




2021-2022 Annual Report

# NATIONAL HEALTH INSURANCE

2021-2022

 全民健康保險年報






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2021-2022 全民健康保險年報



## 署長的話

臺灣實施健保26年了，健保26年來守護民衆健康，在2020到2021年COVID-19疫情席捲全球的期間，也不例外。COVID-19疫情期間，健保署運用「健保醫療資訊雲端查詢系統」、「健保卡註記TOCC」、「遠距醫療」，讓防疫更加即時且民衆更容易取得醫療照護。此外，「全民健保行動快易通|健康存摺」APP（以下稱健保快易通APP）幫助民衆照顧自身的健康，透過健保快易通APP，民衆可以進行口罩預約；新型冠狀病毒檢測結果及疫苗接種紀錄，皆可透過「健康存摺」查詢。

臺灣的健保制度每年都吸引大量國家派員前來考察，疫情期間健保署持續以視訊方式與國際交流。配合政府新南向政策，健保署長期與菲律賓、泰國及越南進行深度雙向交流。2020年在COVID-19疫情無法實體交流下，健保署仍以視訊方式，繼續發展我國與新南向國家醫療衛生領域之交流，包括邀請泰國國家健康安全局（NHSO）及菲律賓健保公司（PhilHealth）共辦理2場視訊會議，分享與交流健保體系如何因應COVID-19疫情之經驗。在國際組織方面，亞太經濟合作會議（APEC）為我國參與之重要國際組織之一，衛生議題亦是我國積極參與之領域，將於疫情解封後邀請各經濟體來臺就數位資料、科技在COVID-19之應用進行研討與分享。

健保多年來累積巨量醫療數據資料，成為臺灣發展醫療人工智慧(AI)的寶庫。自2019年起，在確保個人資料安全前提下，提供去識別化之醫療影像予各界進行研究，以促進精準醫療的發展。目前AI研究成果包括：臺大醫院的人工智慧胰臟診斷輔助工具—PANCREASaver，為世界首創電腦斷層影像自動辨識胰臟癌AI偵測模型，正確率高達91.1%；臺北榮總開發腦轉移瘤AI輔助診斷系統升級版—DeepMetsR-Plus，可精準辨識出腦轉移瘤病灶並計算數量、最大徑與體積等。健保署與成大醫院共同開發「胸部x光影像輔助研究新冠肺炎系統」，可快速判斷肺炎與新冠肺炎風險值，供醫師診斷參考，有效防堵疫情。期待發揮數據價值，提升病人就醫安全及品質，促進精準醫療的發展。

面對疫情，健保署藉由各項資通訊科技系統，建立完整管理架構，持續提供各界即時的資訊，健保署未來仍將以最「彈性」和「韌性」的方式運作，持續與全國人民共同抗疫。

衛生福利部中央健康保險署 署長 **李伯璋**



## Message from the Director General

The National Health Insurance (NHI) has been implemented for 26 years and has been safeguarding the public's health throughout these years. The NHI has also played an important role during the COVID-19 pandemic from 2020 to 2021. During the COVID-19 pandemic, NHIA offers services such as 'NHI MediCloud System', 'TOCC marks on the NHI card' and 'telemedicine'. These services provide the public with timely medical care and reduce the risk of infection. In addition, NHI APP enables the public to take care of themselves. People can register for masks through Name-based mask distribution system, check the result of COVID-19 testing and record of vaccination via the app.

The NHI system has attracted numerous foreign guests from around the world. During the COVID-19 pandemic, there are still video conferences that facilitate exchange of international experiences. In response to the New Southbound Policy, NHIA has long-term bilateral exchange with Republic of the Philippines, Thailand and Vietnam. During the pandemic, NHIA still remains close relationships with countries that are included in the Policy via video conferences, which focus on the medical field. The video conferences include the sharing of how the NHI system responds to COVID-19 with National Health Security Office in Thailand and PhilHealth in Republic of the Philippines. In terms of international organizations, APEC and the relevant public health issues are areas that Taiwan has been participating in. It is expected that after the pandemic restrictions are lifted, Taiwan will invite economies to discuss and share experiences on digital date and application of technology on COVID-19.

During these years, NHIA has accumulated a large amount of medical data, which serves as precious database for developing medical AI. From 2019, under the premise of personal data protection, NHIA offers de-identification of medical images for research purposes and the development of precision medicine. The current AI research includes PANCREASaver, a diagnostic aid for pancreas diagnosis developed by National Taiwan University Hospital. PANCREASaver is the first automatic AI detection CT model that aims to identify pancreatic cancer, with an accuracy of 91.1% ; Taipei Veterans General Hospital develops DeepMetsR-Plus, an upgraded version of AI diagnostic aid to identify metastatic tumor of brain. DeepMetsR-Plus is able to identify the number, maximum diameter and volume of metastatic tumors of brain in a precise manner; NHIA works in collaboration with National Cheng Kung University Hospital to develop AI -based chest x-ray pneumonia detection platform for COVID-19, which enables quick diagnosis identification of value-at-risk of pneumonia and COVID-19. The identification serves as reference for diagnosis and effectively prevent pandemic. The research aims to optimize the current database, improve patients' safe access and facilitate the development of precision medicine.

In response to the COVID-19 pandemic, NHIA advances various information and communications technology, establishes comprehensive management structure and continuously offers live updates. NHIA hopes to work toward maximum flexibility and resilience, and will continue to be in alliance with the public to fight the pandemic.



**Po-Chang Lee**

Director General  
National Health Insurance Administration  
Ministry of Health and Welfare





# 組織沿革 承先啟後

*Organization Structure and History*



Chapter **1**



## 組織沿革 承先啟後

健保署前身為「行政院衛生署中央健康保險局」的金融保險事業機構，於1995年整併當時僅約59%國民可參加之勞保、農保、公保三大職業醫療保險體系，秉持永續發展、關懷弱勢的原則，擴展至全民納保的完整社會保險制度，期間歷經2010年改制行政機關及2013年政府組織整併，最終成就現行的全民健康保險公辦公營、單一保險人模式的組織體系。

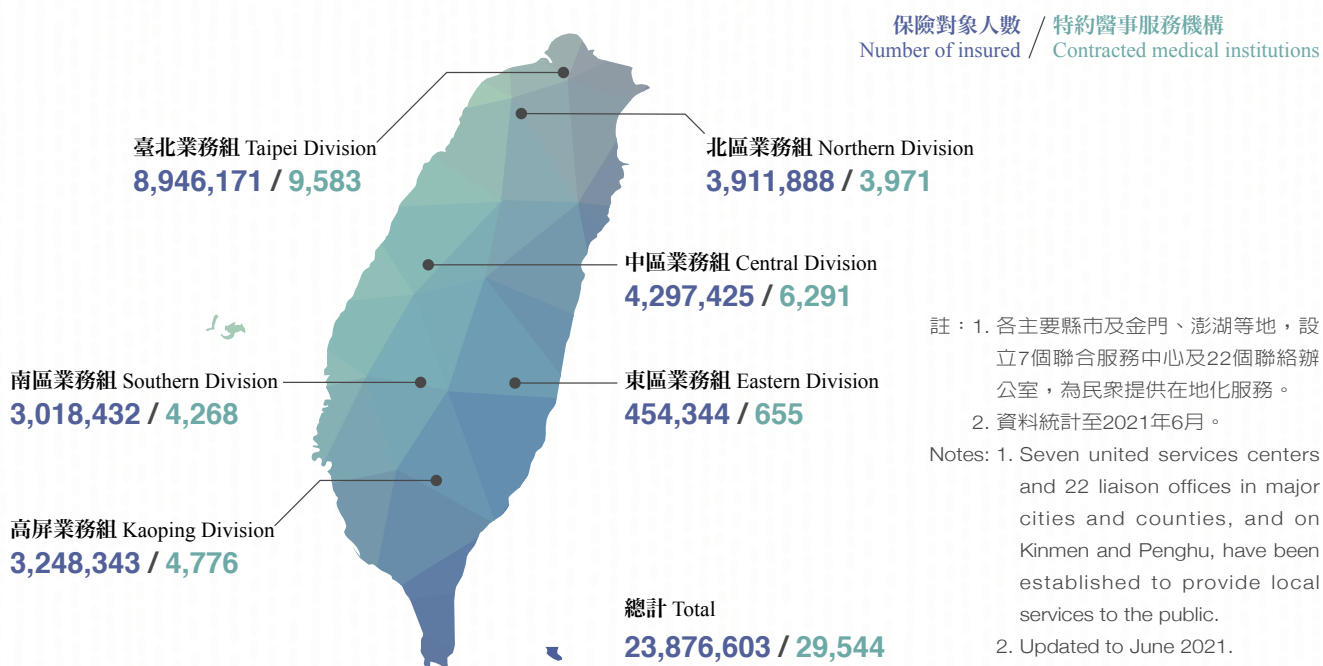
全民健康保險為政府辦理之社會保險，以衛生福利部為主管機關。衛生福利部設有全民健康保險會，以協助規劃全民健保政策及監督辦理保險事務之執行，並設有全民健康保險爭議審議

會，處理健保相關爭議事項。健保署為保險人，負責健保業務執行、醫療品質與資訊管理、研究發展、人力培訓等業務；健保署所需之行政經費由中央政府編列預算支應。

為有效推動全民健保各項服務，健保署除依業務專業性質設置專業組室，規劃各項業務措施之推動，在各地設有6個分區業務組（表1-1、圖1-1），直接辦理承保作業、保險費收繳、醫療費用審查核付及特約醫事服務機構管理等服務，同時設置22個聯絡辦公室，服務在地民衆。至2021年6月30日，在職員工計有3,065名。

**表1-1 中央健康保險署各分區業務組**

Table 1-1 The National Health Insurance Administration's Regional Divisions







## Organization Structure and History

The National Health Insurance Administration was previously known as the 'Bureau of National Health Insurance, Department of Health, Executive Yuan.' When the Bureau was launched in 1995, only roughly 59% of citizens were eligible to participate in the three major occupational medical insurance systems: Labor Insurance, Farmers' Insurance, and Government Employee Health Insurance. In line with the principles of sustainability and concern for the disadvantaged, these insurance systems were merged and enlarged to become a social insurance system covering everyone. The BNHI was repositioned in 2010 as an 'administrative agency' and renamed as the National Health Insurance Administration in 2013 as part of a government reorganization plan.

The National Health Insurance is a government-run social insurance, and has the Ministry of Health and Welfare as its competent authority. The Ministry of Health and Welfare has established the National Health Insurance Committee to assist with the planning of NHI policies and to supervise the implementation

of insurance matters. It also established the National Health Insurance Mediation Committee to handle disputes concerning health insurance. As the insurer, the NHIA bears responsibility for the implementation of health insurance matters, healthcare quality and information management, research and development, and human resource training. Administrative funding needed by NHIA is provided by the central government through a budgetary process.

In order to effectively promote various NHI services, apart from establishing specialized departments and offices in accordance with the nature of specific services and planning the promotion of service measures, the NHIA has established six regional divisions throughout Taiwan (Table 1-1 and Chart 1-1). These directly handle underwriting, insurance premium collection, medical expense review and approval, and the management of contracted medical institutions. At the same time, the NHIA has established 22 contact offices to serve local residents. As of June 30, 2021, the NHIA had 3,065 employees.

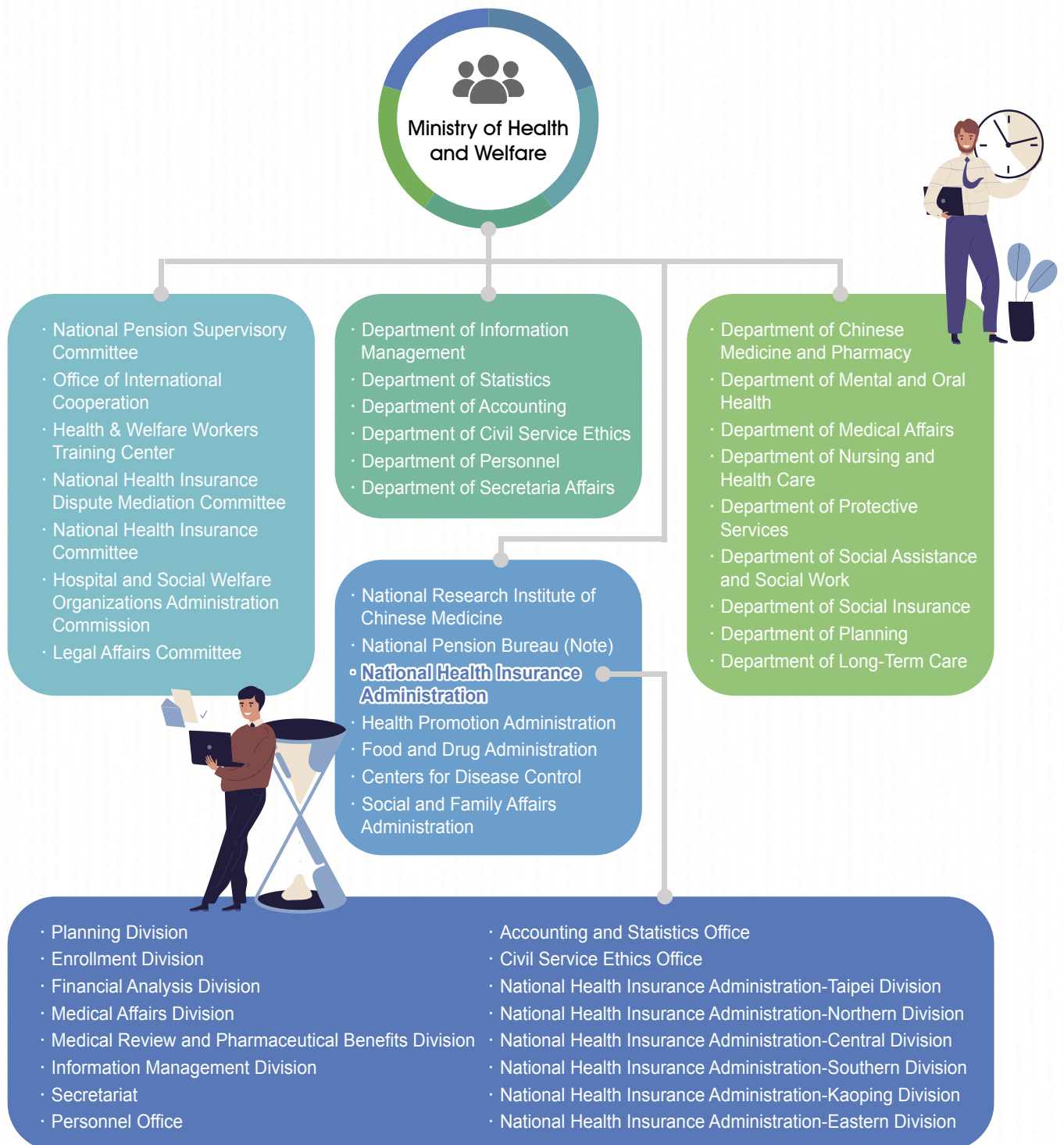




圖1-1 全民健康保險組織架構圖



Chart 1-1 NHIA Organization Chart



Notes: The National Pension Bureau has yet to be established. The Organization Act of Ministry of Health and Welfare stipulates that before the Bureau is set up, its responsibilities may be commissioned to other agencies.



# 全民有保 財務永續

*Universal Coverage and Financial Sustainability*



Chapter **2**





## 全民有保 財務永續

### 全民有保 就醫平權

政府開辦全民健康保險的初衷，即在透過自助、互助制度，將全體國民納入健康保障。因此舉凡健康保險開辦前非屬工作人口的眷屬、榮民及無職業者，含婦女、學生、孩童、老人等，人人均能享有平等就醫的權利，當民衆罹患疾病、發生傷害事故或生育，均可獲得醫療服務。在此前提下，凡具有中華民國國籍，在臺灣地區設有戶籍滿6個月以上的民衆，以及在臺灣地區出生之新生兒，都必須參加全民健保。保險對象分為6類（表2-1），以做為保險費計算的基礎。

全民健康保險也隨著社會客觀環境的改變，在人權與公平的考量下，歷經數次修法，逐步擴大加保對象，包括新住民、長期在臺居留的外籍人士、僑生及外籍生、軍人等均納入健保體系。

二代健保施行後，為全面落實平等醫療服務及就醫之權利，矯正機關之受刑人亦納入健保納保範圍內；本國人久居海外返國重新設籍欲參加健保時，必須有在2年內參加健保的紀錄，或是在臺灣設籍滿6個月才能加入健保；外籍人士也必須在臺灣地區領有居留證明文件且連續居留滿6個月始可加入健保，以符合社會公平正義之期待。





## Universal Coverage and Financial Sustainability

### | Health Care for All with Equal Right to Healthcare

The government's original intention in providing the National Health Insurance program was to provide health security to all citizens via a mutually assisted system. The system was designed to ensure that everyone enjoyed equal rights to healthcare, including groups outside the working population prior to the system's inception, such as dependents, veterans, and the unemployed, including women, students,

children, and the elderly. The inclusion of these groups in the program meant that all citizens have equal rights to access medical services when they get sick, are injured, or give birth. Based on this framework, all persons who are citizens of the Republic of China (Taiwan) and have had a registered domicile in the Taiwan area for six months or more, and all infants born in the Taiwan area, must participate in the NHI program. There are six categories of insureds (Table 2-1), which provide the basis for the calculation of insurance premiums.

表2-1 全民健保保險對象分類及其投保單位

Table 2-1 Classification of the Insured and Their Insured Units

類別 Category	保險對象 NHI Enrollees		投保單位 Insured Units
	本人 Insured	眷屬 Dependents	
第1類 Category 1	公務人員、志願役軍人、公職人員 Civil servants, volunteer military personnel, public office holders	1. 被保險人之無職業配偶。 2. 被保險人之無職業直系血親尊親屬。	所屬機關、學校、公司、團體或個人 Organizations, schools, companies, groups, or individuals
	私校教職員 Private school teachers and employees	3. 被保險人之2親等內直系血親卑親屬未成年且無職業，或成年無謀生能力或仍在學就讀且無職業者。	
	公民營事業、機構等有一定雇主的受僱者 Employees of public and private enterprises and organizations	1. Unemployed spouse. 2. Unemployed lineal blood ascendants.	
	雇主、自營業主、專門職業及技術人員自行執業者 Employers, the self-employed, and independent professionals and technical specialists	3. Unemployed lineal blood descendants within 2 <sup>nd</sup> degree of relationship who are either minor or majority but incapable of making a living, including those in school.	
第2類 Category 2	職業工會會員、外僱船員 Occupational union members, foreign crew members	同第1類眷屬 Same as the dependents in category 1	所屬的工會、船長公會、海員總工會 Unions, the Master Mariners Associations, the National Chinese Seamen's Unions

類別 Category	保險對象 NHI Enrollees		投保單位 Insured Units
	本人 Insured	眷屬 Dependents	
第3類 Category 3	農、漁民 Members of farmers and fishermen associations	同第1類眷屬 Same as the dependents in category 1	農會、漁會 Farmers' associations, fishermen's associations
第4類 Category 4	義務役軍人、軍校軍費生、在卹遺眷 Conscripted servicemen, students in military schools who receive grants from the government, dependents of military servicemen on pensions	無 None	國防部指定之單位 Agencies designated by the Ministry of National Defense
	替代役役男 Military-substitute servicemen	無 None	內政部指定之單位 Agencies designated by the Ministry of the Interior
	矯正機關受刑人 Inmates at correctional facilities	無 None	法務部及國防部指定之單位 Agencies designated by the Ministry of the Justice and Ministry of National Defense
第5類 Category 5	合於社會救助法規定的低收入戶成員 Members of low-income households as defined by Public Assistance Act	無 None	戶籍地的鄉（鎮、市、區）公所 Administrative office of the village, township, city or district where the household is registered
第6類 Category 6	榮民、榮民遺眷家戶代表 Veterans or dependents of deceased veterans	1. 榮民之無職業配偶。 2. 榮民之無職業直系血親尊親屬。 3. 榮民之2親等內直系血親卑親屬未成年且無職業，或成年無謀生能力或仍在學就讀且無職業者。 1. Veteran's unemployed spouse. 2. Veteran's unemployed lineal blood ascendants. 3. Veteran's unemployed lineal blood descendants within 2 <sup>nd</sup> degree of relationship who are either minor or majority but incapable of making a living, including those in school.	戶籍地的鄉（鎮、市、區）公所 Administrative office of the village, township, city or district where the household is registered
	一般家戶戶長或家戶代表 Heads of households or household representatives	同第1類眷屬 Same as the dependents in Category 1	

註：1. 各類眷屬及第6類被保險人均為無職業者。

2. 第4類矯正機關受刑人於2013年1月1日起參加全民健保。

Notes: 1. For people qualify as dependents or as members of Category 6, they must not be employed.

2. Inmates were included in the NHI system under Category 4 beginning on Jan. 1, 2013.



In line with recent societal changes and in consideration of human rights and the principle of fairness, the NHI system has been revised several times over the years. Coverage has gradually expanded to include new immigrant residents, foreign workers stationed in Taiwan long-term, overseas Chinese and foreign students, and military personnel within Taiwan's NHI system.

To further achieve the vision of equal access to treatment and right to medical care, following the implementation of second-generation National Health Insurance, inmates at correctional facilities have also been included in the system. ROC nationals who have lived abroad for an extended period of time and wish to re-enroll in the program must now have either participated in the system at some point during the previous two years or have established residency in Taiwan for at least six months to be eligible. Foreigners must also with an Alien Resident Certificate(ARC) and have resided in Taiwan for at least six months before they can participate in the system. These changes reflect society's expectation of fairness and justice.

As of the end of June 2021, a total of 23,876,603 people participated in NHI (Table 2-2), with 932,399 insured units.

## | **Balanced Finances and Sustainable Operations**

Since it integrated Taiwan's various social insurance systems in 1995, the NHI system has been operated under financial self-sufficiency, and pay-as-you-go principles. At present, the system derives its income chiefly from premiums paid by the insured, employers, and the government, and the system also receives supplementary funds in the form of premium overdue charges, public welfare lottery

earnings distributions, and tobacco health and welfare surcharges distributions.

As Taiwan's overall environment and demographic structure have changed, medical expenses have increased at a faster rate than premium income. Apart from acting vigorously to conserve funds and develop new sources of income, NHIA raised the premium rate in 2002, 2010 and 2021. Bearing in mind the insured's ability to pay, it has also made gradual adjustments to the upper and lower limits, and intervals of the payroll bracket table used to calculate insurance premiums, and the cap on the number of dependents for whom premiums are collected. Military personnel, civil servants and teachers, whose premiums were once calculated on their base salaries, now pay premiums based on their total compensation. A supplemental premium is now collected on six types of income not previously included in premium calculations, and the lower limit of the government's contribution is now clearly specified. All of these measures have served to stabilize NHI's finances and maintain the NHI system's operation and balance.

Following the implementation of the 2<sup>nd</sup> generation NHI in 2013, an income/expenditure linkage mechanism was established, and the NHI Supervisory Committee (responsible for management of income) and the NHI Medical Expenditure Negotiation Committee (responsible for negotiating expenditures) were merged as the National Health Insurance Committee. This committee, which comprises the insured, employers, insurance medical service providers, experts, scholars, impartial public figures, and representatives of relevant agencies, is responsible for reviewing annual insurance premium rate under the approved amount of annual medical payments (Global budget) and reporting the proposed

截至2021年6月底止，參加全民健保的總人數有23,876,603人（表2-2），投保單位有932,399家。

## 財務平衡 永續經營

全民健保自1995年整合各社會保險系統以來，以財務自給自足、隨收隨付為原則。目前保險收入主要來自於保險對象、雇主及政府共同分擔的保險費收入，少部分來自保險費滯納金、公益彩券盈餘分配收入、菸品健康福利捐分配收入等補充性財源。

然而，隨著整體環境與社會人口結構等影響，醫療支出增加速度遠較於保費收入成長速度為快，健保署除積極開源節流外，分別於2002年、2010年及2021年三次調高保險費率，更以量能負擔的精神，陸續調整投保金額分級表上下限與級距及最高付費眷屬人數、逐年將軍公教人員由本薪改以全薪投保、將未列入投保金額的六

項所得計收補充保費、明確規範政府負擔比率下限等，積極穩固財務，維持全民健保系統運作及平衡。

2013年二代健保實施後建立收支連動的機制，將「全民健康保險監理委員會」（收入面監督）及「全民健康保險醫療費用協定委員會」（支出面協定）整併為「全民健康保險會」，並由被保險人、雇主、保險醫事服務提供者、專家學者、公正人士及有關機關代表組成，每年依協議訂定之醫療給付費用總額，完成各年度保險費費率之審議，嗣報衛生福利部轉報行政院核定。期透過收支連動機制，確保長期財務穩定。

## 一般保險費的計算

全民健保的一般保險費費率自開辦起到2002年8月底均維持4.25%，2002年9月起調整為4.55%；2010年4月為穩固健保財務，調整至5.17%。二代健保實施後，因加收補充保險費（當時費率為2%），一般保險費費率從2013年1月起調整為4.91%；2016年1月起一般保險費費率調整為4.69%，補充保險費費率調整為1.91%；惟因醫療支出成長遠高於保費收入成長的問題仍存在，健保財務短絀數逐年擴大，2021年1月1日起一般保險費費率調整為5.17%，補充保險費費率調整為2.11%。

保險費則由被保險人、投保單位及政府共同分擔。第1、2、3類保險對象等有工作者，以被保險人的投保金額×一般保險費率計算；第4、5、6類保險對象，則以第1類至第3類保險對象之每人一般保險費的平均值計算（表2-3、表2-4）。



premium rate to Ministry of Health and Welfare, which further requires Executive Yuan's approval. It is hoped that the revenue/ expenditure linkage mechanism will ensure long-term financial stability

## | Calculation of Regular Premiums

The NHI regular insurance premium rate was kept at 4.25% from the start of NHI implementation until the end of August 2002, and was adjusted to 4.55% in September 2002. In order to stabilize NHI's finances, the rate was raised to 5.17% in April 2010. However, since the implementation of the 2<sup>nd</sup> Generation NHI system, supplementary premium was introduced (initially at a rate of 2%), and the regular insurance premium rate was lowered to 4.91% on January 1, 2013. In January 2016, the regular insurance premium rate was adjusted to 4.69%, and the supplementary premium rate was also lowered to 1.91%. However, the medical expenditure is far higher than the growth rate of premium revenue and the NHI's financial shortfalls has been expanding year by year. Thus, on January 1, 2021, the regular insurance premium rate was adjusted

to 5.17% and the supplementary premium rate was adjusted to 2.11%.

