-shortagesacross-aotearoa-new-zealand

<sup>&</sup>lt;sup>17</sup> New Zealand Medical Workforce in 2023, MCNZ (2023)

skilled doctors who are in significant global demand.<sup>18</sup> In addition, fewer than 40% of IMGs remain in New Zealand two years after they are registered compared to New Zealand graduates, 98% of whom stay two years post-registration with over 75% remaining after 10 years.<sup>19</sup>

### 2.4.2. More diversification in the provision of medical training

Enabling diversification in who, where and how medical students are trained presents opportunities to address the lack of doctors practicing in primary and community care in provincial and rural locations.

# Having more diverse entry pathways into medical training may help improve the diversity of the medical workforce.

Primary care sits at the heart of New Zealand's health system as it is often the first-place people attend for care. In contrast to speciality care, it is more cost effective providing better quality of care at less expense.<sup>20</sup> To support their role in developing future doctors, student recruitment and selection processes need to give sufficient consideration and weight to align with evidence-based indicators of a future general practice career choice. Student admissions criteria needs to expand from focusing on selecting the very top academic performers from a pool of high-achieving applicants to include proactive recruitment of applicants who demonstrate traits linked to future practice as a GP (whether in terms of background, aptitude, demonstrated commitment to generalist practice outside the main urban centres etc.).

The current entry pathway has led to an under-representation of medical school applicants from rural areas and other underrepresented and underserved communities (such as Māori, Pacific people, disabled or from lower socio-economic or refugee backgrounds). To address these disparities, the existing medical schools have introduced dedicated rural entry pathways as well as targeted admission schemes that reserve places for eligible applicants from other communities that have been traditionally underrepresented in medical training who have met the University Entrance standard but have not met the guaranteed entry score. These alternate entry schemes have helped improve the number of students from these traditionally underrepresented communities, without impacting the quality of graduates. However, they are not sufficient on their own to solve our most pressing workforce problems.

Adjusting selection processes by introducing an entry pathway that reduces the reliance on scholastic achievement at secondary school and values tertiary education attainments, complementing this with other selection tools, may further help improve the diversity of the medical workforce. It may lead to an increase in enrolments of students from rural backgrounds and other traditionally underrepresented communities. This is important as international research demonstrates that doctors from these communities are more likely to practice in regions they originate from and pursue careers in general practice.<sup>21</sup>

Encouraging students with a bachelor's degree to undertake medical training would further help diversify our student population. This approach, commonly known as a graduate-entry medical programme, supports the creation of a medical workforce that has the aptitude and

<sup>&</sup>lt;sup>18</sup> Health Workforce Plan 2023/24, Health NZ (July 2023)

<sup>&</sup>lt;sup>19</sup> New Zealand Medical Workforce in 2023, MCNZ (2023)

<sup>&</sup>lt;sup>20</sup> See Starfield, B., Shi, L., & Macinko, J. (2005). Contribution of primary care to health systems and health. *The milbank quarterly*, *83*(3), 457-502.

<sup>&</sup>lt;sup>21</sup> See e.g., Dowell, J., Norbury, M., Steven, K., and Guthrie, B., (2015) Widening Access to Medicine May Improve General Practitioner Recruitment in Deprived and Rural Communities: Survey of GP Origins and Current Place of Work, BMC Medical Education 15:165

interest to provide primary care in rural and provincial areas.<sup>22</sup> Having undertaken previous study would help students draw on the broader range of skills needed by future doctors, such as patient care, leadership, financial literacy, and teamwork. Graduate entrants are more likely to make an informed career choice because of their wider life experiences and will have the additional maturity and strengthened interpersonal skills necessary to provide a diverse multiskilled medical workforce<sup>.23</sup>

#### Increasing opportunities to train in rural areas will contribute to additional demand for and opportunities to work in rural areas and primary care settings.

As noted in section 2.3, even though one in five people live in a rural area, there is an uneven distribution of doctors in New Zealand, with a lower proportion based in rural and provincial areas. It is important that the number of doctors and health practitioners working in rural communities is increased to ensure better access to primary care services.

A recent study found that graduates who participated in a rural immersion programme were six times more likely than non-participants to express an interest in working rurally. They were four times more likely to be interested in practising in a regional area<sup>24</sup> They were more likely to practice in rural areas if they originated from a rural area and were provided opportunities to train rurally (although this does not preclude students raised in urban areas from being interested in working rurally or practising in regional areas and vice versa).

Current medical training pathways provide limited opportunities for medical students to train in rural areas. There is some exposure to rural health settings for those who opt-into the rural immersion schemes offered but places in these schemes are limited. The only exposure other students have is through community-based placements in Years 4 to 6. These placements are of short duration (between two and six weeks) and studies have shown that such placements do not increase rural workforce participation during early healthcare careers.<sup>25</sup>

Longer duration placements are associated with a substantial increase in returning to practice in a rural area after training.<sup>26</sup> The length of the programme also influences the likelihood of practicing rurally. One Australian study identified that students immersed in a rural programme for one, two and more than two years were 1.79, 2.26 and 4.43 times more likely to practice in a rural location compared to students with no rural immersion.<sup>27</sup> This is, in part, because medical students on longer duration rural placements form closer connections

- <sup>25</sup> Darlow, B., Brown, M., McKinlay, E., Gray, L., Purdie, G., & Pullon, S. (2023). Influence of a rural interprofessional education placement on the rural health workforce: working in primary care, rural settings, and with Māori. *Journal of Primary Health Care*, *15*(1), 78-83.
- <sup>26</sup> Kondalsamy-Chennakesavan, S., Eley, D. S., Ranmuthugala, G., Chater, A. B., Toombs, M. R., Darshan, D., & Nicholson, G. C. (2015). Determinants of rural practice: positive interaction between rural background and rural undergraduate training. *Medical Journal of Australia*, 202(1), 41-45.
- <sup>27</sup> O'Sullivan B, McGrail M, Russell D, Walker J, Chambers H, Major L, et al. Duration and setting of rural immersion during the medical degree relates to rural work outcomes. *Medical Education* 2018; **52**: 803-815.

<sup>&</sup>lt;sup>22</sup> Kumwenda, B., Cleland, J., Greatrix, R., MacKenzie, R. K., & Prescott, G. (2018). Are efforts to attract graduate applicants to UK medical schools effective in increasing the participation of under-represented socioeconomic groups? A national cohort study. *BMJ open*, 8(2).

<sup>&</sup>lt;sup>23</sup> Peile, E., & George, C. (2007). Should all medical students be graduates first? *BMJ*, 335.

<sup>&</sup>lt;sup>24</sup> Abid, Y., Connell, C. J., Sijnja, B., Verstappen, A. C., & Poole, P. (2020). National study of the impact of rural immersion programs on intended location of medical practice in New Zealand. *Rural and Remote Health*, 20(4), 1-11

with the local community, increasing their desire to settle there. Meaningful relationships shape their learning and professional aspirations.<sup>28</sup>

There has been a steady decline in the proportion of medical graduates expressing an interest in general practice and rural medicine as a future speciality (declining from 22.2% in 2016 to 16.2% in 2020). To meet our health workforce needs in rural areas and primary and community care settings, we need to diversify the provision of medical education to allow specialisation in general practice or rural hospital medicine for those who are interested in pursuing these vocational scopes of practice.

# Establishing a provincial medical school will positively influence the health, social, economic and research activity of the regions in which it is situated, and students are studying.

Medical schools are an important part of the workforce pipeline. Studies have shown that those located in major urban areas deliver education with a metropolitan focus and programmes are often led by hospital specialists and so are less likely to encourage medical students to pursue a career in rural medicine or primary care. In New Zealand, for instance, graduating doctors are 37% less likely to have an intention to work rurally compared to when they entered medicine.<sup>29</sup> Recent data showed that only 7% of doctors at eight years post-graduation worked in small towns or communities, despite several initiatives to lift this number.<sup>30</sup>

Provincial or rurally situated medical schools that integrate rural clinical placements into the curriculum have the greatest success for producing doctors who work rurally and in general practice.<sup>31</sup> This is because these measures reinforce positive and realistic messages about practicing medicine in rural areas and provide opportunities to build generalist approaches to clinical care. In addition, medical students have more opportunity to work in multidisciplinary teams, alongside nursing and other allied health staff, promoting good foundations for future work practices in an integrated model of care.

The impact that the establishment of a medical school has goes beyond an increase in medical school places and the ensuing increase of the medical workforce. It also has the potential to support the health, social, economic and research activities of the regions in which it is situated, and students are studying. It effectively medicalises these regions through the partnerships that are created between the medical school and local health systems, community engagement in healthcare and acquisition of equipment and technological advance.<sup>32</sup>

The health outcomes of the local populations may be positively impacted with medical students immersing themselves into a community, better community engagement, provision of community-based health initiatives and an increase in access to healthcare to

<sup>&</sup>lt;sup>28</sup> Kelly, L., Walters, L., Rosenthal, D. Community-based medical education: is success a result of meaningful personal learning experiences? Educ Health (Abingdon) 2014; 27: 47-50

<sup>&</sup>lt;sup>29</sup> Poole, P., Wilkinson, T.J., Bagg, W., Freegard, J., Hyland, F., Jo, C.E., et al. Developing New Zealand's medical workforce: realising the potential of longitudinal career tracking. *New Zealand Medical Journal* 2019; 132: 65-73.

<sup>&</sup>lt;sup>30</sup> Wilkinson, T., Rudland, J., Salkeld, A., Hyland, F., Poole, P., Bagg, W. et al. *National report on doctors eight years after graduating from New Zealand medical schools in 2011-2013*. The New Zealand MSOD Steering Group, 2022.

<sup>&</sup>lt;sup>31</sup> McGrail, M. R., Doyle, Z., Fuller, L., Gupta, T. S., Shires, L., & Walters, L. (2023). The pathway to more rural doctors: the role of universities. *The Medical journal of Australia*, 219, S8-S13.

<sup>&</sup>lt;sup>32</sup> Danish, A., Blais, R., & Champagne, F. (2019). Strategic analysis of interventions to reduce physician shortage in rural regions. *Rural and Remote Health*, *19*(4), 1-3.

underserved groups. Research indicates that this impact is not limited to measurable health outcomes but also non-clinical factors such as health behaviours, and social and economic factors.<sup>33</sup> A medical school that actively pursues a community engagement approach to generate ideas, adapts processes and creates relationships between itself and the communities it serves helps alleviate barriers to healthcare, as well as identifies and implements interventions to improve health outcomes.<sup>34</sup>

In addition to being a source of teaching and medical job creation and contributing to spending in the local economy, a new medical school can support innovation and healthcare research, encourage economic growth around research clusters and lead to the development of a highly skilled workforce across academia, industry, and healthcare in the region. The ability to undertake quality research through affiliation with local hospitals and health providers has been found to have a positive effect on the retention and motivation of staff. Improved research activity is also directly associated with better patient outcomes.<sup>35</sup> This is especially important for rural areas, where the establishment of a medical school can lead to the growth in rural health research activity that serves the unique needs of rural residents whilst at the same time better informing rural health policy.

## 2.5. Enabling environment

Increasing the number of doctors trained in New Zealand and diversifying the provision of medical training needs an enabling environment that has capability and capacity to provide quality training environments across a range of health settings.

# Health providers are currently struggling to provide enough clinical placements to meet the existing training demand.

A critical part of undergraduate medical training occurs when medical students complete clinical placements. In the current medical programme, these placements occur predominantly in Years 4 to 6 and help medical students link theory to practice and build the knowledge, skills and attributes essential for practice. Clinical placements occur in a variety of health settings although most time is spent in teaching hospitals. Prevocational training (PGY1 and PGY2) also participate in clinical placement-based training, often in the same or similar health facilities as undergraduate medical students. Approximately 3,200 medical students and intern trainees complete more than 105,000 weeks of clinical placements every year in New Zealand.

The time and skills required to offer supervision reflect the level of training needed by the medical student or PGY1 or PGY2 intern. More supervision is required in the early years of training and this is often intense. It includes being aware of students' level of knowledge and training, their educational goals and progress against these, provision of effective feedback as well as providing practical oversight of the performance of clinical tasks.

Clinical placement capacity and clinical supervision capability sit in a wider set of training pressures on the health system. Clinical supervision is offered from a range of health practitioners (not just doctors). Health practitioners tasked with supervising medical students are also expected to mentor PGY1 and PGY2 interns, vocational trainees depending on the

<sup>&</sup>lt;sup>33</sup> Rodríguez, L., Banks, T., Barrett, N., Espinoza, M., & Tierney, W. M. (2021). A medical school's community engagement approach to improve population health. *Journal of Community Health*, 46, 420-427.

<sup>&</sup>lt;sup>34</sup> Hashem, F., Marchand, C., Peckham, S., & Peckham, A. (2022). What are the impacts of setting up new medical schools? A narrative review. *BMC medical education*, 22(1), 759.

<sup>&</sup>lt;sup>35</sup> Hashem, F., Marchand, C., Peckham, S., & Peckham, A. (2022). What are the impacts of setting up new medical schools? A narrative review. *BMC medical education*, 22(1), 759.

area of speciality, some IMGs and international students. They often supervise and monitor students from other health disciplines as well, which creates additional pressure.

Clinical training in primary care placements are a particular challenge. General practices are private businesses that often do not have the necessary physical spaces or a consistent supervisor availability, causing students to be squeezed into overpopulated primary care placements, decreasing their quality of learning. These pressures impact the ability of health providers to provide clinical placements to medical students. This is reflected in data collected annually by the Royal New Zealand College of General Practitioners (**RNZCGP**). While the proportion of GPs providing at least one type of vocational training has increased over the past decade (**Table 2**), the proportion teaching undergraduate medical students has declined (**Table 3**).

| Year<br>(respondents)                 | 2014<br>(2,069) | 2016<br>(1,816) | 2018<br>(2,773) | 2020<br>(2,830) | 2022<br>(3,356) |
|---------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Provide at least one type of training | 34              | 39              | 39              | 49              | 47              |
| Do not provide training               | 66              | 61              | 61              | 51              | 53              |

| nable et l'electricage et recipientacité promanig a annuig aj type                             |               |               |                 |                 |                 |
|--|---------------|---------------|-----------------|-----------------|-----------------|
| Type of training provided  | 2014<br>(708) | 2016<br>(702) | 2018<br>(1,104) | 2020<br>(1,380) | 2022<br>(1,585) |
| Teacher of undergraduate medical students  | 78            | 79            | 75              | 58              | 54              |
| GPEP 1 teacher   | 20            | 24            | 26              | 23              | 24              |
| Mentor of a registrar in GPEP 2/3  | 19            | 24            | 24              | 22              | 24              |
| Supervisor of house officers doing<br>postgraduate community-based<br>runs                     | -             | -             | 10              | 8               | 12              |
| GPEP medical educator  | 12            | 10            | 11              | 7               | 8               |
| Teacher or educational facilitator<br>for the Division of Rural Hospital<br>Medicine programme | -             | 2             | 2               | 2               | 2               |

#### Table 3: Percentage of respondents providing training by type

GPEP = General Practice Education Programme.

The exposure medical students get while on clinical placement is structured mainly around specific topics or the specialisations of the clinical supervisor. While medical students are required to undertake long-term case studies, opportunities to learn by following a patient's journey are limited as students move through rotations quickly, often in diverse geographic locations.

The existing medical schools have entered into Clinical Access Agreements (**CAAs**)<sup>36</sup> to enable medical students access to health settings for the practical components of their training. Clinical placements are not nationally coordinated, and CAAs are organised by individual contracts at placement settings where the University pays the placement site (for

<sup>&</sup>lt;sup>36</sup> Health NZ | Te Whatu Ora and some General Practices, Community-based Rural Hospitals, Integrated Family Medical Centres, Accident and Emergency Clinics and other health service providers

example, the GP practice) to host a student for a specified period. An estimated value by the Ministry of Health of the payment by the existing medical schools for CAAs is approximately s 9(2)(b)(i) There is an artificial geographic boundary that guides which regions each medical school seeks placements in. This can hinder medical students who were raised outside the geographic boundary corresponding with their medical school gaining a clinical training placement in their local community.

# Training capacity will need to be increased to cope with an increased number of medical students.

To grow the number of doctors trained in New Zealand, we need to strengthen access to and the capability of clinical placements in a wide range of health settings. Using a wider range of clinical settings will reduce the impact on some hospital services that may be over-stretched in terms of offering clinical supervision. The medical training model focuses on hospital care rather than primary and community health settings. In reality, most healthcare is offered in the community. Evidence supports in-place learning, recommending that training be based in primary and community settings so that graduate doctors have locally relevant competencies as well as expanding the number of training placements available. Achieving this requires an increased number of training sites across New Zealand in health services that have the infrastructure and teaching capacity to train medical students.

Increases to training capacity and the provision of new training pathways depend on the health system's capability to provide access to quality training environments. Service delivery priorities, workforce shortages and infrastructure constraints affect the availability of clinical training placements in hospitals and primary and community care settings in urban, provincial and rural areas. The lack of access to suitable clinical training placements, supervisors and educators impacts the ability of the system to effectively manage increases in the number of trainee places. This creates bottlenecks during medical school, in PGY1 and PGY2 and in vocational training. These bottlenecks are more acute in areas experiencing increased workforce shortages or where there is limited ability to reallocate resources. The issues are particularly acute for primary and community care settings which are already overburdened meeting clinical needs and have significant existing workforce pressures and are therefore less likely to be able to support clinical training placements.

Supporting additional training capacity is a critical interdependency for the success of any efforts to increase the number of New Zealand-trained doctors. While outside of the scope of the PBC, this dependency, and the work needed to correct gaps, is acknowledged.

## 2.6. Problem statements

Informed by the workforce challenges identified above, the following problem statements have been identified:

- There is a shortage of doctors in New Zealand, with an estimated 1,700 additional doctors needed to meet current staffing shortages and an additional 3,200 doctors needed by 2032.
- New Zealand produces fewer medical graduates than other OECD countries increasing reliance on internationally trained doctors and contributing to shortages.
- There has been a steady decline in the proportion of medical students graduating from the existing medical schools expressing a preference to enter general practice or rural hospital medicine specialties.
- Maldistribution of doctors reduces access to healthcare in areas experiencing medical workforce shortages.

- The medical workforce is not representative of the New Zealand population and recruiting IMGs cannot address this problem.
- There is insufficient capacity and capability in health settings to provide consistent high-quality training.
- There are gaps in training provision in some regions and types of health settings, limiting the availability of clinical placements.

These problem statements are not exhaustive but represent key motivations for the PBC. Problem statements frame the programme investment objectives (discussed in section 0).

# 2.7. Opportunity to address problems

This section provides an overview of the opportunities that could address the problem statements (**Table 4**). The strategies and policies identified in section 2.1 are also considered to ensure strategic alignment of the proposed investment.

| Problem  | Opportunity  | Alignment  |
|--|--|--|
| There is a shortage of<br>doctors in New Zealand,<br>with an estimated 1,700<br>additional doctors needed<br>to meet current staffing<br>shortages.  | Increasing medical training capacity<br>provides an opportunity to build the<br>pipeline of the future medical<br>workforce.<br>Additional training capacity<br>increases the number of training<br>places, which in turn leads to more<br>of the medical workforce being<br>locally trained with New Zealand-<br>specific experience. This helps<br>ensure communities can access the<br>healthcare they need, particularly in<br>rural and provincial areas and<br>primary and community care<br>settings. | <ul> <li>Enabled by the Government<br/>Policy Statement for Health.</li> <li>Aligned with: <ul> <li>Pae Tū: Hauora Māori<br/>Strategy</li> <li>Te Mana Ola: Pacific<br/>Health Strategy</li> <li>Rural Health Strategy</li> <li>Health Workforce<br/>Strategic Framework</li> <li>Health Workforce<br/>Plan 2023/24</li> </ul> </li> </ul> |
| New Zealand produces<br>fewer medical graduates<br>than other OECD countries,<br>increasing reliance on<br>IMGs and contributing to<br>shortages.  | Increasing our medical workforce<br>capacity helps develop a local<br>workforce and will start to fill the<br>gap in the current medical<br>workforce, reducing reliance on<br>IMGs in the longer-term.  | Enabled by Government<br>Policy Statement for Health.<br>Aligned with:<br>• Health Workforce<br>Strategic Framework<br>• Health Workforce<br>Plan 2023/24  |
| There has been a steady<br>decline in the proportion of<br>medical students<br>graduating from the existing<br>medical schools expressing<br>a preference to enter<br>general practice or rural<br>hospital medicine<br>specialties. | Additional focus on primary and<br>rural care supports the drive to<br>improve the sustainability of<br>general practice. A graduate entry<br>pathway may increase retention in<br>primary care as entry pathways can<br>be designed and personal<br>motivation assessed consistent with<br>required health workforce<br>outcomes.<br>Students will be exposed to primary<br>and rural care practices significantly<br>more than current medical   | <ul> <li>Aligned with the:</li> <li>Rural Health Strategy</li> <li>Health Workforce<br/>Strategic Framework</li> <li>Health Workforce<br/>Plan 2023/24</li> </ul>  |

Table 4: Opportunities to address medical workforce capacity issues

| Problem   | Opportunity  | Alignment   |
|---|--|---|
|   | students, enabling greater choice in<br>future career paths.<br>Diversifying the provision of<br>medical education will ensure that<br>students work inter-professionally<br>to develop their understanding of<br>the entire health team, encouraging<br>future innovation, collaboration and<br>productivity.   |   |
| Maldistribution of doctors<br>reduces access to<br>healthcare in areas<br>experiencing medical<br>workforce shortages.                              | Diversifying the provision of<br>medical education offers an<br>opportunity for individuals to<br>develop local connections, helping<br>local applicants to become<br>embedded in the health workforce<br>for their local community, including<br>graduates who may be more<br>motivated to settle in more rural<br>areas.   | <ul> <li>Aligned with:</li> <li>Pae Tū: Hauora Māori<br/>Strategy</li> <li>Te Mana Ola: Pacific<br/>Health Strategy</li> <li>Rural Health Strategy</li> <li>Health Workforce<br/>Strategic Framework</li> <li>Health Workforce<br/>Plan 2023/24</li> </ul>  |
| The workforce is not<br>representative of the New<br>Zealand population and<br>recruiting IMGs cannot<br>address this problem.                      | Diversifying the entry pathway will<br>actively draw from all parts of the<br>community to ensure the workforce<br>is more representative of the New<br>Zealand population.<br>Graduate entry gives students from<br>a range of educational backgrounds<br>the opportunity to demonstrate<br>aptitude to complete a medical<br>degree.<br>A new medical school based in a<br>new region will remove locational<br>barriers for some students, further<br>diversifying the medical workforce. | <ul> <li>Enabled by the Government<br/>Policy Statement for Health.</li> <li>Aligned with: <ul> <li>Health Strategy</li> <li>Pae Tū: Hauora Māori<br/>Strategy</li> <li>Te Mana Ola: Pacific<br/>Health Strategy</li> <li>Rural Health Strategy</li> <li>Health Workforce<br/>Strategic Framework</li> <li>Health Workforce<br/>Plan 2023/24</li> </ul> </li> </ul> |
| There is insufficient<br>capacity and capability in<br>health settings to provide<br>consistent high-quality<br>training.                           | Increasing our medical workforce<br>provides opportunities to address<br>long-standing issues with access to<br>clinical training and supervision. It<br>provides an opportunity for a wider<br>range of health practitioners to be<br>involved in providing clinical<br>supervision.  | <ul><li>Aligned with the:</li><li>Health Strategy</li><li>Health Workforce<br/>Plan 2023/24.</li></ul>  |
| There are gaps in training<br>provision in some regions<br>and types of health<br>settings, limiting the<br>availability of clinical<br>placements. | Partnering with the rural health<br>workforce to improve and increase<br>clinical placements in rural settings.<br>Providing infrastructure support to<br>GP clinics (such as additional<br>rooms) will help grow clinical<br>placement capacity in primary and<br>community care settings.<br>A new medical school will offer<br>career development opportunities<br>for current medical practitioners  | <ul> <li>Aligned with the:</li> <li>Health Strategy</li> <li>Rural Health Strategy</li> <li>Health Workforce<br/>Plan 2023/24.</li> </ul>   |

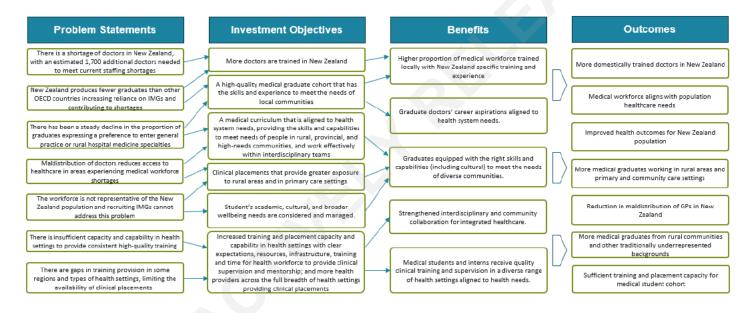
| Problem | Opportunity   | Alignment |
|---------|---|-----------|
|         | who wish to become involved in clinical education and research. |           |

IMG = international medical graduate.

## 2.8. Investment objectives, existing arrangements and business needs

Investment objectives describe the anticipated outcomes from the investment and are a component of the evaluation criteria used for assessing the potential options. The investment objectives are based on the Health Workforce Plan, accompanying strategies and the problems identified in section 0. They are also informed by the opportunities identified in section 0. **Figure 4** (over the page) illustrates the links between the identified problems, the investment objectives, the expected benefits and outcomes.

# Figure 4: Linkages between problem statements, investment objectives, benefits and outcomes



An investment logic map was developed, and the following investment objectives agreed by the Ministry of Health and Health NZ:

- More doctors are trained in New Zealand.
- A high-quality medical graduate cohort that has the skills and experience to meet the needs of local communities.
- A medical curriculum that aligns to health system needs, provides the skills and capabilities to meet needs of people in rural, provincial and high-needs communities and work effectively in interdisciplinary teams.
- Clinical placements provide greater exposure to rural areas and offered in primary and community care settings.
- Student's academic, cultural and broader wellbeing needs are considered and managed.
- Increased training and placement capacity and capability in health settings with clear expectations, resources, infrastructure, training and time for the health

workforce to provide clinical supervision and mentorship, and more health providers across the full breadth of health settings providing clinical placements.

