



21 August 2024

Hon Dr Shane Reti
Minister of Health
Parliament Buildings

Dear Shane,

WAIKATO MEDICAL SCHOOL COST-BENEFIT ANALYSIS RESPONSE

1. Yesterday, two of my advisors met with the team from Sapere and your Ministry of Health officials to discuss the cost-benefit analysis of the proposed Waikato medical school. The meeting was productive – thank you to your office for arranging it. I also appreciated the written responses provided to my office's questions.
2. I understand that a new draft of the cost-benefit analysis has been provided to the Ministry of Health. Based on the summary of changes provided by Sapere, I understand that these changes will not materially alter the quantitative results of the study.
3. Despite the appreciated engagement with Sapere, I remain dissatisfied with the methodology of the cost-benefit analysis. In particular, the omission of the benefits and costs of specialist doctors (who will represent more than 80% of the graduates of the proposed Waikato medical school) materially alters the conclusions of the report and fails to meet the coalition agreement's commitment to a *full* cost-benefit analysis.
4. This letter lays out my concerns in more depth. I have also attached an analysis, produced by my office, which demonstrates the impact that including specialist doctors would have on the report's conclusions.

Process to this point

5. The ACT-National Coalition Agreement says that a "full cost-benefit analysis must be presented before any binding agreement is made with respect to the Waikato medical school".
6. On 27 May 2024, Cabinet agreed to progress a Programme Business Case for the medical school proposal [CAB-24-MIN-0183]. This included an initial cost-benefit

analysis of the proposal, comparing it to increased training capacity at Auckland and Otago and a new training pathway run by the existing medical schools.

7. This CBA (and business case) is due to be presented to EXP before the end of 2024Q3. If approved, you will then progress a detailed business case in advance of a bid at Budget 2025.
8. My office was consulted on the Programme Business Case and Sapere's CBA (5 August version). We provided a series of written questions and then had a productive meeting with the Sapere team, as well as the commissioning economists at the Ministry of Health.
9. In response to our written concerns (and presumably those raised by others), a new CBA was prepared by Sapere. My office has seen a memo outlining the changes that have been made, but we have yet to see this 19 August version. It appears that none of the changes made will substantively move the benefit-cost ratios.

Key concerns with the CBA

10. The Sapere CBA concludes that the Waikato medical school has the highest benefit-cost ratio (BCR) of the options considered. I do not have confidence in this finding.
11. My office's ex-post analysis shows that the inclusion of specialist doctors erases the Waikato proposal's advantage, even with very pro-GP assumptions.

Comparators chosen

12. The Sapere CBA compares the Waikato medical school option to increased training capacity at Auckland and Otago and a new training pathway run by the existing medical schools. It did not consider the options of incentive payments to rural GPs or increased immigration, which might have offered higher value-for-money.
13. This is not ideal, but I understand it does reflect the decision of Cabinet. As noted in the Cabinet paper proposing the work programme [CAB-24-SUB-0183], "further options [were] ruled out as they will not meet all the investment objectives".

Selection of relevant costs and benefits

14. The Sapere CBA only monetises the costs and benefits of providing general practitioners. It does not account for the value provided by the roughly 1,300 additional specialist doctors produced by all three options by 2042.
15. This was explained by Sapere as being driven by the investment objectives, which (in their view) are exclusively focused on GP output. This is untrue. In fact, the first investment objective agreed by Cabinet is that "more doctors are trained in New

Zealand", regardless of their specialism. There is a preference for more rural GPs, but this is not to the exclusion of other doctors. This misapprehension may be driven by poor commissioning from the Ministry of Health, but nonetheless it materially changes the results of the CBA.