Insurance premiums are jointly paid by insureds, insured units (employers), and the government. For insured classified in categories 1, 2, and 3, premiums are based on their salary basis × the regular premium rate. Regular premium for insured classified in categories 4, 5, and 6 are calculated as the average premium paid by those classified in categories 1 to 3 (Table 2-3 and Table 2-4).

## | Setting Payroll Brackets on Which Premiums are Based

With regard to the payroll brackets of insureds in categories 1 through 3, the Ministry of Health and Welfare drafts a periodically updated payroll bracket table that is submitted to the Executive Yuan for approval. The payroll bracket table in effect since January 1, 2022 has 46 brackets (Table 2-5). The payroll basis of category 1 insureds are reported by their insured units (employers), based as the brackets

**表2-2 全民健保各類保險對象人數**

Table 2-2 Number of Insured in NHI system

	第1類 Category 1	第2類 Category 2	第3類 Category 3	第4類 Category 4	第5類 Category 5	第6類 Category 6	總計 Total
人數 Insured	14,233,188	3,619,889	2,045,858	76,324	286,400	3,614,944	23,876,603
占總納保人數 百分比 Percentage of the Insured	59.61%	15.16%	8.57%	0.32%	1.20%	15.14%	100%

資料時間：2021年6月30日

Dated: June 30, 2021



## 投保金額之訂定

第1類至第3類被保險人之投保金額，由衛生福利部擬訂分級表，報請行政院核定，自2022年1月1日起共有46級（表2-5）。第1類被保險人的投保金額，由投保單位（雇主）依被保險人

每月的薪資所得，對照該表所屬的等級申報；第2類無一定雇主勞工被保險人的最低投保金額及第3類農民、漁民等被保險人的投保金額自2022年1月1日起為25,250元。

**表2-3 全民健保一般保險費計算公式**

Table 2-3 Current Formulas for Regular NHI Premiums

薪資所得者 Wage Earners	被保險人 The Insured	投保金額×一般保險費費率×負擔比率×（1+眷屬人數） Salary Basis x Regular Premium Rate x Contribution Ratio x (1 + Number of Dependents)
	投保單位或政府 Insured unit or the Government	第1類第1目至第3目：投保金額×一般保險費費率×負擔比率×（1+平均眷屬人數） Category 1 (subcategories 1-3 Category 1 in Table 1) : Salary Basis x Regular Premium Rate x Contribution Ratio x (1 + Average Number of Dependents)
		第2、3類：投保金額×一般保險費費率×負擔比率×實際投保人數 Categories 2 and 3: Salary Basis x Regular Premium Rate x Contribution Ratio x Actual Number of People Insured
地區人口 （無薪資所得者） Non-Wage-Earning Individuals	被保險人 The Insured	平均保險費×負擔比率×（1+眷屬人數） Average Premium x Contribution Ratio x (1 + Number of Dependents)
	政府 The Government	平均保險費×負擔比率×實際投保人數 Average Premium x Contribution Ratio x Actual Number of People Insured

註：1. 負擔比率：請參照表2-4全民健保保險費負擔比率。

2. 一般保險費費率：2021年1月1日起調整為5.17%(調整前為4.69%)。

3. 投保金額：請參照表2-5全民健保投保金額分級表。

4. 眷屬人數：依附投保的眷屬人數，超過3人的以3人計算。

5. 平均眷屬人數：自2020年1月1日起公告為0.58人。

6. 第4類及第5類平均保險費：2021年1月1日起調整為1,825元(調整前為1,785元)，由政府全額補助。

7. 第6類地區人口平均保險費：2021年1月1日起調整為1,377元(調整前為1,249元)，自付60%、政府補助40%，每人每月應繳保險費為826元(調整前為749元)。

Notes: 1. Contribution Ratio: Based on Table 2-4.

2. Regular Premium Rate: 5.17% starting from Jan. 1, 2021. (The previous rate was 4.69%).

3. Salary Basis: Please refer to Table 2-5.

4. Number of Dependents: The maximum is three even if the actual number of dependents is higher.

5. Average Number of Dependents: 0.58 starting from Jan. 1, 2020.

6. Beginning in Jan. 1, 2021, the average monthly premium for individuals in categories 4 and 5 went up to NT\$1,825 and continues to be entirely subsidized by the government (The previous average monthly premium was NT\$1,785).

7. Since Jan. 1, 2021, the average premium for individuals in Category 6 was adjusted to NT\$1,377 (the previous average premium was NT\$1,249), with 60% paid by the individual (NT\$826) (the previous amount paid by the individual is NT\$749) and 40% by the government.

表2-4 全民健保保險費負擔比率

Table 2-4 NHI Premium Contribution Ratios

保險對象類別 Classification of the Insured			負擔比率 (%) Contribution Ratios (%)		
			被保險人 Insured	投保單位 Insured Units	政府 Government
第一類 Category 1	公務人員 Civil Servants	本人及眷屬 Insured and Dependents	30	70	0
	公職人員、志願役軍人 Volunteer Servicemen, Public Office Holders	本人及眷屬 Insured and Dependents	30	70	0
	私立學校教職員 Private School Teachers	本人及眷屬 Insured and Dependents	30	35	35
	公、民營事業機構等有一定雇主的受僱者 Employees of Public or Private Owned Enterprises and Organizations	本人及眷屬 Insured and Dependents	30	60	10
	雇主 Employers	本人及眷屬 Insured and Dependents	100	0	0
	自營業主 Self-employed	本人及眷屬 Insured and Dependents	100	0	0
	專門職業及技術人員自行執業者 Independent Professionals and Technical Specialists	本人及眷屬 Insured and Dependents	100	0	0
第二類 Category 2	職業工會會員 Occupation Union Members	本人及眷屬 Insured and Dependents	60	0	40
	外僱船員 Foreign Crew Members	本人及眷屬 Insured and Dependents	60	0	40
第三類 Category 3	農民、漁民 Members of Farmers and Fishermen Associations	本人及眷屬 Insured and Dependents	30	0	70
第四類 Category 4	義務役軍人 Military Conscripts	本人 Insured	0	0	100
	軍校軍費生、在卹遺眷 Military School Students on Scholarships, Widows of Deceased Military Personnel on Pensions	本人 Insured	0	0	100
	替代役役男 Males Performing Alternative Military Service	本人 Insured	0	0	100
	矯正機關收容人 Inmates in Correctional Facilities	本人 Insured	0	0	100
第五類 Category 5	低收入戶 Low-income Household	家戶成員 Household Members	0	0	100
第六類 Category 6	榮民、榮民遺眷家戶代表 Veterans and Their Dependents	本人 Insured	0	0	100
		眷屬 Dependents	30	0	70
	地區人口 Other Individuals	本人及眷屬 Insured and Dependents	60	0	40

## 補充保險費計收

二代健保實施後，除了以經常性薪資對照投保金額所計算出的「一般保險費」之外，再加上「補充保險費」，把以往沒有列入投保金額計算的高額獎金、兼職所得、執行業務收入、股利

所得、利息所得或租金收入等項目，納入「補充保險費」的計費基礎，計收補充保險費。希望藉由擴大保險費基，拉近相同所得者之保險費，達到負擔之公平性（圖2-2），低收入戶之保險對象則不列為補充保險費之收取對象。另外，雇主

**表2-5 2022年投保金額分級表**

Table 2-5 Income Brackets for Premium calculation

組別級距 Bracket Differential	投保等級 Income Tier	月投保金額（元） Premium Basis (NT\$)	實際薪資月額（元） Actual Monthly Salary (NT\$)
第一組級距 1200元 Bracket 1 NT\$ 1200	1	25,250	25,250以下
	2	26,400	25,251~26,400
	3	27,600	26,401~27,600
	4	28,800	27,601~28,800
第二組級距 1500元 Bracket 2 NT\$ 1500	5	30,300	28,801~30,300
	6	31,800	30,301~31,800
	7	33,300	31,801~33,300
	8	34,800	33,301~34,800
	9	36,300	34,801~36,300
第三組級距 1900元 Bracket 3 NT\$ 1900	10	38,200	36,301~38,200
	11	40,100	38,201~40,100
	12	42,000	40,101~42,000
	13	43,900	42,001~43,900
	14	45,800	43,901~45,800
第四組級距 2400元 Bracket 4 NT\$ 2400	15	48,200	45,801~48,200
	16	50,600	48,201~50,600
	17	53,000	50,601~53,000
	18	55,400	53,001~55,400
	19	57,800	55,401~57,800
第五組級距 3000元 Bracket 5 NT\$ 3000	20	60,800	57,801~60,800
	21	63,800	60,801~63,800
	22	66,800	63,801~66,800
	23	69,800	66,801~69,800
	24	72,800	69,801~72,800

in the table corresponding to the insureds' monthly wage income. Starting from January 1, 2022, the minimum payroll basis of insureds in category 2 with no fixed employer and the payroll basis of insured in category 3 (members of farmers and fishermen associations) have been set as NT\$25,250.

## Calculation of Supplementary Premiums

Following the implementation of 2<sup>nd</sup> Generation NHI, apart from computing regular premiums based on the payroll bracket corresponding to an individual's regular

組別級距 Bracket Differential	投保等級 Income Tier	月投保金額 (元) Premium Basis (NT\$)	實際薪資月額 (元) Actual Monthly Salary (NT\$)
第六組級距 3700元 Bracket 6 NT\$ 3700	25	76,500	72,801~76,500
	26	80,200	76,501~80,200
	27	83,900	80,201~83,900
	28	87,600	83,901~87,600
第七組級距 4500元 Bracket 7 NT\$ 4500	29	92,100	87,601~92,100
	30	96,600	92,101~96,600
	31	101,100	96,601~101,100
	32	105,600	101,101~105,600
	33	110,100	105,601~110,100
第八組級距 5400元 Bracket 8 NT\$ 5400	34	115,500	110,101~115,500
	35	120,900	115,501~120,900
	36	126,300	120,901~126,300
	37	131,700	126,301~131,700
	38	137,100	131,701~137,100
	39	142,500	137,101~142,500
	40	147,900	142,501~147,900
	41	150,000	147,901~150,000
第九組級距 6400元 Bracket 9 NT\$ 6400	42	156,400	150,001~156,400
	43	162,800	156,401~162,800
	44	169,200	162,801~169,200
	45	175,600	169,201~175,600
	46	182,000	175,601以上

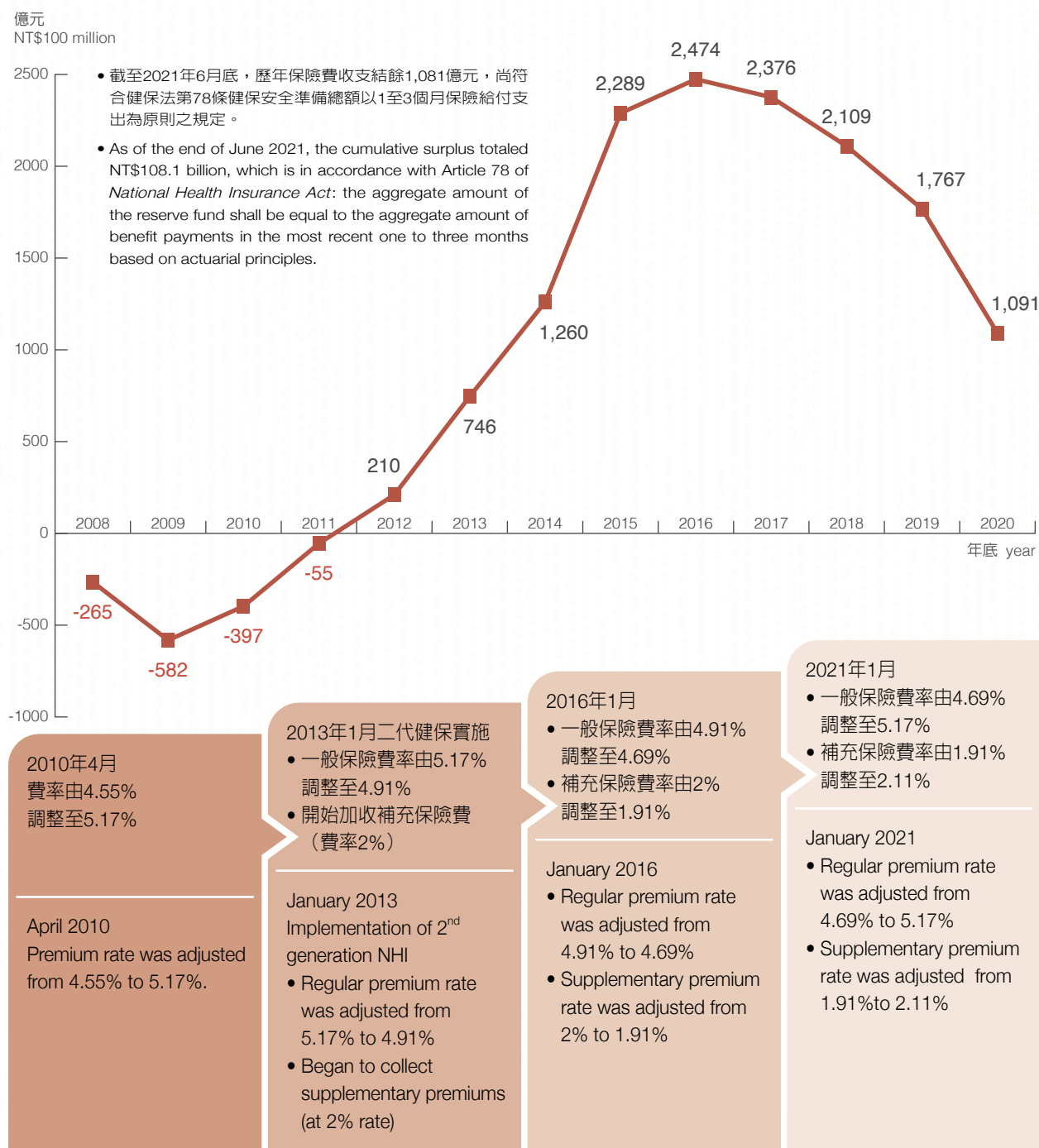
註：2022年1月1日生效。

Note: Effective from Jan. 1, 2022



圖2-1 二代健保實施前後財務收支累計餘絀情形

Chart 2-1 Cumulative Balance before and after the 2<sup>nd</sup> Generation NHI



wages, NHIA also assesses supplementary premiums. The basis for the calculation of supplementary premiums includes large bonuses, part-time income, professional service income, dividend income, interest income, and rental income, which were not included in payroll bracket calculations in the past. It is expected that by expanding the NHI's premium base, it can ensure that persons with equivalent incomes will pay similar premiums, and thereby achieve a fair burden (Chart 2-2). In addition, insureds in low-income households are exempt from contributing supplementary premiums. Furthermore, supplementary premiums are also collected on the difference between the total monthly salaries that employers actually pay their employees each month and the total "payroll basis" of the employees. In 2020, supplementary premium income totaled approximately NT\$47.1 billion and accounted for roughly 7.70% of all premium income for the year.

## | Balancing NHI Revenues and Expenditures

The NHI system first began encountering shortfalls since 1998, and the cumulative budget had its first shortfall at the end of March 2007. An increase in the premium rate in April 2010 helped the cumulative budget shortfall shift to a surplus in February 2012. The launch of the new 2<sup>nd</sup> Generation NHI system has increased the collection of supplementary premiums and the government's minimum contribution to premiums, which overall brought about improvement of financial condition. (Chart 2-1) However, the medical expenditure is far higher than the growth rate of premium revenue, which resulted in the increase of shortfalls since 2017. As a result, the premium rate has been adjusted since January 2021. As of June 2021, there is an accumulated surplus of NT\$108.1 billion. (Table 2-6)



每月所支付薪資總額與其受僱者當月投保金額總額間之差額，亦增列為計費基礎，收取補充保險費；2020年全年補充保險費計收約471.8億元，占同年保險費收入約7.70%。

### ■ 健保財務收支情形

健保歷年保險收支自1998年起開始發生短絀，至2007年3月底，累計健保財務收支首度呈現短絀，故自2010年4月起調整保險費率，歷年

保險收支自2012年2月開始轉虧為盈，另自2013年1月起實施二代健保財務新制，擴大費基加收補充保險費及提高政府總負擔比率等財源挹注，財務亦明顯改善（圖2-1），惟醫療支出成長始終高於保險費收入成長，自2017年起保險收支短絀數逐年擴大，故自2021年1月起調整保險費率，至2021年6月累計收支結餘為1,081億元（表2-6）。

**表2-6 最近5年全民健康保險財務收支狀況（權責基礎）**

Table 2-6 NHI Revenues and Expenditures of the Past Five Years (Accrual Basis)

年度 Year	保險收入〔1〕 NHI Revenues		保險成本〔2〕 NHI Expenditures		保險收支 當年餘絀 (億元) 〔1〕-〔2〕 NHI Annual Balance (Unit: NT\$100 million)	保險收支 累計餘絀 (億元) Accumulated Balance (Unit: NT\$100 million)
	金額(億元) Amount (Unit: NT\$100 million)	成長率 (%) Growth rate (%)	金額(億元) Amount (Unit: NT\$100 million)	成長率 (%) Growth rate (%)		
2016	5,869	-8.43	5,684	5.63	186	2,474
2017	5,900	0.53	5,998	5.54	-98	2,376
2018	6,061	2.73	6,328	5.49	-266	2,109
2019	6,224	2.69	6,566	3.77	-342	1,767
2020	6,278	0.87	6,954	5.91	-676	1,091
2021/1~6	3,492	-	3,503	-	-10	1,081
1995/3~ 2021/6	113,168	-	112,087	-	-	1,081

說明：1. 資料截至2021年6月

2. 保險收入 = 保險費 + 滯納金 + 資金運用淨收入 + 公益彩券盈餘及菸品健康捐分配數 + 其他淨收入 - 呆帳提存數 - 利息費用

3. 保險成本 = 保險給付醫療費用 + 其他保險成本

Notes: 1. Dated as of June 2021.

2. NHI Revenues = Premiums + Fines for Overdue Payments + Investment Income + Contributions from Public Welfare Lottery Surplus and Health and Welfare Surcharge on Tobacco Products + Other Net Revenue - Unpaid Debts - Interest Expenses

3. NHI Expenditures = Reimbursements of Medical expenses + Other Insurance Costs

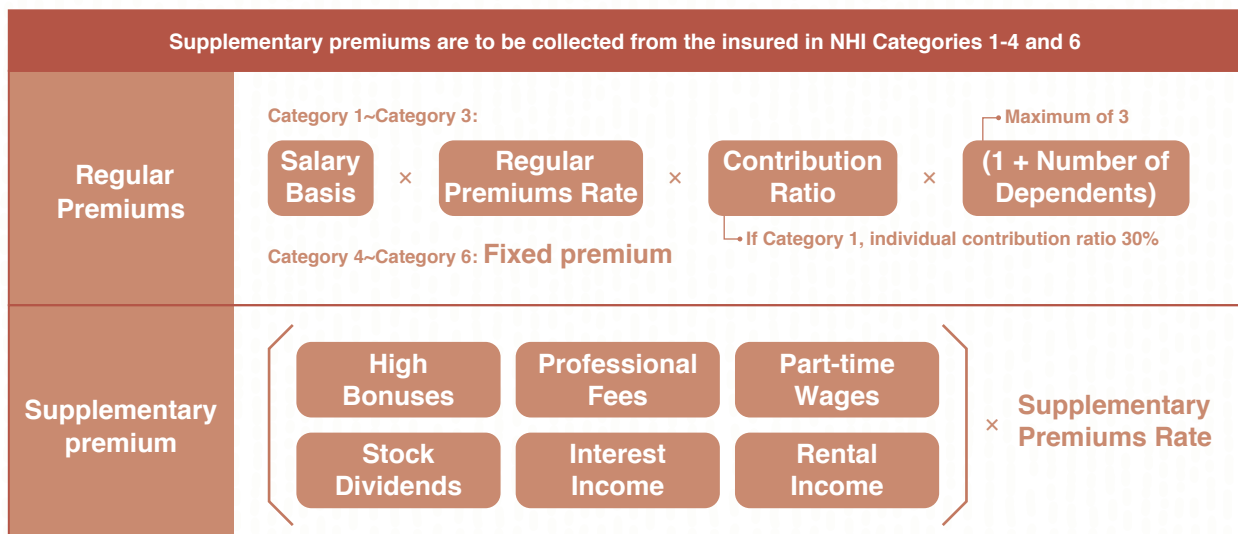
圖2-2 二代健保保險費示意圖



註：1. 2021年1月1日起一般保險費費率調整為5.17%（調整前為4.69%），補充保險費費率調整為2.11%（調整前為1.91%）。  
2. 兼職所得：非屬投保單位給付之薪資所得。

Chart 2-2 2<sup>nd</sup> Generation NHI Premiums Overview

**Second-generation NHI Premiums = Regular Premiums + Supplementary Premiums**



Notes: 1. Starting from Jan. 1, 2021, the regular premium rate is 5.17% (the previous rate was 4.69%) and the supplementary premium rate is 2.11% (the previous rate was 1.91%).

2. Part-time wages: Wage income not paid by the insured's insurance registration organization





# 給付完整 就醫便利

*Comprehensive Benefits and  
Convenient Access*



Chapter **3**



## 給付完整 就醫便利

### 醫療給付範圍

參加全民健保的保險對象，凡發生疾病、傷害或生育事故時，皆可憑健保卡至醫院、診所、藥局及醫事檢驗機構等特約醫事服務機構接受醫療服務。

目前全民健保提供的醫療服務包括：門診、住院、中醫、牙科、分娩、復健、居家照護、慢性精神病復健等項目；醫療支付的範圍則包括：診療、檢查、檢驗、手術、麻醉、藥劑、材料、處置治療、護理及保險病床等，可說是將所有必要的診療服務都包含在內。

### 就醫便利

在全民健保制度之下，民衆可以自由選擇特約醫院、診所、藥局、醫事檢驗機構，接受妥善的醫療照護服務。即使在國外，民衆因不可預期的緊急傷病或緊急分娩，須在當地醫事服務機構立即就醫，可於急診、門診治療當日或出院之日起6個月內申請核退國外自墊醫療費用，但核退費用的標準則以支付國內特約醫院及診所之平均費用為最高上限。

截至2021年6月底止，全民健保特約醫療院所合計達21,594家，占全國所有醫療院所總數92.58%（表3-1）；另有特約藥局6,716家、居家護理機構722家、精神復健機構231家、助產機構19家、醫事檢驗所208家、物理治療所32家、醫事放射所10家、職能治療所4家及居家呼吸照護所8家，保險對象可自由選擇醫療院所接

受醫療照護服務。

2020年平均每人每年門診就醫次數14.2次，平均每百人住院次數14.1次，全國每人每年平均住院日數1.3日。

### 調整部分負擔 落實雙向轉診

全民健康保險部分負擔的設計是為避免醫療浪費，同時不致影響真正有需要的人就醫，自開辦後，門、急診之部分負擔已經調整多次，同時也藉以導正醫療資源利用，使不同層級醫療院所各司其職。

為鼓勵民衆小病到當地診所就醫，需要進一步檢查或治療時再轉診到區域醫院、醫學中心等大醫院，健保署自2005年7月15日起推出若配合轉診則不加重部分負擔之設計，門診基本部分負擔亦配合修正。其中，西醫門診基本部分負擔按「末轉診」及「轉診」兩種方式計收。民衆若未經轉診直接到醫學中心、區域醫院、地區醫院就醫，就會付比較高的部分負擔。牙醫、中醫不分層級一律計收50元。此外，民衆看病時，如藥費超過一定金額，則須加收藥品部分負擔（上限200元）。同一療程中接受第2次以上的復健物理治療（中度一複雜、複雜項目除外）或中醫傷科治療，每次須自行繳交50元的部分負擔費用，但凡因重大傷病、分娩、山地離島地區就醫者及其他符合健保署規定者，均免收部分負擔。

自2016年6月起健保署加強推動分級醫療，以鼓勵民衆有病症先至基層院所就醫，有需要再





## Comprehensive Benefits and Convenient Access

### | Scope of Benefits

When insureds get sick, injured in an accident, or give birth, they can receive medical services at medical institutions such as hospitals, clinics, pharmacies, and medical examination institutions upon presentation of their health insurance card.

The medical services currently provided by the NHI include outpatient care, inpatient care, traditional Chinese medicine (TCM), dental care, child delivery, physiotherapy and rehabilitation, home health care, chronic mental illness rehabilitation, and etc. The scope of medical payments includes diagnosis, examination, lab tests, consultation, surgery, anesthesia, medication, materials, treatment, nursing, and insured beds; essentially all necessary health care services are covered by the system.

### | Convenient Access to Healthcare

Under the NHI system, the insured can freely choose to receive medical care services at any NHI contracted hospital, clinic, pharmacy, or medical laboratory. Even when overseas, the insured can immediately obtain medical care at a local medical institution if they have an unforeseen illness or injury, or have an emergency delivery. Upon return to Taiwan, such individuals may apply for reimbursement of medical expenses paid overseas within six months after receiving emergency treatment, outpatient treatment, or their hospital discharge. The reimbursement will be based on the average payment for domestic hospitals and clinics.