**Table 5** provides further information on the existing arrangements and business needs for each of the investment objectives.

| Investment<br>Objective One | More doctors are trained in New Zealand  |  |  |
|-----------------------------|--|--|--|
| Existing<br>Arrangements    | <ul> <li>There is a shortage of doctors across New Zealand. This is<br/>especially visible in rural areas and in specialities such as general<br/>practice.</li> </ul>   |  |  |
|                             | <ul> <li>Even though there has been continuous growth in doctor numbers<br/>over the past decade, the baseline deficit has not been addressed.<br/>New Zealand is not producing enough doctors to meet current<br/>staffing shortages and there is not a clear plan to address future<br/>needs. This means that there are fewer doctors available to respond<br/>to growing healthcare demands. This has a negative impact on<br/>health outcomes.</li> </ul> |  |  |
|                             | <ul> <li>The total number of doctors required to offer healthcare increases<br/>year by year in response our growing and aging population and<br/>changes to the makeup of our workforce. This workforce is also<br/>aging, with many doctors in mid- to late-career stages considering<br/>opportunities for career breaks and retirement. Others are moving to<br/>part-time work.</li> </ul>  |  |  |
|                             | <ul> <li>There is no shortage of New Zealanders wanting to train as doctors.<br/>Limitations are driven by the number of training places available for<br/>students at medical schools, clinical training and in PGY1 and PGY2<br/>clinical attachments. Medical school intake is capped by government<br/>due to the high costs of provision, and the current cap on funded<br/>places is 614 from 2025.</li> </ul>   |  |  |
|                             | • To address workforce shortages and fill vacancies in certain<br>specialities and locations, New Zealand relies heavily on IMGs. This<br>is not ideal as IMGs are less likely to remain here compared to New<br>Zealand trained doctors. The IMG workforce lacks familiarity with the<br>New Zealand healthcare system, may experience cultural or<br>language barriers and uncertainty around the provision of culturally<br>appropriate care for Māori.     |  |  |
| Business Needs              | <ul> <li>There are enough doctors to meet the health needs of the New Zealand population.</li> </ul>   |  |  |
| 0                           | <ul> <li>A higher proportion of the medical workforce has New Zealand-<br/>specific training and experience.</li> </ul>  |  |  |
|                             | <ul> <li>There are more training places for New Zealanders in our medical<br/>schools in a programme that is demonstrably aligned with required<br/>health workforce outcomes.</li> </ul>  |  |  |
|                             | <ul> <li>Communities can access the healthcare they need, particularly in<br/>rural areas and through primary and community care settings. Wait<br/>times may reduce.</li> </ul>   |  |  |
| Investment<br>Objective Two | A high-quality medical graduate cohort that has the skills and experience to meet the needs of local communities   |  |  |
| Existing<br>Arrangements    | Workforce pressures are acute for doctors working in rural areas and primary and community care settings, including in general practice.   |  |  |

Table 5: Summary of the existing arrangements and business needs

|                               | <ul> <li>New Zealand has a shortage of GPs, particularly outside the main centres. This is likely to grow as the number of doctors specialising in general practice declines, as population growth increases and as a substantial number of GPs retire in the next five years or move to part-time work.</li> <li>There is a maldistribution of doctors in New Zealand with a lower proportion based in rural and provincial areas. This reduces access to healthcare in these areas which can contribute to delays in care and worsen health outcomes.</li> </ul> |
|-------------------------------|--|
| Business Needs                | <ul> <li>An entry pathway that reduces the reliance on scholastic achievement at secondary school and values tertiary education attainments.</li> <li>Raise enrolments of students from rural and provincial areas and backgrounds that are traditionally underrepresented in medical</li> </ul>   |
|                               | <ul> <li>The medical graduate cohort is more representative of the</li> </ul>  |
|                               | communities they serve.  |
|                               | <ul> <li>A greater proportion of the medical workforce is trained in rural and<br/>provincial areas and primary and community care settings.</li> </ul>  |
| Investment<br>Objective Three | A medical curriculum that aligns to health system needs, provides the<br>skills and capabilities to meet needs of people in rural, provincial and<br>high-needs communities and works effectively in interdisciplinary<br>teams.   |
| Existing<br>Arrangements      | • The medical workforce is not representative of the New Zealand population. Some population groups are under-represented, including people from rural, provincial and high-needs communities.   |
|                               | <ul> <li>While different populations have been represented in recent intakes<br/>to medical schools, a significant challenge remains to ensure the<br/>New Zealand population is represented in the medical workforce.</li> </ul>  |
| Business Needs                | <ul> <li>Recruitment and selection processes consider and align with<br/>evidence-based indicators of future general practice career choice<br/>using international best practice selection criteria.</li> </ul>   |
|                               | <ul> <li>The New Zealand medical workforce reflects the socio-cultural<br/>demographics of New Zealand society.</li> </ul>   |
| 20                            | <ul> <li>Shared teaching resources and working or learning in teams across<br/>health workforce teaching programmes is encouraged (for example,<br/>learning in teams of student doctors, nurses and other healthcare<br/>professionals).</li> </ul>   |
| 2                             | <ul> <li>An entry pathway that encourages applicants who have a health or<br/>science background, as well as a community of practice to draw from<br/>professionally, and collegial networks outside of medical workforce.</li> </ul>  |
| Investment<br>Objective Four  | Clinical placements provide greater exposure to rural areas and in primary care settings.  |
| Existing<br>Arrangements      | <ul> <li>Medical students have limited exposure to rural locations and<br/>primary and community care settings under the current medical<br/>training pathway.</li> </ul>  |
|                               | <ul> <li>The existing undergraduate pathway is designed to expose students<br/>to a wide range of medical specialties and health settings to lay the<br/>foundation for completing PGY1 and PGY2 in a diverse range of<br/>settings.</li> </ul>  |

|                              | <ul> <li>Most medical students undertake only short placements (two to six weeks) in community care settings over Years 4 to 6 of the current medical programmes. Some students may participate in rural immersion schemes offered in Year 5, although they are not required to pursue this speciality after graduation.</li> <li>There has been a steady decline in the proportion of doctors expressing an interest in general practice and rural hospital medicine.</li> </ul> |
|------------------------------|---|
| Business Needs               | <ul> <li>Longer duration of clinical placements in rural areas and primary and<br/>community care settings.</li> <li>Greater proportion of medical graduates working in rural areas and</li> </ul>  |
|                              | primary and community care settings.  |
| Investment<br>Objective Five | Student's academic, cultural and broader wellbeing needs are considered and managed.  |
| Existing<br>Arrangements     | <ul> <li>Students are often assigned to clinical placements where the learning environment may not be at the highest standards, which may cause them to experience psychological distress.</li> <li>Students are required to undertake their first three years of study in</li> </ul>   |
|                              | Dunedin or Auckland, which may disrupt community and whānau connections they have in their home regions.  |
|                              | <ul> <li>The area in which students may undertake clinical placements is<br/>dependent on the medical school they are attending, which makes it<br/>difficult for some students to be placed in their local community.</li> </ul>   |
|                              | <ul> <li>Students are often required to travel large distances to undertake<br/>short duration clinical placements, causing them to be away from<br/>their support networks and placing them under significant financial<br/>strain.</li> </ul>   |
| Business Needs               | <ul> <li>A medical workforce that is productive and motivated to deliver<br/>quality care and achieve better health outcomes, operating in an<br/>environment of continuous improvement.</li> </ul>   |
|                              | <ul> <li>Better opportunities for students to undertake clinical placements in<br/>their local community if they want to.</li> </ul>  |
|                              | <ul> <li>Students located in the same region for most of their medical<br/>training, enabling them to develop and maintain support networks<br/>and reducing financial pressure.</li> </ul>   |
|                              | <ul> <li>Training environments that are supportive of the cultural and<br/>wellbeing needs of medical students and trainee doctors.</li> </ul>  |
| Investment<br>Objective Six  | Increased training and placement capacity and capability in health<br>settings with clear expectation, resources, infrastructure, training and<br>time for health workforce to provide clinical supervision and<br>mentorship, and more health providers across the full breadth of health<br>settings providing clinical placements.   |
| Existing<br>Arrangements     | <ul> <li>There is insufficient capacity and capability in health settings to<br/>provide consistent high-quality training to students, as well as are<br/>gaps in training provision in some regions and types of health<br/>settings, limiting the availability of clinical placements.</li> </ul>   |
|                              | <ul> <li>Clinical placement capacity and capability for medical students sits in<br/>a wider set of training pressures on the health system.</li> </ul>   |
|                              | There are approximately 3,200 medical students in New Zealand who need to complete more than 105,000 weeks of placements every year. These students all require clinical supervision and  |

|                | mentorship from a stretched health workforce, who also need to mentor PGY1 and PGY2 interns and IMGs.   |
|----------------|---|
| Business Needs | <ul> <li>Increased training capacity across all health setting, including infrastructure investment at GP clinics.</li> <li>More options for clinical placement, increasing the exposure of medical students to a broader range of disciplines</li> <li>A more consistent and organised approach to the supervision and training provided to medical students and trainee doctors.</li> </ul> |

CAA = Clinical Access Agreement; GP = general practitioner; IMG = international medical graduate; PGY1 = postgraduate Year 1 (prevocational); PGY2 = postgraduate Year 2 (prevocational).

## 2.9. Scope and key requirements

The potential business scope defines the boundaries (or limitations) and the key requirements to satisfy the business requirements to deliver the investment objectives, identified in section 0.

The potential scope of the investment has two key requirements, supported by a robust enabling environment.

The first is increasing the number of doctors who are trained in New Zealand. The proposed investment needs to support a substantial increase in student numbers (with capacity to upscale from there). For instance, establishing a new medical school with an initial cohort of 120 medical students will help bridge the current needs gap in the medical workforce (as stated above the shortage is approximately 1,700 doctors) in a way that is cognisant of the broader workforce's ability to provide for adequate clinical supervision and training. Over time, further up-scaling of the number of medical training placements across the system will support a more sustainable locally trained workforce.

The second requirement is that the way in which medical training is provided in New Zealand needs to be diversified to provide better opportunities for doctors to practice in primary and community care settings in provincial and rural locations. This includes widening the entry pathways to medical training to have a greater focus on aptitude and commitment to generalist practice in provincial and rural areas and primary and community care settings, providing a curriculum that promotes generalist practice throughout the programme, providing appropriate clinical experience (increasing the time students live, work and build connection to rural areas), and ensuring graduate outcomes align to health workforce outcomes (including the availability, accessibility, responsiveness, productivity and quality of this workforce).

A more targeted approach needs to be taken to meeting the healthcare needs of rural, regional, and high-needs communities by focusing on those committed to careers in primary care and who come from underrepresented and underserved communities. The medical curriculum needs to have a strong focus on primary and rural health, and students should have better opportunities to undertake longitudinal placements, including in a regional or rural location. The training programme needs to incorporate elements of interdisciplinary education to allow medical students to develop both a professional identity and identification with their own profession, as well as encourage teamwork skills and shape the attitude of openness towards other health professions especially in integrated models of care.

The proposed investment must be supported by a robust enabling environment. The programme needs to build health system capacity and capability to provide quality training environments for medical students in rural hospitals and primary and community care

settings. New clinical placements are needed rather than competing for existing clinical placement opportunities.

# 2.10. Potential benefits

This section describes the main potential benefits and risks associated with the proposed investment.

Investment benefits represent the tangible benefits that the programme will deliver if it meets the investment objectives. Informed by the opportunities in section 0, the following five benefits have been identified:

- 1. A higher proportion of the medical workforce has New Zealand-specific training and experience.
- 2. Graduate doctors' career aspirations align to health system needs.
- 3. Graduate doctors are equipped with the right skills and capabilities (including offering culturally safe care and practicing in culturally safe environments) to meet the needs of diverse communities.
- 4. Strengthened interdisciplinary and community collaboration for integrated healthcare.
- 5. Medical students and interns receive quality clinical training and supervision in a diverse range of health settings aligned to health needs.

This list is not exhaustive. Instead, it helps inform decisions on the preferred way forward and sets a framework for the future infrastructure and clinical training provider business cases. **Table 6** describes each benefit and identifies the manner in which the benefit can be measured.

| Benefits  | Description  | Measures   |
|---|--|--|
| A higher proportion of the<br>medical workforce has New<br>Zealand-specific training and<br>experience. | The programme supports an<br>intake of an additional 120<br>students per annum compared<br>to the 2025 intake (with<br>capacity to increase over time),<br>making a significant change to<br>the size of the workforce over<br>time. | <ul> <li>Increase in numbers of<br/>domestically trained<br/>doctors per head of<br/>population.</li> <li>Reduction in the gap<br/>between medical<br/>workforce and<br/>population healthcare<br/>needs.</li> <li>Improved health<br/>outcomes for New<br/>Zealand population.</li> <li>Reduction in the<br/>reliance on IMGs.</li> <li>Lower median age of<br/>medical workforce.</li> </ul> |
| Graduate doctors' career<br>aspirations align to health<br>system needs.                                | The programme enables<br>students who are focused on<br>working in rural areas and<br>primary and community care<br>setting to work in rural<br>communities.   | <ul> <li>Attraction of medical graduates to rural areas and primary and community care settings.</li> <li>Improved retention of GPs in rural, primary and community care settings.</li> </ul>  |

#### Table 6: Benefits and performance measures outlined in this PBC

| Benefits  | Description   | Measures   |
|---|---|--|
|   |   | <ul> <li>Reduction in<br/>maldistribution of GPs<br/>in New Zealand.</li> </ul>  |
| Graduate doctors are<br>equipped with the right skills<br>and capabilities (including<br>offering culturally safe care<br>and practicing in culturally safe<br>environments) to meet the<br>needs of diverse communities. | The programme broadens the<br>experience that students have<br>of different parts of the health<br>system, particularly with a focus<br>on increasing experience in<br>primary and rural care.  | <ul> <li>Increase in medical graduates from backgrounds that are traditionally underrepresented in medical programs.</li> <li>Wider range of students in medical training.</li> </ul>  |
| Strengthened interdisciplinary<br>and community collaboration<br>for integrated healthcare.   | The programme increases<br>appreciation for the role of each<br>discipline in the provision of<br>primary and community care,<br>leading to increased<br>collaboration between different<br>specialities and more general<br>healthcare.                          | <ul> <li>Improved collaboration,<br/>understanding of<br/>connections in the<br/>health sector and<br/>integrated care across<br/>health workforces.</li> <li>Increase in training and<br/>placement capacity.</li> <li>More doctors wanting<br/>to train / supervise<br/>medical students.</li> </ul> |
| Medical students and interns<br>receive quality clinical training<br>and supervision in a diverse<br>range of health settings<br>aligned to health needs.   | The programme will build<br>training and placement capacity<br>and capability across the full<br>breadth of health settings<br>providing clinical placements<br>including in hospitals, rural and<br>provincial areas and primary<br>and community care settings. | <ul> <li>Improved experience in rural settings.</li> <li>Increased job satisfaction.</li> <li>Increase in training and placement capacity.</li> <li>More doctors wanting to train / supervise medical students.</li> </ul>   |

GP = general practitioner; IMG = international medical graduate.

#### 2.10.1. Unquantified benefits

**Table 7** summarises further benefits from the proposed investment. These are anticipated but cannot be easily quantified. They nevertheless support the case for investment.

| Unquantified benefit        | Description   |
|-----------------------------|---|
| Improved health<br>outcomes | <ul> <li>Improved health system capacity leading to better access to<br/>primary health care, leading to a reduction in amenable mortality<br/>and in ambulatory sensitive hospitalisations. It will lessen the<br/>pressure on emergency departments and secondary health<br/>services, freeing up resources that can be used elsewhere, and<br/>reduce the need for patients living in rural areas to undertake long<br/>journeys to access healthcare, ensuring they have faster access<br/>to medical attention. Greater GP capacity will also contribute to<br/>improvements in the continuity of care experienced by patients.</li> </ul> |

Table 7: Unquantified benefits of increasing medical training capacity

| Unquantified benefit   | Description  |  |
|--|--|--|
|  | <ul> <li>Having an increased number of GPs working in rural, provincial and under-served communities will reduce vacancies in these areas and, subsequently, recruitment costs. There may also be reduced churn through better career matching.</li> <li>Opportunities for improved research and innovation in healthcare through co-locating the medical school alongside research institutes, leading to innovative health-related technologies with potential commercial application.</li> <li>An opportunity to increase clinical training capacity, supporting greater sustainability in the training pathway.</li> </ul> |  |
| Economic contribution<br>to local communities                              | <ul> <li>Growth in teaching and medical job creation.</li> <li>Increased spending in the communities in which the medical school is located, as well as where medical students undertake clinical training.</li> <li>Reduced travel time (potentially leading to increased productivity) for currently underserved communities</li> </ul>  |  |
| Increased trust in the<br>health system                                    | <ul> <li>Increased confidence in health services due to a more accessible<br/>and available workforce, contributing to increased trust in the<br/>health system. The improved confidence in the health system<br/>may, in turn, result in improved participation in care and improved<br/>health outcomes.</li> </ul>  |  |
| Social benefits arising<br>from access to careers<br>and new opportunities | <ul> <li>The increased quality and number of placements brings new ideas and innovation into rural areas and primary and community care settings (in addition to increased capacity).</li> <li>New medical students may be recruited who would not previously have considered the medical profession, for instance, due to locational barriers or a lack of appropriate education pathways.</li> <li>Increased community connectivity for training doctors as they settle into communities where they have completed longer-term clinical training placements.</li> </ul>  |  |

#### 2.10.2. Disbenefits

In any change process, there are benefits as well as disbenefits (that is, the known downsides of making the investment). Unlike risks, which may be eliminated, disbenefits cannot be removed completely through programme or project actions. While they may be managed to an extent, disbenefits occur if the investment proceeds. The main disbenefits identified for the programme are set out in **Table 8**.

| Disbenefit  | Description and management approach   |  |
|---|---|--|
| Time required for<br>establishment of the<br>new medical school | An emphasis on co-design of the programme with the University of<br>Waikato will mean more intense consultation and engagement is required<br>as part of the programme (compared with a centrally designed and<br>implemented solution). There will be an opportunity cost of not directing<br>this time to other parts of the programme. |  |
| Overall impact on Vote<br>Tertiary Education                    | The initial cost includes tuition subsidies and equivalent full-time student ( <b>EFTS</b> ) funding. If Ministers were to decide that some tuition subsidies should be funded within baseline Vote Tertiary Education, this would  |  |

|                                  | impact the funding of other training areas (and at a disproportionate ratio, given the high tuition subsidies for medicine relative to other provision).  |
|----------------------------------|---|
| Overall impact on Vote<br>Health | Vote Health is also a set budget. If the costs associated with training medical students increase (such as the costs of clinical placements in non-hospital settings), this may impact the spend on other health workforces, or on healthcare delivery. |

## 2.11. Strategic risks

Strategic risks could impact delivery of the programme benefits. These are recorded in the Programme Risks and Opportunities Register and are managed across the programme of work. Risks identified as having the highest residual risk impacting the delivery of the programme benefits are summarised in **Table 9**. A full and detailed risk register for the programme is to be developed. Error! Reference source not found.

| Table 9: The main risks identified for increasing medical training capacity | The main risks identified for increase | sing medical training capacity |
|---|--|--------------------------------|
|---|--|--------------------------------|

| Risk   | Comments and risk management strategies  |  |
|--|--|--|
| Funding requirements for the<br>establishment of a new medical<br>school are greater than<br>anticipated meaning the<br>Government may need to provide<br>additional funds.  | The PBC is informed by best available cost information. This will continue to be updated as improved data becomes available. The business case process will identify funding and financing mechanisms to support affordability assessment before progressing the design of the preferred option(s) further.  |  |
| Failure to secure approval for<br>additional medical student<br>numbers (EFTS funding for 120<br>more students from 2028<br>onwards).  | Close engagement with the Ministry of Education, TEC and the<br>Treasury is needed to ensure increased funding is available to<br>manage tertiary system costs.  |  |
| s 9(2)(a)  |  |  |
| s 9(2)(b)(ii)  |  |  |
| Failure to secure enough clinical<br>placements for students impacting<br>on the programme's ability to<br>deliver the clinical training<br>components of the curriculum as<br>proposed or displacing existing<br>medical schools access to clinical<br>training placements. | Because most medical training occurs in clinical settings,<br>increasing the clinical supervision capacity of the whole sector<br>is a critical enabler of and dependency for any option to<br>increase the number of New Zealand-trained doctors. A<br>systems-wide approach to identifying potential additional<br>clinical placements (above what is currently available to<br>medical students at the Universities of Auckland and Otago) is<br>needed to support access to increased clinical training<br>capacity. § 9(2)(a) |  |

| Risk  | Comments and risk management strategies  |  |
|---|--|--|
|   | s 9(2)(b)(ii)  |  |
| The costs of establishment<br>significantly exceed budget<br>placing the whole institution at<br>risk.  | The University of Waikato will follow existing investment<br>practices, working alongside TEC to ensure that the<br>establishment of a new medical school does not create<br>significant risk.<br>Regular reporting to the ELG during the development of the<br>DBC.   |  |
| Strong opposition to the<br>investment programme, leading to<br>political concerns, delays and<br>ultimately re-work.                                     | Brief the Ministers of Health, Finance and Tertiary Education<br>and Skills regularly.<br>Complete a full CBA.<br>Develop a communications and engagement plan to ensure<br>appropriate engagement and consultation during the<br>subsequent stages of the programme.<br>Take active steps to addressing system capacity to show that<br>work to address a strategic risk is being developed alongside<br>models to increase the number of New Zealand trained<br>doctors. |  |
| If relevant iwi, hapu and other<br>interest groups are not engaged, it<br>is possible they may withdraw<br>their support for the investment<br>programme. | Robust and meaningful engagement with relevant iwi, hapu<br>and other interest groups needs to be carried out throughout<br>the project.   |  |

CBA = cost-benefit analysis; DBC = Detailed Business Case; EFTS = equivalent full-time student; ELG = Executive Leadership Group; PBC = Programme Business Case.

# 2.12. Assumptions, constraints and dependencies

This section sets out the assumptions, constraints and dependencies that may affect the delivery of future options and benefits.

#### 2.12.1. Assumptions

**Table 10** includes assumptions (that is, things that are accepted as true or as certain to happen, without proof). If they are not certain to happen, they may be a risk.

| Assumptions                      | Notes   |
|----------------------------------|---|
| Capable resources with capacity. | The PBC assumes that sufficient skilled resource can be sourced,<br>for both the construction of the medical school and the<br>development and teaching of the curriculum. The business case<br>process focuses on identifying specialist capabilities needed to<br>deliver the project and exploring where these will come from. |

 Table 10: Assumptions underpinning increasing medical training capacity

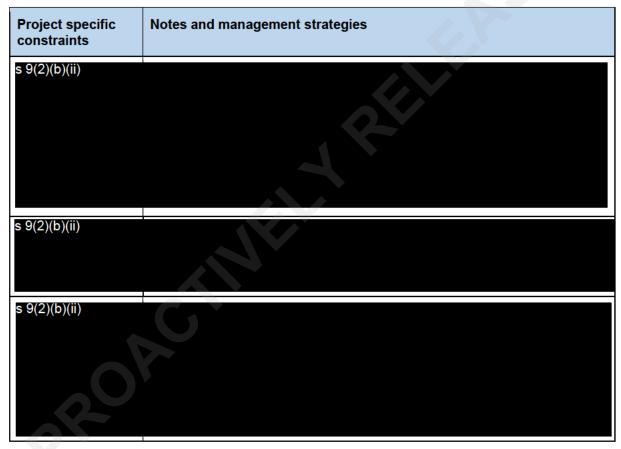
| Assumptions   | Notes   |  |
|---|---|--|
| Student interest in attending<br>the University of Waikato's<br>medical school. | Medical school places are heavily over-subscribed. This suggests<br>that new students can be attracted once the medical school has<br>been established. |  |
| Procurement.  | The Government Procurement Rules can be successfully applied to this type of investment.  |  |

PBC = Programme Business Case.

#### 2.12.2. Programme Constraints

The constraints listed in **Table 11** are limitations imposed on the programme proposal from the outset. The constraints will be considered when developing the options in the Economic Case.

| Table 11: Project | t specific o | constraints |
|-------------------|--------------|-------------|
|-------------------|--------------|-------------|



#### 2.12.3. Programme dependencies

**Table** 12 summarises the dependencies on which success is reliant (that is, external influences, actions or developments outside the scope of the programme). Dependencies will be carefully monitored during the programme of work. This will enable prompt action to be taken where necessary.

| General<br>dependencies                              | Notes and management strategies   |
|--|---|
| Certainty of Crown<br>funding                        | Delivery of the programme of work requires certainty that funding will be available.  |
| Stakeholder support                                  | The programme of work is dependent on ongoing support by Ministers, agencies, the ELG, partners and local communities, as well as academic programme approval.  |
| Infrastructure<br>Business Cases<br>gaining approval | The future Infrastructure Business Cases will enable the development of<br>the building that will house the new medical school. Without its approval,<br>the medical school may not be adequately equipped to teach the proposed<br>curriculum. |
| Availability of clinical<br>placements               | The programme of work is dependent on the availability of clinical placements, which are in demand and therefore limited.   |

ELG = Executive Leadership Group.

# 2.14. Strategic Alignment

The proposed investment has not been developed in response to a single specific strategy, but rather responds to the needs identified in several strategies that provide specific direction for population groups or health conditions. These strategies (outlined below in **Table 13**) inform the design and development of the preferred option. Collectively, these strategies highlight the need for a solution to grow the medical workforce.

| Strategy  | Alignment  |
|---|--|
| Government<br>Policy Statement<br>on Health 2024-<br>2027 | A key priority area for the Government is addressing critical health workforce<br>shortages and gaps in cultural competency. This can be done by introducing more<br>domestic training pathways and developing a workforce that is more<br>representative of the New Zealand population  |
| Health Strategy   | Investment ensures that New Zealand's medical workforce reflects our diverse communities and has the skills and capabilities required to meet our needs.   |
| Pae Tū: Hauora<br>Māori Strategy                          | Increasing medical training capacity helps ensure that the medical workforce is representative of the people it serves, has the necessary skills and competencies to deliver culturally safe and responsive health services and is future proofed. The workforce keeps pace with projected population growth and community needs.  |
| Te Mana Ola:<br>Pacific Health<br>Strategy                | This initiative supports Priority Area 5 by helping increase the representation of Pacific peoples among tertiary graduates with a health qualification. It also increases Pacific representation in the health workforce across localities and nationally, raises awareness among Pacific peoples of health careers and pathways and grows the number of Pacific health workers per population. |
| Rural Health<br>Strategy                                  | Investment aligns with the priorities described in the Rural Health Strategy as it values the rural workforce and better supports rural pathways and ongoing training. It supports clinicians to host rural placements and assists students to take up such placements.  |

#### Table 13: Strategic alignment

# 3. Economic Case

The Economic Case identifies the preferred way forward for the programme that optimises value for the Government and New Zealand. The Economic Case:

- outlines the investment objectives, critical success factors, benefits and costs used to evaluate the options
- explains how the long-list of options was developed and evaluated to identify a short-list of options
- describes the short-list of options in detail and the key features that support the achievement of the investment objectives and critical success factors
- assesses each short-listed option to identify the preferred way forward.

The preferred way forward aligns with the Government's commitment to address the critical shortage of doctors trained in New Zealand. We followed Treasury's Better Business Case guidance and conducted workshops with various stakeholders to develop assessment criteria and critical success factors, identify options and undertake options analysis.

