

10.53106/199457952022031602003

Smartly Safeguard Your Health: Smart Ward

Jung-Hsien Chiang^{1*}

¹Department of Computer Science and Information Engineering, National Cheng Kung University

*Corresponding Author: Jung-Hsien Chiang

Email: jchiang@mail.ncku.edu.tw

Abstract

Renowned IBM Watson has shown blind spots in the field of artificial intelligence (AI)-assisted decision-making in healthcare, forcing its health department to be sold at a low price after failing to generate any substantial clinical breakthrough. In December 2021, Oracle Corporation acquired electronic medical records software company Cerner Corporation for US\$28.3 billion, entering the industry of medical care and health information technology. Adopting completely different strategies, the aforementioned two companies serve as typical examples as the global competition of smart healthcare becomes intensified.

The future prospects of Taiwan's smart healthcare are detailed as follows. In recent years, the design and construction of smart wards has become prevalent in Taiwan. The trend opens up opportunities to enter the medical and healthcare industry by cooperating with the domestic information and communications industry, which boasts solid foundation, to develop various types of early warning system used in wards. The AI-based early warning system provides medical attention to high-risk inpatients at all times, and early warnings enable medical staff to respond in a timely manner, which safeguards patient safety and reduces burden on medical staff.

Keywords: artificial intelligence, smart healthcare, smart ward

病房聰明守護你一智慧病房

蔣榮先^{1*}

¹國立成功大學資訊工程學系

*通訊作者：蔣榮先

電子信箱：jchiang@mail.ncku.edu.tw

所屬單位：國立成功大學資訊工程學系

聯絡地址：臺南市東區大學路1號

摘要

大名鼎鼎的IBM華生(Watson)在協助醫療AI決策的領域上顯現出盲點，導致Watson Health部門因無法在臨床上有實質的突破，被迫低價出售；同時甲骨文(Oracle)公司在2021年12月以283億美元重金買下電子病歷軟體公司Cerner，以進入醫療保健資訊科技領域。以上就是國際上當智慧醫療進入戰國時期，策略截然不同的2個典型例子。

至於臺灣智慧醫療未來的展望，從近年來智慧病房的設計與建置在國內蓬勃發展的趨勢中，可以嗅到結合國內資通訊產業的硬底子進入醫療產業的契機，再進一步結合病房內各式預警系統發展，AI預警系統可時時注意有較高風險的住院病人，提前預警使醫護人員能及時因應，保護病人安全的同時也能減輕醫護人員的負擔。

關鍵詞：人工智慧、智慧醫療、智慧病房