

# **TITLE: Australian Clinical Coding Artificial Intelligence (AI) Adoption Guideline**

## **Introduction**

AI technologies have the potential to improve clinical documentation integrity, produce autonomous coding, conduct clinical coding auditing, and support the management of health information. In an environment of clinical documentation complexity, variation and volume; clinical classification, funding and reporting complexity; human expertise; legislation and standards compliance; privacy and security considerations; risk management; ethics; safety; and quality and efficiency drivers, navigating the path of AI adoption is not straightforward.

A national taskforce established by the Health Information Management Association of Australia (HIMAA) consisted of professional association, government, researchers, public sector, private sector, software vendors, clinical coding professionals and clinical governance experts have authored the Australian Clinical Coding AI Adoption Guideline which is due for release by June 2025.

## **Methods**

The Guideline was developed through undertaking an environmental scan of published and grey literature and the collective expertise of the Taskforce. In February 2025 the Guideline will be released for public consultation to inform the final published version.

## **Results**

The Guideline provides guidance to healthcare organisations, the clinical coding workforce, software companies, users of coded data, educators, and government agencies, on a principle-based approach to adopting AI technologies related to the clinical coding process.

In the Australian context of clinical coding and classification licencing, where ICD-10-AM/ACHI and the Australian Coding Standards are used for inpatient morbidity coding, this Guideline identifies the current use cases for clinical coding automation with artificial intelligence while highlighting current known limitations of AI in clinical coding and acknowledging that AI technologies have and will continue to evolve.

A number of important considerations relating to governance, risk management, privacy and security, ethical and safe use, quality improvement, collaboration and partnership, and human expertise outlined in the Guideline is anticipated to guide the responsible, ethical, and effective use of AI in the production of clinical coded data in accordance with classification and compliance requirements.

## **Discussion/Conclusions**

With international applicability, the publication of the Australian Clinical Coding AI Adoption Guideline is the foundation for harnessing the expertise and learning of the digital health and clinical coding communities as they collaborate to support the adoption of AI for the production of accurate, timely and compliant clinical coded data in Australia and around the world.