# 3.1. Programme evaluation criteria

#### 3.1.1. Investment objectives

The investment objectives (described in section **0** in the Strategic Case) are used in conjunction with the critical success factors to develop a short-list and chose a preferred way forward. **Table 14** describes the investment objectives (repeated for ease of reference).

|   | Investment objective   |  |  |
|---|--|--|--|
| 1 | More doctors are trained in New Zealand.   |  |  |
| 2 | 2 A high-quality medical graduate cohort that has the skills and experience to meet the needs of local communities.  |  |  |
| 3 | <ul> <li>A medical curriculum aligned to health system needs, providing the skills and capabilities to:</li> <li>meet needs of people in rural, provincial and high-needs communities</li> <li>work effectively in interdisciplinary teams.</li> </ul>   |  |  |
| 4 | 4 Clinical placements provide greater exposure to rural areas and in primary and community care settings.  |  |  |
| 5 | Students' academic, cultural and broader wellbeing needs are considered and managed.   |  |  |
| 6 | <ul> <li>Increased training and placement capacity and capability in health settings with:</li> <li>clear expectations, resources, infrastructure, training and time for health workforce to provide clinical supervision and mentorship</li> <li>more health providers across the full breadth of health settings providing clinical placements.</li> </ul> |  |  |

#### 3.1.2. Critical success factors

**Table 15** sets out the critical success factors, which are attributes that are essential for the successful delivery of the programme of work. The critical success factors form part of the assessment framework that options are assessed against in the Economic Case. The critical success factors are as per Treasury Better Business Case guidance but have been refined following stakeholder feedback with proposal-specific criteria. More detail about the critical

success factors is included in Annex 4: Critical success factors and proposal-specific criteria.

| Table 15: Critica | I success factors |
|-------------------|-------------------|
|-------------------|-------------------|

| Critical success factor          | Description   |
|----------------------------------|---|
| Strategic fit and business needs | How well the option meets the investment objectives, related<br>business needs and service requirements and aligns with the<br>Government's strategies and policies.  |
| Potential value for money        | How well the option optimises value for money. The investment is<br>considered value for money if the option increases the number of<br>doctors working, or wanting to work, in primary or community settings<br>in rural and provincial communities, reduces wait times and improves<br>patient experience, and if this would not be achieved without the<br>investment. |
| Supplier capacity and capability | How well the option matches the ability of potential providers to<br>deliver the required services and results in a sustainable arrangement<br>that optimises value for money.  |
| Relative affordability           | How well the option can be delivered from likely available funding in a way that does not displace spending on other health priorities.   |
| Achievability                    | How well the option can be delivered in an acceptable timeframe to achieve the Government's priorities.   |

## 3.2. Developing and evaluating the long-list of options

On 16 May 2024, a workshop was held with representatives from the Ministry of Health, Health NZ, TEC and other stakeholders to identify the options for meeting the investment objectives and business needs. The options were identify ed using a framework focused on potential scope, programme solution, methods of programme delivery, implementation and funding.

To develop the short-list, the Ministry of Health undertook a qualitative assessment of potential options and removed those that clearly did not meet the investment objectives and the critical success factors. For instance, the investment objectives require more doctors to be trained in New Zealand. Any option that did not increase the number of students enrolled in medical school was removed. To close the gap between the number of new doctors and workforce capacity needs, a sizeable increase needs to be made to the funding cap on medical student numbers. Accordingly, we removed any option that proposed raising the cap on medical school training places in small incremental stages. While Health NZ estimated that an additional 285 places are required to close half the workforce gap, any option that proposed a single increase of this magnitude was also removed as this would cause significant issues for clinical training placement capacity and capability (that is, it is unachievable).

To achieve the investment objectives, the pathways and selection criteria for medical students as well as the medical curriculum needs to align with health system needs. Pathways need to steer graduates towards practicing in primary care specialities and in rural and provincial locations. They also need to provide the skills and capabilities to work effectively in interdisciplinary teams and meet the health needs of people in rural, provincial and high-needs communities. To do this, more emphasis needs to be placed on primary and community care settings. Options that solely focused on general medical training (with no rural medical focus) were removed. To encourage doctors to remain in provincial and rural communities after graduation, the preferred option needs to offer longitudinal placements in

rural areas and primary and community care settings. Options that did not have this component as a core feature were also removed.

This created a short-list of viable options, which was carried forward into the indicative CBA. A detailed description of the methodology used is provided in **Annex 5**: **Developing and evaluating the long-list of options**.

# 3.3. Creating a short-list of options

Three viable options were mapped into a short-list of options. The starting point is **Option 3** *Establish a new medical school focused on primary and rural health.* Option 3 reflects the Government's commitment to consider this option as part of the PBC. Two other options meet the potential scope of the investment and the key business requirements:

- Increase current intake at existing medical schools and expand the existing rural immersion programmes (**Option 1**).
- Create a medical training programme focused on rural health, jointly administered by existing medical schools (**Option 2**).

Option 1 is the minimum acceptable option from the perspective of student numbers, medical curriculum focus, and duration of clinical placements. For the purposes of comparability with Option 3, Options 1 and 2 were each set at an increase of 120 medical school places, with the first intake in 2028.

The status quo is included as a comparator to inform the assessment of the other short-listed options. It allows decision-makers to consider if the additional investment being sought through the three short-listed options would be better invested elsewhere.

#### 3.3.1. Option 0 – Status quo (Do minimum)

In accordance with Treasury guidelines, we have included a status quo option. This is described as a 'do minimum option" (rather than a 'do nothing' option) to reflect agreed initiatives to address workforce capacity pressures (such as raising the medical training funding cap by an additional 25 places in 2025). No changes would be made to the entry pathways for admission into medical school, the focus of the medical curriculum, or the arrangements for clinical placements.

Under this option, the two existing medical schools in New Zealand would continue to provide medical qualifications. The number of first-year medical school places that the Government funds would be limited to 589 students, spread across both medical schools (rising to 614 students in 2025). Duration of study for a Bachelor of Medicine and a Bachelor of Surgery would be six years (or five years for those with an existing bachelor's degree). The Year 1 health science course that undergraduate entrants need to complete, and the first two years of medical school (Years 2 and 3) would continue to be taught primarily on campus. Years 4 to 6 would be delivered predominantly in the same health settings as present.

The existing medical schools would continue to offer an admissions scheme focused on students who have a rural background designed to encourage people to train and return to their communities to work. They would also offer targeted admissions schemes that reserve places for eligible applicants from other underrepresented and underserved communities who have met the University Entrance standard but have not achieved the guaranteed entry score.

Both medical schools would also continue to offer a rural immersion programme that place students in a rural setting for the whole of Year 5 of medical school.

- The University of Otago would continue to offer a one-year RMIP. This programme would have capacity for 35 students (in 2025) who would spend Year 5 living and learning in small groups in one of nine rural communities: Wairoa, Tararua, Wairarapa, Marlborough, West Coast, Ashburton, Queenstown, Alexandra and Clutha.
- The University of Auckland would continue to offer its recently introduced RMIP. This programme would have capacity for up to 12 students (in 2025) who would spend Year 5 based in rural communities gain experience on placements at rural general practices and hospitals.

# 3.3.2. Option 1 – Increase current intake at existing medical schools and expand rural immersion programmes

This Option involves increasing the cap on the number of government-funded places at the existing medical schools by 120, with the ability to add further places over time. Additional places would be spread across both existing medical schools, with the expectation that the schools continue to offer their rural immersion programmes. This option assumes that the existing approach to student selection continues to be the basis for entry to medicine, although there will be an increased emphasis on selecting students through the rural and targeted admissions schemes.

Accommodating the proposed increase in medical student places may require changes to the teaching facilities at one or both medical schools, the costs of which would be met by reprioritising existing budgets. While it is assumed that the proposed increase in student numbers would be introduced from 2028, this option could be introduced incrementally on an earlier timeline subject to available teaching capacity.

Under this option, the additional clinical training placements would be required from 2030, as Years 2 and 3 of medical school would be predominantly taught on campus. Additional PGY1 and PGY2 clinical attachments would be required from 2033 and 2034. There would be no changes to the geographical reach of clinical placements for each medical school, training approaches or existing agreements between the medical schools and health providers. However, additional investment would be required to ensure there is sufficient clinical training placements and supervision capacity.

Option 1 recognises that the existing rural immersion programmes and admissions schemes are partially effective. Increasing the medical training placement cap provides the lowest cost option. It does not require additional Crown capital investment, enabling the capital investment associated with the other options to be directed elsewhere (although the costs associated with lifting the cap would still be required to deliver this and the other options).

# 3.3.3. Option 2 - Create a specialised medical training programme focused on rural health, jointly delivered by the existing medical schools

Under this option a specialised medical programme focused on rural health and based on a multidisciplinary model would be created that would provide a rurally based environment for longitudinal training. The programme would be jointly delivered by the existing medical schools, supported by other medical and community stakeholders, such as the RNZCGPs.

The initial cohort is 120 additional medical training places offered via existing rural admission pathways, with capacity to scale-up over time subject to clinical training placement capacity and student demand. The training programme appears to be built on the existing accredited medical curriculum offered by the existing medical schools. While it is assumed that the proposed increase in student numbers would be introduced from 2028, this option could be introduced incrementally on an earlier timeline subject to available teaching capacity.

This option would see students in Years 2 and 3 train on campus, split across the existing medical schools. The curriculum emphasises rural content: students would attend regular tutorials and spend one week each year with a rural health service. During Years 4 to 6, students would train at one of ten smaller rural hospitals (teaching hubs) located in provincial and rural locations spread across the country, with outplacement into rural health practices (spokes). For instance, they would undertake short duration clinical placements in rural general practices and/or rural hospital (Year 4), spend one year based in a rural community (Year 5) and undertake additional placements in rural general practices and/or rural hospital attachments at other times (Year 6).

Accommodating the proposed increase in student numbers while they are learning on campus may require changes to the teaching facilities at one or both medical schools, the costs of which would be met by reprioritising existing budgets. A moderate and scalable quantum of capital expenditure would be required to develop the rural teaching hubs, such as increasing the physical capacity and staffing capability associated with training students in rural health settings, expanding on existing network of rural placements where possible.

Like Option 1, this option requires new clinical training placement capacity in rural areas and specifically in primary and community care settings. Coordination is needed across both medical schools (as opposed to each medical school taking responsibility for their own placements). As Years 2 and 3 are predominantly on campus learning, the increase in health system capacity is required from 2030. PGY1 and PGY2 capacity is needed from 2033 and 2034. Accommodation support is required in provincial and rural health settings to support students on clinical training placements.

# 3.3.4. Option 3 - Establish a new medical school focused on primary and rural health

Option 3 establishes a new medical school with a specific focus on primary and rural health. Entry pathways and student selection criteria would be differentiated from those of the existing medical programmes, and designed to closely align with health workforce outcomes that address our greatest areas of shortage. For instance, admissions could be based on the completion of an undergraduate degree, along with other entry requirements that are good predictors of a student ultimately working in primary care specialities and in rural and regional communities.

An initial cohort of 120 medical students per annum is proposed, with the ability to scale-up subject to clinical training placement availability. The medical curriculum would be delivered over four years, focusing on rural, primary and community care. Year 1 of the programme would be offered on campus at a new medical school, diversifying where medical training currently takes place. Years 2 to 4 would consist of year-long placements in rural health settings, including one year in a GP clinic in a rural community. The proposal to use an existing medical programme with a strong record of success in delivering the desired workforce outcomes reduces the implementation risk associated with this option.

Year 2 would be primarily taught at one of six regional hospitals and is intended to prepare students for their local or adjacent longitudinal placements in Year 3, which is based in a community with a maximum population of approximately 25,000 people. It would primarily involve a substantial placement in general practice that allows students to develop relationships with patients and provide experience with continuity of care. It also includes the opportunity to gain experience in acute care or emergency care in a rural hospital and engage with other community health services such as hauora Māori providers, Pacific providers, hospice, pharmacies, physiotherapy, etc. Year 4 is primarily taught at one of the six regional hospital and prepares medical students for work as a PGY1 (provisional registration in a general medical scope of practice). To deliver this option, new clinical

training placement capacity will be required in rural areas and specifically in primary and community care settings. Given the sizeable net gain across medical training capacity, it is important that this increase is coordinated across all medical schools (as opposed to each medical school being responsible for their own placements).

As Year 1 training is predominantly on campus, increases in health system clinical training capacity are required from 2029. PGY1 and PGY2 capacity is required from 2032 and 2033. Accommodation support is required in provincial and rural health settings to support students who are on clinical placements.

## 3.4. Short-list option assessment

The short-listed options have been assessed against the investment objectives and critical success factors. **Annexes 6** and **7** contain a comparative table describing each option against the investment objectives and critical success factors.

Each short-listed option will lead to an increase the number of doctors trained in New Zealand. They will help to bridge the gap between medical graduates and workforce needs, contributing to meeting Health NZ's goal of 285 additional medical students per year. However, establishing a new medical school will close the gap faster as the proposed length of the training programme is shorter, although the other options could be incrementally introduced on an earlier basis. (**Investment Objective One**).

While each option will produce a high-quality medical graduate cohort (**Investment Objective Two**), Options 2 and 3 offer more exposure to rural health and primary and community care settings. As this will encourage more rural origin students to pursue a career in rural health, these two options are more likely to meet the needs of local communities.

Rural immersion programmes will continue to be offered under Option 1, but this option utilises existing student selection criteria, so is not as impactful as the other options. Options 2 and 3 include a curriculum focused on meeting the needs of people in rural, provincial and high needs communities (**Investment Objective Three**). However, Option 3 provides a more coherent student selection process as it is focused on aptitude and commitment to general practice in rural areas and is therefore more closely aligned to addressing health system needs in primary care, rural, regional and high-needs communities.

Options 2 and 3 offers longitudinal placements in Year 5, as well as short duration placements in rural areas and primary care settings in their other years, increasing the time that students live, work and build connections in such communities (**Investment Objective Four**). While Option 1 increases the intake of medical students by an expansion of the rural immersion programmes, most medical students will continue to have limited opportunities to attend clinical placements in rural areas and primary and community care settings.

All options ensure that the academic, cultural and broader wellbeing needs of medical students are considered and managed **(Investment Objective Five)**. Only Option 3 has national coverage, whereas the other options continue to require students to train in certain geographical areas, which may disrupt community and whānau support. Also, Option 3 offers a different approach to student selection, mitigating mental health pressures for students and the stigma experienced by some students through the current priority schemes.

All short-listed options are associated with an increase in clinical training placement capacity and capability across the full breadth of health settings (**Investment Objective Six**). Options 2 and 3 will lead to an increase of clinical placements in rural hospitals, and primary and community care settings.

Each short-listed option would support government strategies to grow the medical workforce (**strategic fit and business needs**). Options 2 and 3 appear to align more closely with the

agreed investment objectives and related business needs and service requirements, including the requirement that a greater proportion of the medical workforce is trained across the full breadth of health settings.

All options are likely to strengthen the delivery of health services in New Zealand by contributing to reduced wait times and improved health outcomes (**potential value for money**). Options 2 and 3 align expenditure and funding to an increase in the number of doctors practicing in rural and provincial areas, which would contribute to better outcomes for people living in those areas.

Current and potential medical educational providers should have the capacity to deliver each option (**supplier capacity and capability in timeframe**). While Options 2 and 3 involve developing or modifying a medical curriculum, there are no major concerns based on the engagement with the relevant universities. Both options offer opportunities to engage with the wider marketplace to deliver innovative solutions to medical education and clinical training placements.

All options can be delivered in an acceptable period to achieve the Government's priorities (**potential achievability**). Options 2 and 3 are more complicated than Option 1, which is relatively straight-forward but unlikely to significantly improve rural and primary care workforce shortages significantly. Options 2 and 3 have significant infrastructure and operating costs associated with strengthening the capacity and capability of rural and primary health providers that offer clinical placements.

If there is no investment in growing the numbers of doctors trained in New Zealand (**relative affordability**), the status quo ensures that the number of students undergoing medical training is maintained, with the option for minor increases as finances allow. Options 1, 2 and 3 are relatively costly compared to the do minimum option.

## 3.5. Cost Benefit Analysis

The Ministry of Health has engaged Sapere to provide a Cost Benefit Analysis (**CBA**) to evaluate the effectiveness of each of the short-listed options. The CBA identifies the costs and benefits of each option, including both measurable and (where possible) monetisable costs and benefits, and non-monetisable benefits.

The results of the CBA are shown in the table below and evaluates the net benefits of the short-listed options in comparison to the Status Quo. In Sapere's view, their findings align with Treasury's guide to social cost-benefit analysis.

|                              | Option 1 (\$m) | Option 2 (\$m) | Option 3 (\$m) |
|------------------------------|----------------|----------------|----------------|
| s 9(2)(b)(ii), s 9(2)(f)(iv) |                |                |                |
|                              |                |                | -              |
| -                            |                |                |                |
|                              |                |                | -              |
| -                            |                |                |                |
|                              |                |                |                |
|                              |                |                |                |

Table 16: Indicative CBA

|                              | Option 1 (\$m) | Option 2 (\$m) | Option 3 (\$m) |
|------------------------------|----------------|----------------|----------------|
| s 9(2)(b)(ii), s 9(2)(f)(iv) |                |                |                |
|                              |                |                |                |
|                              |                |                |                |

While all options provide net benefits, early indications are that establishing a new medical school has the highest net present value and benefit-cost ratio.<sup>37</sup> Although the new medical school provides greater benefits than other options, it achieves this with the additional investment required for establishment.

The results are highly sensitive to key assumptions, as we would expect with a complex project of this kind. Key assumptions include the amenable mortality reduced as a result of the intervention, the retention of students and whether they go into (and stay in) rural practices. The results are also sensitive to assumptions relating to labour productivity. Further work is required to validate the assumptions in the CBA as part of the development of a Detailed Business Case (**DBC**).

Having a larger increase in the number of GPs working in rural, provincial and under-served communities will make it easier for people living in such areas to see a doctor, leading to a reduction in amenable mortality (premature death). It will also help lessen the pressure on emergency departments, freeing up resources that can be used elsewhere, and reduce the need for patients living in rural areas to undertake long journeys to access healthcare, ensuring they have faster access to medical attention. The increased number of GPs will also reduce vacancies and, subsequently, recruitment costs.

In terms of non-monetised benefits, all options improve health outcomes for New Zealand although Options 2 and 3 are likely to have a bigger impact on currently underserved communities. They would also promote better continuity of care, as patients would be in a better position to see the same doctor in primary care settings on an ongoing basis, and lead to increased competition in the health services provided. The introduction of new medical school will add a new market participant. This is likely to increase competition between providers, improving the quality of education which may lead to better health outcomes for society.

# 3.6. The recommended preferred way forward

The assessment of the programme evaluation criteria and the indicative outcomes of the CBA identify that there are feasible options to grow more domestically trained doctors committed to the delivery of primary care in provincial and rural New Zealand. It appears that there are greater long-term benefits associated with establishing a new medical school, although this option is associated with significant additional investment and some implementation complexity. The CBA is highly sensitive to certain assumptions (for example, amenable mortality, the location of training or number of graduates who end up in general practice) that will be impacted by the detailed design and need further validation. While we

<sup>&</sup>lt;sup>37</sup> Under the most conservative estimates, each of the options would produce less monetised benefits than the required costs. This means the investment requires significant consideration of the relative value of nonmonetised benefits.

recommend that the option to establish a new medical school is taken through to the DBC, the underlying assumptions in the CBA will need to be developed further.

# 4. Commercial Case

The Commercial Case assesses the commercial viability of establishing a new medical school. This is an initial assessment only. Further consideration of the Commercial Case will be completed in the DBC.

## 4.1. The procurement need

# A range of capabilities are needed to deliver the preferred way forward \$ 9(2)(b)(ii), \$ 9(2)(f)(iv)

Training more doctors means that the health system must offer more clinical training placements. It needs to procure upgrades of Health NZ and/or primary and community care facilities (where needed) and cover student placement and supervision costs. CAAs need to be in place with Health NZ and primary and community care services to enable students to access appropriate clinical training placements during undergraduate training.

To source these capabilities, the scope of procurement needs to cover:

- capital costs related to construction and the graduate entry medical curriculum
- engagement, negotiation and provisional agreements with identified suppliers for the provision of technology and support services, ongoing licencing costs, remuneration and incentives for trainers
- undertaking the selection and contracting processes for the services identified.

Limited market soundings across all elements of the procurement have been completed as direction from the Government on its preferred option is required. Advice on some elements is further advanced  $\frac{99(2)(b)(ii)}{2}$ 

This underpins the scope of the Commercial

Case, but the precise scope of services and sourcing approach will be determined in the scoping phase of the procurement process as detailed requirements become clear. The DBC will further explore the commercial risks associated with procuring the capabilities required to establish a new medical school and provide assessment of its viability. Approaches to managing supplier limitations will be considered.

# 4.2. Procurement strategy

#### 4.2.1. Procurement activities should achieve broader outcomes and fulfil te Tiriti o Waitangi obligations

#### The procurement strategy will apply to the preferred option(s)

The procurement strategy provides an overarching strategy for the preferred option, with opportunities to engage the market in a manner that fosters positive relationships with Māori and drives positive broader outcomes. Further exploration of the establishment of the medical school in the DBC will include procurement strategies specific to the activities to be undertaken.

# Commercial and procurement activities are consistent with obligations to te Tiriti o Waitangi

The procurement approach recognises the importance of fostering partnership with Māori. This is relevant for a new medical school if construction occurs on land traditionally occupied and cared for by Māori. Procurement activities:

- foster partnership between the Crown and Māori, in line with the principles of te Tiriti o Waitangi in commercial and procurement activities
- maintain consistency across government where appropriate, particularly in relation to references to te Tiriti o Waitangi in contracts
- ensure procurement processes are aligned to the principles of te Tiriti o Waitangi early in the procurement process, where relevant
- identify preferences of local iwi (for example, Waikato Tainui and the Kīngitanga) and Māori in the planning or business case phase and how those preferences will be communicated in any competitive procurement process
- explore options for co-design of the procurement process, including engagement with iwi
- develop strong relationships and partnerships with Māori health providers such as Te ORA.

#### Support for the Government's Broader Outcomes

Procurement activity takes a thorough, exhaustive approach to Broader Outcomes opportunities. This means:

- all applicable commitments are implemented through procurement planning, design, delivery and ongoing management phases
- commitments are discounted by exception: compelling circumstances must exist to discount an applicable commitment, and the discounting of any applicable commitments must be explained and justified via the relevant procurement plan.

**Table 17** sets out the high-level commitments against each Broader Outcome. These commitments form a baseline of activities to be undertaken as part of each procurement activity.

| Broader Outcome  | Commitments  |  |
|--|--|--|
| Increase New Zealand<br>business access to<br>government procurement | <ul> <li>Aim to award contracts to New Zealand-based suppliers.</li> <li>Look for local providers across the full range of health settings.</li> </ul> |  |

Table 17: High-level commitments to Broader Outcomes

| Broader Outcome                                 | Commitments  |  |
|---|--|--|
| Construction skills and training                | <ul> <li>Include specific requirements for skills and training where possible and reporting and monitoring obligations in the applicable contract arrangements.</li> <li>Encourage sub-contracting arrangements where possible, to support upskilling of local/regional workforces.</li> <li>Partner with organisations delivering training and accreditation</li> </ul> |  |
|   | initiatives in the construction sector.  |  |
| Improving conditions for<br>New Zealand workers | <ul> <li>Ensure good employment standards for employees directly<br/>and indirectly (for example, via sub-contracts) including the<br/>living wage as a minimum level of pay and sound health,<br/>safety and wellbeing standards.</li> </ul>  |  |
|   | <ul> <li>Consider the impact of the task on the health system during<br/>the engagement and design phases and keep an open<br/>dialogue to limit any adverse impacts of the programme on<br/>constrained health workforces.</li> </ul>   |  |
|   | <ul> <li>Include specific requirements for skills and training (non-<br/>construction sectors) where possible and reporting and<br/>monitoring obligations in the applicable contract arrangements.</li> </ul>   |  |
| Reducing emissions and                          | Consider how design of facilities can reduce emissions.  |  |
| waste   | <ul> <li>Include requirements for waste and emissions reduction in<br/>both the supply chain and the delivery of goods/services.</li> </ul>  |  |

# 4.2.2. The procurement approach complies with Government Procurement Principles and Rules

#### The Government Procurement Rules must be followed

Any procurement must follow the Government Procurement Rules unless specific exemption or opt-out is approved in accordance with approved delegated authority. This is required as part of the procurement planning process.

#### The principles of Government Procurement underpin the procurement approach

The five principles of Government Procurement underpin the procurement strategy:

- Plan and manage for great results.
- Be fair to all suppliers.
- Get the right supplier.
- Get the best deal for everyone.
- Play by the rules.

These principles apply to all commissioned work, even if the Government Procurement Rules do not. The procurement approach complies with Government Procurement Principles and Rules and the procurement processes and policies of the receiving agency.

# 4.2.3. A procurement strategy will be prepared describing the broad procurement approach and principles

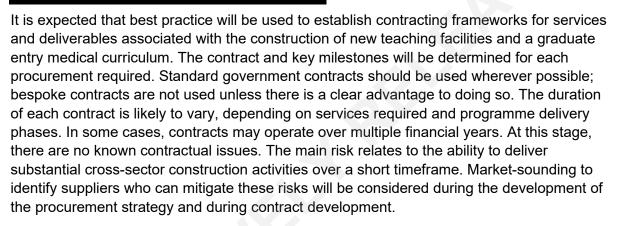
An overarching procurement strategy will be prepared outlining the principles, methods, practices and accountabilities for relevant procurement activities. Detailed procurement plans will be developed for each project in the programme of work, as required. For construction-related capital costs, procurement plans include testing the market to ensure that, where possible, the market can deliver the necessary infrastructure in the tight timeframe if intakes

of additional medical students occur from 2028 onwards. Risks associated with managing the procurement will be clearly articulated and actively managed.

## 4.3. Contractual arrangements

#### Contract provisions for deliverables and services

The programme of work requires capability across different types of providers. This includes commercial suppliers, tertiary education providers capable of hosting a new medical school and Health NZ and primary and community care services hosting medical students on clinical training placements. Different entities are likely to be responsible for different aspects of the contracting arrangements, depending on their areas of accountability. \$9(2)(b)(i)



The programme of work is likely to involve many procurements over its lifetime as work shifts from capex to operational expenditure (**opex**). Procurements are likely to include a mix of facility maintenance, curriculum licencing and remuneration.  $\frac{s 9(2)(b)(ii)}{s 9(2)(b)(ii)}$ 

#### Contract management plans are in place for each contract

Contract management plans address:

- supplier relationship management
- contract administration
- contract provider performance management.

The Contract Management Plan considers and assesses whether agreements fall in the requirements of being classed as Significant Service Contracts. Each contract has a contract manager appointed.

#### Potential payment mechanisms

Potential payment mechanisms are determined in relation to the items being purchased. This is articulated in the relevant procurement plan(s).

#### **Evaluation process**

Cross-functional teams will evaluate bids and recommend a preferred supplier for each project as relevant to the procurement being undertaken. The evaluation team(s) has a broad coverage of skills, including representation from senior roles at the Ministry of Health, the medical school and, where relevant, partner agencies. Evaluation criteria are generally weighted and follow the technical merit of the proposal, the provider's capability and capacity to deliver in a tight timeframe, Broader Outcomes and value-for-money.