As of the end of June 2021, NHI contracted

hospitals and clinics totaled 21,594, and accounted for 92.58% of all hospitals and clinics in Taiwan (Table 3-1). There were also 6,716 contracted pharmacies, 722 home nursing care institutions, 231 psychiatric rehabilitation centers, 19 midwifery institutions, 208 medical examination clinics, 32 physical therapy clinics, 10 medical radiation clinics, 4 occupational therapy clinics, and 8 home respiratory care units. Insureds may freely choose at which hospital or clinic they will receive medical services.

In 2020, the average per capita outpatient visit reached an average of 14.2 times; the average hospital admission rate was 14.1 times per hundred persons; and the average length of hospital stay per person was 1.3 days.

### | Adjusting Copayments and Realizing Two-way Referrals

The NHI copayment system was designed to avoid waste, without affecting access to medical care for those truly in need. Since the NHI's inception, the copayments for outpatient and emergency care have been adjusted multiple times. The NHIA has used copayments as a means to guide medical resource utilization to ensure that hospitals and clinics at different levels focus on their respective duties.

To encourage persons with minor illnesses to seek care at local clinics, and obtain referral to regional hospitals, medical centers, and other larger hospitals only when further examination or more advanced treatment is needed. On July 15, 2005, the NHIA modified the copayment and referral system whereby basic outpatient copayments were revised and

**表3-1 全民健保特約醫療院所數**

Table 3-1 Number of NHI-Contracted Hospitals and Clinics

單位：機構數 Unit: Number of Institutions

	總計 Total	西醫醫院 Hospitals	西醫診所 Clinics	中醫醫院 Chinese Medicine Hospitals	中醫診所 Chinese Medicine Clinics	牙醫醫院 Dental Hospitals	牙醫診所 Dental Clinics
全國醫療院所數 Total Medical Institutions	23,325	471	11,872	4	4,052	1	6,925
特約醫療院所數 Contracted Medical Institutions	21,594	471	10,539	4	3,809	1	6,770
特約率 Percentage of Contracted Institutions	92.58%	100%	88.77%	100%	94.00%	100%	97.76%

資料時間：2021年6月30日。

Dated: June 30, 2021

轉診至適當科別院所，以強化大醫院專注於治療急重症及醫學研究的功能，基層院所則成為提供病患全面性初級照護的第一線守門員，2017年4月15日公告修正西醫門診基本部分負擔，轉診至醫學中心及區域醫院就醫調降40元，未經轉診逕至醫學中心就醫調升60元。另急診部分負擔，則依檢傷分類級數計收，以落實雙向轉診，門診及住院部分負擔如表3-2及表3-3。

此外，於醫療資源缺乏地區就醫的民衆，部分負擔費用均可減免20%，且居家照護之部分負擔費用比率由原來10%調降為5%，以嘉惠醫療資源缺乏地區及外出就醫困難之民衆。

### 家庭醫師及社區藥局在地照顧

為使民衆獲得在地完整持續的醫療照護，2003年3月起推動「全民健康保險家庭醫師整合性照護計畫」，由同一地區5家以上的特約西醫

診所結合社區醫院，組成社區醫療群提供醫療服務。只要透過居家附近的基層診所醫師做為家庭醫師，民衆就可獲得第一線的健康照護。家庭醫師平日為預防保健的專業顧問，建立完整的醫療資料，提供24小時健康諮詢服務專線。若病情需要進一步手術、檢查或住院時，可協助轉診，減少民衆到處找醫師所浪費的時間與金錢。

截至2021年6月底，已有623個社區醫療群在運作，參與之基層診所5,587家，參與率為53.1%，參加醫師數7,637位，參與率為46%；透過社區醫療群受益者超過601萬餘人。

在藥事服務方面，民衆可持特約醫療院所交付的處方箋，到特約藥局領藥。如有用藥的疑問，可以請藥局的藥師或藥劑生提供用藥及健康諮詢等專業服務。藥局不僅為大家的用藥安全把關，更能就近教導民衆正確的用藥知識。

copayments will not increase if patients conform to referrals. Under these measures, the basic copayment for attending a western medicine outpatient clinic at a hospital depends on whether or not an individual has a referral. If people seek care directly at a medical center, regional hospital, or district hospital without a referral, they will be subject to higher copayments. The copayment for dental and Chinese medicine care is NT\$50 without regard to level of care. In addition, if a prescription costs more than a certain amount, a copayment for the medication is also charged (up to NT\$200). Patients receiving follow-up rehabilitation physical therapy (apart from moderate-complex, complex items) or Chinese medicine trauma treatment for the same course of treatment must pay copayments of NT\$50 each time, but such copayments are waived in cases of major illness and injury, child delivery, those who seek care in mountain and offshore island areas, and other cases complying with NHIA regulations.

Starting in June 2016, the NHIA has reinforced referral system in an effort to encourage the public to first seek care at primary care level hospitals and clinics, and if needed, they would be referred to an appropriate specialist hospital department or clinic for further care. This approach will enable large hospitals to devote their full attention to treatment of serious illnesses and medical research, while making primary-level hospitals and clinics the frontline of primary care. The revised basic copayment schedule for Western medicine outpatient care announced by the NHIA on April 15, 2017 reduced copayments for referrals to medical centers and regional hospitals by NT\$40, and increased copayments for medical care at a medical center without a referral by NT\$60. Furthermore, copayments for emergency care are now charged depending on triage grade. These measures ensure the realization of two-way referrals. Outpatient and

inpatient copayments are shown in tables 3-2 and 3-3.

In order to benefit areas with limited medical resources, where it may be difficult to seek care outside, people living in such areas enjoy 20% reduction in copayments, and the copayment rate for home health care has been reduced to 5% from the original 10%.

### | Family Doctors and Community Pharmacies

To ensure that the insured can obtain comprehensive and continuing medical care near their homes, the NHIA introduced the “NHI Family Doctor Plan” in March 2003. Under this plan, five or more NHI-contracted western medicine clinics in the same area can join with a community hospital to form a community health care group. As long as they take a doctor at a primary-level clinic near their home as their family doctor, people can obtain front-line healthcare. Family doctors should ordinarily serve as preventive healthcare consultants, and should bear responsibility for gathering medical data and providing 24-hour health consulting service hotlines. If patients' conditions warrant surgery, further examination, or hospitalization, their family doctors can provide referrals. The family doctor system is intended to save the time and money involved in the process of seeking healthcare.

As of the end of June 2021, 623 community healthcare groups were operating, with 5,587 primary level clinics participating, which represented a participation rate of 53.1%, 7,637 doctors were participating, for a participation rate of 46%, and more than 6.01 million persons benefited from community healthcare groups

With regard to pharmacy services, individuals can obtain medication from a contracted pharmacy



## 多元支付制度

全民健保支付制度採第三者付費機制，民衆至醫療院所就醫所花費的醫療費用，由健保署根據支付標準付費給醫療院所，因此，為求一個合理、公平及健全的全民健康保險制度，醫療費用支付制度的設計扮演重要的角色。

全民健保實施初期，為迅速整合公、勞、農保既有系統，以論量計酬（Fee-for-Service）方式為主，在公、勞保支付標準表的基礎下，配合

保險給付範圍的調整及參酌醫療團體建議加以增修，但該制度容易造成醫療費用無限成長，對醫療品質亦有影響。

爰此，健保署參考其他先進國家制度，再根據不同醫療照護的特性，設計不同支付方式，例如自2002年7月起，全面實施醫療費用總額預算支付制度（Global Budget Payment System）；同時透過支付制度策略，如論病例計酬（Case Payment）、論質計酬（Pay-for-Performance,

**表3-2 全民健保門診基本部分負擔**

Table 3-2 NHI Copayments for Outpatient Visits

單位：新臺幣元 Unit: NT\$

類型 Category	基本部分負擔 Basic Copayments					
醫院層級 Type of Institution	西醫門診 Western Medicine Outpatient Care		急診 Emergency Care		牙醫 Dental Care	中醫 Traditional Chinese Medicine
	經轉診 With Referral	未經轉診 Direct Visit	檢傷分類 Triage Classification			
			第1、2級 Grades 1 & 2	第3、4、5級 Grades 3, 4 & 5		
醫學中心 Medical Centers	170	420	450	550	50	50
區域醫院 Regional Hospitals	100	240	300	300	50	50
地區醫院 District Hospitals	50	80	150	150	50	50
診所 Clinics	50	50	150	150	50	50

註：1. 凡領有《身心障礙證明》者，門診就醫時不論醫院層級，基本部分負擔費用均按診所層級收取新臺幣50元。

2. 門診手術後、急診手術後、生產後6周內或住院患者出院後30日內第一次回診視同轉診，得由醫院開立證明供病患使用。

3. 自2017年4月15日起公告實施。

Notes: 1. The copayment for mentally or physically disabled is fixed at NT\$50 for each medical visit, regardless of the type of medical institution they go to.

2. Patients who return for their first checkup after an outpatient or emergency procedure, or within 42 days after giving birth, or within 30 days after being discharged from the hospital, pay the same copayment as if they were given a referral as long as they have a hospital certificate confirming the need for a follow-up visit.

3. This copayment schedule took effect on April 15, 2017.



upon presentation of a prescription from a contracted hospital or clinic. If patients have any questions about their prescription, they can ask their pharmacist or assistant pharmacist at a pharmacy to provide usage and health consulting services. Pharmacies not only keep tabs on the public's medication safety, but also provide the public with correct medication usage knowledge.

### | Diversified Payment Systems

The NHI's payment system relies on a third-party payment mechanism, and the NHIA pays the medical expenses of persons seeking care to hospitals and clinics on the basis of the NHI fee schedule. The design of the medical expense payment system plays an important role in achieving a reasonable, fair, and effective NHI system.

When the NHI system was initiated, it sought to quickly integrate the existing civil service, labor, and farmers' insurance systems. The fee-for-service approach was adopted as the primary payment system, and taking the government and labor

insurance payment standards as a basis, the NHI's payment standards were revised in conjunction with adjustment of the scope of reimbursements and the recommendations of medical groups. However, this system resulted in an uncontrolled increase in medical expenses, and has affected the quality of care.

Accordingly, the NHIA has followed the example of other leading countries by designing different payment methods based on the characteristics of different types of medical care. For instance, the NHIA implemented the global budget payment system in a full scale since July 2002, and simultaneously employed different revised payment strategies, such as case payment and pay-for-performance (P4P) to change treatment behavior. In addition, the Integrated Delivery System (IDS) implemented by the NHIA in mountain areas and on offshore islands has enhanced integration of the medical service system, and the NHIA also provides payments on the basis of quality and outcomes through pay-for-performance plans. Furthermore, to enhance patient health and medical efficiency, the NHI launched its Taiwan Diagnosis Related Groups (Tw-

**表3-3 全民健保住院部分負擔**

Table 3-3 Copayment Rates for Inpatient Care

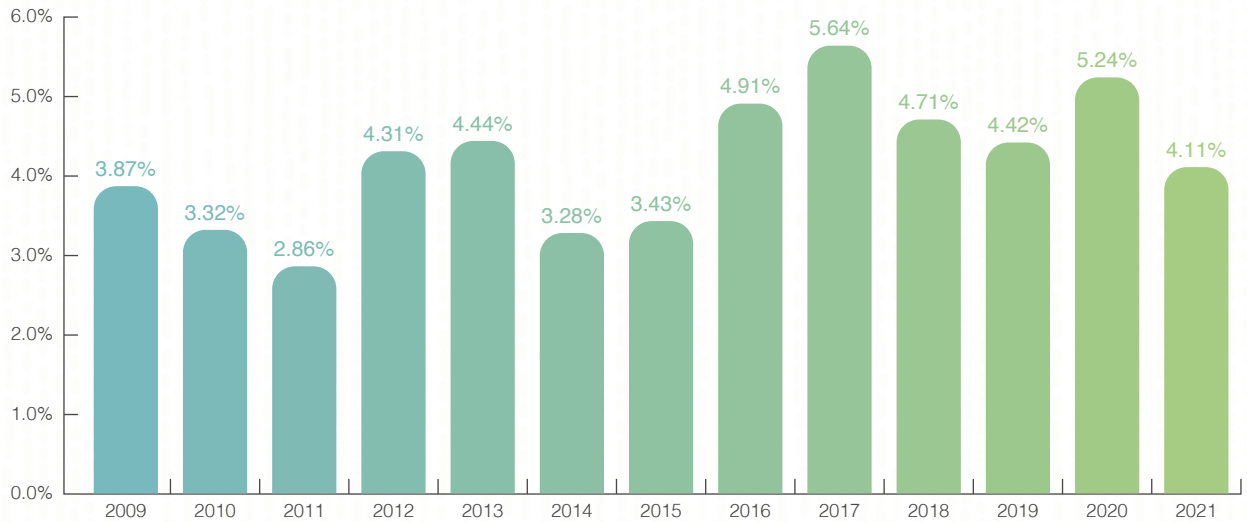
病房別 Ward	部分負擔比率 Copayment Rates			
	5%	10%	20%	30%
急性病房 Acute	-	30日內 30 days or less	31~60日 31-60 days	61日以上 61 days or more
慢性病房 Chronic	30日內 30 days or less	31~90日 31-90 days	91~180日 91-180 days	181日以上 181 days or more

註：依衛生福利部公告2021年以同一疾病每次住院上限為41,000元，全年累計住院上限為69,000元。

Note: The Ministry of Health and Welfare has announced that the upper limit of inpatient copayment for the same disease is NT\$41,000 in 2021, and the upper limit of cumulative inpatient copayments is NT\$69,000.

圖3-1 歷年全民健保總額協定成長率

Chart 3-1 Growth Rate of Annual Global Budget



資料來源：衛生福利部全民健康保險委員會會議全民健康保險業務執行報告。

Source: National Health Insurance Service Implementation Report presented in National Health Insurance Committee meetings under the Ministry of Health and Welfare.

P4P) 改革方案，改變診療行為；此外，推動山地離島地區醫療給付效益提升計畫（IDS）、家庭醫師整合照護計畫，以增進醫療服務體系整合；並以品質與結果支付，例如論質計酬支付等。另為提升醫療服務效率，更自2010年1月1日起實施全民健保住院診斷關聯群支付制度（Taiwan Diagnosis Related Groups, Tw-DRGs），並於2014年7月1日起實施第2階段Tw-DRGs。

### 一 總額預算支付制度

健保署自1998年起陸續推動牙醫、中醫、西醫基層、醫院等部門總額支付制度，至2002年起全面採行總額預算支付制度，以有限健保資源提供有效率且高品質之醫療服務，有效將醫療

費用成長率控制在5%以下。全民健康保險費用總額預算研擬流程如圖3-2。歷年全民健保總額協定成長率如圖3-1，2009年起各總額部門醫療費用協定成長率如表3-4。

為確保醫事服務機構提供的照護品質及範圍，不因總額支付制度實施而改變，在協定醫療費用總額時，同時訂定各總額部門「品質確保方案」包括：醫療服務品質滿意度調查、申訴及檢舉案件處理機制、保險對象就醫可近性監測；以及針對專業醫療服務品質訂定的臨床診療指引、專業審查、病歷紀錄等專業規範、建立醫療院所輔導系統、建立醫療服務品質指標等，並將品質資訊透明化，公開於健保署全球資訊網，做為醫療院所持續提升醫療品質的參考。

圖3-2 全民健保醫療費用總額預算研擬流程

Chart 3-2 NHI Global Budget Drafting Procedures



DRGs) program on January 1, 2010, followed by a second stage of the program, which has been in effect since July 2014.

### | Global Budget Payment System

The NHIA has phased in global budget payment for dental care, traditional Chinese medicine, primary-level Western medicine, and hospital care since 1998,

and implemented a full-scale global budget payment system in 2002, which effectively curbed the growth rate of medical expenses to within 5%. See Chart 3-2 for the NHI Global Budget Drafting Procedures; see Chart 3-1 for the growth rate of annual global budget. Starting 2009, the Annual Negotiated Growth Rate of Global Budget is as shown in Table 3-4.

To ensure that the quality and scope of the care

**表3-4 全民健保歷年各總額部門醫療費用協定成長率**

Table 3-4 Annual Negotiated Growth Rate of Global Budget

單位：% Unit: %

總額部門 Sector	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
整體 Total	3.874	3.317	2.855	4.314	4.436	3.275	3.430	4.912	5.642	4.711	4.417	5.237	4.107
牙醫門診 Dental	3.033	2.515	1.783	2.264	1.421	1.888	2.140	3.463	3.246	4.001	3.433	3.876	3.055
中醫門診 Traditional Chinese Medicine	2.950	2.063	2.551	2.856	2.187	2.421	2.124	3.927	4.066	3.699	4.429	5.393	4.306
西醫基層 Clinics	3.756	2.742	1.874	2.986	2.818	2.391	3.191	4.274	5.157	4.053	4.067	4.401	3.552
醫院 Hospitals	4.887	3.256	3.173	4.683	5.587	3.281	3.659	5.672	6.021	4.800	4.428	5.438	4.382

## 增修支付標準

為平衡醫療發展，自全民健保開辦起，配合醫療科技發展及實際臨床需要，持續新增診療項目，以提供民眾與時並進之醫療技術。截至2021年6月，支付標準共計有4,605項診療項目，經統計2004年至2021年6月，共計106次公告調整支付標準，共修訂2,664項診療項目的支付點數。

為鼓勵醫院重視臨床護理照護人力，促使醫療院所配合增加護理人力，2009年起辦理「全民健康保險提升住院護理照護品質方案」，截至2014年挹注經費累計達91.65億元，用以鼓勵醫院增聘護理人力、提高夜班費及補貼超時加班費，增加護理人員留任的意願。2015年更投入經費20億元用於調整住院護理費支付標準，除提升支付點數外，透過護病比與支付連動制度，盼減輕護理人員工作負擔。每年亦持續投入預算用以調整護理費相關支付標準，2016年投入約

18億元調整各類病床護理費，2017年投入1.98億元調整地區醫院住院護理費，2018年投入約3.72億元提升重症護理照護品質及6.14億點調整護病比支付標準，2019年投入約4.75億元調升急性一般及經濟病床（皆含精神病床）住院護理費。2020年投入約16.14億元調升各類病床護理費（除慢性病床），其中隔離病床護理費調升27.65%。

另外，為配合分級醫療推動，2017年以醫院總額部門「醫療服務成本指數改變率」增加之預算，用於調整急重症項目（共60億元）及偏鄉與地區醫院診療項目（共22億元）之支付點數。自2017年10月1日起，調升167項診療項目支付點數，放寬1,513項手術之兒童加成方式，以及放寬手術通則、急診例假日加成時間、兒童專科醫師加成，另調高偏鄉及地區醫院49項基本診療支付點數。續於2018年及2020年分別新增「地區醫院假日門診診察費加計」及「地區醫院夜間



provided by medical institutions is not affected by the implementation of the global budget payment system, while negotiating global medical expense budgets, the NHIA also drafts quality assurance programs. These quality assurance programs for global budget sectors include medical services quality satisfaction surveys, complaints and reported case handling mechanisms, and insured care accessibility monitoring. The NHIA has also determined clinical services guidelines for professional treatment quality, drafted standards for professional review and case histories, established a hospital and clinic assistance system and medical services quality indicators, and maintained the transparency of quality information by posting relevant information on the NHIA website as a reference helping hospitals and clinics to continue to improve their medical quality.

## | Revision of the Fee Schedule

To ensure balanced medical development and provide the public with up-to-date medical technologies, the NHIA has continued to add new treatment items reflecting technological progress and real clinical needs. As of June 2021, the fee schedule covered a total of 4,605 treatment items. The adjustment of the fee schedule was announced 106 times between 2004 and June 2021, and revisions were made to payment points for 2,664 treatment items

To encourage hospitals to place greater emphasis on clinical nursing manpower, a program to improve the quality of nursing care was initiated in 2009, and more than NT\$9.165 billion had been allocated to it as of 2014. This funding was used to encourage hospitals to hire more nursing staff, increase pay for night shifts, and subsidize extra overtime, making nurses more willing to stay on the job. Another NT\$2 billion was invested in 2015 to adjust the reimbursement rates for

nursing services. This measure has not only increased the payment point values for the nurses' services, but also reduced nurses' burdens through the linkage of payments to the nurse-patient ratio. Every year the NHIA allocates budget to adjust related payment standards of nursing fees. In 2016, NT\$1.8 billion was allocated to adjust nursing fees of all patients; in 2017, NT\$198 million was allocated to adjust nursing fees of patients hospitalized at district hospitals. In 2018, NT\$372 million was allocated to improve the care quality of patients with severe diseases, and NT\$614 million was allocated to adjust the payment criteria based on nurse to patient ratio. In 2019, NT\$475 million was allocated to adjust the fees of inpatient nursing care of acute, regular and economy beds (psychiatric beds included). In 2020, NT\$1.614 billion was allocated to raise the nursing care fees of total hospital beds (except for chronic beds). Among all the fee adjustment, the nursing care fees for isolation beds are raised by 27.65%.

In addition, in conjunction with the promotion of referral system, in 2017, increased budget for the "medical care consumer price index" in the hospital global budget was used to adjust payment points for acute/severe disease items (totaling NT\$6 billion) and service items in remote areas and district hospitals (totaling NT\$2.2 billion). Beginning on October 1, 2017, the payment points for 167 service items were adjusted, markups for children in 1,513 surgery items were elevated, general principles for surgery were relaxed, and markups for ER on weekends, pediatric specialists, and raising payment points for 49 basic diagnosis and treatment in remote towns and district hospitals. In 2018 and 2020, 'additional diagnostic fee for weekend outpatient service in district hospitals' and 'a 10% increase of diagnostic fee for night outpatient service in district hospitals' were implemented

門診診察費加成10%」。2021年以2020年之醫院總額部門「醫療服務成本指數改變率」增加預算，調升急診診察費及400項急重症診療項目支付點數。

為壯大西醫基層診所服務量能，擴大其服務範疇，自2017年起至2021年編列31.6億元用於基層開放表別項目，其中2017年開放「流行性感冒A型病毒抗原」等25項診療項目、2018年起開放「陰道式超音波」等9項診療項目、2019年起開放「淋巴球表面標記-感染性疾病檢驗」等11項診療項目、2020年起開放「部分凝血活酶時間」等17項診療項目及2021年起開放「無壓迫性試驗」等5項診療項目至基層院所執行。

### 醫療給付改善方案

全民健保醫療給付改善方案，係透過調整支付醫療院所醫療費用的方式，提供適當誘因，引導醫療服務提供者朝向提供整體性醫療照護發展，並以醫療品質及效果做為支付費用的依據。自2001年10月起，分階段實施子宮頸癌、乳癌、結核病、糖尿病及氣喘等5項醫療給付改善方案。

子宮頸癌方案自2006年起業務移由國民健康署辦理外，該年亦同時於西醫基層診所試辦高血壓醫療給付改善方案，2007年更擴及醫院執行。另結核病醫療給付改善方案，自2008年起，導入支付標準全面實施辦理。2010年1月新增思覺失調症、慢性B型肝炎帶原者與C型肝炎感染者等2項論質方案，2011年1月再新增初期慢性腎臟病論質方案，該方案自2016年4月起導入支付標準全面實施辦理。

2015年孕產婦全程照護醫療給付改善方案從衛生福利部醫療發展基金回歸至健保署；同年10月新增早期療育門診醫療給付改善方案，2017年新增慢性阻塞性肺病方案，2019年新增提升醫院用藥安全與品質方案。

糖尿病方案因執行成效良好，於2012年10月導入支付標準全面實施；高血壓方案收案對象常合併有糖尿病、慢性腎臟病等疾病，為整併照護方式，自2013年起不再列為單獨項目，而併入其他論質方案推行。近年各方案之照護率如表3-5。



respectively. In 2021, the budget is increased based on 'medical care consumer price index'. An increase of diagnostic fee for emergency care and payment points for 400 acute/severe disease items were implemented.

To strengthen the capacity of primary-level clinics and expand their scope of service, a budget of NT\$3.16 billion was allocated for the year 2017 to 2021, to increase the items of service provided by primary-level clinics. In 2017, 25 diagnostic items, including influenza A virus antigen test, were added. In 2018, 9 diagnostic items, including vaginal ultrasonography, were added. In 2019, 11 diagnostic items, including Lymphocyte surface marker for infectious disease detection, were added. In 2020, 17 diagnostic items, including activated partial thromboplastin time, were added. Since 2021, 5 diagnostic items, including non-stress test, have been offered at clinics.

## | Pay-for-Performance Plans

The NHIA's pay-for-performance plans are intended to adjust medical expense reimbursements to hospitals and clinics while providing appropriate incentives to induce medical service providers to develop and provide holistic healthcare. As a consequence, medical quality and effectiveness are taken as a basis for the reimbursement of expenses. The NHIA phased in this pay-for-performance plan starting in October 2001 to cover payments for the treatment of cervical cancer, breast cancer, tuberculosis, diabetes, and asthma based on well-defined clinical criteria.

The management of the cervical cancer program was transferred to the Health Promotion Administration in 2006, and that same year a pay-for-performance plan for hypertension treated at Western medicine clinics was trialed. In 2007, hospitals became eligible to treat hypertension under the plan, and in 2008, pay-

for-performance for the treatment of tuberculosis was included in the NHI fee schedule. Two additional pay-for-performance plans were added in January 2010: for schizophrenia and for hepatitis B carriers and hepatitis C patients, and another plan was introduced in January 2011 for early chronic kidney disease. Pay-for-performance plan for chronic kidney disease was included in the NHI fee schedule in April 2016.

In 2015, the NHIA took back management of the pay-for-performance program covering full-course maternity care for pregnant women, which had previously been managed by the Ministry of Health and Welfare's Medical Development Fund. A pay-for-performance plan for early treatment for development retardation was added in October of the same year, and a pay-for-performance plan for chronic obstructive pulmonary disease was added in 2017. The NHIA launched the program on improving hospital medication safety and quality in 2019.

Thanks to the positive impact of the diabetes pay-for-performance plan, it was adopted in the fee schedule in October 2012. Furthermore, since the patients under the hypertension plan commonly also had such comorbidities as diabetes and chronic kidney disease, etc., to promote holistic care methods, these conditions were no longer listed as independent items starting in 2013, and were included in other pay-for-performance plans. The recent care rates of each plan are shown in Table 3-5.

