Office of the Prime Minister's
Chief Science Advisor

Kaitohutohu Mātanga Pūtaiao Matua ki te Pirimia

AI – Panel meeting 3
Mon Aug 28, 2023

Timing:	10:00am – 4:00pm
Venue:	UoA Council Room 210 (Clock Tower)
OPMCSA participants: **MoH participants:**	Prof Juliet Gerrard (Co-Chair), Dr George Slim, Dr Rebecca Benson, Dr Emma Brown, Carolle Varughese Prof Ian Town (Co-Chair)
External Panel Members:	Prof Alistair Knott, Prof James Maclaurin, Dr Karaitiana Taiuru, Megan Tapsell, Dr Robyn Whittaker, Prof Michael Witbrock, Dr Vithya Yogarajan
Attendees:	Thor Bessier, Rosie Dobson, Chrisana Archer, Ayesha Amin, Enrico Coiera (Zoom), Sarah Box (Zoom), Leigh Donoghue (Zoom)
Notes:	Delivery of early draft documents includes draft vision, principles, and recommendations.

Agenda Items:

Title / topic	Minutes	Action
Minutes of the previous meeting.	Previous minutes accepted	
Delivery of documents	Vision: • Needs tidying up with feedback given via email • Should include more on nurses and other allied health professionals like pharmacists • Need to incorporate more about how AI is working rather than a focus on data • Discussed the idea of co-pilot Principles: • See emails for feedback on specific language changes • Need to add a sentence about mitigating automation bias in Principle 6	EB/RB/CV: • add "with procedures put in place to minimize automation bias" in P6a • Check for typos • Add section into vision to show where AI is working alongside health professionals

Presentation by Rosie Dobson – Consumer perspectives research	• Discussed what to health users think about the use of their data for AI development
	• Referred to two published studies
	  ○ Dobson et al., 2021. Patient perspectives on the use of health information
	  ○ Dobson et al., 2023. Exploring patient perspectives on the secondary use of their personal health information: an interview study
	• Patients showed an awareness of power, risks, and value of their data
		EB/RB/CV:
		• Need to add a section on consent (dynamic consent) in the report and consent issues with LLM training
		• Talk about communities and types of communities as data doesn't make sense on its own.

	• There were varying comfort levels with data usage, but came with conditions (keep in mind about COVID-19, post COVID-19 context):
	  ○ Secure storage and protected
	  ○ De-identified
	  ○ No harm resulting from use
	  ○ Good governance and oversight (wanted a clinician involved)
	  ○ Wanted data to remain in the health system and local with responsibility for data at the point of collection
	  ○ Transparency and communication
	• Discomfort increased with commercial companies and other third parties (including universities and researchers)
	• Benefits from the use of their data should go back to the health system, communities, and/or to individuals
	• Discussed that people should be empowered to engage with understanding their data and how it is used, and how consent is given – we shouldn't gate keep information
	• Information given to users to opt to read simple and more technical versions of data usage	

Presentation from Enrico Coiera	• Australian Alliance for Artificial Intelligence in Healthcare (AAAiH) is a collaboration to bring different industries together • Healthcare has specific challenges that it must face with AI, such as extraordinary growth in AI that is market-led • People who say AI has no risks, that is not true - risk to confidentiality of patient data etc • To be AI enabled, you have to go to Google, Meta, or AWS as native capacity is not there – e.g.: Private hospital operator Ramsay Health Care has partnered with Google as part of its strategy • The State of Victoria strongly advises against the use of generative AI in healthcare settings • There are huge costs for meeting regulatory requirements • Safety standards include risk based approach (from tests and trials) pre-market and harms-based monitoring and surveillance post-market • We can categorise AI as medical grade AI and non-medical grade AI, but there is no evaluation model for generative AI. Australia has a regulator but is it not well-resourced and post-market surveillance is poor • NZ has an opportunity to model the use of Indigenous languages and how it could impact equity and access and could lead to an MoU with Australia's Medsafe	EB/RB/CV: • Add federated learning to the report • Flag classes of software and how some use might not be as described in the TP bill

	• We discussed about working on regulatory frameworks so that we can use generative AI in the future	
Presentation by Thor Bessier	• Basic science funding (Formus Labs was built on decades of research) • Provision of non-dilutive funding for applied research (from MBIE) Fostering high-risk start ups within the Uni works: o Academic credibility and leverage of other research projects and networks o Entrepreneurial academics can commercialise AND continue their research career o ABI provides space and facilities o UniServices provides funding and IP protection NZ is a unique environment for MedTech startups: o Innovative clinicians and outstanding researchers o Regulatory burden for proof of concept is low (consenting and ethics is robust) o No litigation (ACC is a good model) Discussion: • Regulatory burden slows innovation, too expensive • Critical success is engineers and surgeons having a good relationship • MedTech CoRE plays that role and is expanding • How is data sovereignty proving to be a challenge when there are principles laid out?	EB/RB/CV: • Add in the report about the role MedTech CoRE can play and grow its national potential • Note that they lost their CoRE funding and are being supported by the University and Callaghan
Presentation by MBIE's Ayesha Amin, Sarah Box, Chrisana Archer (arrived approx. 1:50 pm)	• Digital Strategy and Industry Transformation Plan have been released • There has been a focus on growing software as a service (SaaS) and game development • The domestic aim is to encourage more people to take up tech careers (school leavers and career changers) • An AI strategy is long overdue, and there is a lot more focus on AI however, from a strong risk perspective • Sarah Box leads the work on AI • There will be a cross-agency focus on AI across MBIE, DIA, and StatsNZ and currently exploring opportunities and challenges	
Presentation by Leigh Donoghue	• There is a workforce crisis, access to primary care is limited, and significant structural underinvestment • There are deeply entrenched ways of working that need to be disrupted and will be hard to • NZ cannot win the salary war to recruit or retain healthcare professionals and needs to move towards adopting AI to supplement and augment our workforce • There are ways to apply AI beyond the clinician/patient interface, such as:	

	○ Financial data and identifying waste ○ Fraud detection (forensics) in health ○ Clinical coding and billing • Observation is that we are spending about same on data and digital as he saw in the NHS in 2003. (Derek Wallace, NHS report) • GP admin and paperwork is a great opportunity to utilise AI • SNOMED codes should be advocated for Discussion: • AI can help with unstructured data • Need a medical model that understands all the steps in a diagnosis and treatment pathway. • There is a risk we spend money on doing the wrong thing but we have not been spending enough to do the work	
Delivery of documents:	A3 • Needs another side with case studies • Needs more work before it can go out • Report will inform it more Recommendations: • We need to discuss inference and different knowledges when talking about data (see emails) Definitions predictive and generative: • Are not complete, predictive is not just statistical	EB/RB/CV: • Add headings to the ley messages and focus on opportunities first • Add case studies • Lose numbering on principles and specify there are 12 principles • Add "data and inference" to Rec Theme 7. And last sentence ".., and different knowledges" • Put all recommended agencies into the considerations column VY/AK/JM/MW: • To finalise on definitions before Friday
General comments	• Title of the report "Capturing the benefits of AI in Healthcare in Aotearoa New Zealand" - agreed	