#### Probity is of paramount importance when conducting procurement activity

A probity plan will be prepared to guide the promotion and application of probity practice among health providers providing clinical training placements and to ensure probity risks are identified and managed.

Procurement activity is conducted in accordance with the following six key 'probity fundamentals' as stated by the Office of the Auditor-General:

- Accountability.
- Openness.
- Public value.
- Lawfulness.
- Fairness.
- Integrity.

A probity management plan is established as part of the programme establishment and covers all aspects of the programme of work including procurement.

### 4.4. Procurement risks

| Risk  | Mitigation   |
|---|--|
| Relationship with health providers<br>is not well managed leading to<br>issues with clinical placements | There are clear and detailed handover documents for health<br>provider coordinators and medical school relationship teams<br>on signing and established supplier relationship methods. |
| Broader Outcomes objectives are not supported or delivered  | Securing the Broader Outcomes is a focus and commitment<br>from the Executive Leadership Group. Support from New<br>Zealand Government Procurement is available when required.         |
| Health provider instability   | Ongoing supplier and contract relationship management is provided by the medical school.   |
| Lack of supplier competition  | A wide range of market services are engaged.   |

#### 5. Financial Case

Note that the Financial Case, and associated annexes, have been drafted based on some costings information provided by (and about) the University of Waikato proposal to deliver Option 3 – Establish a new medical school focused on primary and rural health.

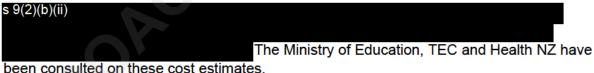
The Financial Case sets out the programme financial implications of the preferred way forward. Table 19 shows the overall costs associated with the preferred way forward. Tables 20-26 provide detailed breakdown of these costs.

|               | Cost (\$) | Funding type |
|---------------|-----------|--------------|
| s 9(2)(f)(iv) |           |              |
|               |           | S            |
|               |           |              |
|               |           |              |
|               |           |              |
|               |           |              |
|               |           |              |
|               |           |              |
|               |           |              |
|               |           |              |

Table 19: Breakdown of estimated costs

PGY1 = postgraduate Year 1 (prevocational); PGY2 = postgraduate Year 2 (prevocational); TI = trainee intern.

The financial costings are indicative at this stage. These costings could change as they are further refined during the development of the DBC.



Cost estimates are indicative and based on the costing assumptions set out in Annex 8, 9, **10 and 11**. They will be further developed as part of the DBC, which includes quantitative risk assessment of financial information.

Per annum cost estimates for ongoing Crown expenditure associated with an additional 120 medical students and PGY1 and PGY2 interns have been prepared in collaboration with the Ministry of Education, TEC and the Ministry of Health Finance team. Components of the cost estimates (such as tuition subsidy, TI grant costs and student support costs) have been provided by the Ministry of Education. Cost estimates for PGY1 and PGY2 have been prepared by the Ministry of Health and Health NZ. We have a higher degree of confidence in these cost estimates, based on the information available and standard practice followed by the Ministry of Education and the Ministry of Health.

# 5.1. Funding sources

#### Crown funding for this initiative is sourced from the annual Budget process.

Budget 2024 provided funding for the development of business cases, and procurement of an independent CBA. Future Crown funding for this programme of work would be sourced from:



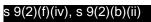
# 5.2. Curriculum costs and costs related to new facilities at the University of Waikato



Further detail on the assumptions and rationale to support the breakdown of costs for curriculum development and investment in facilities at the University of Waikato are provided in **Annex 9**.



# 5.3. Costs to expand clinical training placements







# 5.4. Ongoing costs to government for an additional 120 undergraduate medical students and PGY1 and PGY2 interns per annum

Crown funding of medical school enrolments is limited by a cap to manage the high costs associated with training medical students (both in the primary medical programme and in prevocational training). The funding cap:

- helps ensure availability of clinical training placements (Years 4 to 6 of the existing programmes)
- manages PGY1 and PGY2 clinical attachments and associated salaries
- manages student support costs through Vote Social Development and Vote Revenue (NB these costs are significantly higher relative to other programmes of study).

**Table 24** describes the additional costs generated by increasing the funding cap across multiple Votes. \$ 9(2)(f)(iv)

Additional funding will need to be appropriated from:

- Vote Tertiary Education to cover the tuition subsidy and the TI grant
- Vote Social Development and Vote Revenue for student support costs
- Vote Health for PGY1 and PGY2 costs including salaries and clinical attachment costs.

Detailed costing assumptions are presented in **Annex 10**.



s

### 5.5. Income and expenses associated with a new medical school

| s 9(2)(b)(ii) | S |  |
|---------------|---|--|
|               |   |  |
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|               |   |  |



#### 5.6. Whole of life costs

#### Table 26: Whole of life costs

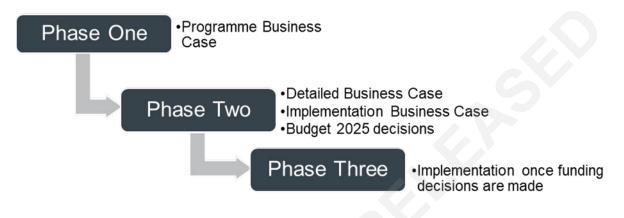
| 5.6. Whole of I  | ife cos | ts      |         |         |         |         |         |         |         |         |         |         |         |
|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Table 26: Whole of life costs                                |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Discount rate (5%)   | 2024/25 | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 | 2030/31 | 2031/32 | 2032/33 | 2033/34 | 2034/35 | 2035/36 | 2036/37 |
| Mid-year discounting period                                  | 0.5     | 1.5     | 2.5     | 3.5     | 4.5     | 5.5     | 6.5     | 7.5     | 8.5     | 9.5     | 10.5    | 11.5    | 12.5    |
| Discount factor  | 0.9759  | 0.9294  | 0.8852  | 0.8430  | 0.8029  | 0.7646  | 0.7282  | 0.6936  | 0.6605  | 0.6291  | 0.5991  | 0.5706  | 0.5434  |
| Establishment cash costs (                                   | \$m)    |         |         |         |         |         |         |         |         |         |         |         |         |
| Building costs   | -       | 19.650  | 71.600  | 65.250  | 0.575   | -       | -       | -       | -       | -       | -       | -       | -       |
| Expanding clinical<br>placements                             | -       | -       | 12.791  | 64.045  | 51.218  | -       | -       | -       | -       | -       | -       | -       | -       |
| Curriculum costs   | -       | 11.200  | 4.100   | 3.700   | 1.000   | -       | -       | -       | -       | -       | -       | -       | -       |
| Infrastructure development<br>FTE (Health NZ)                | 0.800   | 0.800   | 0.800   | 0.800   | -       | -       | -       | -       | -       | -       | -       | -       | -       |
| Placement support FTE<br>including. overheads<br>(Health NZ) | 0.600   | 0.600   | 0.600   | 0.600   | -       | -       | -       | -       | -       | -       | -       | -       | -       |
| Ongoing cash costs (\$m)                                     |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Tuition subsidies  | -       |         | -       | 1.938   | 7.159   | 13.822  | 20.682  | 24.403  | 24.891  | 25.389  | 25.896  | 26.414  | 26.943  |
| TI grant   | -       | -       | -       | -       | -       | -       | 2.691   | 3.115   | 3.115   | 3.115   | 3.115   | 3.115   | 3.115   |
| SA net of tax  | -       | -       | -       | -       | 0.298   | 0.859   | 1.334   | 1.610   | 1.642   | 1.675   | 1.708   | 1.741   | 1.773   |



### 6. Management Case

The Management Case explains the planning arrangements required for successful delivery and to manage programme risks. It focuses on the completion of Phase One (programme confirmation and the development of the PBC) and introduces Phase Two (the DBC, the implementation business case and the associated decision pathway to Budget 2025). The Management Case will be updated following the Cabinet's decisions on its preferred option. The process is outlined in **Figure 5**.

#### Figure 5: Programme of work flow



# 6.1. Work programme governance roles and responsibilities

Increasing the number of doctors trained in New Zealand and diversifying the provision of medical training are significant investments for the health and education systems. Realising the investment objectives and benefits set out in this PBC requires joint oversight from the Ministers of Health, Finance and Tertiary Education and Skills. The Cabinet's decisions about the establishment of a new medical school are based on:

- this **PBC**, which seeks agreement to key components of the programme including analysis of options CBA and direction on the preferred approach (Quarter 3, 2024)
- **DBCs**, which will seek agreement to proceed with a new medical school and provide a full analysis of the preferred approach (**Quarter 1, 2025**)
- Budget 2025, which may confirm the Government's financial commitment for the establishment costs of the proposed medical school (announcements in May 2025)
- Implementation Business Cases, which seek agreement to progress with the commercial and contractual arrangements for delivery (May 2025)
- **Budget 2027**, which may confirm financial commitment for the ongoing operating and capital costs associated with increasing the medical trainee cap (May 2027).

Completing the programme of work requires alignment between multiple parties with different responsibilities (for example, across different Votes, Ministerial portfolios and the University of Waikato's operational delivery). The programme governance approach provides the structure to deliver the agreed outcomes in an ecosystem of complex interdependencies. Essential factors for successful delivery of the programme of work are strong governance to ensure timely decision-making and to support efficient processes. Consistent decision-making avoids rework, supports strong cross-sector relationships and clear leadership ensures that the most appropriate options for meeting the investment objectives are explored. The governance model is established and will guide progress through the Better Business Case and Budget 2025 processes (**Figure 6**).

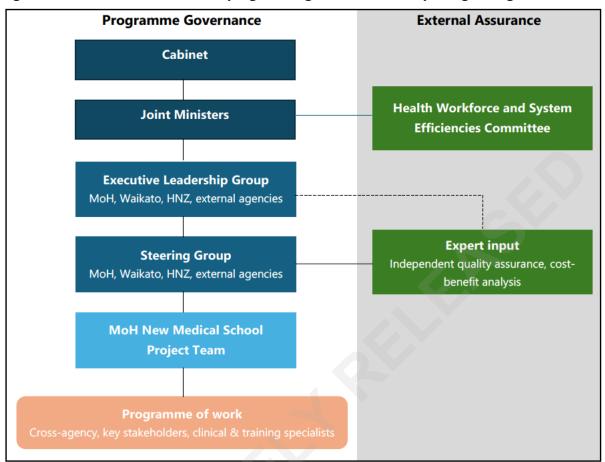


Figure 6: New Medical School work programme governance and reporting arrangements

As the primary decision-making body, Cabinet can agree parameters and delegate decisions within these parameters.

The Ministry of Health provides briefings to the joint Ministers (the Ministers of Health, Finance and Tertiary Education and Skills) on the draft PBC prior to the Cabinet's decisions. Individual government agencies share progress updates on the delivery of the programme milestones for joint Ministers as the programme of work progresses. Programme assurance is provided through oversight from relevant government agencies (through appointment to governance bodies) and through independent technical and IQA advice at appropriate points.

External assurance is provided by the Health Workforce and Systems Efficiencies Committee, a four-member independent group with senior sector representation from Health NZ districts, a Māori health provider and General Practice NZ.

The **Executive Leadership Group** (**ELG**) is chaired by the Director-General of Health. It reports to the joint Ministers of Health, Finance and Tertiary Education and Skills. The ELG meets monthly to strengthen alignment and coordinate across individual agencies and portfolios with a close interest in the establishment of a new medical school. Specifically, the ELG:

- provides strategic guidance to ensure the programme of work aligns with the expected health workforce outcomes
- considers and provides guidance on key deliverables and work stages
- makes timely informed decisions that enable work to progress in accordance with approved deliverables

- provides an agency-authorising environment that ensures each agency is responsible for contributing work to progress deliverables
- supports management of high-level risks and helps resolve strategic issues as they are identified.

The ELG's membership reflects the complexity of the programme of work and its strategic importance to New Zealand's health and tertiary education sectors. It involves Chief Executive-level representation from the Ministry of Health, Health NZ, the Ministry of Education, TEC, the Treasury and the Chair of the Health Workforce and System Efficiencies Committee. Senior academic representation is provided by the Dean (College of Medicine and Dentistry) of James Cook University and the Vice Chancellor of the University of Waikato who provides insight for that university. Independent senior Director representation is included.

The **Project Steering Group** is chaired by the Ministry of Health's Deputy Director-General, Strategy, Policy and Legislation (**DDG SPL**). The Project Steering Group provides strategic direction and alignment for the programme of work. It meets every two weeks to ensure delivery against agreed milestones and timeframes, consider trade-offs and manage risks (escalating to the ELG as needed), support resource allocation, provide feedback on materials and monitor the programme of work's progress. The Project Steering Group members represent the Ministry of Health, Health NZ, the Ministry of Education, TEC, the Treasury and the University of Waikato. The Project Steering Group reports to the ELG.

The **Senior Responsible Owner** (**SRO**) is the Ministry of Health's DDG SPL, which aligns with their role in leading long-term health strategy, setting direction and priority areas for investment for the health sector. The SRO has overall accountability for the programme of work and for ensuring that it remains within the approved scope, timeframe and budget. The SRO enables the realisation of the desired benefits associated with increasing the number of high-quality New Zealand-trained doctors, increased clinical training capacity and a medical curriculum aligned to health system needs. The DDG SPL has the capacity to undertake the SRO role and is supported by appropriate programme management and project teams.

### 6.1.1. Clinical leadership and health practitioner regulation

Effective clinical leadership operating within the regulatory framework for health practitioners is critical to ensuring that the selected option best meets the programme of work's investment objectives. It also enables understanding of what is required to ensure quality clinical training capacity is available.

In Phases One and Two, members of the ELG and Project Steering Group provide access to clinical leadership inputs. This includes advice on considerations for clinical teaching infrastructure in the required range of academic and clinical settings. In Phase Three, clinical input will be sought from a wide range of clinical sector leaders. Key stakeholders include the heads of relevant health regulatory authorities, professional colleges, clinical networks with an interest in primary care, primary and community care health services and hauora Māori providers. Monitoring the quality of the engagements and the input received is completed by the Ministry of Health through its usual performance monitoring functions and through the governance arrangements outlined in this Management Case.

At a programme delivery level, Health NZ's medical training and workforce leads will ensure that workforce and clinical considerations are built into each component of the Better Business Case process where needed. Additional projects to support resolution of the complex interdependencies will be mapped and monitored as part of DBC preparations.

### 6.2. Programme and project management approach

Establishing a new medical school is complex. Effective governance, programme and project management structures are critical to the successful delivery. A tailored project management approach is being used (rather than using a single approach):

- A waterfall structure that supports engaged governance and project stewardship, allowing decision-making and risk management to be addressed in a tiered and structured manner.
- Engagement with agencies, the University of Waikato, clinical stakeholders and iwi.
- Use of existing models that do not require the Ministry of Health or other stakeholders to implement new project management methodologies.
- Close monitoring of workstreams and deliverables which emphasise accountability, teamwork and iterative progress toward a well-defined goal.

This tailored approach is structured and well-sequenced. It allows for timely completion of a high-quality PBC, CBA, subsequent DBC and other inputs. It ensures effective management of scope, budget, time, resources, quality, communications and risk.

### 6.3. Delivery approach

A comprehensive project plan has been developed and is monitored on a weekly basis. The project plan tracks deliverables across a range of programme workstreams and allows the Programme Manager to support the allocation of work across the team, track how individual deliverables are progressing and maintain a strong view on dependencies across workstreams. Risk management and clear escalation pathways are integral to this process. Mapping and managing projects to address broader critical and influential interdependencies will be considered as preparation for Phase 2 begins and as this phase rolls out.

### 6.4. Programme structure and resourcing

Programme and project resourcing is complex and combines Ministry of Health employees (full-time and part-time) and employees of agencies with an interest in the investment objectives (specifically Health NZ, the Ministry of Education, TEC and the Treasury). External specialists are involved when independence or specific skills are required. The use of external specialists is required in relation to business case development, and economic analysis including CBA and independent quality assurance. University of Waikato employees, consultants and, at the appropriate time, staff from its Australian partners, are working on its processes.

The mixed-resourcing approach ensures retention of institutional knowledge and timely access to specialist process and subject matter expertise. It considers the need for a cost-effective structure: some resources are expected to be required for the full duration of Phases One and Two; other resources are required for shorter periods at specific points to complete specific outputs and processes (for example, economic or quality assurance expertise). This approach allows flexibility to scale as required to meet the varying demands of the development of the PBC and the CBA (and later, the DBC).

External specialists are contracted through relevant all-of-government processes, with procurement advice independent from the project team sought as decisions are made.

### 6.5. Phase One: PBC delivery

The Ministry of Health is using the Treasury's Better Business Case process, acknowledging that the tight timeframe to complete the PBC and CBA is ambitious. Oversight of programme

delivery and the associated funding needed to complete the PBC is provided by the ELG, to which the Project Steering Group and the Ministry of Health project team report regularly. Final approvals are provided by the Cabinet.

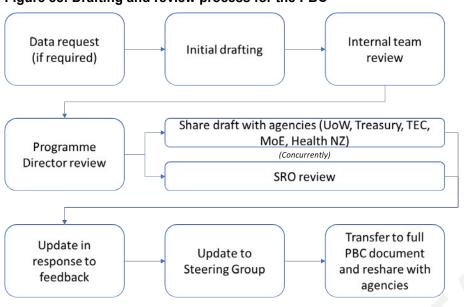
The Ministry of Health is the Project Sponsor for the PBC and CBA, with accountability for delivering the investment objectives. The programme is overseen by a Project Steering Group, which provides operational direction to ensure successful delivery (see **section 0**). **Figure 7** outlines the programme delivery structure. The SRO for the PBC is the Ministry of Health's DDP SPL.



Figure 7: Ministry of Health's programme management structure for the PBC

The Ministry of Health's project team leads the day-to-day operational delivery. It operates in the Health Workforce policy team under the direction of the General Manager - Health System Settings. The project team reports progress and risk status to the Project Steering Group every two weeks. It works collaboratively under the direction of the PBC lead. A lead drafter and lead reviewer collaborate on each of the five cases, with the business case lead taking a key role in drafting or reviewing each case. This ensures consistency across the cases and that feedback received on draft cases feeds into other cases. The Programme Director reviews each draft case before it is shared with the SRO and agencies. Feedback from agencies has been sought on early individual case drafts as well as the draft full PBC.

The Ministry of Health's project team works closely with the University of Waikato project team and representatives from TEC, the Ministry of Education, the Treasury and Health NZ. These agencies are responsible for providing data inputs, clarifying issues related to their portfolio areas and reviewing draft cases to support the PBC in Phase One. **Figure 88** provides a high-level overview of the drafting and review process for the PBC.



#### Figure 88: Drafting and review process for the PBC

### 6.6. Phase Two: Detailed Business Case delivery

Work has been initiated to plan for the DBC delivery. This includes considering accountabilities, roles and responsibilities for development of the DBC and projects to address critical interdependencies. It also covers reviewing existing arrangements, indicative fiscal implications, the mix of projects and potential sequencing for delivery and scope exclusions. Further refinement following progress on the PBC will include:

- a. identifying and confirming the preferred programme components and scope of each project required to deliver on the investment objectives
- b. confirming where new investment is required
- c. identifying where the impact will occur and who is required to support delivery.

Considering responsibilities for developing the DBC does not remove the requirement that sufficient detail and assurance processes have been completed to enable the Cabinet to make decisions on whether to proceed to the DBC process. The required information and responsibility to provide assurance around the delivery of each project is likely to still be provided by those currently responsible. For example, the Ministry of Health is expected to provide a coordinating function and government responsibility for ensuring delivery of the DBC including commissioning the required inputs and information, leading the Budget 2025 process and supporting Ministerial decision-making. Other agencies (such as Health NZ) and the University of Waikato will be responsible for completing associated projects related to system capacity, resourcing and infrastructure that are critical to the ability to establish a new medical school as well as broader systems projects that further support benefits realisation across the investment objectives.

### 6.7. Programme Reporting

Weekly reporting on programme of work progress is provided to the SRO as well as at key agreed milestone points. A Programme Status Report is shared with the Project Steering Group at each fortnightly meeting and with the ELG for its monthly meetings. The programme reports to the Cabinet as required.

### 6.8. Assurance processes

Because of the significance of the investment across the health and tertiary education systems and its nature as a large major project, the Treasury recommended an assurance pathway that includes internal quality assurance by the Project Steering Group, IQA and Gateway reviews. An independent, fully costed CBA is required as per the Coalition Agreement between the National and ACT parties.

Internal quality assurance is provided by the Project Steering Group and the ELG. It is conducted on behalf of the SRO to provide assurance that the programme of work is appropriately planned, managed and controlled and that governance supports the project to best effect.

The programme of work is assessed as 'High Risk' through the Treasury Risk Profile Assessment. It is subject to Gateway reviews. Gateway reviews provide the SRO with information and advice to increase the chances of programme success. The following Gateway reviews are scheduled:

- **Gate 0** review in July 2024 (complete) to assess the processes, standards, guidance and practices used in the governance and management of the programme of work.
- **Gate 1** review in late November 2024 to assess the quality, accuracy and logic of the DBC.

An external provider (IQANZ) provided the IQA for the PBC in June 2024. Further IQA will occur on the DBC and in the implementation phase (if the programme of work proceeds).

### 6.9. Risk management arrangements

A Risk Profile Assessment has been completed. The programme of work is classified as a large major project (high risk and infrastructure delivery of more than \$50M). It requires the completion of a business case process and an assurance plan agreed with the Treasury and key agencies involved in the proposal to establish a new medical school.

The risk management approach identifies, assesses and mitigates risks where possible. Risks are monitored continually throughout the programme of work, as other risks or threats emerge or a known risk's impact or likelihood changes.

A comprehensive risk register including business risks, service risks and external risks has been approved by the SRO. It is maintained on a weekly basis by the Programme Manager. Risk mitigation strategies have been identified for each known risk including early and broad collaboration, consultation and information-sharing with sector partners and interested parties, timely and appropriate procurement, IQA and CBA. A risk register snapshot (at **23 July 2024**) is provided in **Annex 12**. The full risk register is attached.

The treatment of risk involves selecting one or more options for modifying the risk or managing it to a status acceptable within the programme of work's risk tolerance. Risk treatment recognises that elimination of risk is not always possible or desirable. Instead, treatment aims to drive the risk as low as is reasonably practicable or achievable, thereby achieving a balance between the cost of managing the risk and the anticipated benefits. The risk is then reassessed providing an assessment of the residual risk (that is, the level of risk with controls and treatments in place).

 Table 27 summarises roles and responsibilities for managing programme and project risks.

| Role                         | Summary  |
|------------------------------|--|
| ELG                          | Responsibility for ensuring that appropriate risk management processes are<br>applied rests the ELG. The risk register provides the ELG with clear statements of<br>programme risks and risk management strategies to enable ongoing management<br>and regular review. The ELG reviews risks rated 'High' and 'Extreme' each month<br>via the Programme Status Report and provides advice and direction to the SRO.<br>The ELG also receives monthly updates on the overall profile of programme risks.  |
| Project<br>Steering<br>Group | The Project Steering Group reviews risks rated 'High' and 'Extreme' on a two-<br>weekly basis via the Programme Status Report. It provides advice and direction to<br>the SRO and the Programme Manager. At each meeting, it discusses one of four<br>risk areas in-depth (timeframe, relationships, assurance and financials), provides<br>a forum for identifying and addressing additional threats as they emerge and<br>considers the likelihood or potential impact if a previously identified risk changes.  |
| SRO                          | The SRO is accountable for developing and implementing a Programme Risk<br>Management Plan and risk register, ensuring that the Project Steering Group<br>regularly reviews and discusses risks, assesses identified risks and develops<br>strategies to manage those risks. The SRO monitors risks given a 'High' or<br>'Extreme' rating, provides regular Programme Status Reports to the Project<br>Steering Group, highlights 'Extreme' Grade risks and specifies changes to the<br>risks identified during each phase of the project and the strategies adopted to<br>manage them. The SRO is supported by the Programme Manager. |
| Programme<br>Manager         | The Programme Manager tracks and updates the risk register, ensuring mitigations are implemented and status changes are noted. They inform the SRO of changes and prepare risk reporting to the ELG and the Project Steering Group.  |
| Project team                 | All members of the project team are responsible for assisting the Programme<br>Manager and the SRO in the risk management process. This includes identifying<br>analysing and evaluating risks and monitoring throughout the programme of work.  |

#### Table 27: Risk management roles and responsibilities

ELG = Executive Leadership Group; SRO = Senior Responsible Officer.

### 6.10. Issues management

Throughout a programme of work, unplanned events or unexpected problems arise that need to be resolved in order to complete work. If not resolved, an issue may adversely impact programme cost, delivery date or the quality of deliverables. In extremity, an issue can prevent the completion of the programme of work. The programme issues management plan provides a way to record issues as they arise or to record highly probable risks, analyse issues to determine what the problem is, how it may impact the programme and possible resolutions.

Resolution of some issues may require formal changes to the scope of the programme of work. If a formal change to the scope is required, a scope change request will be determined by the Cabinet. The Programme Manager is responsible for reviewing all assigned issues and recording and monitoring progress to resolution. The Project Steering Group is responsible for addressing issues that cannot be resolved by the project team or that the project team needs assistance to resolve. Strategic issues are escalated to the ELG as required, including issues relating to significant stakeholder management challenges or disputes about scope and accountabilities. Escalation of an issue may occur in several ways depending on the circumstances:

• If the issue is not resolved by the resolution date, it should be presented for resolution to the next higher decision-making team/body.

- An issue may be escalated at any time if it becomes clear that the issue has implications for the programme of work as a whole.
- The Programme Manager may involve the key stakeholders and/or the SRO at any time if unable to resolve an issue in their authority, although the issue remains at programme level.

### 6.11. Stakeholder engagement and communications

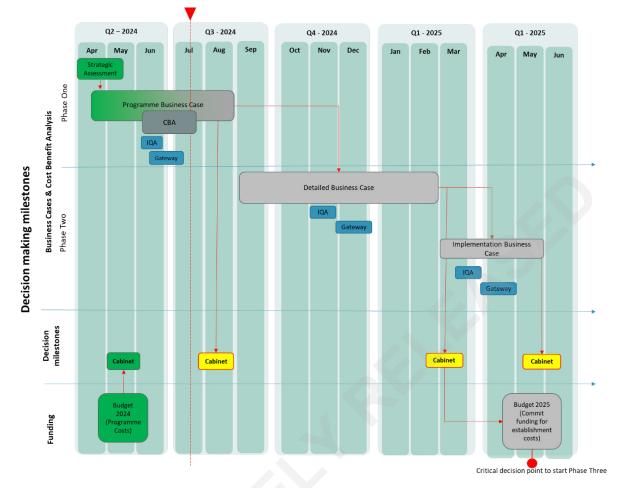
Thorough sector engagement for this programme of work is necessary given the complexity and number of stakeholders involved in training the medical workforce, the breadth of stakeholders who have the expertise required to design a proposal that meets the investment objectives and the owners of land upon which any new facilities might be built. A stakeholder engagement plan has been prepared for Phases One and Two. It uses a collaborate/consult/inform framework to set out a clear approach to managing engagement and relationships with agencies, universities in New Zealand and abroad, clinical agency stakeholders and registration bodies, clinical networks and iwi. The plan recognises that different agencies will lead-out engagement activities, depending on the relevance of the activity to their portfolio area. A separate communications plan has been developed.

