數位驅動醫療轉型：臺灣全人照護的新篇章

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在全球面臨高齡化與醫療人力短缺等挑戰之際，醫療數位轉型已勢在必行。臺灣推動「健康臺灣」藍圖，以「驅動數位照護」為核心，結合大數據、人工智慧(AI)與雲端科技，提升醫療品質與效率，邁向以「全人照護」為核心的新醫療模式。

臺灣兼具資通訊產業優勢與全民健保基礎，長期累積高品質醫療資料，為智慧醫療奠定關鍵基石。我們提出國家級數位醫療平台「333 架構」，整合三大空間、三大標準與三大 AI 中心，打造完整的數位健康基礎建設。在此架構下，推動全國 400 多家醫院電子病歷整合，採用 FHIR 等國際標準，確保跨院資料互通，並在零信任(Zero Trust)資安架構下，讓醫療數據安全流通、有效應用。

在政策推動下，成果已逐步展現。慢性病管理方面，「家醫大平台」導入 AI 風險預測，協助醫師提供個人化照護，推動醫療由被動診療轉向主動健康管理。醫療資訊整合方面，MediCloud 系統提供即時就醫與用藥資訊，並強化檢查結果圖像化呈現及智慧醫療影像判讀，提升醫療品質與病人安全。

在個人健康管理上，「健康存摺」普及率已突破五成，並可串接穿戴裝置數據，促進民眾主動健康管理。癌症治療數位化方面，透過 FHIR 標準交換次世代定序(NGS)資料，加速重大

傷病審查與用藥流程，提升治療可近性。此外，虛擬健保卡、電子處方箋與遠距醫療服務的推動，也有效突破時間與空間限制，擴展偏鄉與居家照護能量。

在醫療 AI 發展方面已建立完整治理體系。我們設立 19 個國家級醫療 AI 中心，涵蓋責任治理、臨床驗證與影響評估，確保 AI 從研發到應用皆安全可靠。目前已有逾 50 項醫療 AI 產品通過核准，應用於癌症早期偵測、心臟事件預測及臨床決策支援。臺灣已有 13 家醫院入選《Newsweek》2026 年全球最佳智慧醫院，亞洲排名第二，展現國際競爭力。此外，臺灣推動聯邦式學習平台，在不移動敏感資料下進行跨機構與跨國 AI 模型驗證，已與東南亞夥伴合作，建立可信賴的國際數據合作模式。

疾病無國界，全球健康治理需完整的合作。臺灣已建構以數據驅動、標準互通與 AI 賦能的智慧醫療生態系，讓醫療服務從醫院延伸至社區與日常生活，落實全人照護。臺灣的實務經驗證明我們有能力為國際社會作出貢獻。

然而，臺灣持續無法完整參與世界衛生組織(WHO)相關機制，聯合國大會第 2758 號決議及 WHA 第 25.1 號決議均未提及臺灣，也未將臺灣排除在 WHO 和世界衛生大會之外。我們誠摯呼籲 WHO 及相關利益攸關方支持將臺灣納入全球衛生體系，增強其完整性與韌性。臺灣將持續以數位創新深化智慧醫療發展，為全球健康福祉貢獻力量，共同實現 WHO 憲章「健康是基本人權」及聯合國永續發展目標「不遺漏任何人」。

Digital-Driven Healthcare Transformation: A New Chapter of Holistic Care in Taiwan

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As the world confronts the challenges of population aging and healthcare workforce shortages, digital transformation in healthcare is no longer optional but essential. Taiwan has introduced the "Healthy Taiwan" vision, placing "driving digital healthcare" at its core. By integrating big data, artificial intelligence (AI), and cloud technologies, the system aims to improve healthcare quality and efficiency while moving toward a new healthcare model centered on holistic, person-centered care.

Taiwan benefits from both a robust ICT industry and the foundation of its National Health Insurance (NHI) system, which has accumulated high-quality healthcare data over time and laid a critical foundation for smart healthcare development. Building on this, we have introduced a national digital health platform known as the "3-3-3 Framework," integrating three major health spaces, three key health data standards, and three National AI governance centers to establish a comprehensive digital health infrastructure. Under this framework, we are promoting the integration of electronic medical records across more than 400 hospitals nationwide and adopting international standards such as Fast Healthcare Interoperability Resources (FHIR) to ensure cross-

institutional interoperability. Within a Zero Trust cybersecurity framework, healthcare data can be securely shared and effectively utilized.

With these policies in place, tangible results are already beginning to emerge. In chronic disease management, the “Family Physician Platform” incorporates AI-based risk prediction to support physicians in delivering personalized care, facilitating a shift from reactive treatment to proactive health management. In terms of healthcare data integration, the MediCloud system provides real-time access to patient records and medication information, while enhanced visualization of examination results and AI-assisted medical imaging interpretation further improve healthcare quality and patient safety.

Personal health management has also been strengthened. The “My Health Bank” platform has surpassed a 50% adoption rate and can be integrated with data from wearable devices, encouraging individuals to take a more active role in managing their health. In digitalization of cancer treatment, Taiwan utilizes the FHIR standard to exchange Next-Generation Sequencing (NGS) data, accelerating the review process for catastrophic illness certification and related medical use, thereby improving access to timely treatment. In addition, the promotion of virtual health insurance cards, e-prescriptions, and telemedicine services is effectively overcoming temporal and geographical barriers, expanding access to rural and home-based care.

Taiwan has established a comprehensive governance framework to advance the development of clinical AI. Nineteen national medical AI centers have been established, covering responsible governance, clinical validation, and impact evaluation, ensuring that AI is safe and reliable across the entire process from development to application. To date, more than 50 AI medical products have received regulatory approval, supporting early cancer detection, prediction of cardiac events, and clinical decision making support. Taiwan also has 13 hospitals ranked among Newsweek's "World's Best Smart Hospitals 2026," placing second in Asia and demonstrating strong international competitiveness. In addition, Taiwan is advancing federated learning platforms that enable cross-institutional and cross-border AI model validation without transferring sensitive data, and has begun collaborating with partners in Southeast Asia to establish trusted international data-sharing models.

Diseases know no borders, and global health governance requires comprehensive collaboration. Taiwan has established a smart healthcare ecosystem driven by data, enabled by AI, and supported by interoperable standards, extending medical services from hospitals into communities and daily life and realizing holistic care. Taiwan's practical experience demonstrates that we are capable of contributing to the international community.

However, Taiwan continues to be excluded from full participation in the World Health Organization and its related mechanisms. United Nations General Assembly Resolution 2758 and World

Health Assembly (WHA) Resolution 25.1 neither mention Taiwan nor exclude Taiwan from participating in WHO and the WHA.

We sincerely urge WHO and relevant stakeholders to support Taiwan's inclusion in the global health system, thereby strengthening its completeness and resilience. Taiwan will continue to advance smart healthcare through digital innovation and contribute to global health and well-being. Together, we can realize the vision of health as a fundamental human right as set forth in the WHO Constitution, as well as the commitment of the United Nations' Sustainable Development Goals to leave no one behind.