Fortifying National Systems for the Age of AI

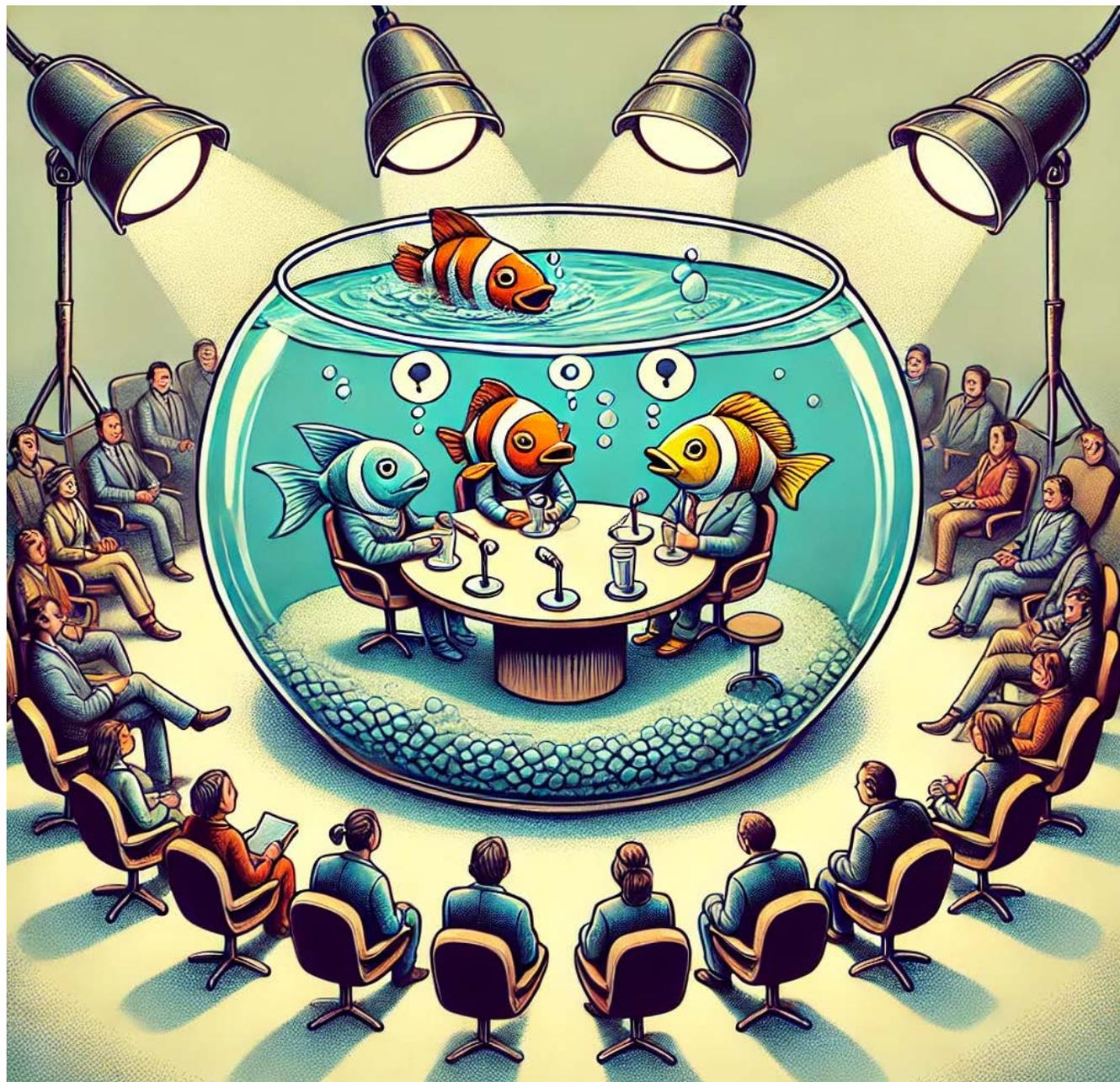**Expected Outcomes:**

- Strengthened understanding of effective AI governance frameworks.

- Identification of actionable steps for inclusive and equitable AI adoption.