### 6.12. Benefits realisation arrangements

The benefits expected to be realised by the establishment of a new medical school are described in the Strategic Case. Benefits will be delivered over the medium- to long-term as students enter medical training, complete on-campus training and move out into clinical placements before achieving registration in a general medicine scope of practice. Realisation of the benefits requires a cross-agency approach involving a range of health, education and iwi bodies due to the interdependencies associated with the programme of work. A high-level Benefits Realisation Management Strategy and Plan and Benefits Register will be developed, detailing the measures and realisation against targets. Identification, measurement and tracking of benefits Realisation Management Strategy and Plan will be reviewed at agreed points in the programme implementation. A final benefits review will be completed at the end of the programme implementation and will run alongside the completion of the programme evaluation.

### 6.13. Programme key milestones

**Figure 9** is a visual overview of the key programme milestones and approximate timings for Phases One and Two through to the Budget 2025 decision point for funding.



#### Figure 9: Summary of the pathway to delivery

The timeframe is ambitious in recognition of the current significant medical workforce challenges and the need to realise benefits as quickly as possible in the medium- to long-term, well after the initial capital investment is complete. Timeframes for each tranche will be re-evaluated as part of Phase 3 planning. Material change to the tranche or programme timelines will be managed through change control processes.

### 6.14. Phase Three: Governance and management

Increasing the intake of medical students requires additional management capacity to support the delivery of clinical placements across the health system. Health NZ is currently working through what that might look like across the three short-listed options.

### Option 0 - Status quo (Do minimum)

Programme governance and management continue across the two existing medical schools and for the health organisations that support clinical training in the health sector.

# Option 1 - Increase current intake of medical students, with a proportionate increase to the existing rural immersion programme

Programme governance and management continue across the two existing medical schools and for the health organisations that support clinical training in the health sector.

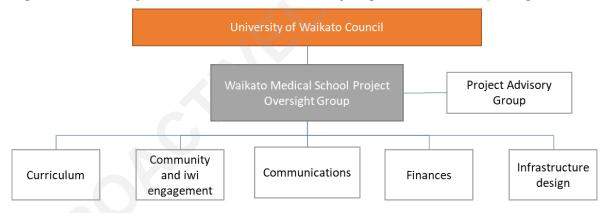
# Option 2 - Establish a medical programme focused on rural health, jointly administered by the existing medical schools

Programme governance and management for Option 2 has not yet been established. The following information was provided by the Universities of Auckland and Otago in their 2022 proposal.

Governance would be developed in partnership with iwi. Hauora Taiwhenua Rural Health Network, as an organisation grounded in sector and community representation and focused on improving rural health outcomes, will act as conduit between the parties, helping to manage the relationships. Governance membership will include Māori, the Universities, RNZCGP and Hauora Taiwhenua sector and rural community representatives. We note that each of partner institutions have established Māori partnerships and leadership that will help guide the establishment of the governance structure. Governance models already exist where multiple partners work together to deliver common goals. We propose either a Centre for Research Excellence (CoRE) type model, or the Auckland ICT Graduate School type model.

### Option 3 - Establish a new medical school focused on primary and rural health

Governance for Option 3 has been proposed by the University of Waikato. Its framework includes appointing its Vice-Chancellor as the SRO. The SRO reports directly to the University Council. This structure underscores the University's commitment to the project's success and ensures strategic alignment and accountability at the highest levels. **Figure 10** Figure 10 outlines the proposed governance and reporting arrangements.



#### Figure 10: University of Waikato Medical School Project governance and reporting

The SRO is the Vice-Chancellor of the University of Waikato, which aligns with the role of the chief executive of the institution and has responsibility under section 294 of the Education and Training Act 2020 for leading and managing the academic and administrative affairs of the University. The SRO has overall accountability for the programme of work and for ensuring that the University of Waikato meets its obligations and commitments with the Ministry of Health, the Government and other relevant parties. The SRO reports to the University of Waikato Council.

The Pro Vice-Chancellor Health is the Programme Manager Lead (**PML**). They are responsible for managing the conduct of the work programme on behalf of the University of Waikato and report to the SRO. The PML is supported by a Programme Manager (the Director of Planning, Performance and Analytics) responsible for monitoring programme timelines and dependencies between the cross functional sub-groups. The Programme Manager coordinates reporting and the risk register, which is assessed weekly by the PML.

The Waikato Medical School Project Oversight Group would be chaired by the Vice-Chancellor. It provides strategic direction and oversight of the programme of work. The Group would meet every two weeks to ensure delivery against agreed milestones and timeframes, manage risks (escalating these to the University Council, if required), manage resource allocation and provide feedback and direction to its sub-groups (curriculum, community and iwi engagement, communications, finances and infrastructure and design). The sub-groups would be project-focused and respond to directives from the Project Oversight Group. The Project Oversight Group would provide regular, comprehensive, updates to the University of Waikato Council and project updates to the Academic Board.

The Waikato Medical School Project Oversight Group would consist of the:

- Vice-Chancellor
- Pro Vice-Chancellor Health
- Chief Operating Officer
- Director of Medicine
- Kīngitanga representative.

The Project Oversight Group would be supported by the Director of the Vice-Chancellor's Office and receive input from a wider Project Advisory Group of external members who represent key stakeholder groups.

### 7. Next Steps

This PBC seeks formal approval from Ministers to commence development of the DBC, based on the preferred way forward and the short-listed options above. The DBC will form the basis on further advice on the establishment of a new medical school and the way it will be procured and financed.

Practical next steps include:

- strengthen the detail on clinical training settings, including infrastructure requirements
- confirm and expand on the expected benefits (including monetisable and nonmonetisable benefits), including the impact on traditionally unrepresented and underserved communities
- prepare a full procurement plan, detailing the procurement approach and criteria, payment mechanisms, contractual arrangements, as well as key delivery dates
- s 9(2)(b)(ii)
- \$ 9(2)(f)(iv)
- establish monitoring and evaluation approach.

### Annexes

This section contains the following annexes.

- Annex 1: Commissioners' letter
- Annex 2: Medical workforce capacity
- Annex 3: Risk management strategy
- Annex 4: Critical success factors and proposal-specific criteria
- Annex 5: Developing and evaluating the long-list of options
- Annex 6: Short-list assessment against the investment objectives
- Annex 7: Short-list assessment against the critical success factors
- Annex 8: Expanding clinical placement assumptions
- Annex 9: Curriculum costs and costs related to new facilities at the University of Waikato
- Annex 10: Ongoing costs to government to train 120 additional doctors
- Annex 11: Income and expenses
- Annex 12: Risk register overview as at 23 July 2024

### **Annex 1: Commissioners' letter**

4 September 2024

To whom it may concern

### **Programme Business Case**

The Ministry of Health is proposing a major strategic initiative to meet future health workforce needs and address the shortage of doctors in rural and provincial areas and in primary and community care settings.

This Programme Business Case is a significant deliverable for this initiative. It investigates to value for money options to deliver this initiative and proposes a plan for its delivery.

We confirm that:

- i We have been actively involved in the development of the attached investment proposal through its various stages
- ii We accept the strategic aims and investment objectives of the investment proposal, its functional content, size and services
- iii the indicative cost estimates of the proposal are sound and based on best available information
- iv suitable contingency arrangements are in place to address any current or unforeseen affordability pressures.

This letter fulfils the requirements of the current Better Business Cases guidance. Should either these requirements or the key assumptions on which this case is based change significantly, revalidation of this letter of support will be sought.

Yours sincerely

Maree Roberts Senior Responsible Officer

### **Annex 2: Medical workforce capacity**

#### Need for increasing training capacity.

New Zealand's health system is staffed by hardworking, highly trained and committed professionals who deliver excellent care. Even though there has been 24% growth in the number of doctors since 2016, New Zealand does not currently have the medical workforce needed to respond to our growing healthcare demands. In its latest health workforce plan (2023), Health NZ estimated that an additional 1,700 doctors are needed to meet current staffing shortages. This number is expected to rise to 3,400 by 2032.<sup>38</sup>

Shortages exist across most vocational scopes of practice. In 2022, for instance, the RNZCGP estimated that there are only 74 GPs per 100,000 population in New Zealand, far fewer than Australia (116) and Canada (122).<sup>39</sup> The Royal Australasian College of Physicians reported that New Zealand has fewer specialists per capita than Australia, with only 71 physicians for every 100,000 people compared to 99 per 100,000 in Australia.<sup>40</sup>

From 2025, 614 training places will be available across the two existing medical schools. It is unlikely that this figure will produce enough doctors to resolve the identified capacity problems. The resulting 'service gap' may include longer waiting times for assessments and treatment, higher thresholds for accessing services, rising levels of burnout among the medical workforce, increased pressures to displace critical non-clinical work such as training and continuing education and missed opportunities to develop more innovative and efficient models of care.<sup>41</sup> Health NZ has proposed a range of options to close the current workforce gap, including increasing domestic medical intakes by 285 places (Note: this figure does not consider the 25 additional medical school places included in the 2024/25 budget).<sup>42</sup>

## Workforce pressures are particularly acute for doctors specialising in general practice.

Primary and community care is the bedrock of healthcare in New Zealand. A well-trained, well-resourced general practice workforce offering integrated care is essential to the provision of quality healthcare at all levels of the system. GPs often serve as the first point of contact for someone seeking care, playing a critical role in primary and preventative healthcare, treating and managing illness and connecting people with more specialised care when needed. Patients report high levels of trust in their GP and are satisfied with the care they provide. Continuity of care is integral to the GP-patient relationship and has been shown to reduce accident and emergency presentations, hospitality and mortality rates.<sup>43</sup>

New Zealand has a shortage of GPs, particularly outside the main centres. Doctors currently working in general practice only make up 25% of the medical workforce, compared with 37% in 2000.<sup>44</sup> While the number of GPs grew by 65 (1.7%) to 3,915 in 2022/23, there was a 2%

<sup>&</sup>lt;sup>38</sup> See Health Workforce Plan 2023/24, Health NZ (2023)

<sup>&</sup>lt;sup>39</sup> The GP Future Workforce Requirements Report, Allen + Clarke (2021), available at https://www.rnzcgp.org.nz/gpdocs/new-website/publications/2021-GP-future-workforce-report-FINAL.pdf

<sup>&</sup>lt;sup>40</sup> See https://www.racp.edu.au/news-and-events/media-releases/workforce-data-shows-physician-shortagesacross-aotearoa-new-zealand

<sup>&</sup>lt;sup>41</sup> See ASMS Research Brief, Forecasting New Zealand's future medical specialist workforce needs (2019), available at https://asms.org.nz/wp-content/uploads/2022/05/Research-Brief-specialist-workforce-projections-\_172060.2.pdf

<sup>&</sup>lt;sup>42</sup> Health Workforce Plan 2023/24, Health NZ (July 2023)

<sup>&</sup>lt;sup>43</sup> Te Rangahau Ohu Mahi The Workforce Survey 2022, RNZCGP (2023)

<sup>&</sup>lt;sup>44</sup> New Zealand Medical Workforce in 2023, MCNZ (2023)

growth in the New Zealand population. This indicates that GP growth is not keeping up with population growth.

GP visits grew nearly 12% between 2008 and 2016, from 11.8 million to around 13.2 million a year, with the largest growth in children and those aged 65-plus years. By 2021, the number of GP visits was approximately 14 million. The types of issues that GPs are dealing with are also becoming more complex with many GPs having to manage patients with moderate to high psychological distress and patients with complex conditions on secondary waiting lists.<sup>45</sup>

The 2022 RNZCGP Workforce Survey reported that 48% of GPs are burned out. This is a significant increase on the 22% in 2016. A further 31% were somewhat burned out. Just 21% reported not being burned out – a big drop from 42% in 2016.<sup>46</sup> The RNZCGP considers that one of the key barriers to doctors choosing general practice is the lack of exposure during their medical training. In their view, without quality role models and prolonged time spent in general practice, doctors do not have enough worthwhile experience to support choosing this vocational scope of practice.<sup>47</sup> Additionally, high levels of student debt upon graduating may incentivise doctors to focus on better remunerated branches of medicine during the initial stages of their career.

## Capacity issues are likely to worsen as many GPs are nearing retirement while several others are moving to part-time work.

While the number of doctors registering in the general practice scope of practice has increased over the past five years, the increase is not sufficient to replace those who are retiring from medicine. The average age of the medical workforce is currently 45.2 years. The current general practice workforce is dominated by medical graduates from the late 1970s to mid-1980s. These GPs are now in their 50s or 60s and many are approaching retirement. Half of GPs are aged 52 years and over and 14% are aged 65 years and over. **Figure 11** sets out the age profile of GPs, who completed the 2022 RNZCGP Workforce Survey.<sup>48</sup>

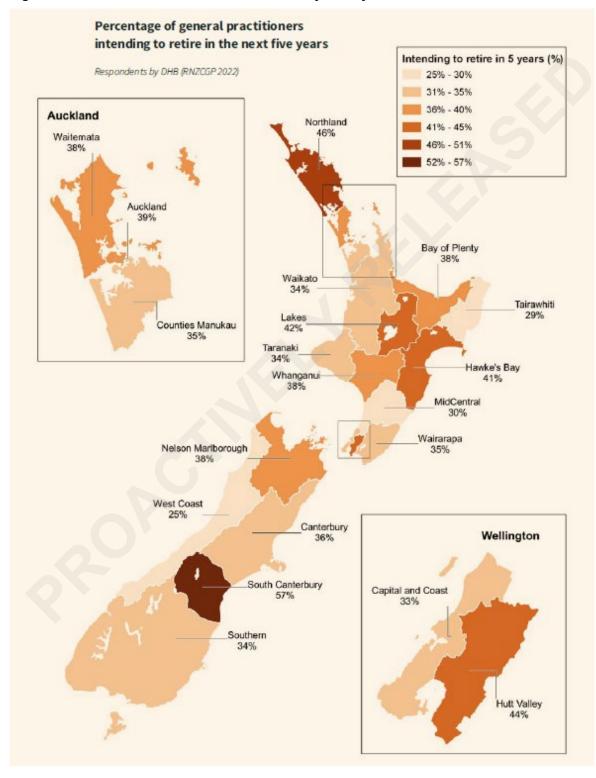


#### Figure 11: Age profile of GPs (n=3,356)

- <sup>46</sup> Te Rangahau Ohu Mahi The Workforce Survey 2022, RNZCGP (2023)
- <sup>47</sup> Te Rangahau Ohu Mahi The Workforce Survey 2022, RNZCGP (2023).
- <sup>48</sup> Te Rangahau Ohu Mahi The Workforce Survey 2022, RNZCGP (2023).

<sup>&</sup>lt;sup>45</sup> New Zealand Health Survey – Ministry of Health

The 2022 RNZCGP Workforce Survey indicated that over one-third of GPs intend to retire over the next five years. Over half intend to retire in the next decade. **Figure 12** shows the percentage of GPs who intend to retire in the next five years in each of the 20 Health NZ districts.<sup>49</sup> Some regions are more acutely affected than other areas, particularly South Canterbury (57%), Northland (46%), Hutt Valley (44%), Lakes (42%) and Hawke's Bay (41%).





<sup>&</sup>lt;sup>49</sup> Te Rangahau Ohu Mahi The Workforce Survey 2022, RNZCGP (2023)

The number of new GPs required to respond to New Zealand's growing healthcare demands is impacted by the number of hours worked by GPs. Almost half of the GP workforce work less than 36 hours per week. This impacts on the average number of hours worked in general practice each week. The 2023 MCNZ workforce survey indicated that doctors in general practice worked 35 hours per week on average, down from 42.2 hours in 2000.<sup>50</sup> A similar figure was reported in the 2023 RNZCGP workforce survey.<sup>51</sup>

The impending retirement of a sizeable proportion of GPs coupled with the increasing tendency of many GPs to work part-time has implications for the delivery of primary care. To maintain current levels of delivery, Health NZ estimates that the medical workforce (including GPs) will need to increase by 14% per annum.<sup>52</sup> More doctors are required to meet the demands that the future growth and ageing in the population place on primary care services.

# There is a geographic maldistribution of doctors with most based in New Zealand's urban centres, which reduces access to healthcare outside these places.

While most of the New Zealand population lives in urban areas, a significant and stable share of the population live in rural areas. These are generally categorised by a small and sparse population compared to cities, as well as the degree of isolation in terms of distance from main centres.<sup>53</sup> Almost one in five people in New Zealand (19% or approximately one million people) live rurally, although many live in areas that border urban centres. Rural areas have a higher proportion of Māori than urban areas (23 compared to 16%) and a higher proportion of people aged 65 years or older (22 compared to 16%).<sup>54</sup>

Significant differences exist in health outcomes between rural areas and urban centres in New Zealand. Rural areas have higher all-cause mortality and amenable mortality (deaths avoided by timely access to healthcare) compared to urban areas.<sup>55</sup> Higher rates of cancers, accidents and cardiovascular disease have been documented.<sup>56</sup> Contributing factors include different demographic structures with a higher deprivation. Gender and demographic differences (higher proportion of males and a lower proportion of people aged 15 to 45 years in rural areas) further contribute to health inequalities. Poorer health outcomes are also due, in part, to difficulties accessing care that prevents or identifies issues early.

While it is important to increase the number of doctors, people must also be able to access appropriate services in both urban centres and rural areas. The distribution of doctors is not currently aligned to population location. The main urban centres have almost four times more doctors per head of population than rural areas (see

**Table** 28).<sup>57</sup> This causes access issues across specialties with longer wait times to see a GP in many rural settings and there are regional, rural and remote areas of New Zealand where

<sup>&</sup>lt;sup>50</sup> New Zealand Medical Workforce in 2023, MCNZ (2023)

<sup>&</sup>lt;sup>51</sup> Te Rangahau Ohu Mahi The Workforce Survey 2022, RNZCGP (2023).

<sup>&</sup>lt;sup>52</sup> Health Workforce Plan 2023/24, Health NZ (July 2023)

<sup>&</sup>lt;sup>53</sup> Rural Health Strategy 2023, Health NZ

<sup>&</sup>lt;sup>54</sup> Health Status Report 2023, Health NZ (February 2024)

<sup>&</sup>lt;sup>55</sup> See Nixon, G., Davie, G., Whitehead, J., Miller, R., De Graaf, B., Lawrenson, R., ... & Crengle, S. (2023). Comparison of urban and rural mortality rates across the lifespan in Aotearoa/New Zealand: a populationlevel study. *J Epidemiol Community Health*, 77(9), 571-577.

<sup>&</sup>lt;sup>56</sup> Eggleton, K., Watts-Henwood, J., & Goodyear-Smith, F. (2024). Development of a rural strategy for an urbanbased medical program: a pragmatic reality. *Rural and Remote Health*, *24*(1), 1-8.

<sup>&</sup>lt;sup>57</sup> New Zealand Medical Workforce in 2023, MCNZ (2023)

access to key specialists is limited, including in Greymouth and Hokitika which has one physician and no paediatricians.<sup>58</sup>

| Health NZ Region                                | Population | Number<br>of<br>doctors | Number of<br>IMGs | Number of<br>GPs<br>(number<br>includes<br>IMGs who<br>work as<br>GPs) |
|---|------------|-------------------------|-------------------|--|
| Te Tai Tokerau                                  | 201,500    | 594                     | 310               | 164  |
| Waitematā                                       | 633,500    | 1,331                   | 560               | 456  |
| Te Toka Tumai Auckland                          | 481,600    | 3,560                   | 1,089             | 534  |
| Counties Manukau                                | 605,100    | 1,202                   | 511               | 380  |
| Waikato   | 451,900    | 1,547                   | 780               | 371  |
| Lakes   | 118,200    | 318                     | 155               | 68   |
| Hauora a Toi Bay of Plenty                      | 274,700    | 870                     | 413               | 242  |
| Tairāwhiti                                      | 52,100     | 161                     | 75                | 40   |
| Taranaki  | 127,500    | 394                     | 188               | 90   |
| Te Matau a Māui Hawke's Bay                     | 182,600    | 573                     | 276               | 160  |
| Whanganui                                       | 69,500     | 158                     | 98                | 40   |
| Te Pae Hauora o Ruahine o Tararua<br>MidCentral | 190,300    | 553                     | 270               | 125  |
| Wairarapa                                       | 51,000     | 79                      | 52                | 41   |
| Hutt Valley                                     | 160,200    | 376                     | 169               | 118  |
| Capital and Coast                               | 322,300    | 1,800                   | 634               | 404  |
| Nelson Marlborough                              | 165,000    | 521                     | 240               | 181  |
| Te Tai o Poutini West Coast                     | 32,700     | 63                      | 42                | 22   |
| Waitaha Canterbury                              | 591,500    | 2,182                   | 775               | 555  |
| South Canterbury                                | 62,300     | 150                     | 88                | 43   |
| Southern  | 350,500    | 1,285                   | 567               | 345  |
| All regions                                     | 5,124,000  | 17,717                  | 7,292             | 4,379  |

### Table 28: Distribution of doctors, GPs and IMGs by Health NZ region

#### The current medical workforce is not representative of the population.

Attempts to address the burden of ill-health in certain is hindered if the GP workforce is not aligned with the profile of the population served. While the number of doctors who identify as Māori or Pacific has steadily increased over the past 20 years, Māori and Pacific doctors are still under-represented compared to the proportion of these ethnic groups in the population. According to the 2023 MCNZ workforce survey, Māori make up at least 16.5% of the

<sup>&</sup>lt;sup>58</sup> See https://www.racp.edu.au/news-and-events/media-releases/workforce-data-shows-physician-shortagesacross-aotearoa-new-zealand

population but only 4.7% of registered doctors are Māori. Just over 8% of New Zealanders identify as Pacific (8.1%) compared to 2.3% of doctors (**Table 29**).<sup>59</sup>

| Ethnicity                   | 2000 | 2005 | 2010 | 2015 | 2020 | 2023 |
|-----------------------------|------|------|------|------|------|------|
| New Zealand European/Pākehā | 76.5 | 57.5 | 53.3 | 51.4 | 49.4 | 44.9 |
| Other European              | -    | 15.4 | 19.7 | 20.5 | 18.9 | 19.1 |
| Māori                       | 2.3  | 2.6  | 3    | 3.4  | 4.1  | 4.7  |
| Pacific Island (Pasifika)   | 1.1  | 1.5  | 1.3  | 2    | 1.9  | 2.3  |
| Chinese                     | 4.5  | 5.4  | 5.3  | 5.9  | 6.3  | 6.7  |
| Indian                      | 4.5  | 5.1  | 5.9  | 6    | 5.8  | 6.4  |
| Other ethnicities           | 7.6  | 10.8 | 9.9  | 11.9 | 10.5 | 12.4 |
| Not answered                | 3.2  | 1.5  | 1.5  | 2.4  | 3.0  | 3.5  |
| Refused                     | 0.2  | 0.2  | 0.2  | 0.0  | 0.0  | 0.0  |
| Total                       | 100  | 100  | 100  | 100  | 100  | 100  |

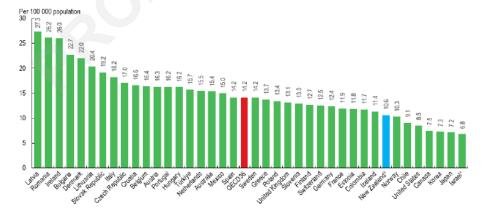
Table 29: Proportion of doctors by ethnic group (%)

The MCNZ estimates that there are currently 909 Māori doctors and 445 Pacific doctors. These numbers need to increase to 3,193 Māori and 1,567 Pacific doctors if the medical workforce reflected the makeup of the New Zealand population.

For communities that are traditionally underrepresented in the medical workforce, the issue is not just about recruiting more doctors but about identifying students who bring tangible connections with their communities as well as language skills and culture. They need to be encouraged to retain and enhance their cultural knowledge as part of their medical training and return to their communities as medical practitioners.

#### New Zealand produces fewer medical graduates than other OCED countries

The shortage of doctors in New Zealand is due in part to supply decisions made in the past. In 1982, the capped number of medical school places was reduced by over 50 to 285 per annum. It remained at that level for 22 years. A series of increases between 2004 and 2015 saw the number of medical school entrants doubled, yet in 2021 New Zealand still had a low rate of medical graduates per capita compared to other OECD countries (**Figure 13**).<sup>60</sup>



#### Figure 13: Comparison of medical graduates per 100,000 population amongst OECD countries

<sup>59</sup> New Zealand Medical Workforce in 2023, MCNZ (2023)

<sup>60</sup> Information available at <u>https://www.oecd-ilibrary.org/sites/9a48414c-</u> en/index.html?itemId=/content/component/9a48414c-en#indicator-d1e32583-c306e547a9 Medical training in New Zealand is currently delivered by two providers: the Universities of Otago and Auckland. Training capacity is limited by an EFTS funding cap, which restricts the number of places medical schools offer to domestic students. Government funding is capped because of the high costs associated with training medical students. Costs include tertiary education and student financial support system and the availability of clinical training placements. The funding cap also supports management of resource requirements for the prevocational medical training programme, including the supervision and training in PGY1 and PGY2 and associated salary costs.

Recent policy changes have meant that the number of students at the two medical schools increased from 589 in 2024 to 614 in 2025. This increase is not expected to meet the medical workforce needs. Demand increases because of issues such as population ageing and growing and increased incidence and complexity of chronic long-term conditions. Assuming half of the expected future gap in doctors can be met through health workforce initiatives including more international recruitment, better retention, task-shifting and use of technology, New Zealand still needs to increase current medical student intake by at least 260 places to close the current workforce gap.

Lifting the number of funded places by 260 would not decrease the quality nor suitability of medical graduates as our existing medical schools both refuse large numbers of applications each year. In its 2018 report, however, the Australian Medical Council's Medical School Accreditation Committee raised concerns that the facilities at the University of Otago had reached capacity and would struggle to cope with further increases in student numbers.<sup>61</sup> The existing medical schools could only accommodate an intake increase of this size if they reconfigured existing facilities and reprioritised existing budgets to address any capital expenditure requirements, which would also make them some of the largest medical schools in the world.

#### Gaps in the current medical workforce are filled by IMGs, which is less than ideal

To mitigate the shortage of New Zealand trained doctors, New Zealand relies heavily on IMGs to address shortages and fill vacancies in certain specialties, including in general practice. IMGs play an important role, filling gaps in our domestic medical workforce and offering a wealth of knowledge and experience in healthcare techniques and practices that New Zealand trained doctors are not regularly exposed to or able to complete training in. They bring an understanding of the cultures from which they come, which is important given our increasing population diversity.

Movement of doctors between countries is normal and is not a one-way flow. Just as IMGs come to New Zealand to work, many New Zealand-trained doctors work in other countries. Relying on IMGs to fill gaps in the GP workforce is not a sustainable solution. We are vulnerable to the growing global medical workforce shortage and will struggle to recruit skilled doctors, who are in significant global demand.<sup>62</sup> In addition, securing IMG resources can create challenges for achieving a responsive workforce representative of the population it serves. This is important given the need to deliver quality healthcare that is both clinically and culturally safe, and which is essential for improving health outcomes for Māori and other population groups.

