Liabilities for Medical Injuries Caused by Artificial Intelligence

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Abstract

Artificial intelligence (AI) is dynamically revolutionizing the whole medical process from examination, diagnosis to treatment. Artificial intelligence will initially be used as a tool to assist physicians in making medical decisions, and later, it may gradually replace physicians and become the authentic decision-maker in clinical practice. In this process of evolution, the standard of care and the duty of care for physicians and medical institutions will also change accordingly. With the assistance of artificial intelligence, the probability of physicians making mistakes will be greatly reduced, thereby reducing their exposure to legal risks; but also because physicians will be able to use artificial intelligence to easily access a large amount of medical information, the court may raise the standard of care that the defendant physician need to have while finding negligence in medical malpractice lawsuits. As the black-box artificial intelligence medicine becomes more and more powerful and dominant in various clinical scenarios, the legal responsibility of physicians and medical institutions for their decision-making errors will shrink. Instead, physicians and medical institutions will be obliged to assess and validate the safety of medical artificial intelligence software before and when such software is applied to clinical practice.

On the other hand, whether medical artificial intelligence enters the market in the form of a pure software program or a combination of software and hardware,

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it is covered and regulated by the Consumer Protection Act of Taiwan. In case of damage which is attributable to product defects, the product liability can be claimed to the developer of medical artificial intelligence according to the Consumer Protection Act of Taiwan. However, how to allocate the legal responsibilities among physicians, medical institutions, and software developers, and how to design appropriate liability insurance to distribute the risks of medical artificial intelligence are issues that we must face and deal with in the future.