- Enhanced collaboration among stakeholders for consensus on Clinician/Patient-centered AI governance strategies.

"Fishbowl" Style Discussion

- **Session panelists** will jump in and out of the bowl throughout the session.

- **Anyone in the audience** may volunteer to jump in the bowl by taking an empty seat and join the discussion.

- Some **audience members may be "volun-told"** to come jump into the bowl.

- Once you are in the fishbowl, you are **free to leave at any time** and return to your seat.

How should artificial intelligence be used in Australian health care? Recommendations from a citizens' jury

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The known: Artificial intelligence (AI) will transform health care. Guidance regarding its use and governance is urgently needed, and should reflect public expectations about the technology.

The new: In a robust citizens' jury process, a diverse sample of Australian citizens recommended a national charter for health care AI and an independent decision-making body. They also emphasised that rigorous evaluation, fairness and patient rights, clinical governance and training, technical and data requirements, and community education and involvement were also critical areas requiring attention.

The implications: Australians welcome clinical applications of AI, provided that strong governance is in place. A coherent national approach is needed, as well as training, evaluation, and oversight in clinical practice.

Abstract

Objective: To support a diverse sample of Australians to make recommendations about the use of artificial intelligence (AI) technology in health care.

Study design: Citizens' jury, deliberating the question: "Under which circumstances, if any, should artificial intelligence be used in Australian health systems to detect or diagnose disease?"

Setting, participants: Thirty Australian adults recruited by Sortition Foundation using random invitation and stratified selection to reflect population proportions by gender, age, ancestry, highest level of education, and residential location (state/territory; urban, regional, rural). The jury process took 18 days (16 March – 2 April 2023): fifteen days online and three days face-to-face in Sydney, where the jurors, both in small groups and together, were informed about and discussed the question, and developed recommendations with reasons. Jurors received extensive information: a printed handbook, online documents, and recorded presentations by four expert speakers. Jurors asked questions and received answers from the experts during the online period of the process, and during the first day of the face-to-face meeting.

Main outcome measures: Jury recommendations, with reasons.

Results: The jurors recommended an overarching, independently governed charter and framework for health care AI. The other nine recommendation categories concerned balancing benefits and harms; fairness and bias; patients' rights and choices; clinical governance and training; technical governance and standards; data governance and use; open source software; AI evaluation and assessment; and education and communication.

In January 2024, the Australian government published its interim response to a consultation on "safe and responsible" artificial intelligence (AI) in Australia.[1] The consultation had the aim of determining how to govern this transformational technology in a manner that preserves public trust, mitigates risk, and supports safe and responsible practices. In clinical care, AI could bring great benefits and serious risks.[2] Australia currently lags behind other countries in health care AI development, deployment, and governance,[3] and health care-specific strategies are needed,[4,5] as recognised by the Australian

Photo: Belinda Fabrianesi

1. AI SAFETY, QUALITY, ETHICS AND SECURITY	2. WORKFORCE	3. CONSUMERS		4. INDUSTRY	5. RESEARCH

Priorities

1. AI SAFETY, QUALITY, ETHICS AND SECURITY	2. WORKFORCE	3. CONSUMERS
Ensure patients receive safe, effective, and ethical care from AI healthcare services which have been developed in accordance with ethical principles, a safety framework and are appropriately monitored post-implementation	Understand knowledge gaps in the workforce and then train the current and future healthcare workforce in the use and implementation of AI-enabled healthcare services.	Help all Australians, including vulnerable consumers, safely use AI to navigate the complex healthcare system and be active participants in the management of their own care and wellbeing.

Priorities

4. INDUSTRY	5. RESEARCH
Support development of the local healthcare AI industry to become globally competitive and deliver significant clinical and economic benefits to Australia.	Ensure the development and deployment of AI in healthcare is based on the most up to date evidence, and that Australia retains world-class sovereign capability to use AI and support industry in the national interest.