IMGs make up 41.4% of the country's medical workforce. New Zealand has the secondhighest proportion of IMGs in OECD countries (behind Israel). We recruit over 1,100 doctors a year to fill the shortages that are not met by the current domestic medical training system.

<sup>&</sup>lt;sup>61</sup> https://www.amc.org.au/wp-content/uploads/2019/04/Otago-2018-Report-secured.pdf

<sup>&</sup>lt;sup>62</sup> Health Workforce Plan 2023/24, Health NZ (July 2023)

The IMG retention rate is significantly lower than for domestically trained doctors. This reduces the longer-term benefits of employing IMGs. Most IMGs who register in New Zealand leave after a short period. In 2021/22, the MCNZ reported that fewer than 40% of IMGs remained in New Zealand two years after they registered. Around 25% remain after 10 years compared to New Zealand graduates where 98% are retained two years and over and 75% of doctors remain after 10 years.

**Figure 14** shows the overall retention rate for IMGs who registered in New Zealand between 2005 and 2023.<sup>63</sup>

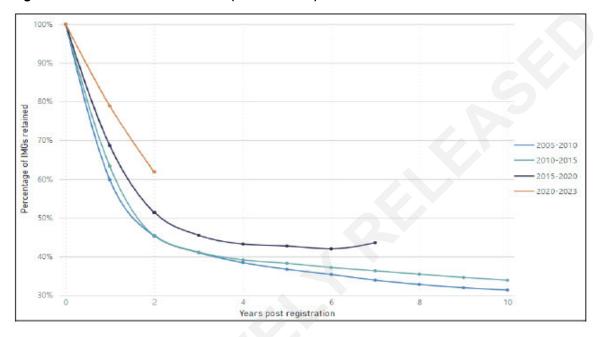


Figure 14: Retention rate for IMGs (2005 to 2023)

IMGs make up over 50% of New Zealand's health workforce in several specialties. The proportion of GPs who are IMGs is 45.9%. As with many specialties, the distribution of IMGs is heavily skewed to locations outside the main centres. In its latest workforce survey, the RNZCGP reported that IMGs make up almost half of GPs in rural areas, while the number working in urban centres was one-third.

<sup>&</sup>lt;sup>63</sup> New Zealand Medical Workforce in 2023, MCNZ (2023)

### Annex 3: Risk management strategy

| Description of Risk  | Impact of Risk  | Likelihood | Impact      | Risk<br>Rating | Risk Mitigation   |
|--|---|------------|-------------|----------------|---|
| Governance Risks   |   |            |             |                |   |
| Strong opposition to the investment programme, leading to political concerns, delays and ultimately re-work.   | Delay to programme delivery                                     | Possible   | Moderate    | Medium         | <ul> <li>Brief Ministers regularly.</li> <li>Develop a communications and engager<br/>and consultation during the subsequent.</li> <li>Take active steps to addressing system<br/>strategic risk is being developed alongsin<br/>Zealand trained doctors.</li> </ul>  |
| Breakdown in relationship between partner organisations.   | Failure of the joint delivery model, jeopardising the programme | Unlikely   | Significant | Medium         | <ul> <li>Active management of the establishmen</li> <li>Clear, supported and formalised governa</li> <li>Aligned incentives to achieve mutual obj</li> </ul>  |
| Financial Risks  |   |            |             |                |   |
| Funding a new medical school is not agreed in Budget 2025,<br>which significantly delays the programme and the realisation<br>of its benefits.   | Delay to programme delivery                                     | Possible   | Severe      | Very High      | <ul> <li>Work closely with the Executive team an<br/>input into the budget bid process and co<br/>relation to others.</li> </ul>  |
| Funding requirements for the new medical school are much greater than anticipated.   | Project cannot be funded at the required scale                  | Possible   | Significant | High           | <ul> <li>The PBC is informed by the current best<br/>to be updated as improved design inform</li> <li>The business case process will identify f<br/>affordability assessment before progress</li> </ul>   |
| The costs of establishment significantly exceed budget placing the whole institution at risk.  | University of Waikato faces<br>significant financial pressure   | Possible   | Severe      | High           | <ul> <li>The University of Waikato will follow exis<br/>TEC to ensure that the establishment of<br/>significant risk</li> <li>Regular reporting to the ELG during the</li> </ul>  |
| Failure to secure the University of Waikato's full contribution to capex.  | Project cannot be funded at the required scale                  | Possible   | Moderate    | High           | s 9(2)(f)(iv)   |
| Failure to secure approval for increase of funding cap on<br>student numbers (that is, no approval for 120 to 160 EFTS,<br>likely due to lack of clinical training places, clinical<br>supervision or PGY1 or PGY2 attachments). | Lower quality and volume of applicants                          | Possible   | Significant | High           | <ul> <li>Close engagement with the Ministry of E ensure increased funding is available to</li> <li>Forecast volumes are based on market in Experience shows that the University of services into new areas.</li> <li>In addition, data highlights that medical suggesting that the prospects for attractionattraction.</li> <li>Work to establish new clinical training plateatement of proposation.</li> </ul> |
| Partnership Risks  |   |            |             |                |   |
| If relevant iwi, hapu and other interest groups are not<br>engaged, it is possible they may withdraw their support for<br>the investment programme.  | Loss of stakeholder support                                     | Possible   | Significant | High           | <ul> <li>Robust and meaningful engagement with<br/>throughout the length of the project.</li> </ul>   |

- gement plan to ensure appropriate engagement nt stages of the programme.
- m capacity to show that work to address a gside models to increase the number of New
- ent of the new medical school.
- rnance arrangements between partners. objectives
- and Treasury to provide appropriate and timely convey the relative priority of this investment in
- est available cost information, but this will continue ormation becomes available.
- y funding and financing mechanisms to support essing the design of the preferred option(s) further.
- xisting investment practices, working alongside of a new medical school does not create
- ne development of the Detailed Business Case.
- f Education, TEC and the Treasury is needed to to manage tertiary system costs.
- et research and senior leadership team scrutiny. of Waikato has been successful at expanding its
- al school places are heavily over-subscribed, acting students are good, if places are available. placements and supervision capacity occurs in osals to train more doctors in New Zealand.
- with relevant iwi, hapu and other interest groups

| Loss of key personnel at the University of Waikato, impacting<br>on ability to deliver the programme.   | Delay to programme delivery   | Possible | Significant | High      | <ul> <li>Attractive remuneration packages as we</li> <li>Incrementally build talent to reduce risk</li> <li>Active succession planning</li> </ul>  |
|---|---|----------|-------------|-----------|--|
| Curriculum and staffing risks   |   |          |             |           |  |
| Curriculum not accredited in time for an intake of students in 2028.  | Learning and teaching cannot be delivered   | Possible | Severe      | Very High | Engagement with accreditors throughout   |
| New buildings with specialist teaching facilities are not<br>opened in time for an intake of students in 2028.  | Alternative interim facilities will be required.  | Possible | Significant | High      | <ul> <li>The building project will have rigorous pr</li> <li>The relevant University of Waikato repre</li> <li>In the event of delay in opening, the part could make use of other repurposed facilyear.</li> <li>Should the delay continue, the impact we facilities.</li> </ul>   |
| Failure to secure enough clinical placements for students<br>impacting on the programme's ability to deliver the curriculum<br>as proposed.                         | Reduced number of students  | Possible | Significant | High      | <ul> <li>A systems-wide approach to identifying p what is currently available to medical stu Otago) is needed to support access to in</li> <li>If there is insufficient capacity through H clinical practices in rural areas and prima additional capacity.</li> <li>Regular reporting to the ELG.</li> <li>S 9(2)(b)(ii)</li> </ul>   |
| Failure to appoint the appropriate specialist teaching staff in time to deliver Year 1 curriculum and assessment.   | Learning and teaching cannot be delivered   | Possible | Significant | High      | The University of Waikato will implement<br>teaching staff are available when the me<br>interest in contributing to teaching the pr<br>curriculum could be taught by reprioritisi  |
| Patient Safety and Health and Safety Risks  |   |          |             |           |  |
| Failure to comply with appropriate health and safety<br>processes and procedures which may lead to injury or<br>accident during construction of the new facilities. | Injury / accident of people<br>associated with the medical school<br>and impacts relating to reputation<br>and legal compliance | Possible | Significant | High      | <ul> <li>The University of Waikato has a dedicate assessed to ensure the new facilities op addressed, risks assessed, and training timescale.</li> <li>Any health and safety concerns are raise governance and management arrangem</li> <li>Health and Safety risk reporting forms pato ensure alignment and effective oversignment and effective oversig</li></ul> |
| Failure to appropriately train students resulting in upset or harmed patient.   | Injury / harm to patients and impacts<br>relating to reputation and legal<br>compliance   | Possible | Severe      | Very High | <ul> <li>Professionalism and clinical skills will be</li> <li>Effective mechanisms will be put in place response.</li> </ul>   |

EFTS = equivalent full-time students; ELG = Executive Leadership Group; PGY1 = postgraduate Year 1 (prevocational); PGY2 = postgraduate Year 2 (prevocational).

/ell as additional support for staff k

out the design and development of the curriculum.

project controls in place.

resentative will report progress to the ELG.

arts of the programme requiring specialist facilities acilities or be rescheduled to later in the teaching

would be mitigated by seeking alternative

g potential additional clinical placements (above students at the Universities of Auckland and increased clinical training capacity.

Health NZ, negotiations will be held with individual mary and community care settings to assess

ent a recruitment plan to ensure high calibre nedical school opens. There has been strong programme and most aspects of the Year 1 sing workloads of existing staff.

ated Health and Safety Policy. This policy will be operational requirements are appropriately ng developed and delivered on an appropriate

ised through the University of Waikato's ements and escalated as required to ELG.

part of the procedures at the University of Waikato sight.

be integrated into the curriculum. ace for reporting of low-level concerns for rapid

### Annex 4: Critical success factors and proposal– specific criteria

Table 30: Critical success factors and proposal-specific clarification

| Critical success factors   | Proposal-specific clarification  |
|--|--|
| Strategic fit and business<br>needs<br>How well the option meets<br>the agreed investment<br>objectives, related business<br>needs and service<br>requirements and<br>integrates with other<br>strategies, policies and<br>plans | <ul> <li>The programme affords the opportunity to grow more domestically trained doctors committed to the delivery of healthcare in rural areas and primary and community care settings.</li> <li>The programme aligns with national strategies including: <ul> <li>Government Priority Statement 2024-27</li> <li>Health Strategy</li> <li>Pae Tū: Hauora Māori Strategy</li> <li>Te Mana Ola: Pacific Health Strategy</li> <li>Rural Health Strategy</li> <li>MoH Health Workforce Strategic Framework 2023</li> <li>HNZ Health Workforce Plan 2023/24.</li> </ul> </li> <li>The proposed initiative supports the Ministry's role as kaitiaki of the health system in New Zealand working to support health agencies to address long-standing workforce challenges and aligns with the aims of:</li> <li>Increasing numbers of doctors are trained in New Zealand with the skills and experience needed to meet the future health needs of local communities.</li> <li>Developing and maintaining a medical workforce representative of the community it serves.</li> <li>Strengthening clinical placement opportunities.</li> <li>Ensuring medical students can work in interdisciplinary teams.</li> <li>Managing the wellbeing of medical students during their studies.</li> </ul> |
| Potential Value for Money<br>How well the option<br>optimises value for money  | <ul> <li>Manages political and public expectations of the health workforce.</li> <li>The cost of the option is reasonable for the extent of achievement of the investment objectives.</li> <li>The solution reduces the time taken to train medical students.</li> <li>The solution supports and enables improved delivery of health services.</li> <li>Existing medical training capacity and capabilities in healthcare settings is not diverted as a result of the programme.</li> </ul>  |
| Supplier capacity and<br>capability in timeframe<br>How well the option<br>matches the ability of<br>potential suppliers to<br>deliver the required<br>services  | <ul> <li>There are suppliers available and ready in the market with the capacity and capability to construct and equip the teaching facilities in the agreed timeframe.</li> <li>The required curriculum for the training programme can be developed in the agreed timeframe.</li> <li>The required increase in clinical placements capacity and capability can be achieved in the agreed timeframe</li> </ul>   |
| Potential achievability<br>How well the option is likely<br>to be delivered and<br>matches the level of  | <ul> <li>The university and relevant agencies have the capacity,<br/>resources and capability to support the delivery and ongoing<br/>medical training programme.</li> </ul>   |

| Critical success factors  | Proposal-specific clarification  |
|---|--|
| available skills required for<br>successful delivery                              | <ul> <li>The programme is achievable within the known constraints and<br/>the current environment (that is, capability availability, funding<br/>and resourcing constraints, competing priorities, etc.).</li> </ul> |
|   | <ul> <li>Scale of change and the proposed timeframe is achievable for the<br/>university and relevant agencies.</li> </ul>   |
| Relative affordability<br>How well the option can be<br>met from likely available | <ul> <li>The university can access the capital to meet the costs to<br/>construct and equip the teaching facilities and develop the<br/>required curriculum.</li> </ul>  |
| funding and matches other funding constraints                                     | <ul> <li>Costs associated with enhancing the capacity and capability of<br/>clinical placements are reasonable in the context of public<br/>spending.</li> </ul>   |
|   | Operating costs appear reasonable to the Crown.  |
|   | <ul> <li>Costs are considered in the context of the overall health<br/>workforce training spend across the sector.</li> </ul>  |

# Annex 5: Developing and evaluating the long-list of options

The key dimensions of choice for the investment programme were assessed based on the problem statements and investment objectives. These dimensions focus on the potential scope of the programme and possible solutions to the problem statements. The dimensions and the potential sub-options create a long-list of options when all possible combinations are considered. This is described in **Table 31**.

| Dimension of choice   | Theme   | Potential sub-options  |
|---|---|--|
| Potential scope<br>In relation to the proposal,<br>what levels of coverage<br>are possible? | Workforce capacity  | <ul> <li>Increase medical student intake</li> <li>Increase IMG numbers</li> <li>Incentivise medial graduates to remain in or return to New Zealand</li> </ul>  |
|   | Student numbers   | <ul> <li>Minor incremental increases over time</li> <li>Substantial increase followed by further increases over time</li> <li>Big bang</li> </ul>  |
|   | Location of clinical<br>placements  | <ul> <li>Primarily urban centres</li> <li>Urban centres plus provincial and rural areas</li> <li>Primarily provincial and rural areas</li> </ul>   |
| Programme solution<br>How could the<br>programme be provided?                               | Entry pathway<br>Focus of medical<br>curriculum<br>Duration of clinical<br>placements | <ul> <li>Prior academic achievement</li> <li>Diverse entry pathway</li> <li>General specialities</li> <li>Mixed curriculum</li> <li>Primary and rural health</li> <li>Short duration (4 to 6 weeks)</li> <li>Long duration (one year)</li> </ul> |
| Methods of programme<br>delivery<br>Who could deliver the<br>programme?                     | Programme provider  | <ul><li>Existing medical school</li><li>New medical school</li><li>Overseas medical school</li></ul>   |
| Implementation<br>When could the<br>programme be delivered?                                 | Programme roll-out  | <ul> <li>Immediate roll-out (less than 1 year)</li> <li>Accelerated roll-out (1 to 3 years)</li> <li>Longer term roll-out (more than 3 years)</li> </ul>   |
| Funding<br>How could it be funded?  | Funding source  | <ul><li>Baseline funding</li><li>Baseline funding plus Crown funding</li><li>Crown funding</li></ul>   |

IMG = international medical graduate.

#### **Evaluation of the long-list options**

**Table 32** explains the options that, theoretically, could grow more domestically trained doctors committed to the delivery of primary and community care in provincial and rural New Zealand. These were developed through the workshops with relevant agencies and other stakeholders.

| Option   | Brief description  |
|--|--|
| Increase the intake for existing rural immersion programmes  | Increase the intake of the rural medical immersion programmes operated by existing medial schools.   |
| Incrementally increase the current intake at existing medical schools  | Increase the current intake of medical students<br>incrementally, spread across the existing medical schools,<br>subject to placement and capacity issues.   |
| Substantially increase in the current intake at existing medical schools   | Raise the current intake of medical students by 120 places (spread across the existing medical schools) with the ability to scale over time, subject to placement and capacity issues.                             |
| Increase the current intake at existing<br>medical schools, along with an<br>expansion of rural immersion<br>programmes    | Increase the current intake of medical students (spread<br>across the existing medical schools) with the ability to scale<br>over time, along with proportionately increasing their rural<br>immersion programmes. |
| Create a specialised training<br>programme focused on rural health,<br>jointly administered by existing<br>medical schools | Create a specialised training programme that builds on the existing medical curriculum and focuses on rural health, jointly administered by existing medical schools.  |
| Establish a new medical school using the current medical curriculum  | Increase the intake of medical students by establishing a third medical school that uses the current medical curriculum.   |
| Establish a new medical school focused on rural and primary health   | Increase the intake of medical students by establishing a third medical school that offers a curriculum focused on rural and primary health.   |

Not all combinations of sub-options are practical. Many options can be removed. To develop the short-list, a qualitative assessment of the sub-options to remove those that clearly did not meet the critical success factors and the investment objectives was completed. The results of this are included in **Table 33**. The rationale for refinement is below.

#### Scale, scope and location

- Workforce capacity: The investment objectives require more doctors to be trained in New Zealand. Sub-options relating to increasing IMG numbers and incentivising medial graduates to remain in or return to New Zealand are removed because they do not create more doctors trained in New Zealand.
- Student numbers: To close the gap between the number of doctors and workforce capacity needs, a sizeable increase needs to be made to the funding cap. The sub-option 'Minor increases over time' has been removed because it will not meet the investment objectives quickly (or at all). It is estimated that an additional 285 places are required to completely close this gap; however, an increase of this magnitude would cause significant issues for clinical training placement capacity. The 'Big Bang' sub-option has also been removed.

• *Location of clinical placements*: To meet the needs of people in rural, provincial and high-needs communities, clinical placements should focus on primary and rural areas. The sub-option 'Clinical Placements in urban areas' has been removed.

#### **Programme solution**

- *Entry pathway*: Diversifying the entry pathway improves the diversity of the medical workforce by raising the enrolment of students from rural backgrounds and other communities that are traditionally underrepresented in medical school. The sub-option focusing on academic achievement has been removed.
- *Focus of medical curriculum*: The medical curriculum needs to meet the needs of people in rural, provincial and high-needs communities. To do this, more emphasis needs to be placed on primary and rural healthcare settings. The sub-option 'General specialities' has been removed.
- *Duration of clinical placements*: To encourage doctors to remain in provincial and rural communities after graduation, the programme needs to focus on longitudinal placements. The sub-option 'Short duration' has been removed.

#### **Programme delivery**

 Programme provider: Ensuring doctors are trained in New Zealand is a key investment objective, given the need to deliver quality healthcare that is clinically and culturally safe and culturally responsive to the needs of the population. The sub-option 'Overseas medical school' has been removed.

#### Implementation

• *Programme rollout*: An immediate roll-out places considerable pressure on the enabling support especially in relation to clinical placement capacity in rural and primary care settings. Conversely, implementing the programme over a longer time-period does not address the problems associated with workforce shortages. The sub-options 'Immediate roll-out' and 'Longer-term roll-out' have been removed.

#### Funding

• *Funding source*: To avoid funding being diverted from other courses that the provider delivers, the option needs to be supported by appropriate levels of Crown funding. The 'Baseline funding sub-option' has been removed.

| Dimension of choice       | Theme                              | Potential sub-options   |
|---------------------------|------------------------------------|---|
| Scale, scope and location | Workforce capacity                 | <ul> <li>Increase medical student intake</li> <li>Increase IMG numbers</li> <li>Incentivise medial graduates to remain in or return to New Zealand</li> </ul> |
|                           | Student numbers                    | <ul> <li>Minor incremental increases over time</li> <li>Substantial increase followed by further increases over time</li> <li>Big bang</li> </ul>             |
|                           | Location of clinical<br>placements | <ul> <li>Primarily urban centres</li> <li>Urban centres plus provincial and rural areas</li> <li>Primarily provincial and rural areas</li> </ul>              |
| Programme solution        | Entry pathway                      | <ul><li>Prior academic achievement</li><li>Diverse entry pathway</li></ul>  |
|                           | Focus of medical<br>curriculum     | <ul> <li>General specialities</li> <li>Mixed curriculum</li> <li>Primary and rural health</li> </ul>  |
|                           | Duration of clinical<br>placements | <ul> <li>Short duration (4 to 6 weeks)</li> <li>Longer duration (one year)</li> </ul>   |
| Programme delivery        | Programme Provider                 | <ul> <li>Existing medical school</li> <li>New medical school</li> <li>Overseas medical school</li> </ul>  |
| Implementation            | Programme roll-out                 | <ul> <li>Immediate roll-out (less than 1 year)</li> <li>Accelerated roll-out (1 to 3 years)</li> <li>Longer-term roll-out (more than 3 years)</li> </ul>      |
| Funding                   | Funding source                     | <ul> <li>Baseline funding</li> <li>Baseline funding plus Crown funding</li> <li>Crown funding</li> </ul>  |

#### Table 33: Refined dimensions and sub-options

IMG = international medical graduate.

# Annex 6: Short-list assessment against the investment objectives

|   | Option 0: Status Quo (Do minimum)  | Option 1: Increase current intake at existing<br>medical schools and expand rural<br>immersion programme   |  | Option 3: Establish a new medical school focused on primary and rural health  |
|---|--|--|--|---|
| Investment objective one<br>More doctors are trained in New Zealand.  | <ul> <li>Increases New Zealand domestic training capacity from 589 to 614 places by 2025.</li> <li>Graduates enter the workforce five years after admission.</li> <li>Reduces the medical trainee gap from 285 new trainee places required to 260 places.</li> </ul> | <ul> <li>Increases New Zealand's domestic training capacity from 614 (in 2025) to 734 from 2028 (although this increase could be incrementally introduced earlier).</li> <li>Graduates enter the workforce five years after admission (from 2033 onwards).</li> <li>Closes medical trainee gap from 260 trainee places (in 2025) to 140 places (from 2028 onwards).</li> <li>Provides some ability to scale-up to accommodate further increases in domestic training capacity over time.</li> <li>Increase in intake will be accommodated by reconfiguring existing facilities and reprioritising existing budgets to address any capital expenditure requirements.</li> </ul> | <ul> <li>Increases New Zealand domestic training capacity from 614 (in 2025) to 734 from 2028 onwards.</li> <li>Graduates enter the workforce five years after admission (from 2033 onwards).</li> <li>Closes medical trainee gap from 260 trainee places (in 2025) to 140 places (from 2028 onwards).</li> <li>Provides some ability to scale upwards to accommodate further increases in domestic training capacity over time.</li> <li>Increase in intake will be accommodated by reconfiguring existing facilities and reprioritising existing budgets to address any capital expenditure requirements.</li> </ul>               | <ul> <li>Increases New Zealand domestic training capacity from 614 (in 2025) to 734 from 2028.</li> <li>Graduates will enter the workforce four years after admission (from 2032 onwards).</li> <li>Closes medical trainee gap from 260 trainee places (in 2025) to 140 places (from 2028 onwards).</li> <li>Provides substantial ability to scale upwards to accommodate further increase domestic training capacity overtime.</li> <li>Requires Crown funding for new purpose-built teaching facilities to accommodate student numbers on campus.</li> </ul>  |
| Investment objective two<br>A high-quality medical graduate cohort that<br>has the skills and experience to meet the<br>needs of local communities. | <ul> <li>No change to existing accredited medical training programme.</li> <li>No change to existing rural immersion programmes or targeted admission schemes currently in place at the University of Auckland and University of Otago.</li> </ul>                   | <ul> <li>No change to existing accredited medical training programme.</li> <li>No change to entry pathways or targeted admissions schemes currently in place at the University of Auckland and University of Otago.</li> <li>Continues to offer rural immersion programmes at each medical school.</li> </ul>  | <ul> <li>Builds on an existing accredited medical training programme to encourage rural origin students to pursue a career in rural health.</li> <li>Makes better use of the targeted admission schemes to identify students who are more likely to work in rural areas.</li> <li>Rural focus increases likelihood graduates will remain in New Zealand.</li> <li>The creation of a specialised medical training programme may negate the need for the existing rural immersion programmes, removing the opportunity for students enrolled in the standard programme to undergo a longitudinal placement in a rural area.</li> </ul> | <ul> <li>Seeks accreditation of new medical curriculum to encourage medical graduate cohort to pursue a career in rural health and/or primary and community care settings.</li> <li>Aligns entry criteria with the needs of local communities by focusing on students who are more likely to work in rural areas and/or primary and community health settings.</li> <li>Rural health and primary and community care focus will increase likelihood graduates will remain in New Zealand.</li> <li>The proposed focus of the entry criteria for the new medical school may lead to students/graduates from other health programmes applying for admission. which may create workforce pressures for those professions. This could reduce the workforce for those professions, although the effect may be negligible given some may now be retained in the health sector who would have otherwise have left the workforce to satisfy a desired change in career.</li> </ul> |
| Investment objective three<br>A medical curriculum that is aligned to health<br>system needs, providing the skills and<br>capabilities to:          | Admissions schemes continue to admit<br>students who have a rural background as<br>well those from underrepresented and<br>underserved communities.  | <ul> <li>Proportionate increase through the existing targeted admissions scheme of students who have a rural background.</li> <li>No change to focus on general specialities and current approach to interdisciplinary education.</li> </ul>   | <ul> <li>Admissions scheme focuses on raising<br/>representation of students from rural and<br/>other backgrounds by 120 places.</li> <li>Programme focused on exposing students<br/>to rural medicine and primary and<br/>community care settings.</li> </ul>   | <ul> <li>Admissions scheme focus on raising<br/>representation of students from rural and<br/>other backgrounds by 120 places.</li> <li>Programme focused on exposing<br/>students to rural medicine and primary<br/>and community care settings.</li> </ul>  |

