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Council of Medical Colleges in New Zealand

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Kanny Ooi
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Medical Council of New Zealand

By email: kooi@mcnz.org.nz

Tēnā koe Kanny,

Re: Discussion paper on when Artificial Intelligence is involved in the care of patients

Thank you for the opportunity to comment on the above discussion paper. The Council of Medical Colleges (CMC) is the collective voice for the medical colleges in New Zealand, and through its members aims to improve, protect and promote public health via a well-trained medical workforce providing high-quality medical care.

The CMC commends the Medical Council for developing this discussion paper on Artificial Intelligence (AI), as a starting point for deciding what sort of guidance should be provided for medical practitioners when using AI in patient care. Please note that several individual medical colleges will also provide submissions.

Overall, the CMC considers the Medical Council's discussion document is thorough, and provides a good overview of issues that need to be considered when using AI in the care of patients. More specific feedback to the questions in the discussion document is provided below.

- 1. With the growth and increasing use of AI in health care, we consider that doctors will need clear guidance on the appropriate use of AI. If we develop guidelines that reflect the principles of Good medical practice (<https://www.mcnz.org.nz/ourstandards/current-standards/good-medical-practice/>) by outlining a number of factors that doctors should consider when using AI in health care, how effective will that be as a starting point?**

Developing guidelines grounded in the principles of good medical practice seems a sensible starting point for guidance around AI in healthcare. A principles based

approach will be necessary, as AI will evolve rapidly making it difficult to develop guidance that remains current.

The Medical Council should also further characterise its definition of AI to distinguish between automation versus a tool to support clinician decision making. The Royal Australian and New Zealand College of Ophthalmologists (RANZCO) gives the example of using a 12-lead ECG with an auto-detect function for cardiac arrhythmia, as a form of AI that has been in common use for many years.

2. What other factors or principles should we include if we go on to develop guidance for doctors on the appropriate use of AI in health care?

Cultural safety and the impact of AI on equitable health outcomes for Māori, Pacific, and other under-served populations will need to be addressed in any guidance. AI systems are only as good as the data they are based on, and will have biases when based on data that is biased. Data sets tend to be collected without input from indigenous communities or patient populations, and data fields may not exist that capture relevant information for different groups of patients. Understanding the limitations of AI, and in particular how AI is likely to perpetuate health inequity, must be included in any guidance document for medical practitioners, and must be taken into account when using AI as part of clinical decision making.

Automation bias should also be discussed in any guidance document – the tendency to over-rely on evidence from automated systems – at the expense of other inputs that inform decision making.

Another factor to address will be ethical use of data. RANZCO has highlighted that often AI or deep learning machines use data from the public sector with no direct permission from individuals or patients. This raises privacy concerns, particularly when the data is used for commercialisation. Considering ethical use of data will be important to address.

3. What role do you think the Medical Council should have in relation to the use of AI by doctors?

The Medical Council has an important role in setting standards for good medical practice, so developing guidance for medical practitioners in the use of AI in providing patient care is appropriate.

The Medical Council's key function of protecting public health and safety is relevant to AI. The primary purpose for AI in healthcare must be focused on supporting clinical decision making to enhance patient care and safety. There is risk that AI may be seen as way to replace clinical decision making, or that algorithms focused on cost-cutting rather than enhanced patient care may be utilised.

The Medical Council can set guidance centred on using AI appropriately as one element to support clinical decision making for enhanced patient care. Guidance should emphasise the importance of clinician oversight and decision making when

using AI as one part of patient care. The Medical Council should also have a role in clearly defining where responsibility for clinical outcomes sits, when clinicians use AI in patient care.

4. What role does the medical profession have to ensure the safe and effective use of AI in patient care? What are a doctor's obligations?

Medical practitioners must have a good understanding of the limitations of any AI systems that they use in clinical decision making, as well as an understanding of factors such as automation-bias that may affect their decision making. Medical practitioners will also need to be confident the focus of the tools they are using is enhanced-patient care, rather than cost-cutting or other drivers where patient care is not the primary aim of the tool.

Medical practitioners should also have the ability to communicate to patients how AI is being used as an input to their care. Review and audit of the use of AI technology and how it relates to patient outcomes will also be relevant.

In terms of cultural safety, medical practitioners will need to understand how AI systems can perpetuate inequity, and how this needs to be accounted for if using AI in clinical decision making.

5. Is there anything else you would like to tell us about our discussion paper or that you would like us to consider?

Medical practitioners and health organisations may be involved in development and oversight of AI technology. Guidance on appropriate governance and transparency of AI technology in the health setting would also be useful. Resources such as the Algorithm Charter for Aotearoa New Zealand (1), Te Mana Raraunga's Māori Data Sovereignty Principles (2), and the Global Indigenous Data Alliance CARE Principles for Indigenous Data Management (3), would be useful to draw on. The Medical Council may also find the AI Forum of New Zealand's document on Artificial Intelligence for Health in New Zealand useful (4).

The CMC also supports an issue raised in the Royal Australian and New Zealand College of Radiologists submission. Under the section "Difficult ethical and practical questions that the use of AI in health care raises," AI is given too much autonomy. For example, this section includes the question if "AI systems and a doctor disagrees, who will be perceived as correct?" The CMC considers AI is a tool that needs direct human oversight and interpretation, as one aspect of clinical decision making.

Finally, thought needs to be given to the principles of Choosing Wisely (www.choosingwisely.org.nz) regarding rational use of our health resources. Adoption of any AI technology must give clear due diligence for the chance of benefit, risk of harm, patient choice and cost of any new AI technology. As is seen with most of the new biologics these can seem promising but at such an enormous expense as to have a manifest impact on the rest of the health spend.

Thank you once again for the opportunity to comment. If you would like to discuss this submission further, please contact Virginia Mills (Executive Director) at virginia.mills@cmc.org.nz

Nāku noa nā,



Dr John Bonning

Chair

References

1. Statistics New Zealand. Algorithm Charter for Aotearoa New Zealand. July 2020. Available from: <https://data.govt.nz/use-data/data-ethics/government-algorithm-transparency-and-accountability/algorithm-charter>
2. Te Mana Raraunga. Māori Data Sovereignty Principles. October 2018. Available from: <https://www.temanararaunga.maori.nz/nga-rauemi>
3. Research Data Alliance International Indigenous Data Sovereignty Interest Group. CARE Principles for Indigenous Data Governance. September 2019. The Global Indigenous Data Alliance. Available from: <https://www.gida-global.org/care>
4. AI Forum of New Zealand. Artificial Intelligence for Health in New Zealand Hauora I te Atamai Iahiko. 2018. Available from: <https://aiforum.org.nz/reports/artificial-intelligence-for-health-in-new-zealand/>