**表3-5 全民健保醫療給付改善方案照護率**

Table 3-5 Percentage of Patients Treated Under NHI's Pay-for-Performance Plan

方案別 Plan	2005	2006	2007	2008	2009	2010	2011
氣喘 Asthma	32.5	34.8	35.2	31.3	31.6	47.0	45.5
糖尿病 Diabetes	23.5	23.2	24.7	26.3	27.6	29.3	31.4
結核病 Tuberculosis	68.8	79.0	91.8	導入支付 標準 Incorporated in the Fee Schedule	-	-	-
乳癌 Breast cancer	12.1	13.0	13.6	14.6	14.5	14.6	13.7
高血壓 Hypertension	未實施 N/A	基層試辦 9.3 Trial-basis 9.3	6.5	3.9	2.7	2.6	2.9
思覺失調症 Schizophrenia	未實施 N/A					40.7	46.9
B型C型肝炎帶原者 Hepatitis B and C carriers	未實施 N/A					9.8	19.4
初期慢性腎臟病 Early stage chronic kidney diseases	未實施 N/A						20.2
孕產婦全程照護 Full-course maternity care	未實施 N/A					由衛生福利部醫療發展基 Sponsored by the MOHW's	
早期療育 Early treatment for development retardation	未實施 N/A						
慢性阻塞性肺病 Chronic obstructive pulmonary lung disease	未實施 N/A						

註：高血壓方案自2006年起於西醫基層開始試辦，2007年則擴大至醫院，其照護率因涵蓋基層診所及醫院，呈現照護率下降情形，又因病患常合併多重疾病，例如糖尿病、慢性腎臟病等，故未再以疾病別單獨另列計畫追蹤，自2013年起停止試辦。早期療育門診醫療給付改善方案自2015年10月實施、慢性阻塞性肺病自2017年4月實施。



單位：% Unit: %

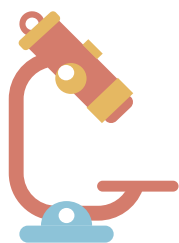
2012	2013	2014	2015	2016	2017	2018	2019	2020
39.3	37.5	41.9	36.0	28.2	29.5	35.1	35.6	38.3
33.9	35.1	41.9	41.1	43.4	47.9	51.3	55.4	58.0
-	-	-	-	-	-	-	-	-
13.4	13.1	10.9	10.6	9.7	8.2	7.7	7.3	7.1
1.4	註							
51.2	52.2	59.1	62.0	63.9	68.2	69.2	67.3	66.4
26.1	30.6	37.2	32.6	35.3	36.6	39.9	41.5	41.5
26.4	32.1	26.7	38.5	42.1	41.8	30.0	30.9	33.5
金支應 Medical Development Fund			29.3	29.5	32.3	33.4	33.3	34.0
				15.3	14.9	13.2	11.5	11.0
					24.3	38.5	35.4	40.3

Note: The hypertension plan was first implemented on a trial basis at Western medicine clinics starting in 2006, and was expanded to hospitals in 2007. Because the care rate for this plan encompasses both primary-level clinics and hospitals, the care rate for this plan decreases. Furthermore, because hypertension patients commonly also have such comorbidities as diabetes and chronic kidney disease, these conditions were no longer tracked under other independent plans, and trial implementation of the plan was ended in 2013. An early intervention outpatient medicine pay-for-performance plan was implemented in October 2015, and a chronic congestive lung disease plan was introduced in April 2017



# 專業審查 提升品質

*Professional Review and Quality Improvement*



Chapter **4**



## 專業審查 提升品質

為避免醫療浪費，保障醫療品質，醫療服務審查制度為必要機制。醫療服務審查重點為：醫療服務項目、數量及適當性。平均一年門診申報件數約3.56億件，平均每日約97萬件，一年住院約328萬件，平均每日約9千件。基於人力及行政成本考量，有關醫療服務審查可區分為「程序審查」與「專業審查」；在工具面，亦大量運用電腦科技與資料分析技術，並致力於發展「電腦醫令自動化審查」及「檔案分析」等電腦輔助審查系統以提升審查效率。

### 專業審查

由於申報案件量甚鉅，健保署於專業審查時採抽樣審查，即以抽樣方式調閱部分病歷送請審查醫藥專家審查，抽樣方式包括隨機抽樣與立意抽樣。隨機抽樣審查結果會以樣本的核減率按比例回推至全部母體案件進行核減，立意抽樣審查

結果因屬特定案件全審非抽樣，故不予回推。

醫療專業審查注意事項之訂定，需先蒐集專科醫學會與醫師公會及醫院協會意見後，經具有相關臨床或實際經驗之醫藥專家組成分科專家諮詢會議討論後訂定。自2017年起，以醫療專業常見治療模式或手術為主題改版修訂採邏輯性編排，比照藥品給付規定進行編碼，以利資訊化勾稽，提供審查醫師參考。

### 運用科技提高審查效率

健保署逐步推動醫療申報電子化，累積至今，已成為全球獨一無二的全民健保資料庫。透過電子化，健保署可快速有效率的審查醫療院所申報資料及發現異常狀態，並從大量的倉儲資料中，輔助分析協助政策方向之訂定，及啟動相關措施，避免醫療資源浪費。





## Professional Review and Quality Improvement

The medical service review system is a necessary mechanism to prevent waste, safeguard quality, and maintain the public's healthcare safety and quality. The key points of medical service reviews include: medical service items, quantity, appropriateness, and quality. An average of 356 million outpatient reimbursement claims are filed every year, which works out to an average of roughly 970,000 per day, and about 3.28 million inpatient care claims (roughly 9,000 per day) are filed each year. Based on manpower and administrative cost considerations, the review process follows two tracks: a procedural review track and a professional peer review track. Computer technology and data analysis are employed extensively in these reviews, and NHIA is striving to develop "computerized physician's order automated review and profile analysis" computer-aided review systems in an effort to boost review efficiency.

### | Professional Review

Due to the immensity of reported cases, the NHIA adopts sampling during professional reviews. That is, a part of the medical records are sampled and submitted for review by medical experts. The sampling methods include random sampling and purposive sampling. The results of random sampling will be scaled down based on the deduction rate of the samples to the total population cases for deduction, while the review results obtained through purposive sampling will not be scaled down.

Before setting guidelines for medical professional review, opinions of medical associations formed by various departments, medical associations of

physicians and hospitals shall be consulted. The guidelines shall be drawn up after departmental meetings and discussions held by medical experts with related clinical and practical experience. Starting from 2017, the guidelines have been compiled based on common treatment methods or surgical techniques and coded according to medication payment requirements, for the purpose of digitalized auditing and serving as reference for the physicians conducting the review.

### | Improving Review Efficiency through Information Technology

The NHIA has gradually pushed forward the digitization of medical reports, which have been compiled over the years to create the NHI database, which is unique in the world. Thanks to this digitization process, the NHIA can quickly and efficiently review claims submitted by healthcare providers, and detect abnormal situations. The information collected in the NHI's vast database is also used to analyze future policy directions, initiate relevant measures, and prevent the waste of medical resources.

### | Automated Review System

The NHIA has developed automated review system for medical orders, i.e. automated auditing rules and no-payment regulations for NHI covered services, fee schedules, NHI drug list, and NHI medical expense review guidelines (such as age restrictions, gender restrictions, specialist physician requirements, etc.) The system rules out no-payment items directly and helps to improve the accuracy of claims submitted by medical providers and thus boosts review efficiency.

## ｜電腦醫令自動化審查

針對全民健康保險醫療服務給付項目及支付標準、全民健康保險藥物給付項目及支付標準、全民健康保險醫療費用審查注意事項等給付規定，明確規範不給付（例如年齡限制、性別限制、專科醫師限制等），則建立醫令自動化審查邏輯，透過電腦邏輯程式檢核，直接核減不給付醫令項目，逐步導正醫療院所申報之正確性，以提升審查效率。

## ｜檔案分析

近年健保署也積極採行以檔案分析為主軸的審查制度，進行醫事機構醫療利用異常之審查管理，目前已採行之措施如下：

1. 依據各項統計資料分析、偵測病患就醫、醫療院所診療型態與費用申報之異常狀況，供

審查參考，使專業審查重點由個案審查轉變為診療型態的審核。

2. 邀請醫界代表討論，共同發展檔案分析審查異常不予支付指標，利用申報資料對醫療院所診療型態進行審核，並針對各指標值設定閾值，就異常部分，以程序審查方式進行核減，以節省人工審查成本。
3. 健保署自2014年9月起，建置「全民健康保險中央智慧系統」（Central Intelligence System, CIS），對重要項目納入統一管控，將疑似異常耗用健保醫療資源的申報項目，由電腦自動篩選出異常案件，列入抽樣樣本或予以標記，並提供異常資訊，抽調病歷送專業審查確認是否符合健保規定，以提升審查效率。該系統目前以健保門診、住診、藥品、特定診療與處置及特定個案名單等，5項主構面開發出約140項篩異指標。

## ｜輔助專業審查

自2014年起擴大推動數位化審查作業，強化「智慧型專業審查系統IPL」整併資訊功能，自動連結健保給付規定、審查注意事項、病歷電子檔案、審查重點等資訊，並增設提醒機制、個別化設定，協助審查醫藥專家有效率進行精確審查。

## ｜推動具名審查，審查醫師資訊透明

為回應各界因審查專業見解差異而提出公開具名以示負責之建議，健保署自2016年10月起，以醫院總額醫療費用為範圍，實施「專業雙審及公開具名」試辦方案，期望達到減少個人專





## | Profile Analysis

In recent years, the NHIA has also actively implemented a profile analysis-based review system, which is able to review and manage irregular medical utilization by medical institutions; the following specific measures are currently in place:

1. Use of statistical analysis, detect abnormalities in patient visits, and diagnostic and treatment practices and expense claims irregularities, where the results serve as a reference in professional reviews. This allows the focus of professional reviews to be shifted from individual cases to treatment practices and operating patterns.
2. Medical community representatives are invited to discuss and co-develop file analysis to review anomaly non-payment indicators, use claims data to carry out reviews on diagnosis and treatment

types of medical institutions, and set threshold values targeting various indexes. For the anomaly part, the procedure review is used to carry out payment reduction to save labor costs.

3. In September 2014, the NHIA set up the “Central Intelligence System, CIS” to unify control of important items. For claims suspected of abnormally consuming NHI medical resources, the computer automatically selects anomaly cases, and lists them in the sampling and flags them. The abnormal information and retrieved medical records are sent for professional review to confirm whether they meet NHI requirements. The system has currently developed about 140 anomaly-screening indicators through the use of 5 main dimensions, namely NHI outpatient care, NHI hospital ambulatory care, NHI pharmaceutical drugs, and NHI specified diagnosis and treatment.



業見解差異，提升醫療費用核減合理性之目的，說明如下：

1. 專業雙審：為全部科別符合特定情況者，得採專業雙審方式辦理審查作業，第2審醫師可參考第1審醫師意見審查，最後以第2審醫師的審查結果作為核減結果為原則，必要時得召開共同審查會。
2. 公開具名：依審查醫師之意願，分為「個別核減案件具名」及「團體公開姓名」雙軌運作。
  - (1) 個別具名：於小兒科、婦產科、耳鼻喉科、眼科、神經科、精神科及泌尿科等7個科別於部分地區試辦，依相關單位提報願意具名之名單，評估後按季公告具名審查之分區及科別。
  - (2) 團體具名：全部科別皆實施，於意願徵詢完成後，按季置於「健保資訊網服務系統（VPN）」供臨床醫師查詢同意公開之專家團體名單，目前同意率超過6成。

## ｜醫療品質資訊公開

健保署自2005年起建置醫療品質資訊公開平台，以藉品質資訊公開，激勵醫界更努力提升個別院所之醫療服務品質，及增進民眾對本保險醫療品質及醫療利用之瞭解，以做為民眾就醫選擇之參考，包括：「專業醫療服務品質報告」、各特約院所之醫療品質指標、服務類指標、特定疾病類指標等，供大眾瞭解國內之醫療品質概況。

除此之外，特約醫事服務機構資訊的基本資

料，例如包括服務項目、診療科別、固定看診時段、保險病床比率、違規醫事機構資訊、掛號費查詢，均公開於全球資訊網。

## ｜合理調整藥價

現行藥品之支付係由醫事機構依藥物給付項目及支付標準向健保署申報藥費，健保署再透過定期藥價調查，取得實際交易價格，據以調整藥品支付價格，使其更接近藥品之市場銷售價格。

自1999年起，依據調查的結果調降藥價，除了縮小藥價差距，亦減緩藥費支出成長。每次藥價調降所節省的費用，用於加速新藥收載及給付、放寬藥品給付範圍、調整支付標準偏低之項目，以提供國內民眾享有與世界先進國家同步的醫療用藥，同時也提升了醫療品質，對於全民的健康保障，具有實質的效益。

為落實健保整體藥費之管控，健保署公告實施「全民健康保險藥品費用分配比率目標制」試辦方案，自2013年1月1日起試辦至今已有8年，主要是預設每年藥費支出「目標值」，並與實際藥費支出做連結，當超過目標值時自動啟動每年一次之藥價調整，讓藥費維持穩定及合理範圍。

## ｜給付C型肝炎全口服新藥

過去C肝治療需每週施打一次長效型干擾素，並配合每日口服雷巴威林（ribavirin），療程半年至一年。自從治療C肝的全口服新藥上市後，可提高治癒率、降低副作用並縮短療程，全民健保於2017年1月起納入給付，並於健保醫療費用總額編列專款經費做為C肝治療所需之藥品預算。2017年至2020年已投入約228億元預算用



## | Facilitating Professional Review

Since 2014, the NHIA expanded the use of digital reviews using information technology, and strengthened the information integration function of the “Intelligent Peer Review Online System”. This effort included the establishment of automatic links to health insurance payment regulations, review guidelines, case history e-files, and review focal point information, and the addition of reminder mechanisms and individualized settings helps review experts to perform their work accurately and efficiently

## | Facilitating Named Review and Transparent Information of Reviewing Doctors

In response to the suggestions from all sides to reveal names of the reviewers to show responsibility due to disparities in professional review opinions, the NHIA has implemented the “named professional double review” pilot plan for hospital global budget medical expenditures since October 2016. The plan is aimed at achieving the purpose of reducing disparity in individuals professional opinions and enhancing medical expenditure deduction reasonability:

1. For the professional “double review” part, specific cases are targeted for review by two physicians. The second physician can refer to the review of the first physician. The deduction cases will be based on the reviewing result of the second physician. If needed, joint review meeting will be arranged.
2. For the “named review part”, depending on the willingness of reviewing physicians, it is divided into two types: “individual reviewer named deduction cases” and “reviewer groups named”.

(1) Individual review named: seven departments, namely, pediatrics, obstetrics and gynecology, otolaryngology, ophthalmology, neurology, psychiatry, and urology, have carried out the pilot plan in some areas. According to the list of professional groups that have agreed upon named review, named areas and departments will be revealed quarterly after evaluation.

(2) Review groups named: Implemented in all departments. After consultation, Virtual Private Network (VPN) provides clinicians with the list of professional groups that have agreed upon named review. The consent rate has so far reached 60%.

## | Transparent Medical Quality Information

In 2005, the NHIA launched a platform to provide transparent information on healthcare quality in an effort to encourage the medical community to improve care quality. The platform was also designed to enhance public understanding of medical quality and medical utilization under NHI, and provide reference to patients making decisions about their healthcare choices. This platform includes professional healthcare service quality reports, medical quality indicators of contracted hospitals and clinics, customer service indicators, and indicators concerning specific diseases, and can help the public gain an understanding of the quality of care in Taiwan.

Furthermore, basic information concerning contracted medical institutions, including service items, examination and treatment departments, scheduled visiting hours, insurance bed ratios, information on medical institutions violating NHI rules, and registration fee queries are made public online.

於給付C型肝炎用藥之治療，近四年來約有11.1萬人受惠。2021年起，為達到2025年臺灣消除C肝的願景，持續編列充足治療經費，2021年預算共65.7億元，至少可讓4萬多人受惠。

### ■ 民眾自付差額特材

由於醫療器材產業迅速發展，新醫療器材日新月異，健保署明白民眾醫療的需求，與時俱進，在財源合理下編列預算，逐步將新醫療器材納為健保給付的特材（健保收載給付之醫療器材稱為特殊材料，簡稱健保特材）。新醫療器材雖

改善現有健保收載特材之某些功能，但是價格也較原健保給付類似產品昂貴許多。為使民眾使用到適當且符合效益的新醫療器材，健保署自1995年起陸續將新增功能類別之特殊功能人工心律調節器、冠狀動脈塗藥支架、特殊材質人工髖關節、特殊功能人工水晶體、特殊材質生物組織心臟瓣膜、腦脊髓液分流系統、治療淺股動脈狹窄之塗藥裝置、治療複雜性心臟不整脈消融導管及特殊功能及材質髓內釘組等9類列為民眾自付差額項目（表4-1）。若民眾選用自付差額特

**表4-1 民眾關心之自付差額特材一覽表**

Table 4-1 Special Medical Devices with Balance Billing

項目 Item	開始實施時間 Effective Date
特殊功能人工心律調節器 Special Function Pacemaker	1995/08/03
冠狀動脈塗藥支架 Drug-eluting Coronary Artery Stent	2006/12/01
特殊材質人工髖關節 Special Materials of Hip Prosthesis	2007/01/01
特殊功能人工水晶體 Artificial Intraocular Lenses	2007/10/01
特殊材質生物組織心臟瓣膜 Special Materials of Bio-prosthetic Heart Valve	2014/06/01
腦脊髓液分流系統 Cerebral Spinal fluid shunt system	2015/06/01
治療淺股動脈狹窄之塗藥裝置 Drug-device Combination Products for Superficial Femoral Artery Stenosis	2016/05/01
治療複雜性心臟不整脈消融導管 Ablation Catheter for Treatment of Complicated Cardiac Arrhythmia	2017/11/01
特殊功能及材質髓內釘組 Intramedullary nail with Special Function and Materials	2018/06/01

## | Reasonable Drug Price Adjustments

Under the current system for reimbursing medication expenses, medical institutions file drug expense claims with the NHIA based on NHI Drug List, and the NHIA will gather actual transaction prices through regular drug price market surveys to adjust drug prices periodically, making sure that they are closer to the sales price on the market.

Since 1999, drug prices have been reduced based on these market surveys. These periodic adjustments in drug prices have not only helped shrinking the gap between actual market prices and NHI reimbursement prices, but also slowed the growth of the system's medication expenditures. The funds saved are being used to accelerate the inclusion of new drugs, widening the scope of drug payments, adjusting the payment standards for items with relatively low prices, the NHIA is ensuring that patient access to drugs is on a par with the world's leading countries while improving the quality of healthcare in Taiwan. This is one way the NHIA used to safeguard people's health.

To further control health insurance medication costs as a whole, it has been 8 years since the NHIA announced trial implementation of the "NHI Drug Expenditure Target" from January 1, 2013. This system sets yearly targets for NHI drug expenditures, which are linked with actual drug expenditures. If actual expenditures exceed targets, a process to adjust drug prices is automatically initiated once each year, keeping the NHI system's overall spending on drugs stable and within a reasonable scope.

## | Covering New Oral HCV Medications

In the past, hepatitis C treatment required the injection of peginterferon once a week, coupled with a daily oral intake of ribavirin. The course of treatment lasted from six months to one year. The introduction of the new hepatitis C full oral drug can improve the cure rate, reduce side effects, and shorten the course of treatment. The NHIA has, since January 2017, included it in the payment items and allocated a specific budget from the total budget for drugs needed for hepatitis C treatment. From 2017 to 2020, NT\$22.8 billion was





材品項，健保按現行類似品項之支付標準給付，超過費用由民衆自行負擔。

有關2017年8月1日收載為民衆自付差額特材之客製化電腦輔助型顱顏骨固定系統，因臨床使用占率高已成為臨床主流，經評估後健保署已於2018年12月納為全額給付。另外健保署更於2020年針對民衆自付差額特材改革，依臨床實證支持的臨床效果，訂出合理差額費用及合理的健保給付比例，希望在兼顧健保的財務下，讓創新醫材以自付差額方式納入健保給付，增加民衆使用創新醫材可近性。

為保障民衆權益，針對2019年12月31日以前已收載的自付差額特材（義肢除外），健保署積極與公、學、協會溝通討論，由臨床依照自付差額特材的功能與材質進行分類，並提供淺顯

易懂的分類說明供民衆參考，同時訂出各分類專業認為合理的收費極端值，自2020年8月24日以符合專業自主的方式進行管理。此外，醫療法規規定醫療院所應於手術或處置前讓民衆充分獲得資訊。此外，醫療院所也應將病患使用自付差額特材之品項名稱、品項代碼、收費標準（包括醫院自費價、健保支付價及保險對象負擔費用）、產品特性、副作用、與健保已給付品項之療效比較等相關資訊，置於醫療院所之網際網路或明顯之處所。另健保署亦會將民衆自付差額特材與健保全額給付特材之價格及功能資訊，置於健保署全球資訊網站，民衆可至健保署全球資訊網「醫材比價網」搜尋各醫院收費價格，了解後再與醫師討論選用合適的特材。





allocated for payment coverage for Hepatitis drug, benefitting 110,000 patients in these four years. Starting from 2021, to achieve the goal of hepatitis C elimination by 2025, the total budget of NT\$6.57 billion was allocated for treatment and is expected to benefit at least 40,000 patients.

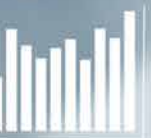
### | Medical Devices with Balance Billing

With the progress of science and technology, the new medical devices have developed rapidly. The NHI shall consider how to increase patients' accessibility to new medical devices, while maintaining financial stability. Although some new medical devices offer improved functions, their prices are often far more expensive than similar items listed in the NHI fee schedule. To ease the financial burden of patients who may access to new medical devices, the NHIA has started to list new categories with improved function or innovative medical devices as balance billing items since 1995 and continually list new categories. Until now, there are 9 categories of balance billing items, including special function pacemaker, drug-eluting coronary artery stent, special materials of hip prosthesis, artificial intraocular lenses, special materials of bio-prosthetic heart valve, cerebral spinal fluid shunt system, drug device combinational products for superficial femoral artery stenosis, ablation catheter for treatment of complicated cardiac arrhythmia, and intramedullary nail with special function and materials (Table 4-1). Whenever an insured person needs to use those balance billing-medical device, NHI will reimburse the amount at the rate of similar items approved by the system, and the rest are paid by the patients.

The customized cranial and facial bone fixation

system, which was listed as a balance billing item from August 1, 2017, has been covered in full after evaluated by the NHIA in December 2018. Moreover, the NHIA reformed the policy regarding balance billing items in 2020, setting a reasonable cost difference and percentage of NHI payment based on results supported by clinical evidence. The reform hopes to include innovative medical devices as balance billing items in the NHI system, increasing accessibility while taking the finances into consideration.

To protect patient's rights, in December 31, 2019, NHIA takes initiative in discussing the categorization of costly balance billing medical devices (exclusive of prosthesis) with guilds, associations and unions based on its function and materials. The categories and descriptions are clear and well-understood, and also regulate reasonable extreme price. Starting from August 24, 2020, the management is implemented in accordance with professional autonomy. To safeguard patients' rights, the Medical Care Act stipulates that medical institutions should grant them full access of information prior to any surgery or treatment. In addition, NHIA contracted hospitals and clinics must post information on their websites or conspicuous places to public, which includes the name of product, item codes, fee standards about out-of-pocket payment, NHI listing prices, insured copayments, and product characteristics, side effects, as well as therapeutic effects comparison with items fully covered by the NHI. Furthermore, NHIA will post balance billing medical devices related information and features on its official website. People are able to learn the prices of such balance billing medical devices at different hospitals from the "Price Comparison Platform of Self-Paid Medical Devices" websites.



# 健康科技 服務增值

*Health IT and Value-added Services*



## Chapter 5



## 健康科技 服務加值

### 醫療資訊上雲端 調閱分享無弗屆

全民健保累積20多年的健保申報資料，堪稱是全國最大的個人資料庫，近年來大數據（Big Data）觀念興起，健保署在資安確保下，開始逐步彙整各域資料，透過雲端運算技術提供醫師臨床專業判斷或將健保資料回饋給民眾。2013年7月健保署建置完成以病人為中心的「健保雲端藥歷系統」，透過健保的VPN系統，提供特約醫事服務機構於診療需要時，可即時查詢病人過去6個月的用藥紀錄，作為醫師處方開立或藥事人員用藥諮詢參考，以提升民眾就醫品質，減少不必要之醫療資源重複使用。

分析「健保雲端藥歷系統」使用情形，顯示醫師利用系統查詢之病患，用藥日數重疊率已明

顯降低。此外，特約醫事服務機構整合健保雲端藥歷資訊及院內用藥管理系統，紛紛建置院內專屬之用藥管理機制，如設立門住診標準化雲端藥歷系統查詢作業流程、設置敬老領藥窗口、發展雲端藥歷智慧判讀程式、追蹤不當藥物等；或鼓勵住院病人改服用自行攜入（他院或門診開立）之藥品，提升藥事人員用藥安全角色功能，並強化用藥安全環境，顯示健保雲端藥歷系統已有成效。

基於前述推動基礎，健保署參考使用者回饋意見及臨床實務需求，自2015年起擴大發展「健保醫療資訊雲端查詢系統」，除持續精進雲端藥歷系統，並增建中醫用藥紀錄、檢查檢驗紀錄、檢查檢驗結果（含國民健康署成人預防保健





## Health IT and Value-added Services

### | NHI MediCloud System Facilitates File-sharing

Accumulated for over 20 years, NHI's claims data constitutes the largest repository of people's health information in Taiwan. With the rise of the Big Data concept in recent years, NHIA has begun to gradually compile data in various fields while maintaining information security. It uses cloud computing technology to provide doctors with clinical professional assessments and offer health insurance data to the public. In July 2013, the NHIA completed the patient-centered NHI PharmaCloud System, which allows contracted medical institutions to query in real-time patients' medication records for the previous six months via the NHI VPN system. By providing reference information to doctors when prescribing prescriptions, and to pharmacy personnel when providing advices on medication use, this system is enhancing care quality and reducing unnecessary duplication of medical resources.