16. My office has adjusted (in a relatively basic way) the Sapere results to include the value of specialist doctors produced by the three options. Their analysis shows that, at every reasonable estimate for the costs and benefits of specialist doctors (relative to GPs), the BCR advantage of the Waikato medical school is erased or reversed:

Waikato medical school's BCR premium over Option 2

		Benefit of a specialist as % of GP				
		80%	100%	120%	140%	160%
Cost of a specialist as % of GP	100%	0.00	-0.03	-0.05	-0.08	-0.10
	120%	0.01	-0.01	-0.03	-0.05	-0.07
	140%	0.02	0.00	-0.01	-0.03	-0.04
	160%	0.02	0.01	0.00	-0.01	-0.03

17. By way of explanation, even assuming that specialists are 20% less valuable than GPs and 60% more expensive to provide (the bottom left cell), Waikato medical school's BCR would only be 0.02 higher than that of the joint rural health school. That compares to a gap of 0.1 in the Sapere analysis.
18. This analysis makes no other adjustments to Sapere's analysis. This includes maintaining the implication of Sapere's findings that all three options produce the same number of specialists. As Sapere noted in their memo, this is contrary to expectations. The non-Waikato options would likely produce more specialists than Waikato.
19. According to Sapere's memo, the 19 August version of the CBA will include more qualitative discussion about the production of specialist doctors. We have yet to see this discussion, but naturally this will not affect the overall BCR.
20. Sapere told us that calculating costs and benefits for non-GP doctors will be a difficult analytical task. Nonetheless, our analysis indicates it will have a material impact on the results of the exercise, making it worthwhile.

Effectiveness at producing rural GPs

21. The key finding that underlies the Sapere report's conclusion is that the Waikato medical school will be more effective at producing (and retaining) GPs than the other medical schools (and the two other options).

22. My office has concerns about the report's interpretation of Australian observational evidence as causal and applicable directly to New Zealand. There is no allowance for the fact that people with underlying pro-GP preferences may choose to join a GP-focused school (but, in a counterfactual world, would have gone to a conventional medical school and become a GP anyway), meaning the reported 'effect' of GP-focused schools is at least in part biased upward by a selection effect.
23. Sapere report that they are confident that the Kwan et al. and Wollongong medical school findings upon which they rely is causal. We do not share their confidence, given school attendance is neither random nor quasi-randomly assigned in either case. Even if *some* causal effect exists, it does not follow that it will be of the quantum observed in the relied-upon studies. Nonetheless, we acknowledge there appears to be a total lack of good experimental (or natural-experimental) evidence on this front.

Next Steps

24. Our view is that a CBA of a medical school that does not count the costs and benefits of more than 80% of its NZ-resident graduates (the specialist doctors) is not a *full* CBA. As such, it is not sufficient as a basis on which to make binding agreements.
25. I oppose the continuation to a detailed business case. It will distract the Ministry of Health, when clearly their health economics expertise needs to focus on fixing Health New Zealand.
26. If you remain committed to this project, I recommend commissioning an enhanced cost-benefit analysis that accounts for *all* the doctors produced by all three options.

Yours sincerely,



David Seymour MP
ACT Leader

Ex-post modification of Sapere CBA of Waikato Medical School to include specialist output

Cells highlighted in yellow were added to illustrate the effect of including specialists in the costs and benefits of medical training options

Other cells come directly from Sapere's 5 August report (p. 11-12)

	Option 1 Auckland + Otago expansion	Option 2 Rural health school	Option 3 Waikato Medical School
Doctor output by 2042			
Total	1,420	1,500	1,550
GPs	131	206	258
Specialists (implied)	1,289	1,294	1,292
Assumed/implied costs/benefits per doctor			
Mortality benefits per GP (implied)	15.17	15.13	15.13
Mortality benefits per specialist (assumed)	15.17	15.13	15.13
Cost of providing a GP (implied)	4.01	4.01	4.03
Cost of providing a specialist (assumed)	5.61	5.62	5.64

Assumptions	
Cost of a specialist as % of GP	140%
Benefit of a specialist as % of GP	100%

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Monetised benefits

Reduction in amenable mortality (GP)	1,987.03	3,116.80	3,902.73
Reduction in amenable mortality (specialist)	19,551.77	19,578.35	19,543.90
Reduction in pressure on ED departments	1.91	3.45	5.10
Lower recruitment costs	3.17	6.17	8.08
Reduced travel time for underserved communities	22.24	35.36	43.83
Total benefits	21,566.12	22,740.13	23,503.64

Benefit Cost Ratio

Sapere	2.26	2.65	2.73
Sapere + specialists	2.66	2.69	2.69

Waikato premium over joint rural health school

0.00

These benefits will be removed in 19 August version
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