Joint Committee of Public Accounts and Audit Inquiry into the use and governance of artificial intelligence systems by public sector entities

Submission by the Australasian Institute of Digital Health (AIDH)

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Terms of reference

The inquiry will have particular regard to the following:

- the purposes for which AI is currently being used by the public sector entity and whether there are planned or likely future uses.
- the existing legislative, regulatory and policy frameworks that are relevant to the use of AI and whether they are fit for purpose.
- whether the internal governance structures that currently exist for AI will ensure its ethical and responsible use by public sector entities.
- the internal framework/policies or additional controls used for assessing the risks associated with the use and possible misuse of AI, including the areas of security, privacy, ethics, bias, discrimination, transparency and accountability.
- whether there is an adequate line of sight to the output of AI, and the decisions made through its use.
- whether the public sector has the internal capability to effectively adopt and utilise AI into the future.
- whether there are sovereign capability issues to consider given that most AI tools currently used in Australia are sourced from overseas.
- any other related matters.

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Introduction

The Australasian Institute of Digital Health (AIDH) welcomes the opportunity to contribute to the Joint Committee of Public Accounts and Audit (the Committee) inquiry into the use and governance of artificial intelligence (AI) systems by public sector entities.

AIDH acknowledges the work of the Australian Government Digital Transformation Agency as it relates to the safe and responsible use of AI across the Australian Public Service (APS).[1]

AIDH represents a diverse and growing community of professionals at the intersection of health and technology, and we are committed to ensuring that the integration of AI into healthcare is both beneficial and safe.

AIDH wishes to share with the Committee our position on safe and responsible AI as presented in:

- our September 2024 submission to the Centre of Disease Control (CDC) consultation on their usage of data;
- our submission to the Department of Industry, Science, and Resources' proposals for the introduction of mandatory guardrails for AI in high-risk settings;
- our submission to the Department of Health and Aged Care on Safe and Responsible AI in healthcare; and in
- the Australian Alliance for Artificial Intelligence in Healthcare (AAAiH) National Policy Roadmap for artificial Intelligence in Healthcare.[2]

The submissions are available upon request.

We provide below some key highlights of our positions on how AI can be safely integrated across the Australian Public Service. Some comments will specifically relate to public sector entities that deliver healthcare or have an involvement in the delivery of healthcare, including the Department of Health and Aged Care, its agencies, and health related commissions and entities.

We would welcome the opportunity to meet with the Committee to discuss further.

[1] See AI policy guidance and training available at https://www.dta.gov.au/blogs/ai-policy-guidance-and-training-rounding-out-responsible-approach-ai-adoption and the recent assurance framework.
[2] Available at https://aihealthalliance.org/wp-content/uploads/2023/11/AAAiH_NationalPolicyRoadmap_FINAL.pdf

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Use and governance of Artificial Intelligence (AI)

AI has the potential to transform the healthcare sector by improving patient outcomes, streamline operations, and support clinicians. However, there are also risks associated with the deployment of AI, especially in high-risk settings such as health care, where human lives are at stake. These concerns are particularly significant when it comes to ensuring patient safety, data privacy, and accountability in decision-making.

1. Introduction of mandatory guardrails for AI in high-risk settings

In our submission to the Department of Industry, Science and Resources (RISR), AIDH strongly supported the introduction of mandatory guardrails for AI in high-risk settings. AI in healthcare poses unique challenges, and without adequate regulation, there is a risk of harm to patients that may be irreversible or difficult to compensate. For example, AI systems used in diagnosis or treatment planning must undergo rigorous testing and require human oversight to prevent errors that could have significant consequences on patient health.

AIDH strongly recommends the adoption of a “human in the loop” approach, which ensures that human judgment remains central in the application of AI in healthcare settings or in settings related to healthcare, such as the Australian Commission on Safety and Quality in Health Care. We also advocate for robust clinical and data governance to protect patient privacy and ensure the ethical use of AI in health. At the same time, data governance needs to allow for the secondary use of health data as indicated in our submission to the CDC.