Key Recommendations

1. AI SAFETY, QUALITY, ETHICS AND SECURITY	2. WORKFORCE	3. CONSUMERS
1. To better coordinate and harmonise the responsibilities and activities of those entities responsible for oversight of AI safety, effectiveness, and ethical and security risks, **establish a National AI in Healthcare Council.**	6. Support the development of **a shared code of conduct for the safe, responsible and effective use of AI** by health professionals and organisations.	8. Co-design and collaboratively implement a **nationally accessible program for digital health literacy** to inform the public of AI's benefits, risks and safe use, and increase public trust and confidence in AI.
2. To ensure AI in healthcare is safe, effective and therefore does not harm patients, it needs to be **developed and deployed within a robust risk-based safety framework.**	7. Assist professional bodies in accessing expertise and prior models to support the **development of profession-specific codes of practice for the responsible use of AI**.	9. Work together with Aboriginal and Torres Strait Islander communities to develop a **mechanism that collates health-related data for use in AI in a culturally safe and trusted manner** within their control, in line with principles of Indigenous Data Sovereignty.
3. For accreditation, healthcare organisations using AI should demonstrate that they meet **minimum AI safety and quality practice standards.**		10. Ensure **professional codes of conduct and training emphasises the role of clinicians in educating patients** about the responsible use of AI, as part of a commitment to shared decision making.
4. Urgently **communicate the need for caution in the clinical use of generative AI** when it is currently untested or unregulated for clinical settings, including the preparation of clinical documentation.		
5. Ensure the **national AI ethical framework** from the Department of Industry, Science and Resources supports the deployment of value-based clinical and consumer AI in routine practice.		

Key Recommendations

4. INDUSTRY	5. RESEARCH
11. Develop **national clinical AI procurement guidelines** in partnership with the jurisdictions, health services and industry.	16. Provide **significant targeted support for healthcare AI research** that builds sovereign capability and can translate to improved priority health services and support for industry.
12. Provide **support and incentives for local industry** (and SMEs in particular). a. Consider **expanding the R&D Tax incentives scheme to cover regulatory compliance** costs. b. Ensure the pathway to reimbursement for AI-based clinical services via Medical Services Advisory Committee (MSAC) is understood. c. Consider additional funding to support new products to come to market.	
13. Develop mechanisms to provide industry with ethical and consent-based **access to clinical data** to support AI development and leverage existing national biomedical data repositories.	
14. Support the development of a **National AI Capability Centre in Healthcare** (NAICCH) to assist industry (and SMEs in particular) to bring products to market.	
15. Assist future policy by **identifying emerging AI markets and opportunities**.	

Vision

An AI-enabled healthcare system delivering personalised healthcare safely, ethically and sustainably.

Mission

A fully funded national plan by 2025 designed to create an AI-enabled Australian healthcare system capable of delivering personalised healthcare, safely, ethically and sustainably supported by a vibrant AI industry sector that creates jobs and exports to the world, alongside an AI-aware workforce and AI-savvy consumers.

PMAC | PRINCE MAHIDOL AWARD CONFERENCE 2025

Harnessing Technologies in an Age of AI to Build A Healthier World

ULAANBAATAR PRINCIPLES OF ETHICS ON ARTIFICIAL INTELLIGENCE IN MEDICINE

1. Recognizing the sensitivity of health data, all stages of AI research, planning, development, and application must protect and respect human dignity, honor, reputation, and personal information. Emphasis will be placed on the dignity of individuals over personal data alone.
2. All decisions and actions made by healthcare AI systems will be overseen by humans, respecting human autonomy in decision making.

3. Healthcare AI must be safe and non-harmful, reducing potential risks and harms while increasing benefits, aligning with national security principles.
4. All stages of healthcare AI product development will be based on research and evidence.

5. Healthcare AI solutions should respect diversity, ensuring no discrimination against any group throughout the design, development, and implementation stages.
6. Healthcare AI solutions should aim to reduce discrimination, data biases, digital divides, and inequalities.

7. The planning, research, data, development, and application of healthcare AI solutions, as well as any limitations or shortcomings, should be clear to the public and professional organizations, remaining transparent and open except for personal and state secrets.

