

Taiwan's Advances in Digital Healthcare

Helping Other Countries Achieve Universal Health Coverage by

2030

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This year marks the 24th anniversary of Taiwan's implementation of universal health coverage. Taiwan's National Health Insurance (NHI) covers the full spectrum of essential and high-quality health services, from prevention and treatment to rehabilitation and palliative care.

In the 1960s, Taiwan's progressive health sector began the process of incorporating laborers, farmers, and government employees into the health insurance system. It is now widely regarded as one of the best in the world. The NHI ranked 14th in the 2017 Global Access to Healthcare Index of *The Economist*, and ninth in the 2018 Health Care Efficiency Index of Bloomberg Finance.

The success of Taiwan's NHI can be attributed to several key factors. First, it adopted a single-payer model with contributions from individuals, employers, and the government. A supplementary premium is also charged based on payers' income levels. Second, to control medical expenses, a budget payment system was adopted to set caps on healthcare costs paid by the government. Under these caps, Taiwan's medical expenses

accounted for only 6.4 percent of GDP in 2017, lower than the OECD average. In the same year, the NHI's administrative costs were kept under 1 percent of its total budget, and the public satisfaction rate was 86 percent. Third, the NHI's integrated preventive health care services and pay for performance programs have ensured a high quality of healthcare and encouraged continued improvement of health standards. Fourth, to reduce health inequalities, premium subsidies are provided to disadvantaged groups such as low-income households and the unemployed.

The provision of preventive and primary healthcare is the most cost-efficient approach to achieving universal health coverage. Taiwan's Ministry of Health and Welfare has developed tools utilizing artificial intelligence and cloud computing to access the massive databases it has built over the past 24 years. For instance, the MediCloud system was launched to enable healthcare providers to query patients' medical records within the NHI system, while the PharmaCloud system provides prescription drug information to physicians and pharmacists. Currently, through digital cloud tools, community-based primary care providers in Taiwan can retrieve test reports—including CT scans, MRIs, ultrasounds, gastroscopies, colonoscopies and X-rays—from secondary and tertiary institutions and receive prescription information.

These digital health technologies have enhanced care services in many ways. They have improved the quality of care and reduced

costs, in terms of both time and money, by properly matching health services with the locations where these services are provided. They have also lowered the potential risks arising from repeated examinations. Related systems are patient-centered, meaning that they are organized around the complex needs and expectations of patients and communities, helping realize the concept of good hospitals in the community and good doctors in the neighborhood.

Taiwan has learned how to utilize its competitive advantages in information technology and medicine to deliver better care and enhance the health of the overall population. In response to the goals set by the Health Workforce 2030 of the World Health Organization (WHO), Taiwan has also provided scholarships for in-service programs and higher education to thousands of people, both Taiwanese and foreign nationals, in fields such as medicine, nursing, dentistry, healthcare administration and public health.

At a time when achieving universal health coverage has never been more urgent and important, Taiwan has actively sought to share its first-rate experience in healthcare reform. Regrettably, political obstruction has deprived Taiwan of the right to participate in and contribute to the World Health Assembly—WHO's decision-making body. In the past two years, WHO has denied Taiwanese delegates, who represent the 23 million citizens of a democratic and peaceful country, access to the assembly. Nevertheless, Taiwan remains committed to enhancing regional and global health cooperation, sharing its experience and capacity

in healthcare reform with countries in need, and making universal health coverage a reality by 2030.

Against this backdrop, we urge WHO to respond favorably to the widespread calls for Taiwan's inclusion in the World Health Assembly and related technical meetings, mechanisms and activities. WHO should abide by its own principles of inclusiveness and universal participation. Taiwan is a worthy and reliable partner that can help countries around the world achieve the meaningful goal of universal health coverage by 2030.

實踐UHC-資訊時代的健保改革

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自臺灣開辦全民健保、實踐全面健康覆蓋(UHC)至今已屆滿24年，臺灣的全民健康保險制度包括了全面且有品質的健康服務，從預防到治療、失能復健到緩和醫療全面涵蓋，且自1960年代即納入勞工、農民、公僕等，人人均享有平等就醫的權利，也被譽為世界上最好的健康保險制度之一。因著實施全民健保，我國於2017年經濟學人雜誌調查全球健康照護可近性排名全世界第14名，及2018年彭博雜誌調查健康照護效能排名第9名。

臺灣的全民健保之所以如此成功，歸功於以下因素；其一，採取單一保險人制，由政府、雇主及個人三方支付保費，並強制依所得增加徵收補充保費；其二，採取總額支付制度，為醫療服務總額補助設定上限，有效控制醫療保健支出，2017年僅占GDP的6.4%，低於OECD國家之平均。此外，行政成本支出僅約為健保總支出的1%，2017年民眾滿意度高達86%。其三，提供整合性預防措施及使用者付費原則，確保了醫療照護品質，

並鼓勵持續精進。其四，為減少健康不平等，針對弱勢族群如低收入戶、失業人口等，提供保費補助。

提供初級衛生保健及相關預防措施是實踐全民健康覆蓋最有成本效益的方法，我國的健保自開辦以來，已累積超過24年的健保申報資料，並透過先進的科技如雲端運算技術及AI人工智慧，建置如「健保醫療資訊雲端查詢系統」提供醫事人員即時查詢病人之病歷資料，及「健保雲端藥歷系統」提供醫師及藥師病人用藥紀錄，社區基層院所也可透過雲端系統調閱病人於次級、三級醫院所作CT、MRI、超音波、胃鏡、大腸鏡及X光等檢查影像報告及處方內容。

此套依照民眾及社區整體需求及期待所建立的數位化醫療照護科技，不僅增進就醫品質、節省了時間及金錢，也降低重複檢查的潛在健康風險，更落實分級醫療「社區好醫院，厝邊好醫師」的理念。臺灣已知道如何利用我們的強項-醫療及IT科技來增進醫療服務及民眾健康。另外，配合WHO制定的2030年衛生人力目標，我們提供國內外人士醫師、護理師、牙醫師、醫療行政及公衛人員等在職及高等教育獎學金。

一直以來，臺灣積極分享我們世界級醫療照護改革的經驗，但卻頻遭受政治干擾，阻撓我國參與世界衛生大會(WHA)及其之貢獻，WHO拒絕我國代表著2,300萬愛好和平及民主的民眾之與會代表參與前兩年之WHA大會。雖然如此，我國仍堅定的持續協助增進區域及全球醫衛合作，分享我國醫衛改革的經驗及能力，幫助其他國家實踐2030年全面覆蓋之目標。

因此，我們籲請WHO依循其憲章精神-包容且廣泛參與，對於國際社會廣泛支持臺灣參與WHA及WHO相關技術性會議、機制及活動的呼籲，作出正面的回應，因為臺灣在協助各國於2030年實踐全面健康覆蓋目標，確為值得信賴的好夥伴。