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Matthew Brady

## **NTU Singapore study finds gaps in regulatory awareness among medical AI developers**

A study led by Nanyang Technological University, Singapore (NTU Singapore) has found that many developers building medical AI tools lack familiarity with the regulatory frameworks that govern their use. The research, published in npj Digital Medicine, is described as one of the first multi-regional surveys focused specifically on regulatory awareness among medical AI developers.

Researchers surveyed 122 medical AI developers across Singapore, China, Hong Kong and the United Kingdom to assess their awareness, familiarity and perceptions of frameworks such as the EU AI Act and Singapore's Artificial Intelligence in Healthcare Guidelines.

More than half of respondents, 57%, were aware of at least one regulatory framework, with senior developers and those from non-academic organisations more likely to know of multiple frameworks and to be more familiar with them than junior developers or those in academic settings. However, 67% of the organisations developers worked for had not adopted any regulatory framework, and developers at organisations that had adopted a framework showed greater familiarity with it than those at organisations that had not.

The study also found that most developers believed they should bear responsibility for the AI tools they build, in conjunction with government or institutional ethics bodies, users, and the organisations supplying training data.

Asst Prof Wilson Goh of NTU's Lee Kong Chian School of Medicine and Chief Data Scientist at the Centre of AI in Medicine, who co-led the study, said developers are well placed to assess data quality, model limitations and risks such as bias and hallucination, and that the awareness gaps identified were concerning despite the sense of responsibility developers expressed.

The researchers recommended that regulatory frameworks be incorporated into developer training at educational institutions, and that structured mentorship between senior and junior developers could help address gaps in navigating regulatory requirements. They also called for national regulatory bodies to take a more active compliance role and pursue longer-term harmonisation of frameworks across jurisdictions.

Professor Joseph Sung, NTU's Senior Vice President for Health & Life Sciences and Director of the Centre of AI in Medicine, who led the study, said resolving the challenges of adopting AI in healthcare requires collaborative effort across stakeholders to ensure patient safety, data privacy and the long-term reliability of AI in medicine.

The findings follow an earlier study by the same researchers on clinician perceptions of medical AI, which found gastroenterologists generally trusted and accepted the use of AI tools in clinical settings.

<https://healthtechasia.co/ntu-singapore-study-finds-gaps-in-regulatory-awareness-among-medical-ai-developers/>