Analysis of usage of the PharmaCloud System has revealed that when doctors use the system to query patients, the overlap in days of drug use is reduced significantly. Furthermore, NHI contracted medical institutions have incorporated NHI PharmaCloud information into their internal drug management systems to create their own in-house specialized drug management mechanisms. These could include standardized procedures for inpatient and outpatient PharmaCloud System query procedures, setting up counters where the elderly can pick up their prescriptions, developing intelligent PharmaCloud interpretation programs, and tracking inappropriate drug use or prescriptions. The NHI PharmaCloud

is also being used to encourage inpatients to use medications that they have brought in themselves (medications prescribed by other hospitals or outpatient departments). These processes have helped pharmacists to better fulfil their role in enhancing the safe use of medicines and have improved the overall "medication safety" environment, reflecting the profound usefulness of the NHI PharmaCloud System.

Building on this foundation, the NHIA developed the expanded "NHI MediCloud System" in 2015 based on users' feedback and practical clinical needs. The new system encompasses not only the continuously improving PharmaCloud System, but also being expanded to function a total of 12 additional query systems, including: Chinese medicine prescription use records, examination and test records and results, detailed records of surgeries, dental treatment and surgical records, drug allergy records, records of specific controlled drug and specific clotting factor medications usage, rehabilitation records, hospital discharge summaries and Taiwan Centers for Disease Control vaccination records. Furthermore, there are also sections presenting medical records regarding Hepatitis B and C. All of this information is brought together on the same single platform. The system also provides a user-friendly search interface and reminders (for instance, reminder windows displaying the most recent date of specific tests, a timeline showing visits to medical practitioners and recent medical care, and the mechanism that automatically reminds physicians whether there is a duplicate prescription, drug interaction or allergic agent). These upgrades to the system make it easier for medical professionals to gain quicker access to vital information by shortening the time needed to read information and use the system.

及四癌篩檢結果）、手術明細紀錄、牙科處置及手術紀錄、過敏藥物紀錄、特定管制藥品用藥紀錄、特定凝血因子用藥紀錄、復健醫療紀錄、出院病歷摘要及疾病管制署預防接種紀錄等共12類資料，以及專區呈現B、C型肝炎就醫資訊。各項查詢系統建置於同一查詢平台，並發展提示功能、友善查詢介面及主動提醒機制（例如特定檢查項目最近一次執行日期提示視窗、就醫用藥時間軸及主動提醒醫師當次處方與病人餘藥是否有重複開立、藥品交互作用或含有過敏藥等），以縮短使用及閱讀所需時間，並有助於醫師、藥師及特定醫事人員臨床處置專業判斷，提供病人更好的照護品質。

### 雲端加值服務 健康存摺運用

從健保大數據分析發現，控制不必要的檢驗檢查及用藥是提升醫療資源使用效率之重要關鍵。因此自2015年起，鼓勵醫療院所上傳病患各項檢驗檢查結果。2018年1月起，各大醫院為病患執行CT、MRI、超音波、胃鏡、大腸鏡及X光檢查，其他的基層院所即可透過健保醫療資訊雲端查詢系統調閱影像及報告內容。對民眾而言，至同層級醫院尋找第二醫療意見或在居家附近基層院所接受後續照護，只要由雲端調閱資料，就可看到檢驗檢查報告，節省等待醫院作業流程與金錢花費，也降低重複檢查的潛在健康風險。藉此落實分級醫療「社區好醫院，厝邊好醫師」的理念，提升病患就醫品質及方便性，也減少醫學中心壅塞的問題。

另外，健保署個人化雲端服務的「健康存摺」系統提供已註冊健保卡的民眾免插卡即可登

入系統查詢的服務，運用一目瞭然的視覺化資訊圖表，搭配篩選及分類功能，讓民眾快速瞭解個人最近的就醫紀錄、檢驗檢查結果及預防保健資料，直接掌握本身的健康狀況，進行自我健康管理。民眾也可以下載個人健康存摺資料加值運用或利用行動裝置登入「全民健保行動快易通」健康存摺APP之「健康存摺」，隨時查詢個人就醫資料，或於就醫時提供醫師參考，預期可縮短醫病間醫療資訊的不對等，提升醫療安全與效益。

健康存摺自2014年推出以來，使用人數不斷上升，截至2021年6月30日止，健康存摺使用人數約580.3萬人，使用人次已達1億156萬人次。約9成使用者認同透過健康存摺可瞭解個人就醫情形，有助於掌握自我健康情形，顯示健康存摺對於促進民眾自我健康照護有正向幫助。

### 邁向AI健保 輔助精準審查

#### 1. 專業審查系統主動智慧提示

為匯集審查所需的各項資訊，並減少專審醫師查找資訊的人工作業，健保署透過大數據分析於專業審查系統主動提示各式審查重點，以醫療費用案件為例，系統會主動呈現保險醫事服務機構是否為篩異指標抽審對象與篩異原因、該保險醫事服務機構之各項醫療利用統計資訊、歷史核減情形等；另以事前審查案件為例，主動呈現癌症免疫藥品不得合併使用標靶藥物、類風濕關節炎免疫藥品提示個案不適合用藥之情形、傳統抗風濕病用藥歷程及檢驗結果等資訊，協助審查醫師迅速掌握審查重點，簡化翻查病歷與比對給付規定之人工作業。

This enables physicians, pharmacists and specific healthcare professionals to make better clinical judgments and provide patients with even better care quality.

## | Value-added Cloud Services: My Health Bank

According to the NHI big data analysis, it was found that controlling unnecessary examinations, checkups and medication administration are an important key. Therefore, since 2015, medical institutions have been encouraged to upload various examination and checkup results. Starting on January 2018, primary care medical institutions may retrieve images and report contents of CT, MRI, ultrasound, gastroscopy, colonoscopy, and X-ray examinations performed on patients by major hospitals through the NHI MediCloud System. As far as the general public is concerned, seeking second medical opinions or subsequent care from a hospital of the same level can be achieved by retrieving data from the cloud to view test and checkup reports, thereby saving the time from waiting for hospital operating processes and money, while reducing potential health risks arising from repeated examinations. Through the implementation of the concept of grading medical care “good hospitals in the community; good doctors in the neighborhood”, patients’ medical care quality and convenience can be improved, and the problem of medical center crowdedness can be reduced.

In addition, the NHIA’s personalized cloud-base service – the “My Health Bank 2.0” enables patients with valid NHI cards to log into the system and query their records without the need to insert their cards in a card reader. The system’s simple and intuitive visualized interface makes it easy for users to get a clear, accurate picture of their recent doctor visits, examinations and test results, and preventive health

care information, allowing users to play a more active role in monitoring and managing their own health. Individuals can also download personal My Health Bank value-added applications or use their mobile devices to log onto the NHI app (My Health Bank APP). This empowers users to check their medical information at any time and use it as reference information to doctors when users receive care. The NHIA expects that this service will reduce the medical information asymmetry between doctors and patients, and thereby enhance medical safety and effectiveness.

The number of “My Health Bank” users has increased significantly since the system was introduced in 2014. As of June 30, 2021, the system had approximately 5,803,000 users, and downloads had been made over 115.6 million logins. Approximately 90% of users agreed that “My Health Bank” helped them to better understand their medical care status and facilitated monitoring of their health condition. These results indicate that the system is making a positive contribution to encouraging people to pay greater attention to their own personal healthcare.

## | Toward AI-assisted NHI and Develop Precision Medical Review

### 1. Professional Review System Prompt

To collect the necessary information for review and reduce the manual work of professional review physicians for searching information, NHIA utilizes the big data to analyze the key points for professional review via system prompt. Take the case of medical expenses for example, the system presents information such as whether the insurance medical service is the target of audit testing for screening index and the reasons behind screening index, statistics of medical uses and the record of reimbursement in the insurance





## 2. 人工智慧 (AI) 輔助精準審查

健保署應用大數據與AI科技輔助，結合結構化費用申報資料與非結構化檢驗檢查影像與報告，在尊重醫療專業的前提下，發展智能輔助精準審查機制，以下舉「影像或報告品質監測」及「影像重複或相似度偵測」為例說明。

### (1) 特約醫事服務機構申報前的上傳影像或報告品質監測：

推動鼓勵保險醫事服務機構即時上傳醫療影像、檢查文字報告以及檢驗結果，並針對CT與MRI檢查文字報告、C肝及腎功能檢驗結果等資料，健保署已建置上傳品質監測系統，可透過大數據分析了解保險醫事服務機構上傳資料品質是否穩定，例如比對影像檔案資訊與該筆上傳醫令項目是否一致、影像文字報告內容是否含有影像發現或臆斷、檢驗結果值是否為空值等。以監測結果適時回饋提醒保險醫事服務機構改善上傳資料的品質，增進健保資料庫審查應用價值並提升雲端共享效能。

### (2) 特約醫事服務機構申報後的送審影像重複或相似度偵測：

運用AI技術自行開發重複醫療影像偵測、牙科影像及白內障影像相似度偵測等審查輔助工具，能將影像自動分群，在5秒內完成1千張影像重複偵測、6分鐘完成1千對牙科及白內障影像相似度偵測，輔助審查醫師快速判讀是否有不同個案送審重複及相似度高的影像之異常情事。

## 3. 應用AI科技防疫加值

健保署與成大醫院共同合作開發「胸部X光影像輔助研究新冠肺炎系統」，病患就醫照完胸部X光後，由醫師在該系統上傳X光影像，可以在1分鐘內取得AI模型自動判讀肺炎與新冠肺炎風險值，以及標註病灶位置的結果影像，以供醫師精準診斷和提早治療之參考，並作為新冠肺炎（COVID-19）防疫工作之警示，達到利用AI技術加值科技防疫效益。

## | 電子申報提升作業效率

自全民健保開辦以來，健保署即鼓勵特約醫事服務機構採用網際網路、媒體、VPN等方式申報費用，統計資料顯示，特約醫事服務機構採醫療費用電子申報之比率已近100%。

2004年配合健保卡全面上線後，健保署建置健保資訊網（Virtual Private Network, VPN）作為與特約醫事服務機構雙向溝通之專用網路，特約醫事服務機構除了可透過VPN進行健保卡連線、認證、更新、上傳作業以外，更可進行費用申報等網路申報服務，提供更有效率之連線服務管道，目前對於特約院所各申辦作業如：醫療費



medical service. Furthermore, take pre-review case for instance, the system presents information such as medications for cancer immunotherapy shall not be combined with those for targeted therapy, immunotherapeutic medications for rheumatoid arthritis not suitable for individuals, medication procedure for rheumatic disease and examination results. The efforts are all aimed at helping physicians quickly grasp the main points of professional review and simply the manual work of looking up medical record and payment guidelines.

## **2. AI assisted precision review**

NHIA utilizes big data and AI assisted technology to organize structured expense report and unstructured examination image and report. Under the premise of respecting medical profession, NHIA develops the mechanism for AI assisted precision reviewing. The followings are the example of 'quality monitoring for image and report' and 'monitoring for repetition or degree of similarity of images'.

### **(1) Quality monitoring of uploaded images or report prior to declaration from contracted medical institutions**

NHIA encourages contracted medical institutions to upload medical images and examine the report and results in real time. In terms of examination report of CT and MRI, Hepatitis C and kidney function, the NHIA has established the quality monitoring system, which helps understand whether the quality of information uploaded by medical institutions is stable. For instance, the system examines whether the information of images are consistent with those of the uploaded physical order items, whether the report includes the findings from images or certain presumptions, whether the examination result is null. The monitoring result thus serves to remind the medical institutions of the quality

of uploaded information in an appropriate manner, increase the value of NHI database and improve the sharing efficiency of cloud system.

### **(2) Monitoring for repetition of images or degree of similarity submitted by contracted medical institutions after declaration**

With assisted reviewing tools for monitoring repetition of medical images, dental images and degree of similarity of cataract images, the system is able to automatically categorize the image, complete the repetition monitoring for 1000 images within five seconds and degree of similarity of 1000 pairs of dental and cataract images within six minutes, which overall help reviewing physicians to make quick diagnosis of whether there is repetition or high degree of similarity among the images from different individuals.

## **3. Application of AI technology to contain the pandemic**

The NHIA works in collaboration with National Cheng Kung University Hospital to develop 'image-based chest x-ray pneumonia detection platform for COVID-19'. The physician uploads the x-ray image to the system and is able to receive value-at-risk of pneumonia and COVID-19 automatically identified by AI model within a minute as well as the image that marks that position of the lesion. The results serve as references for physicians' precision diagnosis and early treatment and the reminder for preventing the spread of COVID-19, which can altogether optimize the value of AI assisted technology for containing pandemic.

## **| Enhancing Efficiency through Electronic Claims**

Since the inception of the NHI program, the NHIA has encouraged contracted medical institutions to employ the Internet, media, and the NHI VPN to report

用申報、個案管理以及院所續約等作業，健保署亦逐步完成電子化作業。

另為因應近年來醫療院所e化的腳步逐漸加速，健保署於2006年9月建置完成並啟用「電子化專業審查系統」，建立了醫療費用專業審查（含文字及影像資料）作業e化環境，以期協助醫療院所進行醫療專業審查電子化申請或申報，並經由醫療影像儲傳系統（PACS: Picture-Archiving and Communication System）傳遞送審案件之影像檔案；建立個人病歷件歸戶平台，提供審查醫師優質作業環境，於2017年完成醫療影像及相關電子化檔案集中化管理，並強化事前審查、醫療費用抽樣審查案件資料處理功能，並將門診申復案件、住院申復案件、住院Tw-DRGs案件、重大傷病案件、牙位更正等之專業審查納入，同時串接健保署內部之醫療給付相關系統，使整個審核流程更加自動化，並提升原有人工審查作業的效率，降低行政作業成本。

為鼓勵更多醫療院所採用網路方式申報醫療費用，所有特約醫事服務機構申報作業以健保署健保卡資料管理中心（IDC）為單一入口，集中由全民健保資訊網路連線申報，健保署也配合作業需求，持續提供特約醫事服務機構更多更便捷的電子申報服務。同時亦期望透過推動跨院所間的醫療影像檔上傳與調閱作業，減少不必要的重複檢驗與檢查，促進跨醫院間的資訊流通。

### | 健保卡加速電子化管理

為提升民眾就醫便利性，自2004年1月1日起，健保卡全面正式上線，整合原有的健保紙卡、兒童健康手冊、孕婦健康手冊和重大傷病證

明卡4種卡冊的就醫紀錄，並將原本卡冊上明示之登記事項，以隱性及代碼方式，登記於晶片內，除具便利性，同時保障就醫隱私，另外，因醫療資訊雲端查詢系統之資料呈現約有2-3天的落差，但透過健保卡登錄藥品及檢驗（查）項目，可讓醫師在診療時即時參考。

因民眾每次就醫紀錄，醫療院所均於健保卡登錄並於24小時內傳送至健保署，每天的門診與住院人次即可及時統計，針對某些異常就診的行為，健保署可及早發現而加以追蹤輔導。此外，保險對象器官捐贈或安寧緩和醫療意願或預立醫療決定之檔案，亦可註記於健保卡。

### | 多重機制縱深防禦確保資訊安全

健保卡不僅確保民眾個人隱私，也代表臺灣醫療網路的資訊平台聯繫更加順暢，健保卡在安全管理上也多次獲得國際肯定。為保障資訊安全，健保卡採取多重防偽處理，晶片採多重相互驗證機制，以確保資料安全。

在網路系統上，則採用健保資訊網封閉性專屬網路，設有多道防火牆，可降低駭客入侵系統或盜取資料之風險；健保卡紀錄均以代碼登載及亂碼傳輸，有效保障個人隱私。

為強化健保卡和健保資料的安全管理機制，健保署自2003年8月即成立「資通安全小組」，負責相關工作及推動認證，另外，健保署為落實資訊安全工作，全面推動資訊安全管理系統（ISMS）建置作業，讓資訊安全確實向下扎根。健保署為強化整體資通安全，對外網路採單一入口並建構縱深防禦機制，布建各式偵測及防

expenses claims, and statistics indicate that the use of electronic submission of medical expenses claims by contracted medical institutions is approaching 100%.

After NHI cards went fully electronic in 2004, the NHIA set up an NHI virtual private network (VPN) to facilitate two-way communication with contracted medical institutions. Apart from being able to use the VPN to perform uploading and online NHI card verification and updating, contracted medical institutions can also file their expenses claims more efficiently. The NHIA has also gradually completed the digitalization of various reporting operations by specially-engaged medical institutions such as medical expenses reporting, individual case management and contract-renewal.

Furthermore, responding to the accelerating adoption of information technology by hospitals and clinics in recent years, the NHIA completed the introduction of the “Picture-Archiving and Communication System” (PACS) in September 2006, which established an online environment (including text and image data) for the professional review of medical expense reimbursement claims. This system is helping hospitals and clinics to perform online applications and reporting in connection with their reimbursement claims. In addition, an individual medical record file system has been established to provide reviewing doctors with a good quality operating environment. The NHIA instituted the centralized management of medical images and related electronic files in 2017. This initiative has prompted the NHIA to merge similar functions within the integration of operations, strengthened pre-authorization reviews, and added data processing functions for the random review of medical expenses, while also adding professional review of outpatient appeal cases, inpatient appeal cases, Tw-DRGs cases, catastrophic disease and injury, and orthodontic cases to the system. At the

same time, the medical payment system within the NHIA enables the reviewing procedure to be more automatic, increases the efficiency of reviewing and reduces the administrative costs.

To encourage even more hospitals and clinics to claim medical expenses online, the NHIA has established a single electronic window—the IC Card Data Center (IDC)—on its website where all contracted medical institutions can file expenses online. In conjunction with its operating needs, NHIA is also continuing to provide contracted medical institutions even more convenient electronic reporting services. The NHIA also expects that its promotion of the exchange, uploading and reviewing of medical imaging files between cross-medical facilities will reduce the number of unnecessarily duplicated examinations and tests, while promoting the information exchange between hospitals.

### | Accelerating Digital Management via NHI Cards

To enhance the public's healthcare convenience, NHIA introduced IC health insurance cards on January 1, 2004 as a replacement for the previously-used paper cards and child healthcare handbooks, maternity healthcare handbooks, and catastrophic illness certification cards. The information that had been previously recorded on these four types of documents has now been encrypted and encoded in the new card's embedded chip. Alongside greater convenience, this shift also protects users' medical privacy. In addition, since the data in the NHI MediCloud System has a 2 to 3-days lag, but drugs and test (checkup) items stored in the NHI Card serve as immediate references for physicians during diagnosis and treatment.

Because hospitals and clinics must enter patients'



禦機制（如SOC、防火牆、郵件過濾、入侵偵測、應用系統防火牆、防毒防駭軟體、進階持續性威脅攻擊防禦措施），以進行全年無休之網路及電子郵件安全監控作業，於資料庫內可資識別個人資料之欄位加密方式儲存，以確保健保署整體資通安全。

### ■ 健保雲端科技協助防疫

2020年全球遭受嚴重特殊傳染性肺炎（COVID-19）疫情影響，臺灣健保制度在防疫過程中扮演關鍵角色。健保資料庫及多年來建置之雲端系統成為協助防疫之利器之一，透過雲端系統連結各醫療院所，交換防疫過程中所需之資訊，而協助防疫之作為，皆依據「傳染病防治法」及「嚴重特殊傳染性肺炎防治及紓困振興特別條例」相關規定執行，在保護個人隱私方面維持最小侵害性原則，以謀求最大之公共衛生安全利益。

#### 1. 「健保醫療資訊雲端查詢系統」——智慧雲端科技防疫

2020年初新冠肺炎（COVID-19）疫情在全球各國逐漸蔓延，健保署配合中央流行疫情指揮中心指示，運用健保VPN網路及雲端系統已廣布於各醫療院所的優勢，快速將武漢旅遊史及疾管署匡列之與確診個案接觸者相關提示，建置於雲端系統，插入病人健保卡，就會立即跳出視窗提醒醫療院所留意病人狀況。

爾後又依據整體防疫作為，陸續擴增至各國旅遊史、特定高風險職業別及群聚史、轉診採檢提醒、病人10日內曾被開立流感抗病毒藥劑

等，透過整合衛生福利部、內政部移民署、交通部民用航空局、國軍退除役官兵輔導委員會等跨部會資料（圖5-1），提供各級醫療院所（含健保特約及非特約醫事機構）、長照機構、行政機關（內政部消防署、法務部矯正署及各地方檢察署）可透過線上查詢（有／無健保卡）、批次下載或API介接等多元管道，掌握進出人員TOCC（Travel history旅遊史、Occupation職業別、Contact history接觸史及Cluster是否群聚）等防疫相關資訊（圖5-2），減少院內、群聚和社區感染擴散風險，降低醫事人員及執行業務人員之內心壓力及感染風險，有效掌握疾病流向及全面防堵群聚感染。

統計2020年2月至2021年6月為止，TOCC提示之總查詢次數已高達近9.37億人次。善用資訊系統快速提供具臨床實務參考價值的資訊，並再與醫事人員習慣的院內醫療資訊系統（Hospital Information System, HIS）結合，進行主動提示及加值運用，使效益最大化，更是雲端系統整體價值所在。

健保署持續優化雲端系統，並補助醫療院所提升網路頻寬，友善使用者環境。因應新冠肺炎（COVID-19）疫情，配合檢疫與防治採行措施之居家隔離、居家檢疫、自主健康管理者及中央流行疫情中心防疫政策增列之適用對象，在急迫醫療需要，且經衛生局指定之醫療院所醫師評估可實施視訊診療前提下，醫師核對病人身分並取得同意後，可輸入病人身分證號查詢雲端系統，迅速掌握病人近期就醫資訊，避免重複用藥、藥品交互作用或過敏的情形發生，保障病人用藥安全。



visit records onto their health insurance cards, and then transmit this information to the NHIA within 24 hours, the NHIA is able to monitor daily outpatient and inpatient use person-times statistics, and is able to quickly discover and track irregular healthcare behavior, and provide prompt assistance. In addition, insureds can also note willingness to donate organs or desire not to be resuscitated or be given hospice care on their NHI cards.

### | Using Multiple Mechanism to Ensure Information Security

NHI cards not only ensure privacy, but also facilitate the smooth flow of information through Taiwan's online medical information platform. The NHI card has received international recognition for its security management on several occasions. To safeguard information security, the card provides several anti-forgery features, and the embedded chip employs a number of mutual verification mechanisms intended to maintain data security.

Health insurance information is transmitted via the NHIA's dedicated VPN, which has multiple firewalls in an effort to reduce risk of hackers breaking into the

system or stealing data. In addition, NHI cards records are entered in encoded form and encrypted during transmission, which effectively safeguards personal privacy.

To strengthen health insurance card and health insurance data safety management mechanisms, the NHIA established an 'information security task force' in August 2003 responsible for managing security-related tasks and completion of system certification. The NHIA has also established a full-scale information security management system (ISMS) to ensure the security of medical information throughout the healthcare system. In order to strengthen system-wide monitoring of information security, the NHIA adopted single entry for external network and established multi-layered security protection and various detection and defense mechanisms (such as Security Operation Center, firewall, mail filter, intrusion detection, application firewall, antivirus software, protective measures for advanced persistent threat) to perform continuous monitoring of e-mail and online security. Also, the personal information can be saved via encryption to ensure the security of medical information throughout the healthcare system.

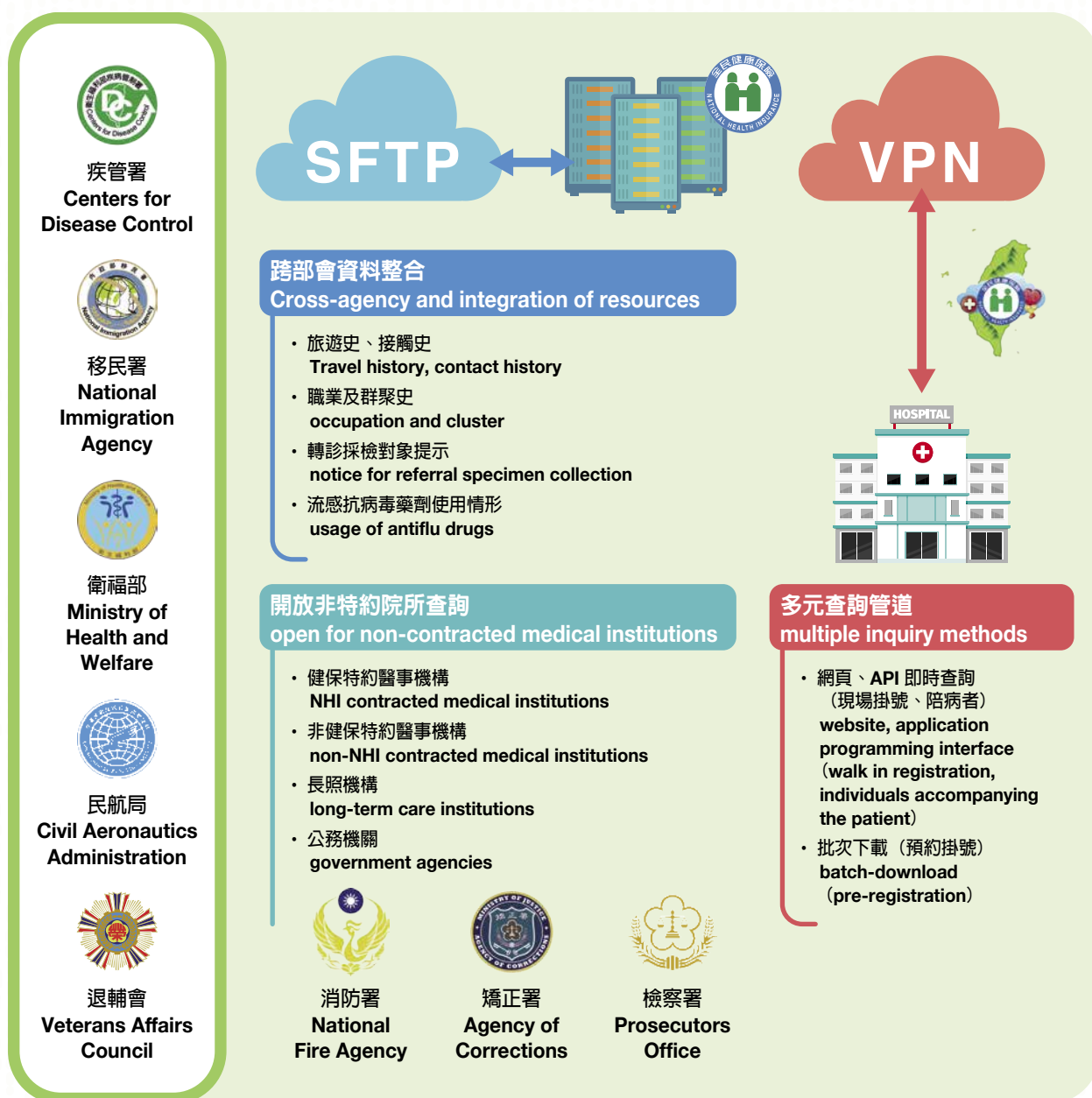


具資料串接彈性、查詢即時性及方便性之健保雲端系統，疫情期間發揮強大的附加價值，在中央流行疫情指揮中心指示下，提供醫療院所

查詢即時且正確之病人TOCC資訊，避免醫療資訊不對稱，減少醫事人員染疫之風險，維持醫療量能。

圖5-1 跨部會資料整合 全民防疫守門人

Chart 5-1 Cross-agency and integration of resources safeguard national health



## | Using NHI Cloud Technologies to Tackle Pandemic

Taiwan's NHI system played a vital role in containing the COVID-19 pandemic in 2020. The NHI database and cloud system constructed over the years have been proven as effective tools to tackle pandemic. Medical institutions are linked through the cloud system to exchange any informations necessary during this period of time, and all relevant measure comply with Communicable Disease Control Act and Special Act for Prevention, Relief and Revitalization Measures for Severe Pneumonia with Novel Pathogens. The ultimate goal is maximizing public health benefits while minimizing intrusion of privacy.