8. Healthcare AI solutions should be accessible to all, regardless of social background, age, gender, social, political, cultural, or economic status. It should support, include, and serve vulnerable and underserved groups for the benefit of humanity.
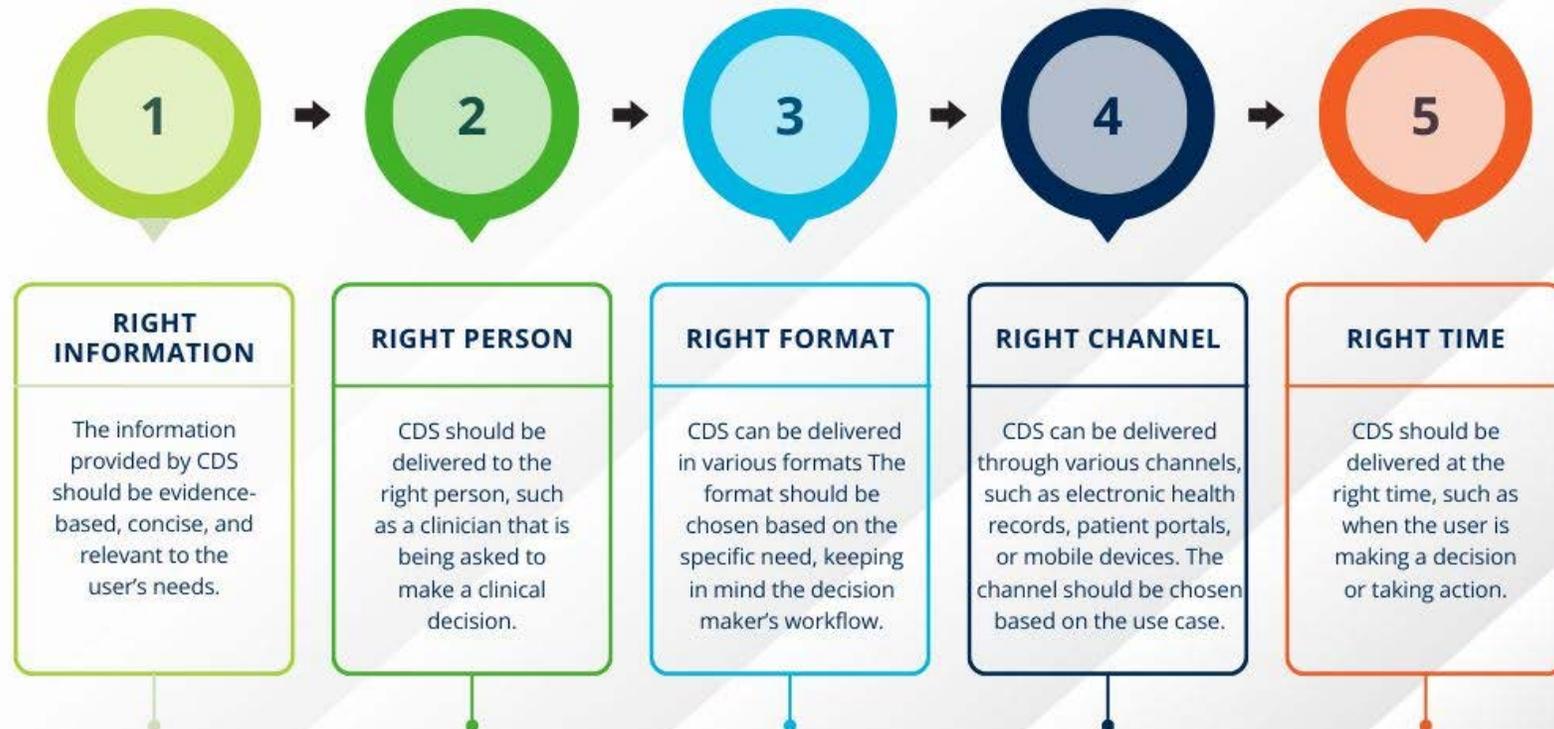
9. Any healthcare AI product will comply with relevant intellectual property and copyright laws.
10. All stages of planning, research, development, testing, deployment, and usage of healthcare AI products must support sustainable development, being beneficial to people, society, and the environment.

