

大數據時代對於醫療照護影響與 醫療隱私保護之研究

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摘要

大數據從數位設備獲得有關民眾行為的資料，並結合現行健康資料，以此預測長期健康狀態與非傳統治療方式的介入點，同時設計更好的診療工具，預防疾病與增加可近性。因此，在互聯網的時代，整合健康系統與大量的臨床、財務、社會與環境資料，有助於即時分析與病患照護。另一方面，當醫療照護產業被大數據優勢「加持」的同時，亦必須面對個資安全與隱私侵犯的議題，且其造成的傷害與威脅逐漸明顯。因此，隨著大量數據透過資訊科技在傳遞工具上被揭露，政府必須提出健康照護系統學習的新道德架構，要求確保病患的隱私與在使用研究發現時的道德標準。本研究聚焦大數據與對於醫療隱私保障與維護的影響及其因應方法，相關內容包括大數據與醫療照護產業之關係、大數據對於醫療照護產業的影響、大數據做為醫療照護產業的創新來源、大數據對於醫療隱私的影響與因應方式，最後提出面對大數據時代醫療隱私的保障與維護的建議。

關鍵詞：大數據、去識別化、個人資訊、醫療照護產業、醫療隱私

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The Research of Impact of Health Care and Medical Privacy in the Big Data Era

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Abstract

“Big data” obtains information on public behaviors related to digital devices. Combining such information with existing health data can help predict some points of intervention in long-term health status and non-traditional treatment methods. In addition, it can aid in designing more effective diagnostic tools, preventing diseases, and increasing accessibility. Hence, in the era of interconnectedness, the integration of a health system as well as a huge amount of clinical, financial, social, and environmental data contributes to real-time analysis and patient care. On the other hand, while the health care industry is “blessed” by the advantages of “big data,” people have to confront the issue of personal data security and privacy, the harms and threats caused by which are increasingly becoming apparent. Thus, as a large amount of data is exposed via information technology applied to communication tools, a new moral framework for learning in health care must be put forward by the government to ensure patient privacy and ethical standards using the research findings. This study focused on how “big data” impacts medical privacy protection and maintenance as well as the responding measures taken by the government and other stakeholders. The related contents of discussion in this study include the relationship between “big data” and the healthcare industry, the impact of “big data” on the healthcare industry, “big data” as the source of innovation for the healthcare industry, the impact of “big data” on medical privacy, and the responding measures taken

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by governments around the world. Finally, the study investigates how governments and industries unite to confront the challenge of protecting and maintaining medical privacy in the “big data” era.

Keywords: big data, de-identification, personal information, medical care industry, medical privacy