### 1. 'NHI MediCloud System': using cloud system and technology to tackle the COVID-19 pandemic

Since the outbreak of COVID-19 pandemic worldwide in the beginning of 2020, NHIA cooperated with Center Epidemic Command Center (CECC) and made use of VPN and NHI MediCloud System, which have already been widely used in medical institutions. With the insertion of NHI card, the medical institutions are able to have quick access to individual's travel history to Wuhan area and listed contacts with confirmed cases via the system, and the medical institutions can thus be aware of patients' condition.

Later, the system further included individual's travel history of every countries, occupation, cluster, notice of referral for specimen collection and testing and prescriptions of antifu drugs in the past 10 days. With cross-agency and integration of resources from Ministry of Health and Welfare, Ministry of the Interior National Immigration Agency, Civil Aeronautics Administration, Ministry of Transportation and Communication and Veterans Affairs Council, etc. (Chart 5-1), the medical institutions (including NHI contracted

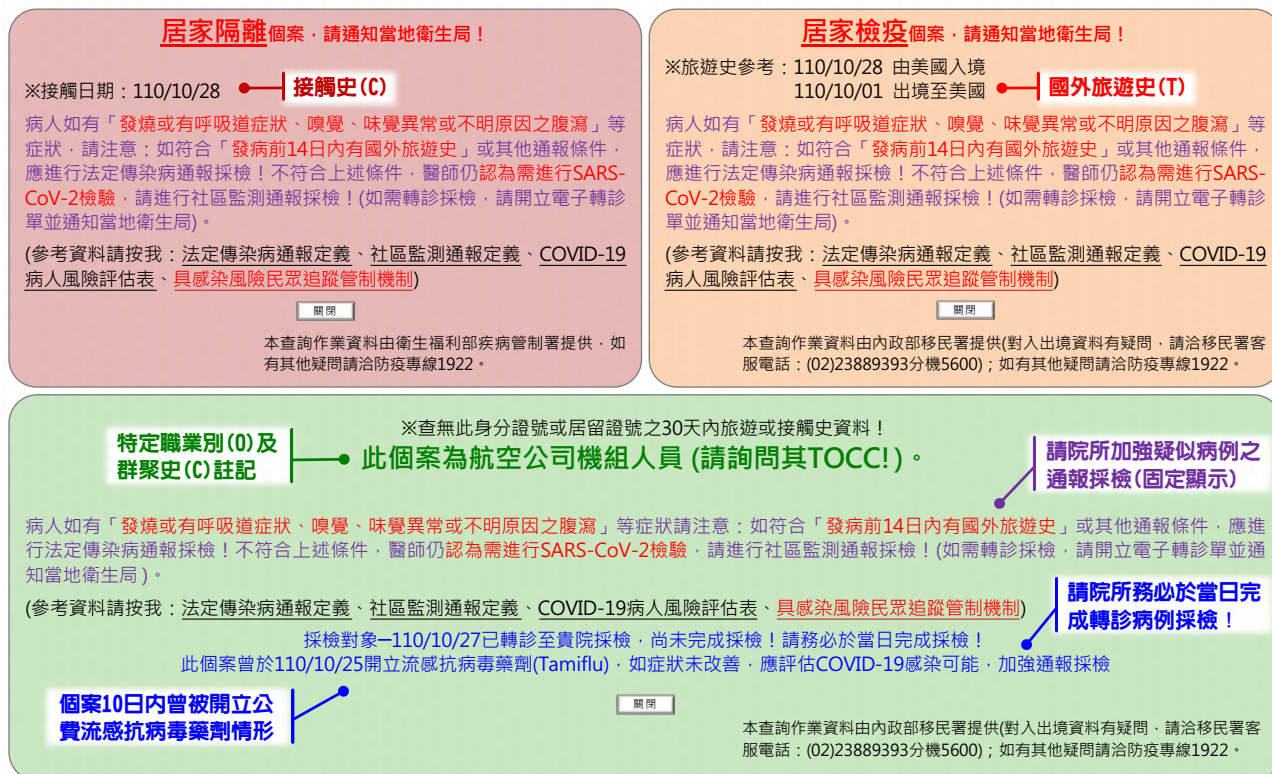
and non-contracted medical institutions), long-term care institutions, National Fire Agency, Ministry of the Interior, Agency of Corrections, Ministry of Justice and local prosecutors offices) can use online services (with/without the NHI card), batch-download or application programming interface to get access to individual's TOCC (Travel history, Occupation, Contact history, Cluster) (Chart 5-2). The efforts are aimed at reducing the spread of COVID-19 within the hospital, clustering and community, lessening the pressure and risk of infection endured by medical staff and professional practitioners, understanding the current development of pandemic and containing the COVID-19 pandemic.

From February 2020 to June 2021, the number of TOCC inquiry has reached up to 937 million times. With instant information that responds to clinical practice and hospital information system that is familiar to medical staff, the NHI MediCloud System optimizes its value via active reminding system and value-added application.

NHIA is now constantly optimizing the NHI MediCloud System and subsidies medical institutions for expanding network bandwidth, which further offers user-friendly environment. In response to the COVID-19 pandemic, NHIA works in collaboration with policies that regulates quarantine and measures for containing pandemic. If people who are undergoing home isolation, home quarantine and self-health management as well as individuals listed by CECC need urgent medical care, and have been evaluated suitable for conducting telemedicine by physicians from medical institution designated by Department of Public Health, the physician is authorized to query the NHI MediCloud System by entering patient's ID number after gaining the consent from the patient. The physician can thus get access to patient's recent medical records, which avoid duplicated medication, drug interaction or allergies and safeguard patients' safety.



圖5-2 雲端系統TOCC等防疫資訊提示視窗示意圖



## 2. 全民健保導入AI技術 加值科技防疫

健保署為協助新冠肺炎（COVID-19）防疫工作，運用健保大數據導入人工智慧(AI)技術，與國立成功大學醫學院附設醫院共同合作開發「胸部X光影像輔助研究新冠肺炎系統」。透過AI模型，可於數秒鐘內快速判讀X光影像，提供病人COVID-19風險值，有效提升X光影像判讀量能，並可警示醫療人員，使其可依風險值快速分流病患，降低感染風險，有效防堵疫情。

在醫療資源分布不均的情形下，醫療資源缺乏的地區可能面臨因放射科醫師有限，造成長時間等待檢驗結果的情形。「胸部X光影像輔助研究新冠肺炎系統」建置於健保資訊服務系

統（VPN），使其他醫療院所不需額外添購AI設備，只要上傳X光影像，即可於1分鐘內取得AI模型判讀新冠肺炎（COVID-19）之風險值以及標註病灶位置之影像。

AI偵測模型可提升影像判讀的量能，避免因延遲診斷造成疾病惡化或形成防疫破口。互動式AI模型亦可結合全國臨床醫師經驗，讓AI模型持續精進，並分享醫療服務至全臺灣各個角落，使民眾不受到地理環境的限制，得到更高品質的醫療服務，有效改善民眾健康。

## 3. 健保電子轉診平台增加「指定社區採檢院所」促進轉診收治分流就醫

為建立COVID-19社區採檢網絡，擴大醫療



**Chart 5-2 Information such as TOCC Displayed on NHI MediCloud System**

**Home isolation case, please contact local health authorities.**

Contact date: October 28, 2021 ● **Contact history**

If this patient display symptoms, such as fever, respiratory symptoms, loss of smell or taste or unknown cause of diarrhea, please be aware that if the patient has overseas travel history within 14 days prior to symptom of fever or other COVID-19-related conditions must be reported, please conduct specimen collection and mandatory communicable disease reporting. For those who do not meet the above conditions but the physician still considers SARS-CoV-2 examination necessary, please conduct specimen collection and community monitoring (if referral specimen collection is necessary, please issue electronic referral notice and contact local health authorities).

Click here for references: [definition of mandatory communicable disease](#), [definition of community monitoring reporting](#), [CECC Measures for Following Up on Persons at Risk of Infection](#).

Close

The information is provided by Centers for Disease Control, Ministry of Health and Welfare. Should you have any questions, please call 1922, the communicable disease reporting and consultation hotline.

**Home Quarantine cases, please contact local health authorities.**

Travel histories: October 28, 2021 entry from the US ● **Overseas Travel history**  
October 1, 2021 bound for the US

If this patient display symptoms, such as fever, respiratory symptoms, loss of smell or taste or unknown cause of diarrhea, please be aware that if the patient has overseas travel history within 14 days prior to symptom of fever or other COVID-19-related conditions must be reported, please conduct specimen collection and mandatory communicable disease reporting. For those who do not meet the above conditions but the physician still considers SARS-CoV-2 examination necessary, please conduct specimen collection and community monitoring (if referral specimen collection is necessary, please issue electronic referral notice and contact local health authorities).

Click here for references: [definition of mandatory communicable disease](#), [definition of community monitoring reporting](#), [CECC Measures for Following Up on Persons at Risk of Infection](#).

Close

The information is provided by National Immigration Agency, Ministry of the Interior. Should you have any questions about travel history, please call (02)23889393#5600. If you have other questions, please call 1922, the communicable disease reporting and consultation hotline.

No travel or contact history found in the past 30 days of this ID number or /Alien Resident Certificate ID Number!

Note for specific occupation and cluster

The individual is a member of a flight crew  
(please inquire about TOCC!)

Patients meeting the suspected case definition for COVID-19 should be followed for specimen collection and reporting (fixed display)

If this patient display symptoms, such as fever, respiratory symptoms, loss of smell or taste or unknown cause of diarrhea, please be aware that if the patient has overseas travel history within 14 days prior to symptom of fever or other COVID-19-related conditions must be reported, please conduct specimen collection and mandatory communicable disease reporting. For those who do not meet the above conditions but the physician still considers SARS-CoV-2 examination necessary, please conduct specimen collection and community monitoring (if referral specimen collection is necessary, please issue electronic referral notice and contact local health authorities).

Click here for references: [definition of mandatory communicable disease](#), [definition of community monitoring reporting](#), [CECC Measures for Following Up on Persons at Risk of Infection](#).

Prescriptions of anti-flu drugs in the past 10 days.

The individual has been referred to this hospital for specimen collection on January 19, 2021, and has not yet completed specimen collection.  
Please make sure to complete specimen collection on the same day.

The individual has been prescribed Tamiflu medication on January 25, 2021.

Please complete the specimen collection for suspected cases on the same day!

Close

The information is provided by National Immigration Agency, Ministry of the Interior. Should you have any questions about travel history, please call (02)23889393#5600. If you have other questions, please call 1922, the communicable disease reporting and consultation hotline.

Thanks to the flexibility, immediacy and convenience, the MediCloud System gives full play to its additional value during the COVID-19 pandemic. Under CECC's instructions, the NHIA provides medical institutions with instant and accurate TOCC information of patients. This measure helps avoiding medical information asymmetry, reducing medical staff's risk of infection and maintaining medical capacity.

## 2. AI technologies equip NHI with capacity for containing the COVID-19 pandemic

To help containing the COVID-19 pandemic, the NHIA utilizes big data with AI technologies and works in collaboration with National Cheng Kung University Hospital to develop 'image-based chest x-ray pneumonia detection platform for COVID-19'. Thanks to AI model, the physician is able to quickly identify

x-ray images and offer value-at-risk of COVID-19, which effectively increases the capacity of x-ray images identification, alerts medical staff and helps medical triaging, which reduce the risk of infection and effectively contain the COVID -19 pandemic.

Due to uneven distribution of medical resources, it might take long time to receive testing results in areas that are short of medical resources and radiologists. 'Image-based chest x-ray pneumonia detection platform for COVID-19', which is built within VPN, makes it unnecessary for medical institutions to make additional purchase of AI equipment. Through uploading x-ray images, information such as the value-at-risk of COVID-19 identified by AI model as well as the image that marks that position of the lesion can be received within a minute.



服務防疫量能，避免疑似COVID-19個案集中於大醫院採檢，防止急診壅塞及杜絕院內傳播，進而影響醫療院所服務量能。健保署與疾管署合作，針對COVID-19疑似需採檢之個案，於健保電子轉診平台增加「指定社區採檢院所」名單，以利醫師協助轉診，並於「健保醫療資訊雲端查詢系統」顯示尚未完成轉診採檢之提示訊息，促進轉診收治分流就醫，落實病人適當之安置。

#### 4. 健保給付視訊診療協助居家隔離、居家檢疫與應自主健康管理之就醫需求

因應COVID-19疫情，配合防疫措施進行居家檢疫、居家隔離或自主健康管理之民衆，如有急迫醫療需要且無發燒或呼吸道症狀，應聯繫當地衛生局協助安排就醫，經衛生局確認就醫需求後轉介至指定醫療機構進行視訊診療，若偏遠地區等特殊情形無法視訊時，個案得採行電話診療；考量疫情嚴峻，暫訂自2021年5月15日起至中央流行疫情指揮中心公告全國三級警戒降級或

解除之次月底為止，放寬照護對象至門診病人，同時開放病情穩定之慢性病複診病人醫師得選擇以電話問診，另為顧及民衆隱私，醫師應於醫療機構診間內進行視訊診療，透過視訊診療之醫療費用亦納入健保給付。

截至2021年6月30日衛生局指定之通訊診療醫療機構計11,174家，其中醫院416家、診所10,758家；累計接受視訊診療民衆計77,456人次。

#### 5. 健保卡支援口罩實名制協助防疫

「口罩實名制」運用健保卡作為購買口罩的憑證，購買方式從「1.0實體通路」至藥局及衛生所購買，增加「2.0網路通路」，民衆透過健保卡、自然人憑證登入eMask口罩預購系統，或是藉由「全民健保行動快易通|健康存摺APP」進行身分認證和手機認證，即可進行口罩預購，使民衆更方便購買口罩，後續與全臺超商合作，推出更便利的「3.0超商預購」，讓民衆可以直接在超商事務機插健保卡預購口罩。健保卡支援「口罩實名制」販售，協助疾管署及食藥署公平地分配防疫物資，提供民衆最周全的防疫保護，作為臺灣最堅強的防疫助手。

AI detection model is able to increase the capacity of image identification, keep diseases at bay and avoid infection control breach. Interactive AI model can also integrate experiences of nationwide clinicians, which facilitate constant advance of AI models and offer medical services throughout Taiwan. People can thus have access to high-quality medical services beyond geographical limitations.

### **3. 'Designated community institutions for specimen collection' is added on the NHI electronic referral platform, which facilitates referral and triaging for seeking medical attention**

To establish COVID-19 specimen collection within the community, enlarge the capacity for containing pandemic, avoid suspected cases gathering for specimen collection in big hospitals, avoid overcrowding in emergency department and infection within the hospital that further reduce the medical capacity, NHIA works in collaboration with CECC to add a list of 'Designated community institutions for specimen collection' on NHI electronic referral platform that helps with the referral, presents a list of uncompleted information regarding referral specimen collection on NHI MediCloud System, facilitate referral and triaging for patients who are seeking medical attention.

### **4. Telemedicine under coverage that offers medical services for individuals under quarantine and self-health monitoring**

In response to the COVID-19 pandemic, if there is urgent medical need for individuals who are under quarantine or self-health monitoring but do not have fever or symptoms of respiratory tract infection, individuals shall contact department of public health and receive medical service accordingly. After the confirmation of medical need, individuals will then

be transferred to designated medical institutions for telemedicine. For special conditions such as telemedicine being unavailable in remote places, phone consultations are available. In response to the severe COVID-19 pandemic, CECC announces that starting from May 15, 2021, the medical service includes outpatient services, while patients with chronic disease yet stable condition can choose phone consultations. Furthermore, to protect individual's privacy, physicians shall conduct telemedicine in the medical institution. Telemedicine services covered by the NHI are also included in the NHI coverage.

As of June 30, 2021, the telemedicine institutions designated by Department of Public Health totaled 11,174 (416 big hospitals and 10,758 clinics). Telemedicine services have totaled 77,456 visits.

### **5. Name-based mask distribution system via the NHI card**

'Name-based mask distribution system' serves as evidence for buying masks via the NHI card. The purchase can be done via '1.0 physical access' in pharmacy and public health center, '2.0 internet access' that enables individuals to log in to eMask mask purchase system via the NHI card or Citizen Digital Certificate, or accreditation of identification and mobile via NHI app. '3.0 pre-order at convenience stores' enables individuals to pre-order masks simply by inserting the NHI card in the kiosk. The NHI card has its role in 'Name-based mask distribution system' and helps the Centers for Disease Control and Food and Drug Administration with fair distribution of supplies, which offers the most comprehensive care for the public and assistance during the COVID-19 pandemic.







# 照顧弱勢 守護偏鄉

*Caring for the Needy and  
Safeguarding Remote Areas*



Chapter **6**



## 照顧弱勢 守護偏鄉

### 對經濟弱勢民衆的補助措施

全民健保採強制納保，社會上難免有一部分繳不起保險費的低收入戶及經濟邊緣人口，如何貫徹全民納保政策，有賴多項協助措施，以確保社會安全網的穩固，更彰顯自助互助的精神。為了照顧癌症、洗腎、血友病、精神病等重大傷病患者，以及經濟困難弱勢民衆的就醫權益，健保署提出多項協助繳納保險費的措施。另外，對於罕見疾病、重症患者及偏遠地區民衆，亦提供醫

療及經濟上的協助。現行的協助措施包括保險費補助、紓困貸款及分期繳納等，執行成果請見表6-1。

### 弱勢群體保費補助

各級政府對特定弱勢者補助健保費，包括低收入戶、中低收入戶、無職業榮民、失業勞工及眷屬、身心障礙者、未滿20歲及55歲以上之無職業原住民，2020年全年補助人數約358.5

**表6-1 繳納健保費之協助措施成效**

Table 6-1 Financial Assistance to the Disadvantaged

項目 Item	對象 Assisted Groups	期間 Period	人(件)數 No. of People/ Cases	金額 Amount
保費補助 Premium Subsidies	政府對特定弱勢者補助健保費，包括低收入戶、中低收入戶、無職業榮民、失業勞工及眷屬、身心障礙者、未滿20歲及55歲以上之無職業原住民 Government subsidies to the disadvantaged, including to low-income households, the near poor, unemployed veterans, unemployed workers and their dependents, people with disabilities, and unemployed indigenous people younger than 20 or older than 55.	2020.1~12	358.5萬人 3.585 million people	285.8億元 NT\$ 28.58 billion
		2021.1~6	357萬人 3.57 million people	156.9億元 NT\$ 15.69 billion
紓困貸款 Relief Loans	符合衛生福利部所訂經濟困難資格者 Those who qualify as economic difficult cases based on Ministry of Health and Welfare criteria	2020.1~12	2,135件 2,135 cases	1.72億元 NT\$ 172 million
		2021.1~6	854件 854 cases	0.7億元 NT\$ 70 million
分期繳納 Installment Plans	欠繳保險費無力一次償還者 Those unable to pay overdue premiums at one time	2020.1~12	8.5萬件 85,000 cases	26.2億元 NT\$ 2.62 billion
		2021.1~6	3.2萬件 32,000 cases	10.1億元 NT\$1.01 billion

資料時間：2020年1月1日～2021年6月30日。

Note: Dated from Jan. 1, 2020 to June, 2021.



## Caring for the Needy and Safeguarding Remote Areas

### | Subsidy Programs for the Economically Disadvantaged

Under the NHI's compulsory enrollment system, it is inevitable that some low-income families and economically-disadvantaged groups may not be able to afford health insurance premiums. To ensure that all citizens have access to care, the NHIA provides many assistance measures aimed at maintaining a strong safety net and the spirit of mutual assistance. The NHIA consequently offers numerous premium payment assistance measures aimed at patients with catastrophic illnesses, such as cancer, kidney diseases requiring dialysis, hemophilia, and mental illness, and economically-disadvantaged citizens. Furthermore, the NHIA also provides medical and economic assistance to people living in remote areas or suffering from rare or critical illnesses. Current assistance measures include premium subsidies, relief loans, and installment payment plans (see Table 6-1 for assistance results).

### | Premium Subsidies for Disadvantaged Groups

Various levels of government provide NHI premium subsidies to the members of specific disadvantaged groups, including low-income families, the near poor, unemployed veterans, unemployed workers and their dependents, persons with disabilities, and unemployed indigenous citizens under the age of 20 and over the age of 55. A total of approximately NT\$28.58 billion in premium subsidies was provided to roughly 3.585 million individuals in 2020. As of June 30 in 2021, approximately NT\$15.69 billion in premium subsidies had been provided to roughly 3.57 million individuals.

### | Relief Loans

The NHIA provides interest-free loans to people facing economic hardship so that they can pay their NHI premiums and unpaid out-of-pocket medical expenses, thus safeguarding their right to care. During 2020, a total of 2,135 loans amounting to NT\$172 million were made throughout the year, and 854 loans totaling NT\$70 million had been made as of June 30, 2021.

### | Installment Payment Plans

Those who do not qualify for relief loans, but cannot pay their overdue premiums of NT\$ 2000 or above at one time due to economic hardship, are eligible to repay the overdue amount in installments. Permission was granted in 85,000 cases to repay NT\$2.62 billion in installments in 2020, and permission was granted in 32,000 cases to repay NT\$1.01 billion in installments up until June 30 2021.



萬人，補助金額約285.8億元。另，2021年截至6月30日止，補助人數約357萬人，補助金額約156.9億元。

### ｜紓困貸款

提供經濟困難的民眾，無息申貸健保費用及應自行負擔而尚未繳納之醫療費用，以保障就醫權益。2020年全年共核貸2,135件，金額1.72億元。2021年截至6月30日止，共核貸854件，金額0.7億元。

### ｜分期繳納

對於不符合紓困貸款資格，但積欠健保費達2,000元以上，因經濟困難無法一次繳清者，2020年全年辦理分期繳納共8.5萬件，合計26.2億元。另2021年截至6月30日止，辦理分期繳納共3.2萬件，合計10.1億元。

### ｜轉介公益團體補助保險費

對於無力繳納健保費者，健保署提供轉介公益團體、企業及個人愛心捐款，以補助其健保費。2020年全年轉介成功個案計3,988件，補助金額共1,680萬餘元。2021年截至6月底止，轉介成功個案計2,065件，補助金額共1,061萬餘元。

### ｜保障弱勢民眾就醫權益

為落實醫療平權之普世價值，及蔡總統競選時之醫療主張，有關符合健保投保資格就可憑健保卡就醫，全面廢除健保欠費鎖卡政見，健保署2016年6月7日起實施「健保欠費與就醫權脫鉤（全面解卡）案」，推動健保全面解卡，給予國人就醫權益的公平性保障，民眾只要辦理投保

手續，均可安心就醫。健保全面解卡象徵著醫療人權更上一層樓，受惠對象絕非過去欠費遭鎖卡者，而是藉著廢除鎖卡制度，才能夠真正去除弱勢民眾心中恐懼欠費而無法就醫的枷鎖，更加落實政府照顧弱勢，保障全民就醫權益之宗旨。

全民健保對弱勢民眾積極提供各種保障措施，建構完整的健保經濟困難民眾保護傘，排除民眾參加健保之經濟障礙，使經濟困難民眾隨時享有妥適之醫療照護，協助其辦理投保、健保費紓困、轉介、分期繳納等。

### ｜爭取公益彩券回饋金協助弱勢族群

為落實照顧弱勢族群，保障其就醫權益，健保署除既有分期繳納、紓困貸款及愛心專戶等協助措施外，自2008年起爭取公益彩券回饋金協助弱勢族群減輕就醫負擔，主動篩選並發函通知符合資格的民眾，協助其繳納健保相關欠費等。迄2021年6月底，累計補助金額已達45.43億元，累計補助人數達24萬4,924人（表6-2）。

### ｜減輕特定病患就醫部分負擔費用

對於領有「身心障礙證明」者，門診就醫時不論醫院層級，門診基本部分負擔費用均按診所層級收取50元，較一般民眾（80～420元）為低。

對於包括癌症、慢性精神病、洗腎、罕見疾病及先天性疾病等領有重大傷病證明的病患，免除該項疾病就醫的部分負擔費用。另為保障罕見疾病患者權益，凡屬於衛生福利部公告的罕見疾病必用藥品，健保均以「專款專用」方式給付，實質減輕其就醫經濟負擔。



## | Referral to Premium Assistance from Charity Groups

The NHIA may refer persons unable to pay their NHI premiums to seek assistance from public interest groups, companies, and personal charities. In 2020, 3,988 cases were successfully referred to charitable sources of assistance, and a total of more than NT\$16.8 million in subsidies were provided. During 2021, 2,065 cases were successfully referred and received over NT\$10.61 million in subsidies during the first six months of the year.