| HUMAN DIGNITY | SAFETY | EQUAL OPPORTUNITY | TRANSPARENCY | ACCESSIBILITY | SUSTAINABILITY |

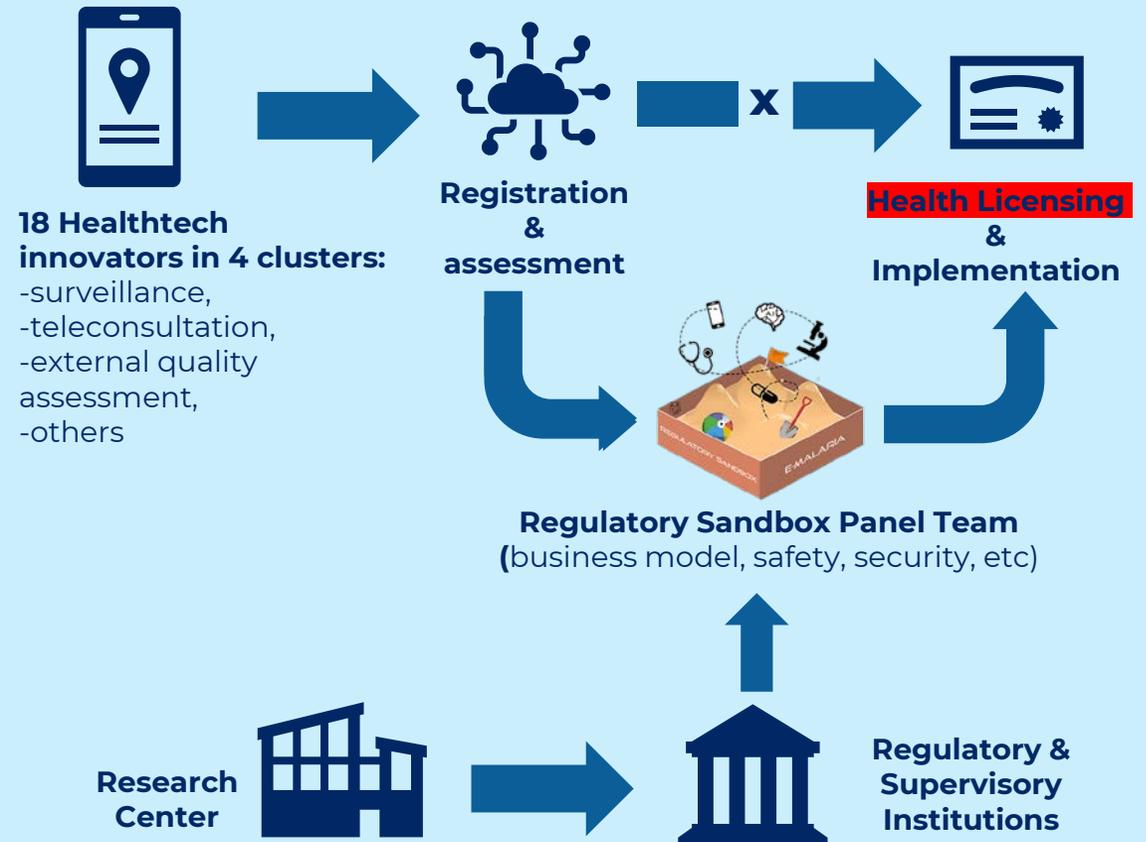Mongolian Society of Artificial Intelligence in Medicine

Leveraging Regulatory Sandboxes to Enhance Governance and Stewardship of Digital Health Innovation: Insights from Indonesia's e-Malaria Initiative

Conventional Health Sector Regulation and Governance:

- Slow regulatory process

- Regulatory lag behind technological advancement

- Cross sectoral innovation challenges

- Unregulated adoption vs public safety concerns

- Complex approval and licensing requirements

- Lack of clear pathway for digital health innovation

E-Malaria Regulatory Sandbox Workflow

18 Healthtech innovators in 4 clusters:
-surveillance,
-teleconsultation,
-external quality assessment,
-others

Registration & assessment

Health Licensing & Implementation

Regulatory Sandbox Panel Team
(business model, safety, security, etc)

Research Center

Regulatory & Supervisory Institutions