|   | Option 0: Status Quo (Do minimum)  | Option 1: Increase current intake at existing<br>medical schools and expand rural<br>immersion programme   | Option 2: Create a specialised medical training programme focused on rural health, jointly administered by the existing medical schools  |
|---|--|--|--|
| <ul> <li>meet needs of people in rural,<br/>provincial and high-needs<br/>communities</li> <li>work effectively in interdisciplinary<br/>teams.</li> </ul>  | <ul> <li>No change to current focus on general specialities and approach to interdisciplinary education.</li> </ul>  |  | <ul> <li>Modified training programme promotes<br/>interdisciplinary team-based learning<br/>environments.</li> <li>The existence of dual training pathways at<br/>the same university would enable students<br/>to transfer from the specialised training<br/>programme to the standard training<br/>programme, reducing the number of<br/>graduates who may choose to practice in<br/>rural areas or primary and community<br/>health settings.</li> </ul>  |
| Investment objective four<br>Clinical placements provide greater exposure<br>to rural areas and in primary care settings.   | <ul> <li>Rural and primary and community care<br/>focused longitudinal placement available in<br/>Year 5 of medical school.</li> <li>Between 24 and 35 student places</li> </ul>   | <ul> <li>Does not increase the time students<br/>spend on placement in rural areas or<br/>primary and community care settings.</li> <li>Limited increase (approximately 20%) to</li> </ul>   | <ul> <li>Provides 120 dedicated places for rural<br/>and primary and community care one-year<br/>longitudinal placement in Year 5.</li> <li>Provides rural and regional exposure at</li> </ul>   |
|   | <ul> <li>available from 2025 for the University of<br/>Otago's RMIP</li> <li>Approximately 12 new student places from<br/>2025 for the University of Auckland's<br/>RMIP.</li> <li>Students who are not enrolled in a rural<br/>immersion programme can only complete<br/>short duration placements in rural areas<br/>and primary and community care settings<br/>during their training.</li> </ul> | <ul> <li>student places to the existing rural immersion programmes.</li> <li>Students who are not enrolled in a rural immersion programme continue to complete short duration placements in rural areas and primary and community care settings during their training.</li> <li>Requires capital investment to increase capacity and capability of the health system to support placing students in rural hospital and primary care settings.</li> </ul> | <ul> <li>general practice and rural hospitals in<br/>Years 4 and 6.</li> <li>Requires capital investment to increase<br/>capacity and capability of the health<br/>system to support placing students in rural<br/>hospital and primary care settings.</li> </ul>  |
| Investment objective five<br>Students' academic, cultural and broader<br>wellbeing needs are considered and<br>managed.   | <ul> <li>Existing student support settings including pastoral support programmes.</li> <li>Continuation of existing programmes to address possible bullying, harassment and discrimination when on clinical placement.</li> </ul>  | <ul> <li>Existing student support settings including pastoral support programmes.</li> <li>Continuation of existing programmes to address possible bullying, harassment and discrimination when on clinical placement.</li> </ul>  | <ul> <li>Existing student support settings including pastoral support programmes.</li> <li>Continuation of existing programmes to address possible bullying, harassment and discrimination when on clinical placement.</li> <li>Establishment of accommodation to support clinical placements in provincial and rural locations and on campus.</li> <li>The dual training pathways that would be on offer at the existing medical schools may give rise to competition and stigma between the different programmes.</li> </ul> |
| <ul> <li>Investment objective six</li> <li>Increased training and placement capacity<br/>and capability in health settings with:         <ul> <li>clear expectations, resources,<br/>infrastructure, training and time for<br/>health workforce to provide clinical<br/>supervision and mentorship</li> </ul> </li> </ul> | <ul> <li>Increases New Zealand domestic training capacity from 589 to 614 places by 2025.</li> <li>Graduates will enter the workforce five years after admission.</li> <li>Reduces the medical trainee gap from 285 new trainee places required to 260.</li> </ul>   | <ul> <li>Provides additional clinical placement<br/>capacity from 2030.</li> <li>Provides additional PGY1 and PGY2<br/>capacity from 2032 and 2033.</li> <li>Proportionate increase to rural and<br/>primary and community care clinical<br/>placement capacity for the existing rural<br/>immersion programmes.</li> </ul>  | <ul> <li>Provides additional clinical placement capacity from 2030.</li> <li>Provides additional PGY1 and PGY2 capacity from 2032 and 2033.</li> <li>Offers new rural and primary and community care placement capacity for 120 trainees.</li> </ul>   |

| ical<br>ural<br>ing | Option 3: Establish a new medical school focused on primary and rural health  |
|---------------------|---|
| s at<br>ents        | s 9(2)(f)(iv)   |
| ear                 | <ul> <li>Provides 120 dedicated places for rural<br/>and primary and community care on-year<br/>longitudinal placement Year 3.</li> <li>Provides rural and regional exposure at<br/>general practice and rural hospitals in<br/>Years 2 and 4.</li> </ul> |
| Iral                | <ul> <li>Requires capital investment to increase<br/>capacity and capability of the health<br/>system to support placing students in<br/>rural hospital and primary care settings.</li> </ul>   |
| ing<br>and<br>ent.  | <ul> <li>Existing student support settings including pastoral support programmes.</li> <li>Establishment of programme to address possible bullying, harassment and discrimination when on clinical placement.</li> </ul>                                  |
| l<br>De             | placement.<br>s 9(2)(f)(iv)   |
|                     | <ul> <li>Provides additional clinical placement capacity from 2029.</li> <li>Provides additional PGY1 and PGY2 capacity from 2031 and 2032.</li> <li>Offers new rural and primary and community care placement capacity for 120 trainees.</li> </ul>      |

|   |  | Option 2: Create a specialised medical training programme focused on rural health, jointly administered by the existing medical schools                      |  |
|---|--|--|--|
| <ul> <li>more health providers across the full<br/>breadth of health settings providing<br/>clinical placements.</li> </ul> | <ul> <li>Supports establishment of a national<br/>coordination and commissioning model to<br/>manage clinical placements across all<br/>settings.</li> </ul> | <ul> <li>Supports establishment of a national<br/>coordination and commissioning model to<br/>manage clinical placements across all<br/>settings.</li> </ul> | <ul> <li>Supports establishment of a national<br/>coordination and commissioning model to<br/>manage clinical placements across all<br/>settings.</li> </ul> |

# Annex 7: Short-list assessment against the critical success factors

|  | Option 0: Status Quo (Do minimum)   | Option 1: Increase current intake at<br>existing medical schools and expand rural<br>immersion programme   | Option 2: Create a specialised medical<br>training programme focused on rural<br>health, jointly administered by the existing<br>medical schools   | Option 3: Establish a new medical school focused on primary and rural health   |
|--|---|--|--|--|
| Strategic fit and business needs<br>How well the option meets the agreed<br>investment objectives, related business needs<br>and service requirements and integrates with<br>other strategies, policies and plans.   | <ul> <li>Scale of impact on investment outcomes<br/>limited by current pathways and current<br/>trainee cap.</li> <li>Minor increase in the number of New<br/>Zealand trained doctors.</li> </ul> | <ul> <li>Sizeable increase in the number of New Zealand trained doctors.</li> <li>Increase in training cap is only expected to have a minor impact on the distribution and retention of rural medical workforce, as growth is not focused on rural and primary medicine.</li> <li>Aligns with Government workforce strategies.</li> </ul>  | <ul> <li>Sizeable increase in the number of New Zealand trained doctors.</li> <li>Increase in training cap with a rural focused programme is expected to lead to better distribution and retention of the rural medical workforce.</li> <li>Aligns with government workforce strategies.</li> </ul>  | <ul> <li>Sizeable increase in the number of New Zealand trained doctors.</li> <li>Increase in training cap with a rural focused programme is expected to lead to better distribution and retention of the rural medical workforce.</li> <li>Aligns with government workforce strategies.</li> </ul>  |
| Potential value for money<br>How well the option optimises value for<br>money.   | Limited improvements for delivery of health services.   | <ul> <li>Supports and enables improved delivery<br/>of health services including reduced wait<br/>times but the growth in workforce capacity<br/>is likely to be higher in urban areas.</li> <li>The cost of the option is deemed<br/>reasonable for the extent of achievement<br/>of the investment objectives.</li> </ul>  | <ul> <li>Supports and enables improved delivery of health services including reduced wait times.</li> <li>The cost of the option is deemed reasonable for the extent of achievement of the investment objectives.</li> <li>Existing medical training capacity and capabilities in healthcare settings would not be diverted as a result of the programme.</li> </ul>   | <ul> <li>Supports and enables improved delivery of<br/>health services including reduced wait<br/>times.</li> <li>Reduces the time taken to train medical<br/>students.</li> <li>The cost of the option is deemed<br/>reasonable for the extent of achievement of<br/>the investment objectives.</li> <li>Existing medical training capacity and<br/>capabilities in healthcare settings would not<br/>be diverted as a result of the programme.</li> </ul>  |
| Supplier capacity and capability in<br>timeframe<br>How well the option matches the ability of<br>potential suppliers to deliver the required<br>services.   | This critical success factor is not applicable to this option.  | <ul> <li>No requirement to develop or modify the curriculum for the training programme.</li> <li>Not necessary to construct new teaching facilities and any changes that may be required to existing teaching facilities would be able to be made in the agreed timeframes.</li> <li>The required increase in clinical placements capacity and capability can be achieved in the agreed timeframe.</li> </ul>  | <ul> <li>Not necessary to construct new teaching facilities and any changes that may be required to existing teaching facilities would be able to be made in the agreed timeframes.</li> <li>The current curriculum can be modified to enable the delivery of a training programme focused on rural health in the agreed timeframe.</li> <li>The required increase in clinical placements capacity and capability can be achieved in the agreed timeframe.</li> </ul>  | <ul> <li>There would be suppliers available and ready in the market with the capacity and capability to construct and equip the teaching facilities required for the new medical school in the agreed timeframe.</li> <li>The required curriculum for the medical training programme can be developed in the agreed timeframe.</li> <li>The required increase in clinical placements capacity and capability can be achieved in the agreed timeframe.</li> </ul>   |
| Potential achievability<br>How well the option can be delivered in an<br>acceptable time to achieve the Government's<br>priorities including appropriate community<br>engagement throughout the process and<br>acquisition and consenting is achieved in the<br>required timeframes. | This critical success factor is not applicable to this option.  | <ul> <li>Scale of change and the proposed timeframe would be achievable for the university/s and relevant agencies.</li> <li>The university/s and relevant agencies would have the capacity, resources and capability to support the delivery and ongoing medical training programme.</li> <li>The programme would be achievable in the context of the known constraints and the current environment (capability availability, funding and resourcing constraints, competing priorities, etc.).</li> </ul> | <ul> <li>Scale of change and the proposed timeframe would be achievable for the university and relevant agencies, especially given the preliminary activities that have occurred to date.</li> <li>The university and relevant agencies would have the capacity, resources and capability to support the delivery and ongoing medical training programme.</li> <li>The programme would be achievable in the context of the known constraints and the current environment (capability availability, funding and resourcing constraints, competing priorities, etc.).</li> </ul> | <ul> <li>Scale of change and the proposed<br/>timeframe would be achievable for the<br/>university and relevant agencies, especially<br/>given the preliminary activities that have<br/>occurred to date.</li> <li>The university and relevant agencies would<br/>have the capacity, resources and capability<br/>to support the delivery and ongoing<br/>medical training programme.</li> <li>The programme would be achievable in the<br/>context of the known constraints and the<br/>current environment (capability availability,<br/>funding and resourcing constraints,<br/>competing priorities, etc.).</li> </ul> |

|   | Option 0: Status Quo (Do minimum)  | Option 1: Increase current intake at<br>existing medical schools and expand rural<br>immersion programme   | Option 2: Create a specialised medical<br>training programme focused on rural<br>health, jointly administered by the existing<br>medical schools   | Option 3: Establish a new medical school focused on primary and rural health  |
|---|--|--|--|---|
| Relative affordability<br>How well the option can be met from likely<br>available funding and matches other funding<br>constraints. | <ul> <li>Operating costs have already been<br/>appropriated for and were considered in<br/>overall health workforce training spend<br/>across the sector.</li> <li>No new capital investment is required.</li> </ul> | <ul> <li>Operating costs appear reasonable to the Crown.</li> <li>The university/s can access to baseline funding to meet any costs incurred modifying and equipping the teaching facilities.</li> <li>Crown funding required to enhance the capacity and capability of clinical placements. The associated costs appear reasonable in the context of public spending.</li> <li>Costs are considered in the context of the overall health workforce training spend across the sector.</li> </ul> | <ul> <li>Operating costs appear reasonable to the Crown.</li> <li>The university/s can access to baseline funding to meet any costs incurred modifying and equipping the teaching facilities.</li> <li>Crown funding required to enhance the capacity and capability of clinical placements. The associated costs appear reasonable in the context of public spending.</li> <li>Costs are considered in the context of the overall health workforce training spend across the sector.</li> </ul> | <ul> <li>Operating costs appear reasonable to the Crown.</li> <li>Requires Crown funding to meet the costs to construct and equip the teaching facilities and develop the required curriculum.</li> <li>Crown funding required to enhance the capacity and capability of clinical placements. The associated costs appear reasonable in the context of public spending.</li> <li>Costs are considered in the context of the overall health workforce training spend across the sector.</li> </ul> |
|   |  | across the sector.   | across the sector.   | across the sector.  |
|   |  |  |  |   |

# Annex 10: Ongoing costs to government to train 120 additional doctors

The following outlines key assumptions and procedures for estimating the cost of increasing medical school places as of 17 June 2024. Tertiary education and Student Support costs have been calculated by the Ministry of Education. The costs should be considered as indicative and will need to be re-estimated and validated as part of any Budget process that seeks funding for them.

#### **Vote Tertiary Education assumptions**

- The same tuition subsidy and TI grant for medicine applies to all medical students.
- The tuition subsidy is \$51,271 per EFTS per annum in 2024, increasing to \$52,553 for 2025. As the tuition subsidy is set in each budget, sensitivity analysis in the detailed business case costings will include an assumption of no further annual increase.
- Each 120 EFTS enrolled in a graduate-entry programme would otherwise complete one EFTS of postgraduate science, giving an 'effective' medicine rate of \$47,343 per EFTS: this reflects the Ministry of Education's standard costing practice to assume alternative study, but may under-estimate the amount and cost of study per student.
- The TI grant (\$26,756) is paid to all TIs and the value has not been adjusted for some years: the current grant value is assumed with payment at the beginning of the year for 75% of TIs and the remaining TIs paid in instalments through the year.
- The tuition fee charged to students enrolled in the proposed new medical school will be around the same as charged by the existing medical schools.

#### Vote Social Development and Revenue assumptions

Additional medical students lead to increased costs for the Student Loan Scheme and student allowances, which are administered under Vote Social Development and Vote Revenue. The key components are students borrowing for fees and for living costs. Not all students borrow from the loan scheme.

Due to borrowing from the Student Loan Scheme being interest-free while studying and while borrowers remain in New Zealand, and some other factors, the Crown incurs an immediate write-down on the value of lending. This is incurred as an expense under Vote Revenue. The borrowing and write-down costs have been calculated in accordance with agreed and audited methodologies for the Student Loan Scheme.

The Minister for Tertiary Education and Skills has consulted on allowing an Annual Maximum Fee Movement (AMFM) of 6% for 2025 and fees increasing inline with CPI forecasts for the relevant year thereafter has been assumed. Estimated living cost borrowing is based on past patterns for medical students with assumptions applied in line with those for estimating overall living costs borrowing.

It is important to note that the student support costs attributed to additional medical school students may be managed differently or separately to other costs, with this being determined through Budget processes.

#### **Vote Health assumptions**

Vote Health's operating funding requirement is based on the salaries and placement costs of PGY1 and PGY2 interns. Salary costs beyond PGY2 are excluded and will be treated as future cost pressures to be funded within existing baselines or through new funding. PGY1 costs will be incurred from 2031. PGY1 and PGY2 costs will be incurred from 2032. This timing recognises that funding needs to be in place before intern students arrive.

No attrition has been assumed for the additional medical places.

The value for a doctor using a real cost-of-employment factor is \$251,201 which includes the full cost of salary, penal rates / overtime, training costs and overheads. This value has been inflated to 2031 using the wages (average ordinary-time hourly) annual % change as per the Budget Economic and Fiscal Update (**BEFU**) 2024. Representing the full costs of employment of the PGY1 and PGY2 intern year as a financial cost to this Option does not account for the offsets in terms of staffing and service delivery that interns may provide.

Overall, Vote Health costs accounts for more than half of the estimated costs of training 120 additional medical students.

s 9(2)(b)(ii), s 9(2)(f)(iv)

# Annex 12: Risk register overview

| Risk name     | Risk description and<br>cause/s of risk  | Likelihood | Impact      | Pre-<br>mitigation<br>risk level | Mitigation   | Status reporting   | Post<br>mitigation<br>risk level |
|---------------|--|------------|-------------|----------------------------------|--|--|----------------------------------|
| Quality       | Outputs are not the<br>high quality needed to<br>give Ministers<br>confidence to make<br>decisions due to a lack<br>of detail on financial<br>and other information<br>inputs.   | Possible   | Significant | High                             | A structured approach is being<br>used to assess the quality and<br>confidence of evidence used to<br>inform the PBC drafts. This will be<br>included in the PBC introduction.<br>Iterative approach to drafting with<br>regular review and refinement in<br>response to feedback from key<br>agencies.<br>Commissioning the CBA to inform<br>the PBC to allow more financial<br>detail to inform decision-making<br>earlier in the BBC process than<br>originally envisioned. | CBA has been refined and updated<br>in response to consultation.<br>Where further analysis is required on<br>the information informing the<br>business case for the new medical<br>school, this will be delivered as part<br>of the detailed business case.  | Medium                           |
| Relationships | The successful delivery<br>of this work relies on<br>support and<br>engagement from<br>organisations with<br>competing priorities<br>and concerns about the<br>options being<br>considered to meet the<br>investment objectives. | Likely     | Moderate    | Medium                           | Working closely cross agency at<br>ELG, SG and project team level.<br>Engaging directly with key<br>stakeholders to capture and<br>consider their concerns including<br>framing of the business case to<br>ensure all options well evidenced<br>and presented fairly for<br>consideration.   | Acknowledge that this work requires<br>significant input from a range of<br>agencies, alongside other BAU work.<br>Regular engagement with Auckland<br>and Otago. More engagement with<br>stakeholders not as closely<br>connected to the PBC drafting is<br>planned for the coming weeks.<br>Planning for the DBC includes<br>acknowledgement of the work and<br>resourcing required from different<br>agencies and will include<br>engagement mapping.<br>Gateway acknowledge the good<br>status of inter-agency relationships<br>and that interviewees were | Low                              |

| Risk name  | Risk description and cause/s of risk  | Likelihood | Impact      | Pre-<br>mitigation<br>risk level | Mitigation  | Status reporting   | Post<br>mitigation<br>risk level |
|------------|---|------------|-------------|----------------------------------|---|--|----------------------------------|
|            |   |            |             |                                  |   | committed to support the successful delivery of this work.   |                                  |
| Timeframes | The timeframe to<br>deliver the full Better<br>Business Case (BBC)<br>process for decision<br>making for a New<br>Medical School for a<br>Budget 2025 decision<br>is ambitious. | Possible   | Significant | High                             | Planning for delivery is focused<br>on the entire work programme<br>through to the Budget 2025<br>decision point. This includes<br>delivery of the programme BC<br>with the CBA for Cabinet<br>consideration in late August to<br>allow sufficient time for Detailed<br>BC to be developed. | <ul> <li>Planning for the detailed business case to ensure:</li> <li>sufficient resource to support its development,</li> <li>accurate identification and responsibilities for risks, and</li> <li>efficient use of the available time.</li> </ul> | Medium                           |



# Briefing

### Cabinet paper: New Medical School – Programme Business Case

| Date due to MO: | 11 September 2024  | Action required by:   | 12 September 2024 |  |  |  |
|-----------------|--|-----------------------|-------------------|--|--|--|
| Security level: | IN CONFIDENCE  | Health Report number: | H2024048657       |  |  |  |
| То:             | Hon Dr Shane Reti, Minister of Health                          |                       |                   |  |  |  |
| Copy to:        | ter of Finance   | 5                     |                   |  |  |  |
|                 | Hon Penny Simmonds, Minister for Tertiary Education and Skills |                       |                   |  |  |  |
| Consulted:      | Health New Zealand: 🛛  |                       |                   |  |  |  |

### **Contact for telephone discussion**

| Name             | Position  | Telephone |
|------------------|---|-----------|
| Maree Roberts    | Deputy Director-General, Strategy, Policy and Legislation                         | s 9(2)(a) |
| Suzanne Townsend | Acting Group Manager, Health System<br>Settings, Strategy, Policy and Legislation | s 9(2)(a) |

### Minister's office to complete:

|                      | □ Decline   | □ Noted               |
|----------------------|-------------|-----------------------|
| Needs change         | □ Seen      | □ Overtaken by events |
| See Minister's Notes | □ Withdrawn |                       |

Comment:

# Cabinet paper: New Medical School – Programme Business Case

| Security level: | IN CONFIDENCE         | Date: | 11 September 2024 |  |
|-----------------|-----------------------|-------|-------------------|--|
| То:             | Hon Dr Shane Reti, Mi |       |                   |  |

#### **Purpose of report**

1. This paper provides the Cabinet paper: *New Medical School - Programme Business Case* for lodgement by 12 September 2024.

#### **Key points**

- 2. The Cabinet paper, Programme Business Case and Cost Benefit Analysis of a new medical school at the University of Waikato has completed Ministerial consultation. No substantive feedback was provided during Ministerial consultation. The Minister for Māori Development supports the paper but asks that consideration is given to how the proposal can address workforce diversity.
- 3. The Cost Benefit Analysis provider (Sapere) had a meeting with officials from Hon David Seymour's office on 20 August 2024 to go through in detail the outcomes of the assessment. We have drafted a letter for your office (4 August 2024) responding to specific questions raised at the meeting.
- 4. Treasury have also provided a formal comment for the Cabinet paper. Treasury does not support this Cabinet paper and the recommendation to progress to a detailed business case, and instead recommends work is completed on broader costed alternative options to address workforce shortages.
- 5. We recommend that you note with your colleagues that the development of a Detailed Business Case will include further validation of the costings. Priorities for investment can be made through Budget 2025, including the new medical school proposal and other health workforce initiatives.
- 6. We have updated the Cabinet paper and included the Treasury comment. The Cabinet paper is ready to be lodged on 12 September 2024 and will be considered by the Expenditure Review Committee on 17 September 2024.
- 7. We are preparing a communications pack and will provide this to your office. We intend to publish the Programme Business Case, Cost Benefit Analysis on the Ministry of Health's website following Cabinet decisions. We will also prepare a press release for your office, outlining the decisions following Cabinet and next steps.
- 8. Subject to Cabinet agreement, we will progress with the coordination and development of the Detailed Business Case for consideration by Cabinet in Quarter 1 2025.

#### Recommendations

We recommend you:

- a) **Note** Treasury have included a comment in the Cabinet paper not supporting the recommendation to proceed with development of the Detailed Business Case
- b) Note that consideration of the Detailed Business Case can be made alongside other potential investment and priorities as part of Budget 2025, subject to agreement from Cabinet to proceed
- c) **Note** the Cabinet Paper, Programme Business Case and Cost Benefit Analysis (attached) are now ready for lodgement on 12 September 2024 for consideration by the Expenditure Review Committee on 17 September 2024.

Maree Roberts Deputy Director-General, Strategy, Policy and Legislation Date: 11/09/2024

Hon Dr Shane Reti

**Minister of Health** Date: 13/9/2024

# Cabinet paper: New Medical School -Programme Business Case

#### Context

1

- 9. The Cabinet paper: *New Medical School Programme Business Case* submission, with the Programme Business Case and the Cost Benefit Analysis were circulated for Ministerial consultation on 6 August 2024.
- 10. We have received feedback from the Minister for Māori Development, no other feedback was received during Ministerial consultation. Treasury have also provided a comment for inclusion in the Cabinet paper.
- 11. The papers have been updated and are appended. We expect to lodge the papers on 12 September 2024, for consideration by the Expenditure Review Committee on 17 September 2024.

#### Ministerial consultation – feedback

- 12. The Minister for Māori Development supports the paper but asks that consideration is given to how the case for the new medical school could be strengthened by demonstrating how it can address workforce diversity. Greater diversity in the workforce is required to meet the distinct needs of those population groups (including Māori, Pasifika and women) that continue to experience significant inequities in health outcomes.
- 13. A rurally focused primary and community care training pathway would better serve these population groups and is a key aspect of the proposal. The case for change in the Detailed Business Case can further elaborate on this point, subject to Cabinet agreement to proceed.
- 14. Officials from your office convened a meeting of the Cost Benefit Analysis provider (Sapere) and officials from Hon David Seymour's office on 20 August 2024 to go through in detail the outcomes of the assessment. Ministry of Health officials attended this meeting. The meeting focused on addressing specific technical elements of the methodology. We have drafted a letter for your office (4 August 2024) responding to specific questions raised at the meeting.
- 15. It is likely that other Ministers may also have questions on the results of the Cost Benefit Analysis and officials can be present at the cabinet committee meeting on 17 September 2024 to answer any specific questions.

#### Treasury comment

- 16. 'The Treasury does not support this Cabinet paper and the recommendation to progress to a Detailed Business Case. We instead recommend you ask the Minister of Health to seek broader costed alternative options to address workforce shortages, which could include options focussed on training and retention of rural GPs. The report back should align with the Health Workforce Plan that Treasury understands is being developed by Health New Zealand.
- 17. While the Treasury recognises that New Zealand is experiencing an increasing shortage of doctors, including General Practitioners, we do not consider that progressing with this investment pathway represents the best value-for-money. The cost of the project is significant

and is unaffordable in the current fiscal climate with significant operating and capital funding demands. The Treasury considers an estimated  $\lim_{x \to 0} \frac{s g(2)(f(x))}{g(2)(f(x))}$  investment could have a greater impact in alternative approaches, such as improving workforce retention, removing barriers to workforce entry, and changing models of primary care. Such alternatives are unlikely to require significant upfront capital investment and may be more feasible and timelier to implement.'

- 18. The Ministry expects that this discussion will be had at Cabinet and notes that:
  - a. development of a Detailed Business Case will enable design and testing of the proposal including providing more accurate costings across all components of the proposal and sequencing of when these costs would be incurred (the Detailed Business Case information requirements are noted below); and
  - b. priorities for investment can be made through Budget 2025, this includes consideration of the proposal against other health system initiatives where decisions can be made on the relative affordability and impact.
- 19. The Treasury comment has been included in the Cabinet paper and we have included an additional talking point to support any discussion at Cabinet. You may wish to discuss your approach with the Minister of Finance and Minister for Tertiary Education and Skills (as joint Ministers for this programme of work) prior to Cabinet committee discussions on 17 September 2024.

#### **Detailed Business Case information requirements**

- 20. The Ministry and other key agencies have begun planning for the Detailed Business Case delivery ahead of the Cabinet consideration of the Programme Business Case.
- 21. The Detailed Business Case is expected to be provided to Cabinet in early Q1 2025. This gives approximately three months from end of August to December 2024, to complete the first draft of the Detailed Business Case and then to progress with assurance processes.
- 22. The Detailed Business Case will require significant amount of work to be completed by Health New Zealand the University of Waikato, within tight timeframes. This work includes:
  - Clinical placements design, including describing current clinical placement capacity, developing a model for implementation and identifying infrastructure and staffing requirements, costs and funding sources and the funding model.
  - b. Medical school design and curriculum development, including describing and validating the medical school model, more detailed description of infrastructure and curriculum requirements and costs, describing and validating entry/selection requirements, describing the clinical experience model and clinical placement requirements.
- 23. The work required for development of the proposal will need to be prioritised and resourced sufficiently to allow the work to be completed in time for assurance processes to be completed. The information provided by the University of Waikato and Health New Zealand needs to undergo testing including financial audits and Quantitative Risk Assessment of the costs. Gateway review and Independent Quality Assurance are also a requirement for this next stage of work. A clear procurement and management approach is also required to provide confidence that the programme can be delivered on time and to budget and achieve the investment outcomes.