2. Balancing innovation with safety

AI presents many benefits for healthcare, such as improving access to care, supporting clinical decision-making, and enabling remote monitoring. However, the risks of AI are equally significant. Misdiagnosis, data breaches, and over-reliance on AI are just some of the dangers if these technologies are not implemented with the right safeguards.

To address these concerns, AIDH supports a risk-based regulatory framework that includes specific protections for healthcare. This involves adapting international best practices, such as the European Union AI Act, to the Australian context; ensuring that AI systems are developed and deployed with patient safety as the priority.

3. Inclusive AI for all Australians

We recognise the need for AI solutions to be inclusive and representative of the entire Australian population, including rural, remote, and First Nations communities, and healthcare consumers. AI must be trained on diverse data sets to ensure it delivers accurate results for all patients, regardless of background or location. This is also true of AI systems that may be used in the public service to support the design of health policy or that may be used to manage health and care programs.

We also emphasise the importance of involving First Nations knowledge holders in the development of AI technologies. This ensures AI is culturally appropriate and respects the unique needs of First Nations communities, particularly in how it interacts with Indigenous Cultural and Intellectual Property and data sovereignty.

4. Ethics, transparency, and accountability

Central to the AIDH position is the principle of transparency. We believe that patients, healthcare professionals and public servants working in healthcare related positions should be informed when AI is used.

AI systems should be designed in ways that allow for human intervention when necessary, particularly in cases where the AI's output may not fully capture the nuances of a patient's condition or specific needs related to healthcare.

AIDH also advocates for a system of accountability where AI developers and users are held responsible for the outcomes of AI decisions. This includes mandatory reporting of AI errors.

5. Building capacity of the workforce

To fully harness the potential of AI, it is critical to focus on building workforce capacity through education, training, and ongoing professional development.

AIDH emphasises the need for healthcare professionals and public servants working in health-related positions to develop specific capabilities to integrate AI into their workflows effectively and safely.

This includes not only understanding how AI systems function but also how to critically assess and apply AI-generated outputs in clinical decision-making or in health policies. Continuous education is essential to ensure that the workforce remain informed about advancements in AI technology and its implications for patient care.

Upskilling the workforce with the necessary digital and analytical skills will be pivotal in maximising the benefits of AI while ensuring patient safety and enhancing the quality of care.

AIDH has developed an entry level course to digital health, Digital Health 101[3], that we recommend for all clinicians, professionals and public servants working in healthcare and healthcare related settings. AIDH will soon start releasing entry level courses specific to healthcare and the health sector.

6. Regulatory framework

We believe that Australia is at a critical juncture in terms of AI regulation, and we encourage the adoption of a national AI framework that supports innovation while protecting the public from the potential harms of AI. This framework should be flexible enough to adapt to technological advancements, yet robust enough to ensure consistent safety standards across sectors. In addition, a set of regulations specific to healthcare should also be adopted to respond the unique needs of the healthcare sector, especially as it relates to risk management and accountability.

About AIDH

The Australasian Institute of Digital Health (AIDH) represents a diverse and growing community of professionals at the intersection of healthcare and technology.

The Institute has more than 250 distinguished Fellows who are experts or pioneers in digital health, and has a growing membership of professionals comprising doctors, health informaticians, nurses, midwives, allied health, other clinicians, administrators, and health technology business leaders.

The Institute provides objective, non-partisan, and independent advice on the use of technology and health informatics to improve consumer outcomes and solve the most pressing challenges facing our healthcare system.

The Institute's unique composition and reach brings together an extraordinary network of Australia's leading digital health experts across the private, public and community sectors to advance our nation's transition to a digital health future.

[3] More information is available at https://aidh-pdc.getlearnworlds.com/course/digital-health-101-course