## | Protecting the Right to Care of the Economically Disadvantaged

In order to realize the universal right to equal medical care and fulfill President Tsai, Ing-wen's campaign promise that all insured can use their NHI card to receive medical care, and the policy of locking the cards of persons who cannot afford their premiums would be abandoned, the NHIA instituted the "decoupling of the payment of premiums from the

right to receive medical care" effective on June 7, 2016 to unlock all inaccessible cards, and guarantee all citizens enrolled in the NHI their rights to enjoy medical care. The full-scale unlocking of health insurance cards symbolizes a new level of protection of the human right to receive medical care. Furthermore, cards will no longer be locked for failure to pay premiums. By revoking the practice of card locking, the NHIA has removed the fear felt by the disadvantaged that they will not be able to receive care when they need it. The move embodies the government's goal of protecting of the weakest in society and safeguarding the people's right to healthcare.

The various protective measures for people suffering from economic hardships provided by the NHI form a comprehensive umbrella to safeguard the health of those disadvantaged. By eliminating economic obstacles to people participating in the NHI through assistance with the enrollment of insurance, premium relief loans, referrals to assistance, and installment payment plans, the NHIA has ensured that people suffering difficult economic circumstances can still enjoy adequate medical care at any time

## | Obtaining Public Welfare Lottery Feedback Funds to Assist Disadvantaged Groups

In order to provide care to disadvantaged groups, in addition to installment plans, relief loans, and referrals to assistance, the NHIA has also used public welfare lottery feedback funds since 2008 to ease the medical care burden of disadvantaged groups. The NHIA actively selects and notifies people who are eligible for this program, and helps them to pay overdue premiums. As of the end of June 2021, the cumulative subsidies provided to this program totaled



**表6-2 最近2年公益彩券回饋金補助成果表**

Table 6-2 Contributions from Public Welfare Lotteries Feedback Funds of the Past Two Years

年度 Year	計畫名稱 Program Description	人數 No. of Beneficiaries	金額 (新臺幣) Amount
2019	協助經濟弱勢民衆重返健保醫療照護計畫 Plan to help the financially disadvantaged to be re-covered by NHI medical care	6,880	2.31億元 NT\$ 231 million
	協助更生人、新住民、未成年、特殊境遇及急難救助之民衆脫離健保欠費困境計畫 The program on helping people address unpaid health insurance fees, targeting ex-offenders, new immigrants, minors, and people facing emergency and hardships.	378	0.07億元 NT\$ 7 million
2020	協助經濟弱勢民衆重返健保醫療照護計畫 Plan to help the financially disadvantaged to be re-covered by NHI medical care	7,487	2.31億元 NT\$ 231 million
	協助重大傷病者、新住民、未成年及隔代教養之經濟弱勢家庭脫困計畫 The program on helping people address unpaid health insurance fees, targeting people with catastrophic diseases, new immigrants, minors and people from kipped generation families	165	0.03億元 NT\$ 3 million
2021 上半年 First half of 2021	協助弱勢青年及貧戶家庭脫離健保欠費困境計畫 The program on helping people address unpaid health insurance fees, targeting youth and people with financial difficulties	7,591	1.07億元 NT\$ 107 million
2008/1~2021/6 Total		244,924	45.43億元 NT\$ 4.543 billion

註：資料時間截至2021年6月底。

Note: Data as of the end of June 2021

## 對疾病弱勢族群照護

### 身心障礙者

健保署自2002年起施行「牙醫門診總額特殊醫療服務計畫」，以醫療服務加成支付方式服務，鼓勵醫師提供先天性唇顎裂患者及特定身心障礙者牙醫醫療服務。

至2006年起放寬可由各縣市牙醫師公會或牙醫團體組成醫療團，定期至身心障礙福利機構服務、支援未設牙科之精神科醫院或特殊教

育學校提供牙醫特殊巡迴醫療服務。2011年7月1日起，更進一步針對特定身心障礙類別且符合居家照護條件者，提供到宅服務。2013年1月1日起，新增提供入住身心障礙機構之長期臥床者牙醫服務。2014年1月1日起增加政府立案收容發展遲緩兒童機構者機構服務。2015年1月1日起進一步提供衛生福利部所屬老人福利機構內，長期臥床者牙醫診療服務。2016年1月1日新增提供重度以上重要器官失去功能者牙醫服務。2020年1月1日起新增出院準備個案及經衛生福

NT\$4.543 billion, and a cumulative total of 244,924 persons had benefited from it (Table 6-2).

## | Easing the Financial Burden of Copayments

Persons certified as having disabilities pay a basic clinic copayment of NT\$50 for outpatient care, regardless of where they receive care; this amount is lower than the copayments paid by the general public (NT\$80-NT\$420).

Individuals with catastrophic illnesses, such as cancer, chronic mental illness, kidney diseases requiring dialysis, and other rare and congenital diseases, are exempt from paying copayments for the treatment of those diseases. To safeguard the rights of patients with rare diseases, the NHI uses special earmarked funds to pay for drugs designated by the Ministry of Health and Welfare as necessary to treat rare diseases, easing the economic burden of care for such patients.

## | Care for Medically Vulnerable Groups

### People with disabilities

Introduced by the NHIA in 2002, the program for providing dental services to persons with disabilities offers higher reimbursements to encourage dentists to provide dental care to patients with congenital cleft lips and palate, and other groups with specific disabilities.

The NHIA eased regulations in 2006 to allow local dentist associations or groups to establish dental teams to provide regular services to organizations devoted to caring for people with disabilities. The teams can provide roving dental services to psychiatric hospitals without dental departments and special

education schools with special needs. Since July 1, 2011, dentists from the teams have provided in-home dental services to persons with designated disabilities who meet residential care criteria. On January 1, 2013, the teams began providing dental care to bedridden patients at organizations caring for the disabled, and on January 1, 2014, the teams began providing services at government-registered organizations caring for developmentally delayed children. The teams' service scope was further extended to bedridden patients at elderly care facilities under the Ministry of Health and Welfare on January 1, 2015. On January 1, 2020, services for preparation for being discharged and dental service in nursing home selected by Department of Nursing and Healthcare, Ministry of Health and Welfare are available. On January, 2021, dental services for people with moderate moving functional limitation due to brain and spine injury are available.

### People with catastrophic diseases

The 30 catastrophic illnesses announced by the NHIA include cancer, chronic mental illness, end-stage renal failure, and congenital conditions, all of which are very costly to treat. Insured individuals with a catastrophic illness card are exempt from copayments when obtaining treatment of these conditions.

As of the end of December 2020, a total of more than 970,000 catastrophic illness cards had been issued (to over 911,000 people, who accounted for 3.8% of all insured). In 2020, the cost of treating catastrophic illnesses totaled approximately NT\$227.4 billion, and accounted for 28.7% of all NHI medical expenditures. Roughly NT\$74.4 billion in NHI expenditures goes for the purchase of drugs needed to treat catastrophic illnesses, and this amount is nearly 34% of the NHI system's total medication expenditures.



利部護理及健康照護司擇定之一般護理之家牙醫服務。2021年1月1日起新增腦傷及脊髓損傷之中度肢體障礙者牙醫服務。

### 重大傷病患者

現行健保署公告的重大傷病範圍有30類，包括癌症、慢性精神病、洗腎及先天性疾病等，這些疾病醫療花費極高，凡領有重大傷病證明的保險對象，因重大傷病就醫便可免除該項疾病就醫之部分負擔費用。

截至2020年12月底，重大傷病證明有效領證數約有97萬餘張（人數為91萬1千餘人，約占總保險對象的3.8%），而2020年全年重大傷病醫療費用約2,274億餘元（占全年總醫療支出的

28.7%），健保藥品費用中，每年約有744億元（近3.4成）用於重大傷病，顯示重大傷病的醫療費用支出比重高，全民健保的確為他們提供實質的協助。

### 罕病患者

罕見疾病屬重大傷病範圍項目，就醫時可免除部分負擔，截至2020年12月衛生福利部公告的罕見疾病種類有226項，截至2020年12月底止，重大傷病罕見疾病項目領證數共11,771張。經統計2020年罕見疾病之藥品費用約為66.6億元。

為照顧罕見疾病患者，凡經通過列為罕見疾病患者治療藥品，皆加速收載於「全民健康保險





The high level of spending on the treatment of catastrophic illnesses reveals the tremendous assistance that the NHI system provides to these individuals.

### **People with rare diseases**

Individuals with rare diseases classified as catastrophic illnesses are exempt from copayments when being treated for their condition. The Ministry of Health and Welfare currently recognizes 226 types of rare diseases, and had issued 11,771 rare disease verification cards as of the end of December 2020. Drug expenditures for the treatment of rare diseases totaled approximately NT\$6.66 billion in 2020.

In order to provide necessary care to patients with rare diseases and ease their medical care burdens, reimbursement standards for all medications designated for use in the treatment of rare diseases must be promptly included in the 'NHI Drug List and Fee Schedule.'

### **People with multiple chronic conditions**

Patients with multiple chronic conditions consume the largest share of resources in Taiwan's healthcare system. With the aging of Taiwan's population, the prevalence of multiple chronic conditions has been increasing steadily, and the care of these individuals is becoming an important issue. To ensure that such patients obtain integrated care services, and avoid redundant or inappropriate medications, examinations and treatment, the NHIA initiated the "Hospital Integrated Care Program" on December 1, 2009. Patients participating in this program have lower copayments and registration fees, reduced visit and transportation time, and increased care safety and quality.

This plan has been implemented for many years. Each year, the average medical visits of cases accepted decreased compared to the same period in the previous year, indicating positive effectiveness. Each year, about 160 hospitals take part in this program providing integrated care services, and targets receiving integrated care exceed about 170,000 people.

### **Providing Care in Remote Areas Lacking Medical Resources**

According Article 43 and 60 of the Enforcement Rules of the National Health Insurance Act, where a beneficiary receives outpatient care service, emergency care services or home-care service in a resource depletion area, the self-bearing amount may be reduced by 20%. In addition, the NHIA has also implemented the following plans in order to enhance medical services in remote areas or areas deficient of medical resources.

### **Integrated Delivery System (IDS)**

Due to their isolated geographical environment and inconvenient transportation, Taiwan's mountain areas and offshore islands are universally lacking in medical resources. As a consequence, the NHIA has drafted plans to induce willing and capable hospitals and clinics to send adequate medical manpower to these underserved areas. Introduced in November 1999, the Integrated Delivery System (IDS) encourages large hospitals to provide specialized medical service, emergency services, and overnight care in mountain areas and on offshore islands at fixed locations or through roving services.

At present, there are 50 townships in the outskirts of the country. A total of 26 contract institutions have undertaken 30 projects, serving more than 480,000

藥物給付項目及支付標準」列入給付，使罕見疾病患者受到應有的照顧，減輕醫療照護的負擔。

### 多重慢性病患者

多重慢性病患乃是我國醫療照護系統中最重要的資源使用者，隨著我國人口結構的逐年老化，多重慢性病的盛行率逐年升高，其醫療照護課題也將愈趨重要。為使多重慢性病的民衆可以獲得整合性照護服務，避免重複及不當用藥、檢驗檢查與治療等，健保署自2009年12月1日起，推動「醫院以病人為中心之整合照護計畫」，參與的病人，可減少部分負擔及掛號費支出、看診及往返交通時間，並提升就醫安全及品質。

本計畫執行多年，每年收案照護對象平均就醫次數較上年同期呈現減少，施行成效良好。每年參與照護，提供整合服務之醫院約160餘家，接受整合照護對象人數約17萬餘人。

### 對山地離島、偏鄉及醫療資源缺乏地區族群的照護

依據健保法第43條暨施行細則第60條，經公告之醫療資源缺乏地區就醫之門診、急診與居家照護服務，減免20%部分負擔，除此之外，健保署亦實施下列計畫以提昇山地離島地區或醫療資源缺乏地區之醫療服務：

### 全民健康保險山地離島地區醫療給付效益提昇計畫

山地離島地區因地理環境及交通不便，醫療資源普遍不足；因此健保署規劃由有能力、有意願之醫療院所以較充足的醫療人力送至山地離

島地區，自1999年11月起，陸續在山地離島地區實施「全民健康保險山地離島地區醫療給付效益提升計畫（Integrated Delivery System, IDS計畫）」，鼓勵大型醫院至該地區提供專科診療、急診、夜診等定點或巡迴醫療服務。

目前全國公告之山地離島鄉計有50鄉，共26家特約院所承作30項計畫，服務民衆達48萬餘人，當地民衆對計畫之平均滿意度為93%。

### 醫療資源不足地區改善方案

2021年投入8.38億元，持續辦理醫療資源不足地區改善方案，以「在地服務」的精神鼓勵中、西、牙醫醫師至醫療資源不足地區執業，或是以巡迴方式提供醫療服務。2020年共有598家特約院所至醫療資源不足地區巡迴，服務民衆達73.9萬餘人次。

### 醫療資源不足地區之醫療服務提升計畫

為加強提供離島地區、山地鄉及健保醫療資源不足地區民衆的在地醫療服務及社區預防保健，增進就醫可近性，2012年起實施「全民健康保險醫療資源不足地區之醫療服務提升計畫」，以專款預算、點值保障方式，鼓勵位於上述區域或鄰近區域的醫院，提供24小時急診服務，及內科、外科、婦產科及小兒科門診及住院醫療服務，強化民衆就醫在地化，2021年計有94家醫院參與。



people, with the average satisfaction of the local people reaching 93%.

#### **Improvement Plan for Medically Underserved Areas**

In 2021, the NHIA devotes an additional NT\$838 million annually to towns and townships with insufficient medical resources, and is implementing the Improvement Plan for Medically Underserved Areas to encourage dentists, physicians, and Chinese medicine physicians to work in underserved areas in the spirit of “local service,” or provide healthcare services in such areas on a roving basis. In 2020, 598 contract institutions have conducted tours in areas deficient of medical resources, serving more than 739,000 people.

#### **Upgrading Medical Services in Underserved Areas**

The NHIA introduced the Medical Service

Improvement Program for Underserved Areas in 2012 in order to strengthen medical services and preventive healthcare at the community level on offshore islands, in mountainous areas, and other areas lacking in medical resources. This program, which has an earmarked budget and guaranteed point values, encourages hospitals in the foregoing areas or nearby to provide 24-hour emergency services, and internal medicine, surgical, gynecological/obstetric, and pediatric outpatient and inpatient services. 94 hospitals were participating in 2021, helping to improve the provision of convenient services at a more local level.





# 民眾滿意 國際肯定

*Public Satisfaction and  
International Recognition*



Chapter 7



## 民眾滿意 國際肯定

### | 健保經驗 蜚聲國際

臺灣的全民健保採行集中、統籌資源且適用層面廣的單一保險人體制，相較於其他國家健康照護體制，行政成本較低並可達保險費公平性及一致性的優點，也是許多國家取經的重點，每年均吸引大量國外專家學者或官方代表前來我國考察健保制度，在疫情期間亦持續以視訊方式與國際交流。

全民健康覆蓋（Universal Health Coverage）為聯合國永續發展目標的重要項目之一，其宗旨是為了保障每個人都能獲得基本的醫療照護服務，而我國自1995年開辦健保至今，即是為了讓全體國民均享有平等就醫的權利，提供民眾高可近性且低負擔的就醫環境。根據CEOWORLD雜誌（世界著名商業雜誌）在2019年針對世界89個國家的「健康照護指標」評比中，臺灣名列世界第一，2020年全球資料庫網站Numbeo公布的健康照護指標（Health Care Index）評比，臺灣在93個國家當中亦排名第一，展現我國醫療衛生軟實力。

2020年全球籠罩在COVID-19的疫情之下，臺灣積極成功的防疫作為受到國際肯定，國際頂尖學術期刊《BMJ》的部落格在2020年7月21日出版的專欄中刊登一篇「What we can learn from Taiwan's response to the COVID-19 epidemic（我們可以從臺灣面對COVID-19的防疫經驗中學到什麼？）」，文中介紹了本次防疫過程中健保署的兩項關鍵技術，一個是透過健保卡讓醫療

院所能及時上傳民眾之醫療資訊，另一個則是透過「健保醫療資訊雲端查詢系統」分享就醫民眾之就醫紀錄及醫療資訊，提供醫師在診斷及開立處方時參考，這篇文章讓世界各國了解臺灣如何運用醫療資訊科技與完善的醫療基礎設施和前瞻性的計畫相結合，作為遏止全國疫情大流行的強效工具。

在國際組織方面，亞太經濟合作會議（APEC）為我國參與之重要國際組織之一，衛生議題亦是我國積極參與之領域，健保署於2019年獲得APEC經費補助辦理APEC醫療資訊分享國際研討會後，2020年再次於APEC衛生工作小組（HWG）提出「APEC Conference on Digital Healthcare Innovation- COVID-19 Response by Health Information Utilization」提案，同樣也獲得APEC同意經費補助，將於疫情解封後邀請各經濟體來臺就數位資料、科技在COVID-19之應用進行研討與分享。

配合政府新南向政策，健保署長期與菲律賓、泰國及越南進行深度雙向交流，成果豐碩。2020年在COVID-19疫情無法實體交流下，健保署仍以視訊方式繼續發展我國與新南向國家醫療衛生領域之交流，經駐外人員協助接洽後，健保署分別邀請泰國國家健康安全局（NHSO）及菲律賓健保公司（PhilHealth）共辦理2場視訊會議，分享與交流健保體系如何因應COVID-19疫情之經驗。



## Public Satisfaction and International Recognition

### | Internationally Acclaimed NHI Experiences

The National Health Insurance in Taiwan adopted the single-payer system that is widely applicable and optimizes the resources. Compared to the healthcare system in other countries, the NHI in Taiwan features its lower administrative expenditures as well as its fairness and consistency. Each year, a large number of foreign experts, scholars or official representatives are attracted to visit Taiwan to investigate its National Health Insurance system. During the COVID-19 pandemic, Taiwan also remains international relations via video conferences.

Achieving Universal Health Coverage is a foundation of the health-related goals of the UN Sustainable Development Goals, and the goal ensures that each individual has access to basic medical care. Taiwan's National Health Insurance system was implemented since 1995, with its goal of providing equal rights as well as accessible and affordable medical care for each citizen. According to the 2019 edition of CEOWORLD magazine (the world's leading business magazine) Health Care Index, which ranks 89 countries according to factors that contribute to overall health, Taiwan has the best health care systems in the world. Furthermore, according to Numbeo's Health Care Index, Taiwan has been ranked as the best among the 93 countries on the list, which indicates the overall quality of the healthcare system in Taiwan.

During the COVID-19 pandemic in 2020, Taiwan's effort in containing the pandemic has again gained international recognition. The BMJ, a leading journal dedicated to medical research, published a column

'What we can learn from Taiwan's response to the COVID-19 epidemic' on July 21, 2020, and introduced two forms of information technologies that are critical in its pandemic preparedness and control. The first is the NHI Smart Card that allows all providers real-time access to upload patient records and claims. The other is the NHI MediCloud system, which provides providers and patients with real-time access to patient's health records, including diagnostic imaging and prescriptions. The article introduces how Taiwan's information technology, strong public health infrastructure and forward-looking plans have their crucial roles in effectively controlling the COVID-19 pandemic in Taiwan.

In terms of international organizations, APEC is an important international organization that in which Taiwan has been involved. Also, Taiwan has also been putting efforts in health issues. In 2019, the NHIA was subsidized by APEC to hold an international conference on APEC medical information sharing. In 2020, the NHIA again submitted the proposal 'APEC Conference on Digital Healthcare Innovation-COVID-19 Response by Health Information Utilization' in Health Working Group (HWG), APEC, and has been again subsidized by APEC. After the COVID-19 safety measures are lifted, each economy will be expected to come to Taiwan and discuss the usage of digital information and technologies among the COVID-19 pandemic.

In response to the New Southbound Policy, the NHIA has long been involved in in-depth bilateral interaction with Republic of the Philippines, Thailand and Vietnam and has gained fruitful results. Even

## 全民健保 民衆滿意

全民健保實施曾面臨諸多困難，從一開始的滿意度不到4成，到目前持續成長至8成以上，顯見民衆十分肯定健保。其中雖曾因2002年度保險費率及部分負擔調整，以及2005年度開始進行多元微調，導致民衆對全民健保的滿意度稍有下降，但隨後即快速回升至7成以上。2013年1月起二代健保實施，針對所得收入高者加收補充保險費，滿意度曾一度下滑後隨即回穩至8成左右，2020年民衆對健保的滿意度更創下高峰達到90.2%（圖7-1），我國因有全民健保，對

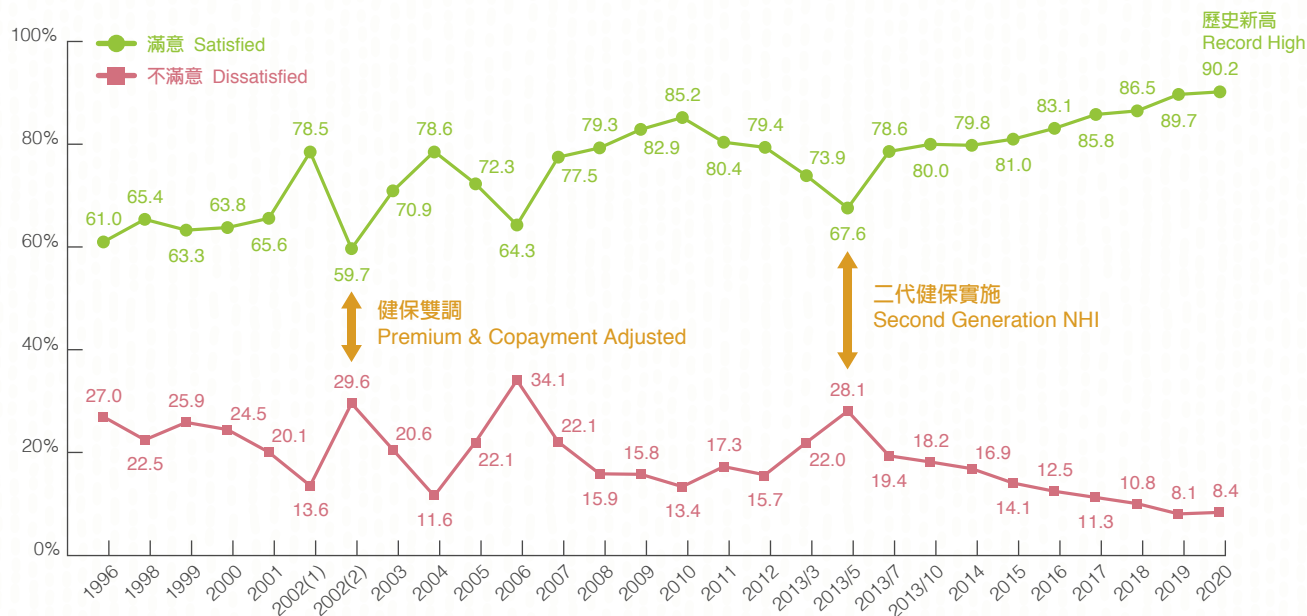
經濟弱勢民衆的健康照護更能提供完善的醫療保障。

## 充分發揮 互助功能

全民健保的核心價值在於透過社會互助，以「社會保險」的形式，來分擔保險對象罹病時的財務風險。重大傷病人口占全體保險對象人數的3.8%，醫療費用卻高達健保總醫療支出的28.7%。其中，癌症、洗腎及血友病等重大傷病之平均醫療費用是一般人的6.3倍到97.0倍不等，顯示健保充分發揮了社會保險互助的功能，使重大傷病患者不致因病而貧（表7-1）。

圖7-1 全民健保滿意度趨勢圖

Chart 7-1 Trend of NHI Satisfaction Surveys



註：1. 2002年，保險費率及部分負擔調整。

2. 2005年，投保金額上限、軍公教人員投保金額及菸品健康捐金額等調整。

3. 2013年，二代健保實施。

Notes: 1. The dip in satisfaction rates in 2002 corresponds with a period of adjustment for premium rates and copayments.

2. Similarly, 2005 saw an adjustment to payroll bracket upper limits, the payroll brackets for military, civil service, and teaching personnel, and the amount of tobacco health and welfare surcharges.

3. The year 2013 saw the implementation of the 2<sup>nd</sup> Generation NHI system.



though the face-to-face was unavailable during the COVID-19 pandemic in 2020, the NHIA is still interacting with the New Southbound countries via video conferences that focus on medical field. With the assistance from diplomatic personnel, the NHIA invited National Health Security Office from Thailand and PhilHealth from Republic of the Philippines respectively and held video conferences to jointly share the experience of how health insurance system has responded to COVID-19 pandemic.

### | High Satisfaction Rate toward NHI

The NHI system has faced many difficulties, and the public's satisfaction with the system was below 40% in the early days. Today, public satisfaction is over 80%, making it clear that the system enjoys a high level of public approval. Although the system's satisfaction rating fell following increases in premiums and copayments in 2002 and in the wake of some fine-tuning of the system in 2005, it quickly rebounded to over 70% in the wake of these changes. The 2<sup>nd</sup> Generation NHI system has been implemented since January 2013, and supplementary premium was imposed on high income households. The satisfaction

that had at one point dropped climbed back to around 80%. In 2020, the general public's satisfaction towards the NHI even peaked at 90.2 % (Chart 7-1). Due to the implementation of NHI in Taiwan, comprehensive medical protection can be better provided to the needs of disadvantaged people.