24. The Detailed Business Case would enable Cabinet to consider whether to proceed with a new medical school, subject to confirmation through Budget 2025 that funding would be prioritised for this investment.

#### Next steps

- 25. Talking points have been prepared and are appended to support your discussion at Cabinet Expenditure Review Committee. Officials will be present to support any detailed discussion of the outcomes of the Programme Business Case and Cost Benefit Analysis.
- 26. The Ministry has prepared a communications pack and will provide this to your office. Subject to Cabinet agreement we are proposing to:
  - a. publish the Programme Business Case and Cost Benefit Analysis on the Ministry website; and
  - b. proactively release the Cabinet paper and other advice that has been provided to date to support development of the Programme Business Case.
- 27. Subject to agreement from Cabinet, the Ministry will proceed with development of the Detailed Business Case and provide a press release for your office, outlining the decision and next steps.

ENDS.

### Appendix

- 1) Talking points
- 2) Cabinet paper: New Medical School Programme Business Case
- 3) Programme Business Case
- 4) Cost Benefit Analysis

Briefing: H2024048657

## **Appendix One: Talking Points**

s 9(2)(g)(i)



# Cabinet

## Minute of Decision

This document contains information for the New Zealand Cabinet. It must be treated in confidence and handled in accordance with any security classification, or other endorsement. The information can only be released, including under the Official Information Act 1982, by persons with the appropriate authority.

### New Medical School: Programme Business Case

Portfolio Health

On 23 September 2024, following reference from the Cabinet Social Outcomes Committee, Cabinet:

- 1 noted the New Medical School Programme Business Case (PBC) and independent Waikato Medical School Cost Benefit Analysis (CBA), attached to the submission under SOU-24-SUB-0113;
- 2 **noted** that the CBA referred to in paragraph 1 above is considered to provide a partial cost benefit analysis;
- 3 **noted** that:
  - 3.1 the PBC has identified that a new medical school at the University of Waikato (Option 3 of the Programme Business Case and CBA, the new medical school proposal) would achieve the investment objectives, and meet the critical success factors set out in the PBC;
  - 3.2 the indicative outcomes of the assessment to date from the CBA identified that there are greater long-term benefits (with the additional investment required) compared to other options considered;
- 4 **noted** that the new medical school proposal is part of a wider programme of work with a focus on addressing the short-term need and the long-term sustainability of New Zealand's health workforce, including:
  - 4.1 further uplift of the medicine training cap in existing medical schools, as well as attracting, retaining and increasing engagement of the existing workforce;
  - 4.2 opportunities to increase other non-medical workforce within primary care, including nurse practitioners and other specialist care roles;
- 5 **noted** that the new medical school proposal is an investment to contribute to addressing New Zealand's long-term medical workforce requirements in primary and community care;
- 6 **invited** the Ministry of Health to submit a Detailed Business Case (DBC) for Option 3 in Quarter 1 of 2025 for Cabinet consideration;

- 7 **agreed** that the Ministry of Health, as part of the development of the DBC, will:
  - 7.1 refine the problem definition to focus on general practice shortages, particularly in rural areas;
  - 7.2 continue to build the evidence base and confirm assumptions;
  - 7.3 validate indicative costs and financial assumptions, including stress testing of the cost estimates and infrastructure requirements against different scenarios;
- 8 **agreed** that the Ministry of Health coordinate the work required for the DBC, including:
  - 8.1 commissioning the required inputs and information for the DBC;
  - 8.2 leading the Budget 2025 initiative;
  - 8.3 supporting Ministerial decision-making;
- 9 **noted** that Health New Zealand and the University of Waikato will be commissioned by the Ministry of Health to provide more detailed information for the DBC;
- 10 **noted** that the monetised benefits that will be included in the DBC will be based on assumptions in the CBA, including:
  - 10.1 the proportion of graduates who will be General Practitioners (GPs), and the likely impact of additional GPs on mortality;
  - 10.2 estimations of the costs and benefits of non-GP graduates (e.g. specialists), and other key impacts;
- **noted** that the establishment of a new medical school is subject to Budget 2025 investment decisions and agreement to the DBC;
- 12 **noted** that there is a significant programme of work required for Health New Zealand if the new medical school proposal proceeds, and that this work will need to be prioritised and require dedicated resourcing;
- 13 noted that the full CBA of the new medical school proposal, as included in the National Party - ACT Party Coalition Agreement, will be fulfilled as part of the DBC.

Diana Hawker for Secretary of the Cabinet

Secretary's Note: This minute replaces SOU-24-MIN-0113.

#### In Confidence

Office of the Minister of Health

Cabinet Social Outcomes Committee

#### New medical school – Programme Business Case submission

#### Proposal

- 1 This paper:
  - 1.1 submits the Programme Business Case and Cost Benefit Analysis (CBA) on the proposal for a new medical school at the University of Waikato; and
  - 1.2 seeks agreement to invite the Ministry of Health (the Ministry) to submit a Detailed Business Case to Cabinet in Quarter 1 of 2025.

#### **Relation to government priorities**

- 2 The proposals in this paper align with the Government Policy Statement on Health 2024-2027, Priority Area 4: Workforce.
- 3 A full CBA of the proposal for a new medical school at the University of Waikato was included in the National Party ACT Party Coalition Agreement.
- 4 This paper contributes to the Coalition Government's Quarter 3 Action Plan for New Zealand, Number 30 *Take Cabinet decisions on the Programme Business Case, including CBA, for a proposed third medical school at the University of Waikato.*

#### **Executive Summary**

- 5 New Zealand's health workforce is our greatest asset and the enabler to improving the health and wellbeing of New Zealanders. We have a highly skilled and hardworking workforce, committed to providing the best level of care they can.
- 6 New Zealand does not train enough doctors to meet the demands of our growing and aging population particularly in rural areas and in primary and community care settings. My priority is to train more domestically trained doctors committed to the delivery of primary care in provincial and rural New Zealand.
- 7 To achieve my priorities, investment is required to:
  - 7.1 increase tertiary education domestic training capacity;
  - 7.2 provide a focused rural and primary and community care training pathway; and
  - 7.3 increase capability and capacity in the health system.

- 8 The University of Waikato provided a proposal for a new medical school. The proposal has been considered alongside other options through development of a Programme Business Case and an independent CBA to assess whether they can achieve the investment objectives and provide good value for money.
- 9 The indicative outcomes of the CBA identified that there are several feasible options to train more domestically trained doctors, and those options achieve the investment objectives and have a positive net present value. However, establishing a new medical school at the University of Waikato appears to have the greatest long-term benefits (with the additional capital investment required). The CBA is based on some assumptions (e.g., the location of training or number of graduates who end up in general practice) that will be impacted by the detailed design and need further validation.
- 10 Based on the Programme Business Case and CBA analysis, I recommend we proceed with development of a Detailed Business Case for the proposed new medical school at the University of Waikato. As part of the development of the Detailed Business Case, I recommend the CBA is developed further to validate the assumptions made.
- 11 I am seeking your agreement to invite the Ministry to proceed with the development of a Detailed Business Case for consideration by Cabinet in Quarter 1 of 2025.

#### Context

My priority is to train more domestically trained doctors with a particular focus on the delivery of primary care in provincial and rural New Zealand

12 The Programme Business Case submitted by the Ministry (Appendix 1) demonstrates that feasible solutions exist, and the independent CBA provides evidence that investment would provide significant benefits for New Zealand.

To achieve my priorities, we need to build training capacity, establish rural and primary and community care training pathways, and increase capacity and capability in the health system

13 The Programme Business Case provides an evidence base for investment in three key areas: increasing domestic training capacity, establishing rural and primary and community care training pathways, and increasing capacity and capability in the health system.

#### Increasing our domestic training capacity

- 14 There are not enough doctors to respond to New Zealand's increasing healthcare demands. To meet current staffing shortages, Health New Zealand (Health NZ) estimates that an additional 1,700 doctors are needed. This number is expected to rise to 3,400 by 2032 if further capacity is not secured now.<sup>1</sup> To tackle this issue, we must invest in:
  - 14.1 our tertiary education providers to increase domestic capacity for medicine training (the 120 training places referenced in this paper provides a significant step towards the capacity required); and

<sup>&</sup>lt;sup>1</sup> See Health Workforce Plan 2023/24, Health NZ (2023) available at

https://www.tewhatuora.govt.nz/publications/health-workforce-plan-202324/

14.2 lifting Government funding for additional medicine training places to close the gap and align training with expected demand (Government caps domestic medicine training places due to the high cost of provision)

#### Establishing rural and primary and community care training pathways

- 15 Shortages exist in general medicine and in most vocational scopes of practice. Shortages are particularly acute in general practice outside of the main centres. General Practitioners (GPs) make up less of the medical workforce than they used to (25% in 2023 compared with 37% in 2000). Only 0.6% of doctors work in rural areas, resulting in reduced access to healthcare in these places. To tackle this issue, we must ensure that there are:
  - 15.1 medical training programmes that focus on rural medicine and the delivery of primary and community care in provincial and rural areas;
  - 15.2 longer duration placements in rural and primary and community care settings, which are associated with an increase in returning to practice in these settings after training; and
  - 15.3 more diverse entry pathways into medical training, including reduced locational barriers for study, to help improve the diversity of the medical workforce.

#### Increasing capacity and capability in the health system

- 16 Health providers are currently struggling to provide enough clinical training placements to meet the existing demand. The lack of access to suitable clinical training placements, supervisors and educators impacts the system's ability to manage increases in the number of trainee places effectively. This creates bottlenecks during medical school, in post-graduate training and in vocational training. To tackle this issue will require:
  - 16.1 additional investment to support clinical placements in line with the uplift in Government funding for additional medicine training places;
  - 16.2 additional capacity and capability in primary and community care facilities willing to take on trainees for longer duration placements in line with a new rural and primary and community care training pathway; and
  - 16.3 a consistent approach to supervision and training provided to medical students and trainee doctors.

#### Proposal to establish a new medical school at the University of Waikato

- 17 The University of Waikato provided a proposal for a new medical school that would increase domestic training capacity, provide a focused training pathway for rural and primary and community care, and see an increase in health system capability and capacity for training.
- 18 Cabinet agreed that the Ministry develop a Programme Business Case and commission an independent CBA to consider this proposal and other options that

could address our current challenges [CAB-24-MIN-0183]. This paper submits the Programme Business Case and CBA for consideration.

- 19 The indicative outcomes of the assessment from the CBA and the Programme Business Case have identified that a new medical school at the University of Waikato:
  - 19.1 would achieve the investment objectives and meets the critical success factors set out in the Programme Business Case; and
  - 19.2 has several benefits (identified through the CBA) for the medical workforce and subsequent impact on health outcomes for New Zealanders, particularly in rural and primary and community care settings.
- 20 The long-term benefits are more significant (with the additional capital investment required) for a new medical school at the University of Waikato compared to other options considered. However, the CBA is based on assumptions (e.g., amenable mortality, the location of training or number of graduates who end up in general practice) that will be impacted by the detailed design and need further validation.
- 21 Based on the Programme Business Case and CBA, I recommend we proceed with development of a Detailed Business Case. As part of the development of the Detailed Business Case, I recommend the CBA is developed further to validate the assumptions made.
- 22 I seek your agreement to invite the Ministry to proceed with the development of a Detailed Business Case on the proposal for a new medical school at the University of Waikato for consideration by Cabinet in Quarter 1 of 2025.

# Development of a Detailed Business Case for a new medical school at the University of Waikato

- 23 The decision to proceed with the Detailed Business Case for the University of Waikato proposal gives assurance that the Government is committed to progressing the work.
- 24 The University of Waikato proposal will require a significant programme of work in three key streams:

| s 9(2)(f)(iv) |  |  |  |
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- 25 The Detailed Business Case will include details of each of the three streams of work and provide assurance that they can and will be delivered successfully, including the estimated total cost to deliver the programme.
- 26 The Ministry will coordinate and commission work to both the University of Waikato and Health NZ to support the Detailed Business Case development. I expect this to be completed by Quarter 1 of 2025.

# I have made this recommendation on consideration of the outcomes of the Programme Business Case and Cost Benefit Analysis

27 The Programme Business Case identified that there are feasible solutions, and the CBA has provided early indications that there is evidence to support the new medical school investment. On balance, a new medical school at the University of Waikato (option 3), which the government has signalled a commitment to consider, can deliver on the investment objectives.

#### **Programme Business Case process and outcomes**

- 28 Alongside the proposal from the University of Waikato, two alternative options and the status quo (as comparator), were identified:
  - 28.1 Option 0. Do minimum, reflects existing initiatives to address workforce capacity pressures (status quo);
  - 28.2 Option 1. Increase current intake at existing medical schools;
  - 28.3 Option 2. Create a specialised medical training programme focused on rural health, jointly delivered by the existing medical schools; and
  - 28.4 Option 3. Establish a new medical school focused on primary and rural health.
- 29 Other options were removed from consideration that:
  - 29.1 did not increase the number of students enrolled in medical school;
  - 29.2 solely increased medical school student numbers without a clear focus on rural areas and primary and community care settings; and
  - 29.3 did not have a longitudinal placement in rural areas and primary and community care settings.
- 30 The options considered were most likely to achieve the investment objectives and meet the investment's critical success factors. The options provide the most useful comparison of the University of Waikato's proposal against alternative forms of investment.
- 31 How each option achieved the investment objectives was consistent and based on best practice, i.e.:
  - 31.1 increase training capacity by 120 places;

- 31.2 have a training pathway focused on placing students for a longer duration in a rural and primary and community care settings; and
- 31.3 increase health system capability and capacity.
- 32 Options differ in the scale of investment required, and the scale of impact e.g., option 1 would not see a significant impact in the number of trainees going through rural training pathways, as it primarily focuses on lifting Government funding to increase medical training places across existing medical schools. Options 2 and 3 provide a dedicated and full-scale programme for the 120 trainees to enter a rural programme.
- 33 The Programme Business Case provides a more detailed description of these options, how they achieve the investment objectives, and the assessment process that the Ministry has undertaken.

#### **Cost Benefit Analysis process and outcomes**

34 An independent CBA was commissioned from Sapere, using the All-of-Government procurement process. The CBA approach aligns with Treasury guidance on social cost-benefit analysis. The CBA assessment is discussed below.



- 35 While all options provide net benefits, the analysis indicates that establishing a new medical school has the highest net present value (sum of economic value of the programme's lifetime, minus the present value), the highest benefit cost ratio (2.7), and the greatest non-monetised benefits.
- 36 Under conservative assumptions, all options may result in negative Net Present Values, meaning that the valuation of the expected monetised benefits would not

outweigh the required investment. However, Net Present Value only incorporates the benefits which can be assigned a dollar value. The wider benefits are represented qualitatively and also need to be considered along-side the Net Present Value.

- 37 The CBA indicates that the New Medical School (Option 3) is the most expensive option but is expected to realise the most benefits. The ability of option 3 to realise these benefits is key to its value proposition.
- 38 All options improve health outcomes for New Zealand and Options 2 and 3 are likely to have a bigger impact on currently underserved communities.
- 39 S 9(2)(f)(iv) Options 2 and 3 have a greater impact on GP

numbers and those likely to work in rural areas.

- 40 Having a larger increase in the number of GPs working in rural, provincial and underserved communities will make it easier for people living in such areas to see a doctor, leading to a reduction in amenable mortality (premature death). It will also have a larger impact on lessening the pressure on emergency departments, freeing up resources, and reduce the need for patients living in rural areas to undertake long journeys to access healthcare. The increased number of GPs will also reduce vacancies and, subsequently, recruitment costs.
- 41 While Options 2 and 3 are likely to improve continuity of care, as patients will be in a better position to see the same doctor in primary care settings on an ongoing basis, the introduction of a new medical school will add a new provider. This is likely to increase competition between providers, improving the quality of education which may lead to better health outcomes for society. Introducing a new provider may also have downsides particularly if the clinical placement system is at capacity.
- 42 The results are however sensitive to key assumptions (including costs) as we would expect with a complex project of this kind. Key assumptions for example, include the retention of doctors and whether they go into (and stay in) rural practices, as well as the discount rate. The results are also sensitive to assumptions relating to labour productivity and amenable mortality.
- 43 The CBA has been undertaken independently and at pace and provides useful insights. However, more time is required to validate the assumptions and test the data that informs the CBA, as this will enable us to make decisions based on thorough and tested information, reducing risk for instance around total costs to the Crown. I am recommending that the CBA is tested further alongside the Detailed Business Case.

#### Programme of work - next steps

#### **Development of the Detailed Business Case**

- 44 The proposal for a new medical school is a complex and ambitious programme of work. It impacts both the health and tertiary education systems and will require multiple projects to be delivered successfully to achieve the investment objectives.
- 45 I am recommending that the Ministry coordinate this work and be responsible for the development and delivery of the Detailed Business Case, including:

- 45.1 commissioning information for the Detailed Business Case;
- 45.2 leading the Budget 2025 initiative; and
- 45.3 supporting Ministerial decision-making.
- 46 Health NZ and the University of Waikato will be commissioned to provide more detailed information for the Detailed Business Case on key components of the work that fall within their accountabilities Table 2 below.



Managing dependencies and risks for the development of the Detailed Business Case

- 47 The Programme Business Case has been assessed through the Treasury Gateway review process and undergone Independent Quality Assurance to ensure that any risks are identified and that there are appropriate processes and governance in place.
- 48 Both the Independent Quality Assurance and Treasury Gateway review noted risks around the timelines and need to plan for delivery of the Detailed Business Case, resourcing, and coordination of the next phase of work. Risks to the programme have been noted in the Programme Business Case.
- 49 To provide assurance that any risks and dependencies can be managed, and there is a high probability of success for delivery of the Detailed Business Case:
  - 49.1 existing Governance arrangements will continue with the Ministry coordinating and responsible for delivery of the Detailed Business Case;

- 49.2 detailed planning is undertaken to ensure the Detailed Business Case can be delivered with the specified timeframes;
- 49.3 prioritisation of the programme of work and allocation of resources will be required by the Ministry, Health NZ, the University of Waikato; and
- 49.4 mapping wider dependencies and enablers to the programme will be carried out by the Ministry.
- 50 Development of the Detailed Business Case, if agreed, will need to be prioritised and requires resourcing from within Health NZ and the University of Waikato baselines.

#### Timeframe

| Milestone  | Decision   | Timeline  |
|--|--|-----------|
| Programme<br>Business Case                                     | Seeks agreement to proceed to the Detailed Business Case   | Submitted |
| <b>Detailed Business</b><br><b>Case</b> provided to<br>Cabinet | Seeks agreement to proceed with a Budget 2025 initiative,<br>provides detailed operational design and finalised<br>establishment costings                          | Q1 2025   |
| Budget 2025<br>confirmation                                    | Confirms the Government's financial commitment for establishment costs   | May 2025  |
| Implementation<br>Business Case<br>provided to Cabinet         | Seeks agreement to progress with the commercial and<br>contractual arrangements and detailed management for delivery   | June 2025 |
| Budget 2027  | Confirms the Government's financial commitment for the<br>ongoing operating and capital costs associated with increasing<br>the funding cap for medicine programme | May 2027  |

#### **Financial Implications**

- 51 Officials have undertaken further exploratory work with input from the University of Waikato to:
  - 51.1 provide a breakdown of financial information to support development of the CBA. This has been provided to Sapere and forms the basis of the costs for the CBA attached as Appendix 2.
  - 51.2 understand the basis for the cost estimates and their reliability. The Ministry has worked with the University of Waikato, Health NZ, the Ministry of Education, and the Tertiary Education Commission to understand the requirements for the new medical school and key assumptions that have supported development of the costings.

- 51.3 understand the level and scope of Crown investment required and the source of any additional funding.
- 52 Table 4 provides a summary of the estimated total cost of investment required, including both establishment costs and ongoing Government costs. More detailed financial tables are provided in the Programme Business Case – financial case section. The costs are indicative and require further work and testing through development of the Detailed Business Case, including independent review and risk assessment.



 Table 4. Summary of estimated financial costs

- 53 Establishment costs would be sought through Budget 2025 and ongoing Government costs would be sought through Budget 2027. The costs are an estimate based on the new medical school proposal from the University of Waikato with input from Health NZ. Any changes to the proposal or wider tertiary and health funding settings (e.g., student support settings) will have an impact on the total costs incurred. Costs may change significantly between now and Budget 2027, if current cost growth assumptions change between now and when funding is sought.
- 54 A Detailed Business Case will be prepared with final estimates for Budget 2025. There are likely to be adjustments in the costs due to:
  - 54.1 optionality in the operational design and approach for establishment, with choices still expected to be made through the Detailed Business Case process on the different streams of work identified (Table 2 refers);
  - 54.2 completion of more detailed cost estimates and quality assurance as part of the Detailed Business Case that will support completion of a Budget 2025 initiative for establishment costs;
  - 54.3 risk of unexpected cost escalation and scope change throughout the life of the project.
- 55 There are no direct financial implications from the proposals in this paper, as funding was already reprioritised through Budget 2024 to support development of business cases and to procure the Cost Benefit Analysis.
- 56 The Treasury has recommended not proceeding with the Detailed Business Case and exploring alternative options that a more affordable (noted below). My expectation is

that the Detailed Business Case allows for consideration of a fully costed proposal for a new medical school against other priorities for investment in Budget 2025. Given the critical nature of the medical workforce shortages described in the Programme Business Case, not one solution will be sufficient on its own. Significant investment will be required over a sustained period of time across a range of different interventions.

#### **Treasury comment**

- 57 The Treasury does not support this Cabinet paper and the recommendation to progress to detailed business case. We instead recommend you ask the Minister of Health to seek broader costed alternative options to address workforce shortages, which could include options focussed on training and retention of rural GPs. The report back should align with the Health Workforce Plan that Treasury understands is being developed by Health NZ.
- 58 While the Treasury recognises that New Zealand is experiencing an increasing shortage of doctors, including General Practitioners, we do not consider that progressing with this investment pathway represents the best value-for-money. The cost of the project is significant and is unaffordable in the current fiscal climate with significant operating and capital funding demands. The Treasury considers an estimated  $\frac{\$ 9(2)(f)(x)}{10}$  investment could have a greater impact in alternative approaches, such as improving workforce retention, removing barriers to workforce entry, and changing models of primary care. Such alternatives are unlikely to require significant upfront capital investment and may be more feasible and timelier to implement.

#### Investment contribution from the University of Waikato

- 59 My expectation, as per the original proposal, is the Government will provide a contribution to establishment costs alongside a contribution from the University of Waikato. The Government has previously indicated its commitment to \$280 million in establishment costs for a new medical alongside the University of Waikato's commitment of \$100 million.
- 60 Officials have engaged further with the University of Waikato on what their contribution would include and how this would relate to investment required from the Crown. The University of Waikato has provided an indicative split of where they expect contributing investment will be provided:

| 60.1 | s 9(2)(f)(iv) |
|------|---------------|
| 60.2 |               |
|      |               |

61 Officials are confident that the University of Waikato will be able to contribute to the overall costs of the programme, as outlined above. I have asked officials to confirm the details of the University of Waikato's contribution and any impact on their long-term financial sustainability.

62 Total investment from the Crown will be impacted by the University of Waikato's contribution to establishment costs. The split of investment between the University of Waikato and the Crown will be confirmed as part of the Detailed Business Case, with the Crown's contribution dependent on decisions made through Budget 2025.

#### Legislative Implications

63 There are no legislative implications.

#### **Population Implications**

- 64 Addressing medical workforce issues, particularly in provincial and rural areas and in primary and community care settings, will help improve the health outcomes of populations experiencing inequities by reducing barriers to care. The potential benefits associated with the proposal for a new medical school include:
  - 64.1 better access to health care because of increased number of doctors and improved distribution of doctors working in rural settings, improving health outcomes for rural people, particularly Māori who are more likely to live in rural and remote areas
  - 64.2 improved diversification of the medical training model leading to more choice for medical training entrants and a workforce that is more closely aligned to the cultural and ethnic distribution of the New Zealand population.

#### **Human Rights**

65 There are no human rights implications.

#### **Use of external Resources**

66 The programme of work has been supported with 2.5 FTEs over the last 3 months. External resourcing included technical expertise on the Better Business Case process, drafting of the Programme Business Case, programme management, and engagement support with key external stakeholders. The Ministry also procured an Independent Quality Assurance provider and independent CBA.

#### Consultation

- 67 The following agencies were consulted on the proposals in this paper: the Treasury, Health NZ, Accident Compensation Corporation, Ministry of Disabled People -Whaikaha, Ministry of Social Development, Te Puni Kōkiri, and the Infrastructure Commission. The Department of the Prime Minister and Cabinet was informed.
- 68 The Ministry engaged with the University of Waikato, Health NZ, the Ministry of Education, the Tertiary Education Commission and Treasury on development of the Programme Business Case.

#### Communications

69 I will provide a press release, subject to an agreement by Cabinet, on the preferred way forward and timing for development of a Detailed Business Case.

#### **Proactive Release**

70 This Cabinet paper will be released as part of the press releases subject to decisions being confirmed by the Cabinet with redactions as appropriate under the Official Information Act 1982.

#### Recommendations

The Minister of Health recommends that the Committee:

- 1 **note** that the Programme Business Case and independent Cost Benefit Analysis (CBA) have been submitted for consideration by Cabinet;
- 2 **note** that the Programme Business Case has identified that a new medical school University of Waikato (Option 3 of the Programme Business Case and CBA):
  - 2.1 would achieve the investment objectives and meets the critical success factors set out in the Programme Business Case; and
  - 2.2 the indicative outcomes of the assessment to date from the CBA identified that there are greater long-term benefits (with the additional investment required) compared to other options considered
- 3 **invite** the Ministry of Health to submit a Detailed Business Case for Option 3 in Quarter 1 of 2025 for Cabinet consideration
- 4 **agree** that the Ministry of Health coordinate the work required for the Detailed Business Case, including:
  - 4.1 commissioning the required inputs and information for the Detailed Business Case;
  - 4.2 leading the Budget 2025 initiative; and
  - 4.3 supporting Ministerial decision-making
- 5 **note** Health New Zealand and the University of Waikato will be commissioned by the Ministry of Health to provide more detailed information for the Detailed Business Case
- 6 **note** the CBA is based on some assumptions (e.g., the location of training or number of graduates who end up in general practice) that will be impacted by the detailed design and need further validation
- 7 **agree** that the CBA is developed further as part of the Detailed Business Case to validate the assumptions made in the CBA
- 8 **note** that the establishment of a new medical school is subject to Budget 2025 investment decisions and agreement to the Detailed Business Case

9 **note** that there is a significant programme of work required for Health New Zealand if the proposal proceeds and this work will need to be prioritised and require dedicated resourcing.

Authorised for lodgement

Hon Dr Shane Reti

Minister of Health

### Appendices

Appendix 1 – Programme Business Case

Appendix 2 – Cost Benefit Analysis