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**The Royal Australasian College of
Physicians' submission to the
Ministry of Health**

Long-term Insights Briefing on Precision Health
Kohitātea 2023

Introduction

The Royal Australasian College of Physicians (RACP) welcomes the opportunity to submit feedback to the Ministry of Health on their Long-term Insights Briefing on Precision Health (the Briefing).

The RACP works across more than 40 medical specialties to educate, innovate and advocate for excellence in health and medical care. Working with our senior members, the RACP trains the next generation of specialists, while playing a lead role in developing world best practice models of care. We also draw on the skills of our members, to develop policies that promote a healthier society. By working together, our members advance the interest of our profession, our patients and the broader community.

Consultation Questions

1. Do you think precision health is a worthwhile topic to explore in our Long-term Insights Briefing? Why or why not?

Whilst it was acknowledged there is a significant opportunity for precision health to support screening, diagnosis, and treatment for diseases that may have genetic links, some members suggested it may not be of utmost priority to pursue. They have noted there are other challenges our health system is facing that should be focused on, such as the embedding of the health reforms, health workforce issues, and inequitable social determinants of health. Members felt that prioritising these issues should be considered, rather than exploring new and alternative forms of healthcare that could potentially be resource-intensive and risk furthering inequities. The RACP has long advocated that an individual's health status is impacted by wider systemic factors. In a resource low environment any effort to impact the future wellbeing of the people of Aotearoa New Zealand should prioritise the social determinants of health, making healthy housing, good work, whānau wellbeing and health equity the norm¹.

2. What opportunities does precision health create for more effective health care in the future (more than 10 years ahead)?

Precision health, if utilised, has the potential to use genetic markers to identify at-risk patients for rare diseases, allowing for early diagnosis and treatment. However, this may require significant investment in genetic testing and genome sequencing across patient databases to build a reliable and accessible dataset. This would also require genomic testing capability across the country, a further resource investment, to avoid inequitable access to these scores. Ultimately, the risk for poor coverage of the population is high and may further exacerbate inequities.

3. What barriers or restrictions do you see in the health system that might hold it back from adapting future precision health advancements?

Adapting future precision health advancements would require significant investment in physical hardware such as genome analysers, capable laboratories, computational resources and sufficient data storage. As such, development of these resources would be expensive and may not ever have coverage across the population. In addition to physical hardware, trained specialists would also be required, which may be a challenge given the current health workforce issues and the specificity of training required. Finally, sufficient frameworks would also need to be developed related to the safe handling, storage and use of private genetic information and data.

¹ Royal Australasian College of Physicians. Make It The Norm. [Internet] Sydney: Royal Australasian College of Physicians; 2020. Available from <https://www.racp.edu.au/advocacy/make-it-the-norm>. Accessed 10 January 2023.

Another potential major barrier is the acceptance of the public towards precision health and the related collection, storage and use of genetic data. This would extend to having an informed and willing health workforce that understands genomics, to ensure precision health is incorporated into our health system fully. It is suggested that this work is left in the hands of experts rather than the private sector for reasons of data sovereignty. The AI Governance Group (AIGG) at Te Whatu Ora Waitematā and allied universities are already experts in this field.

4. What concerns or issues do you have with precision health, or how we may adapt it in Aotearoa in the future?

In addition to the high costs associated with precision health and the potential challenges outlined above, a major risk is the protection of genomic data. Recent cyber-attacks highlight the vulnerabilities of our health system's ability to secure our health data, and sufficient computing and data storage capabilities would need to be developed if precision health were to be expanded.

5. Which case study areas do you think the briefing should explore? Why? You can indicate one or more of the following (or identify any other areas of interest to you):
 - a. Genomics
 - b. Pharmacogenomics
 - c. Digital health
 - d. Computational biology

Digital health is an area that is already in practice but could be further developed to support any precision health advances. Genomics and pharmacogenomics would be an area that could be adopted in our health system, if there were sufficient data and capability to do so properly and equitably.

Key points

Precision health may provide an opportunity to improve our diagnosis and treatment of disorders with genetic links, especially as our health system strengthens its digital capabilities. Realising the full (and therefore equitable) potential of precision health, however, would require significant investment in resources such as laboratory capacity and a trained workforce. This would be in addition to existing resource and workforce challenges.

The RACP believes addressing the present health system challenges, to support the health reforms and create a more equitable health system, is of a higher priority than exploring advances such as precision health at the moment.

The RACP thanks the Ministry of Health for the opportunity to provide feedback on this consultation. To discuss this submission further, please contact the NZ Policy and Advocacy Unit at policy@racp.org.nz.

Nāku noa nā



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