### | Harnessing the Power of Mutual Assistance

The core value of the NHI system is its reliance on mutual assistance to have all of society share the financial risk of caring for those who get sick through a 'social insurance' mechanism. Although patients with catastrophic illnesses account for 3.8% of all persons enrolled in the system, they also account for as much as 28.7% of all health insurance medical expenditures. Among these catastrophic illnesses, the average medical expenses of persons with cancer, kidney disease requiring dialysis, and hemophilia are from 6.3 to 97.70 times those of the general public. This situation manifested NHI's role as a social insurance system, and ensured that patients with catastrophic illnesses are not driven into poverty by medical bills (Table 7-1).

**表7-1 健保醫療資源利用情形**

Table 7-1 NHI Medical Resource Utilization Status

類別 Category	醫療費用（點） Medical expenses (points)	平均值倍數 Equivalency
全國每人平均National Average	33,046	1.0
每一重大傷病患者 Average catastrophic illness patient	234,268	7.1
每一癌症患者 Average cancer patient	207,376	6.3
每一罕病患者 Average rare diseases patient	710,127	21.5
每一洗腎患者 Average kidney dialysis patient	637,581	19.3
每一呼吸器患者 Average patient on mechanical ventilation	775,915	23.5
每一血友病患者 Average hemophilia patient	3,205,269	97.0

註：以2020年重大傷病年度統計資料為例。

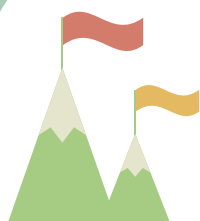
Note: The above figures are based on 2020 catastrophic illness statistics.





# 跨步精進 展望未來

*Recent Progresses and Future Outlook*



Chapter 8



## 跨步精進 展望未來

全民健保經過多年的耕耘，其豐碩的成果在全球建立聲望，不僅獲得世界各國讚揚，也成為各國建立或改革健保制度的研究對象。走過從前、邁向未來，環境及社會結構變動的議題，在醫療資源有限的情況下，全民健保將持續滾動式檢討改善，朝下列方向推動革新措施，並規劃遠景藍圖：

### | 珍惜健保資源、加強分級醫療

為逐步推動分級醫療，已擬定「提升基層醫療服務量能」、「導引民衆轉診就醫習慣與調整部分負擔」、「調高醫院重症支付標準，導引醫院減少輕症服務」、「強化醫院與診所醫療合作服務，提供連續性照護」、「提升民衆自我照護知能」及「加強醫療財團法人管理」等六大策略及相關配套措施依序實施，短期內朝壯大基層醫

療實力，建構基層診所與醫院良好的合作機制等方向努力。提升醫療品質與量能，讓基層提供民衆優質的照護服務，亦可減輕大型醫院之負荷，並能更專注提供急重症醫療，達成病人分流之目的。醫療院所間組成「垂直整合策略聯盟」，藉由聯盟進行上下游垂直整合、醫院及診所間分工合作，運用電子轉診平台及雲端資訊之上傳及分享，落實雙向轉診，提供病人連續性、以病人為中心的醫療照護、並提升照護品質。

### | 從社區到醫院連續性全人照護

#### 居家醫療整合照護

全民健保自1995年開辦起，陸續推動行動不便患者一般居家照護、慢性精神病患居家治療、呼吸器依賴患者居家照護、末期病患安寧療護等7項居家醫療照護，2015年接受居家醫療服







## Recent Progresses and Future Outlook

After many years of laying the groundwork, the NHI system has earned international acclaim through its many major accomplishments, and also serving as a model for other countries in the process of building or reforming their systems. Looking ahead to the future, changes in Taiwan's overall environment and social structure, and growing constraints on medical resources, the NHI will continue to perform rolling reviews for improvements. The NHIA plans to implement reforms in the following areas as it maps out its blueprint for the future:

### | Cherishing NHI Resources and Strengthening the Referral System

In order to gradually strengthen the referral system, the NHIA has drafted six strategies of 'enhancing the capacity of primary care', 'diverting the public to get used to the referral system and adjusting copayments', 'increasing payments to hospital for critical care as an incentive to reduce their services for minor illnesses', 'strengthening cooperation between hospitals and clinics to ensure continuous care', 'promoting the public's capacity for self-care', and 'bolster the management of medical foundations' and accompanying measures. In the short-term, the NHIA seeks to strengthen primary care capabilities and develop effective cooperation mechanisms among primary care clinics and hospitals. By enhancing medical quality and capabilities, it is hoped that primary care providers can offer the public superior care services, so that large hospitals can reduce their burden and focus more on the provision of emergency and critical care. The 'vertical integration

strategic alliance' formed by medical institutions have implemented two-way referrals to provide patients with continuous and patient-centered medical care and enhancing care quality through a vertical integration of the alliance's upstream and downstream, collaboration among hospitals and clinics, use of electronic referral platform, and uploading and sharing of medical information using cloud technologies.

### | Continuous and Holistic Care from the Community to Hospitals

#### **Residential Integrated Care**

The NHI began implementing seven types of residential care, including basic home care for patients with impaired mobility, home care for patients with chronic mental illness, home care for ventilator-dependent patients, and hospice care since 1995. More than 100,000 people received home care medical services in 2015. It is well known that patients' care needs can change during the home care process as their conditions shift. If a patient's condition stabilizes, their treatment can be changed from general home care to home medical visits; if however their illnesses become terminal, their treatment can be changed from general home care to hospice care. As the type of treatment changes, patients may have to be transferred to institutions providing the necessary services.

In order to improve the fragmented service models of different types of home care, the NHIA integrated four types of service, including general home care, respiratory home care, and hospice care, as the 'Integrated Home Health Care Program' in February 2016. The goal of the program is to expand the types

務之人數超過10萬人。在照護過程中，患者之照護需求將隨病程發展轉變，如病情穩定時，由接受一般居家照護改為居家醫療訪視，或病程發展到末期時，由接受一般居家照護轉為安寧療護；在轉換服務項目時，可能需要轉換至有提供服務的機構。

為改善不同類型居家醫療照護片段式之服務模式，自2016年2月起健保署將一般居家照護、呼吸居家照護、安寧居家療護等4項服務，整合為「居家醫療照護整合計畫」。計畫的特色為擴大照護對象、強化個案管理機制，且著重於促進社區內照護團隊之合作，包括各類醫事人員間之水平整合，及上、下游醫療院所之垂直整合，以病人為中心提供完整醫療服務。自2019年6月起計畫擴大服務內容，納入中醫師及藥師服務，並加重居家主治醫師的責任，病患之整體照護需求，由居家主治醫師整體評估，必要時再連結中醫師、護理師、呼吸治療師等其他醫事人員服務；而病人也需要配合居家主治醫師整合用藥、接受完整照護，如果無法配合，則維持原有就醫模式於門診就醫領藥，將有限的居家醫療人力，留給真正有需要的行動不便患者。

截至2021年6月，有3,042家醫事服務機構組成223個團隊，就近照護約5.9萬人。健保署將持續鼓勵組成社區內照護團隊，並均衡分布於各區域，以照顧更多行動不便患者，讓病患回歸社區生活，減少不必要之社會性住院。

### 安寧療護維護生命品質

為緩解病人因得到威脅生命疾病所造成的身心靈痛苦，提供個別性的全人照顧，全民健保提

供安寧療護服務項目，包含「住院安寧」、「安寧共同照護」及「安寧居家療護」，由醫療團隊人員依病人需求，提供自入院、出院至居家完整的安寧整合性照護服務。

安寧居家療護，提供不須住院治療之末期病人，在醫師診斷轉介後，可於家中或機構中接受安寧居家療護服務，包括醫師、護理師、社工、心理師等人員的訪視及病人止痛，不僅提供病人自住院至居家的完整照護，提升照護品質。

為推動社區化之安寧照護，健保署持續結合居家醫療整合團隊及家庭醫師群來推動，由住家附近之醫療院所提供服務，讓末期病人回歸社區與在地安老。2020年接受全民健保安寧居家服務人數為14,158人（較2019年成長11%），2021年1-6月有8,781人（較2020年同期成長5%），顯示接受安寧居家療護的末期病人，逐漸成長。

### 提供急性後期照護

全民健保2014年開始推動急性後期照護，經醫院協助轉介至居家附近有「急性後期照護團隊」之社區醫院，對急性期後功能下降且有復健潛能之病人，提供短期積極性之復健整合照護，初期選擇腦中風試辦，2015年9月納入燒燙傷病人。

2017年7月1日起實施擴大照護對象範圍，除腦中風、燒燙傷病人外，新增創傷性神經損傷、脆弱性骨折、心臟衰竭及衰弱高齡病人，另新增急性後期整合照護居家模式，並鼓勵更多醫療院所組成跨院、跨專業的合作團隊服務，讓病人回歸社區醫療。

of people who receive the service, strengthen case management mechanisms and promote cooperative team care in the community. This program also calls for the horizontal integration of various types of medical personnel and the vertical integration of upstream and downstream hospitals and clinics, and seeks to provide comprehensive patient-centered medical services. Starting from June 2019, the program has expanded its scope and started to include services provided by Chinese medicine physicians, and pharmacists. At the same time, the responsibility of home care doctors has been further emphasized. The home care doctor is responsible for evaluating a patient's overall needs for home care, and requesting services provided by other medical personnel, such as Chinese medicine physicians, nurses, and respiratory therapists, when necessary. Patients are required to cooperate with home care doctors in taking medicine and receiving comprehensive home care. If the patient can not cooperate with the doctor, he or she shall return to receive medicine during outpatient sessions, so that the limited number of home care service providers can take care of physically impaired patients with actual needs.

As of June 2021, 3,042 medical institutions had organized 223 teams to provide care to 59,000 persons. The NHIA will continue to encourage the establishment of community care teams, with the goal of having teams distributed evenly throughout the country. By caring for patients with impaired mobility, the teams will help patients resume life in their communities and reduce unnecessary 'social hospitalization'.

### **Hospice Care on Quality of Life**

The NHI offers many hospice care services, including 'hospital hospice care', 'hospice shared care'

and 'hospice home care', which deliver holistic care and ease the physical, mental, and emotional suffering of patients facing life threatening illnesses. Depending on patients' needs, medical teams provide integrated hospice care from hospital admission and discharge to home care.

The hospice home care program delivers services to terminally ill patients at their homes or institutions after they are diagnosed and given a referral for hospice care by their doctors. Featuring regular visits by medical personnel such as physicians, nurses, social workers, and psychologists, and measures to give patients effective pain relief, this holistic approach not only provides comprehensive hospital-to-home care, but also enhances the quality of care.

To promote hospice care within the community, the NHIA has continued its efforts to increase local hospital participation in integrated home health care teams and family doctor care teams. This initiative enables terminal patients to return to the community and live out their lives in dignity. In 2020, the number of people who received NHI palliative home care totaled 14,158 people (an increase of 11% compared to 2019). From January to June, 2021, the number totaled 8,781 people (an increase of 5% compared to 2020), indicating a gradual increase in the number of terminal patients who received palliative care.

### **Enhancing Post-acute Care Quality**

Under the 'Post-acute Care Quality Enhancement Program' introduced by the NHIA in 2014, medical centers assist referral of patients to nearby community hospitals with post-acute care teams. This program provides short-term integrated rehabilitation care to post-acute patients who are disabled but have rehabilitation potential. The program initially targeted



推動迄今，全國共有217家醫院組成38個醫院團隊參與，2020年腦中風收案超過5,500人，其中91.3%整體功能有進步，由嚴重依賴進步至初步可以生活自理的程度，87%病人成功返家回歸社區，也能降低病人的再住院率與急診率。

### ｜擴大家庭醫師整合照護計畫

為重視社區基層醫療，因應人口老化、慢性病之增加，提倡預防醫學，促進分級醫療，健保署自2003年起，推動辦理「全民健康保險家庭醫師整合性照護計畫」，在臺灣建立本土化之家庭醫師制度，由5個以上的基層診所組成社區醫療群，以群體力量提供「以病人為中心」的全人醫療照護，對民眾健康管理及衛教，提升預防保健執行率與基層醫療品質，並建立基層醫療院所與醫院之合作關係，共同辦理轉診、個案研討、社區衛教等活動；另設置24小時諮詢專線，提供民眾周全性、協調性與持續性的服務。



截至2021年6月底，有5,587家基層診所與296家醫院共同組成623個醫療群，共同照護超過601萬名收案會員。健保署將持續鼓勵社區醫療群結合藥局、衛生所、物理治療所、檢驗所並建立醫療群合作診所，提供復健科、眼科及精神科醫療服務，以提升社區醫療群照護能力，落實在地化、社區化的全人照護與醫療。

### ｜便民服務貼近民眾需求

關懷偏鄉住民一直是健保署持續推動之工作重點，自2016年起規劃與鄉、鎮、市（區）公所跨機關合作辦理在地製發健保卡便民服務，讓偏遠地區民眾換發健保卡時有更多選擇，可就近至附近鄉、鎮、市（區）公所現場申辦，並在15分鐘內領取新的健保卡，以節省申辦健保卡往返健保署各聯合服務中心或各縣市所屬聯絡辦公室的交通路程、交通費或等候新卡寄送時間。截至2021年6月，健保署已與花東地區之光復鄉、成功鎮、大武鄉及關山鎮，新北市金山區、宜蘭縣宜蘭市及南澳鄉、桃園市復興區、新竹縣尖石鄉及五峰鄉、苗栗縣泰安鄉、南投縣埔里鎮及水里鄉、彰化縣芳苑鄉、雲林縣虎尾鎮、嘉義縣阿里山鄉、台南市佳里區、屏東縣春日鄉及潮州鎮及車城鄉等20處公所合作，提供民眾在地製卡便民服務。

健保署對外的所有服務據點為簡化現場申領健保卡等待時間，自2013年底全面進入無紙化作業，以電子化作業取代原紙本申請，大幅縮短民眾等待時間。另配合現代電子錢包的趨勢，健保署對外服務據點依其地方屬性提供不同電子票證種類繳交健保費及健保卡工本費，已於2016



stroke patients on a trial basis, and was extended to burn patients in September 2015.

The NHIA's revised 'NHI Post-acute Integrated Care Program', which was introduced on July 1, 2017, expanded the scope of patients' eligible for care to include those with traumatic nerve injuries, insufficiency fractures, heart failure, and frailty due to old age, as well as the stroke and burn patients already covered by the program. To help patients receive care in the community, the revised program also incorporated an integrated post-acute care home model and encouraged even more hospitals and clinics to form inter-institutional, inter-professional service teams.

Up to now, a total of 217 hospitals across the country have participated in this program by forming 38 groups. In 2020, over 5,500 cases of stroke were accepted. Of these patients, 91.3% enjoyed improvement in overall function, such as improvement from severe dependency to preliminary ability to perform self-care, and 87% were able to successfully return to their homes and life in community. The program also reduced patients' rehospitalization rate and emergency treatment rate.

### | Expanding Family Doctor Integrated Care

To emphasize primary level community care, while also responding to the country's aging population and concomitant increase in chronic diseases and the need to promote preventive medicine and hierarchically integrated medical system, the NHIA has been implementing the 'Family Doctor Integrated Care Program' since 2003 as a means of establishing a localized family doctor system in Taiwan. Under this program, five or more primary-level clinics can organize community healthcare groups, which rely on

collective resources to provide patient-centered holistic medical care. The program has also sought to boost the preventive healthcare implementation rate and quality of primary-level medicine through public health management and health education, and establish cooperative relationships among primary-level clinics and hospitals involving joint referrals, case review, and community health education activities. Under this program, the NHIA has established a 24-hour consulting hotline to ensure that the public can receive comprehensive, coordinated, and ongoing services.

As of the end of June 2021, 5,587 primary care clinics and 296 hospitals have jointly set up 623 medical groups who have jointly offered care to over 6.01 million accepted members. The NHIA will continue to encourage community medical groups to cooperate with pharmacies, public health centers, physical therapy institutions, and examination institutions and establish cooperated medical groups to provide rehabilitation, ophthalmology, and psychiatry medical services in order to enhance community medical groups' care capacity to be able to provide localized holistic care and services.

### | Convenient and Responsive Services

Because caring for residents of remote areas has always been one of the NHIA's top priorities, it implemented a plan to work with city, district, and township offices in producing and issuing NHI cards on-site in 2016. This convenient service gives people living in rural areas the option of applying for and receiving a new NHI card within 15 minutes at a nearby district office. This saves their time and expense of having to travel to a more distant regional NHIA service center or service office in an urban area. As of June 2021, the NHIA was cooperating with 20 district



年下半年推行信用卡臨櫃刷卡服務，以減少櫃檯人員收存現金、辨識鈔票真偽之風險，提高行政效率，讓民眾有多元的繳費方式及免攜帶現金的服務。

未來健保署將提供健保「創新智慧服務平台」服務，打造健保全渠道（Omni-channel）雲端智慧客服系統，使民眾與健保署之溝通渠道不再受到地點與時間之限制，民眾將可運用多元載具（包括室內電話、手機、智慧型行動裝置、電腦等）透過多媒體服務管道，如：線上文字客服、視訊客服、傳真等，隨時隨地取得健保業務諮詢服務。如遇緊急事件發生時，透過即時啟動跨區的備援機制，提供民眾更及時、完整、便利與高品質的服務。

### 健康存摺提升自我照護知能

健保署持續發展以人為中心的全人照護，結合雲端運算（Cloud Computing）及巨量資料（Big Data）概念，以網路取代馬路，運用互聯網（Internet of Things）的便利性，串聯個人資料（My Data），建置「健康存摺」，提供個人線上數位服務，落實知情權，協助民眾做好自我健康管理，並可利用健康存摺做為醫病間溝通橋樑，減少醫病間醫療資訊的不對等，提升就醫安全與效率。

健康存摺透過視覺化資訊圖表，搭配個人健保資料篩選及分類功能，讓民眾可快速瞭解個人的就醫情形，包括醫師臆斷、處置、用藥、檢驗（查）結果及醫療影像等資料，還能預估未來

offices respectively located in the Hualien-Taitung area's Guangfu Township, Chenggong Township, Dawu Township and Guanshan Township; New Taipei City's Jinshan District; Yilan County's Yilan District and Nan'ao Township; Taoyuan's Fuxing District; Hsinchu County's Jianshi Township and Wufeng Township; Miaoli County's Tai-an Township; Nantou County's Puli Township and Shuli Township; Changhua County's Fangyuan Township; Yunlin County's Huwei Township; Chiayi County's Alishan Township; Tainan City's Jiali District; and Pingtung County's Chunri Township and Chaozhou Township and Checheng Township to provide the public with convenient on-site card production services.

To simplify NHI card application procedures and shorten waiting times at service locations, the NHIA adopted full-scale paperless operations at the end of 2013. As a result, waiting times have fallen dramatically since the NHIA went paperless and began employing electronic application procedures. Furthermore, to take advantage of the trend towards 'e-wallets', NHIA offices offer different electronic payment options for NHI premiums and new NHI card fees depending on their location. The NHIA began offering credit card payment services during the second half of 2016 to reduce the amount of cash handled at NHIA service counters. This move lessened the risk of receiving counterfeit bills, improved administrative efficiency, and gave customers more payment options without the need to carry cash.

In the future, the NHIA will provide a 'Smart Services Platform' to serve as an NHI 'Omni-channel' cloud customer service system. The new system will make it possible for the public to obtain health insurance information from the NHIA at any time or place using various means (including landline, mobile phone, smart mobile devices, and computer) through

multiple channels, including instant message customer service, video call service, and fax. At the same time, in the event of an emergency, the NHIA can activate inter-regional backup mechanisms to provide the public with timely, comprehensive, convenient, and high-quality services.

### | Better Self-care with My Health Bank

As part of its ongoing efforts to develop holistic patient-centered care, the NHIA has merged the Cloud Computing and Big Data concepts with the convenience of the Internet of Things and its 'My Data' database of personal information to get people to live healthier lifestyles. In addition, the NHIA's 'My Health Bank 2.0' system is a cloud tool that enables users to manage their medical records, enhances doctor-patient communication, reduces information asymmetry and increases overall safety and efficiency of seeking medical attention.

My Health Bank provides an easy-to-understand graphic presentation of information alongside personal health insurance data filtering and sorting functions, this system allows users to quickly understand their recent doctor visits, diagnoses and treatments, treatment history, prescriptions, examination results and medical images. The system can also forecast users' likelihood of developing liver cancer during the next 10 years and can assess kidney function and risk. Having access to the 'My Health Bank 2.0' system is like having a personal health manager at one's side at all times.

In an era when the prevailing focus of medical care is evolving from treatment of disease to self-care and prevention, the NHIA is working with the Ministry of Health and Welfare on the 'Taiwan Health Cloud'





10年罹患肝癌的機率與腎臟病預後風險評估，於是，健康存摺在手，就是每個人的隨身健康管理師。

在這個醫療照護由疾病治療，導向自我照護及預防的時代，健保署配合衛生福利部臺灣健康雲計畫，持續推展跨機關健康資料整合，目前已整合之跨機關資料包括醫事司器捐或安寧緩和醫療意願、疾病管制署預防接種資料、國民健康署成人預防保健結果、四癌篩檢結果及金門縣政府補助縣民自費健檢結果等資料。另外，為便利民眾申請健康存摺，於2018年5月導入手機快速認證，只要是本國籍保險對象，手機門號是自己的名義申辦，且為月租型搭配行動上網，就能完成「全民健保行動快易通|健康存摺」APP註冊及綁定，免出門即可隨時隨地線上查詢及申辦健保業務。外籍人士目前尚未提供行動電話認證服務，但可透過「健保卡網路服務系統」或「臨櫃」完成註冊並綁定於行動裝置，即可使用「全民健保行動快易通|健康存摺」APP健保櫃檯各項服務。

健康存摺除提供個人就醫資料外，亦提供APP推播，主動提醒應接受洗牙、癌症篩檢、成人預防保健，內建行事曆功能，主動串聯就醫紀錄，並可匯入及匯出，讓民眾更清楚掌握就醫行程，另有「兒童預防接種時程提醒」，讓家長不要忘了孩子的常規疫苗施打，增進使用黏著度。

健保署持續擴充健康存摺資料的豐富性及服務範圍，包括鼓勵健檢機構若民眾簽署同意書，則協助將「自費健檢」結果傳送健保署載入其個人的健康存摺，或可由民眾自行登錄健檢資料。並自2019年5月7日起新增眷屬管理功能，民眾在取得長輩同意後，即可以查閱長輩健康存摺，協助照顧長輩健康，民眾如有未滿15歲以下子女依附加保，系統會將子女就醫資料自動帶入家長之健康存摺中，協助家長照顧未成年子女健康。

為利民眾可以自主運用個人健康存摺資料，健保署自2019年3月釋出「軟體開發套件（Software Development Kit, SDK）」功能，讓當事人下載資料後，可依自主意願，將資料提供給信任的第三方APP、健康管理服務系統，或其他公私立單位進行後續加值服務，讓健康存摺更能彰顯其價值，作為民眾最可靠的健康管理助手。

另為協助控制COVID-19疫情，健康存摺新增口罩購買紀錄、COVID-19檢測結果、COVID-19疫苗注射紀錄，未來將持續精進健康存摺功能，改善操作介面及操作流程，提供使用者友善的操作介面及流暢的操作流程，並增加疾病管理功能，以擴大使用人數。



project, which seeks to integrate health data across different agencies and develop digital and cloud-based services. Currently, cross-agency data that has been integrated includes: an organ donation or hospice/palliative care survey from the MOHW's Department of Medical Affairs; preventive inoculation data from the Centers for Disease Control; outcomes of adult preventive health services from the Health Promotion Administration; results of four cancer screenings; and health check-up data from Kinmen County residents (as reimbursed by the county government). Additionally, to encourage new registrations for My Health Bank, a mobile phone-based fast certification service was introduced in May 2018. Local citizens may apply via a mobile number in his/her name, with a monthly cell phone data plan. Qualified users can then use the NHIA mobile app to certify their identity and browse My Health Bank. The app makes it possible for the insured to manage their NHI information online and file the NHI application anytime, anywhere. Currently, mobile phone-based fast certification service is not yet available for foreigners. But with 'NHI Card Online Services Registration' or 'counter services', foreigners are still able to use the NHIA mobile app to certify their identity and browse My Health Bank.

To improve app user loyalty among the public, improvements made to My Health Bank include: push notifications, which provide active reminders for health-related services such as dental scaling, cancer screening, and adult preventive health services; enhanced calendar functions; and linking to user medical history for convenient data import and export in the app, allowing users to easily manage his/her medical service usage. Furthermore, there is also 'parental reminders for children's scheduled inoculations and routine vaccinations', which is also aimed at improving app user loyalty.

In the future, the NHIA will continuously improve on the diversity and range of services of My Health Bank. Health checkup institutions are also encouraged to send out-of-pocket health checkup results to the administration which can then be made available for download in My Health Bank. Users can also input their own health checkup data. The NHIA has added with the family member management function since May 7, 2019. After obtaining the consent of the elderly, one can check the My Health Bank for their elder family members to help take care of their health. For a parent having children under the age of 15 enrolling in the National Health Insurance with him/her, the system will automatically bring the children's medical information into the parent's My Health Bank system for the parent to take care of the health of their children.

To help people manage their own My Health Bank system, the NHIA also added functions such as software development kit (SDK) in March, 2019, in which users are able to authorize his/her data to be provided to services such as trusted apps, health management systems, and other public/private organizations for further value-added services. These improvements will continue to enhance My Health Bank and solidify its role as the most reliable health management service.

In addition, to contain the COVID-19 pandemic, additional functions such as 'record of buying masks', 'COVID-19 testing results', 'COVID-19 vaccination record' are added. In the future, the NHIA will continuously make improvements on operation interface, operation flow and management on diseases, which can overall increase the user base.



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