

出國報告（出國類別：開會類）

# 參加「第 13 屆亞洲健康保險年會」 出國報告

服務機關：衛生福利部中央健康保險署

姓名職稱：李伯璋署長

派赴國家：新加坡

出國期間：108.4.23-108.4.25

報告日期：108.5.30

## 壹、 目的

「第 13 屆亞洲健康保險年會」於 108 年 4 月 24 日至 25 日舉辦，本人受邀於會議演講：” Sustainability of Healthcare System-Inception of Healthcare Referral Network and NHI MediCloud System” 演講中除介紹健保成就，亦分享臺灣的健保運用雲端資料庫協助改善醫療服務品質及效率之成果，現場與會者均對我國健保制度稱羨不已，並與我方代表進行熱烈討論與交流。

## 貳、 演講內容

### 前言

為保障國民因生、老、病、死、傷殘、失能、失業而發生個人及家庭的經濟危機時能獲得幫助，乃於「自助互助、風險分擔」的原則下，透過社會保險制度，建構我國社會安全體系。

全民健保經過多年的耕耘，以「普及、經濟、便利、滿意度高」的成果吸引全球關注，不僅在國內維持高達八成五的滿意度，每年也吸引數百位外賓來臺瞭解臺灣的健保制度。

健保納保率達 99.6% 以上，全國 93% 的醫療院所皆與健保署特約，醫療可近性可謂相當便利。健保財務主要來自於保險對象、雇主及政府共同分擔的保險費收入，少部分為外部財源挹注，包括公益彩券盈餘、菸品健康福利捐分配收入等，截至目前財務狀況穩定。

未來因人口老化及醫療科技進步等因素，長期仍將面臨財務壓力，目前我們努力做制度面改善，以求健保長期穩健。現今衛福部和健保署積極推動分級醫療制度，即希望引導民眾改變就醫習慣，促進醫療院所分工合作，以免大型醫院塞滿輕症病患，排擠到其他急、重症病人的救治，病人無法獲得適切的照顧。

## 推動分級醫療

我國醫療院所的層級，按照衛生福利部分類，目前分為醫學中心、區域醫院、地區醫院及基層診所，各級醫院負有不同的照護任務與角色，醫學中心負有研究、教學以及急重症病患的治療照護，其他層級醫院則另負有任務及功能。

分級醫療的目的是讓醫院專注照顧急重症病患，民眾有病先至家庭醫師或附近診所就醫，經醫師專業診療後，如病情需要，則轉診至其他專科診所或醫院照護，病患經轉診治療後，應依醫師建議轉回原院所或其他適當院所，接受後續治療。

分級醫療透過各級醫療院所分工合作，藉由雙向轉診，提供病患連續性、整合性的醫療照護，協助民眾找對醫師、看對科，提升醫療照護品質。為了紓解醫院擁擠情形，健保署推動雙向轉診制度，並調整門急診部分負擔，期望建立制度，目的在促使醫療資源有效運用，院所分工合作，民眾得到最好的照護，慢慢導引大家有病先找家庭醫師，視病情需要再轉診至醫院。

## 雲端醫療資訊分享

此外，本署積極強化「健保醫療資訊雲端查詢系統」功能，在 2018 年新增查詢電腦斷層 (CT)、磁振造影 (MRI)、超音波、鏡檢及 X 光等醫療檢查影像功能，使診所醫師也看得到大醫院檢查的影像及報告，作為病人日後病情追蹤參考。如此透過雲端資料分享，既可避免重複醫療，也能協助落實分級醫療。

台灣健保是單一保險人制度，因此可以把所有被保險人的就醫申報資料集中保管，在保護病人隱私的前提下，民眾不論到哪家醫院就醫，醫師都可以在診間進行調閱，可有效避免重複用藥及不必要的檢驗檢查，達到有效節流的目的。此外，健保署一直不斷精進「健康存摺」的功能，讓民眾可以透過手機快速認證，透過「全民健保行動快易通」APP 就能隨時取得個人過去三年的就醫資料，而且最近又開放眷屬管理功能，讓子女可以幫長輩進行健康管理。

## 未來改革方向

健保署也由健保大數據發現，近年來健保醫療支出每年成長約 5%，其中病人檢驗檢查的支出比醫師診療費及其他的服務成長幅度顯著許多，其中不乏短期內重複檢查及因重複就醫而多領取之藥物，形成醫療浪費。未來，健保署會落實利用大數據做精準審查，加強違規浮報、虛報、溢報健保費用的醫療行為的查核，由健保署與醫界共同管理不必要醫療行為，以將資源回饋於新藥、新科技及改善醫療環境。全民健保是台灣社會安定的基石，讓全民就醫沒有經濟障礙，因此反映在民調的數字上，是政府施政滿意度最高的政策之一。但我們仍不以此自滿，不斷精益求精，積極推動「推動分級醫療，落實雙向轉診」改革工程，期能為 2,300 萬民眾提供最好的醫療照顧，也為醫療人員創造快樂的工作環境。

# 參、 演講投影片資料

## Sustainability of Healthcare System- Inception of Healthcare Referral Network and NHI MediCloud System

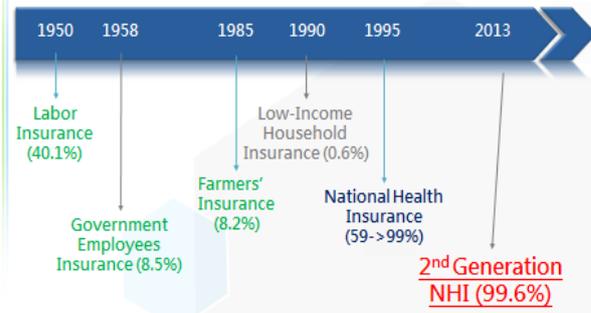
Po-Chang Lee, M.D., M.T.L.  
Director General, National Health Insurance Administration  
Professor of Surgery, National Cheng Kung University  
Chairperson of the Board, Taiwan Organ Registry and Sharing Center

May 23, 2019



National Health Insurance Administration,  
Ministry of Health and Welfare

## Milestones of Taiwan Social Insurance



Year	Insurance Type	Coverage %
1950	Labor Insurance	40.1%
1958	Government Employees Insurance	8.5%
1985	Farmers' Insurance	8.2%
1990	Low-Income Household Insurance	0.6%
1995	National Health Insurance	59->99%
2013	2nd Generation NHI	99.6%

\* ( ) indicates % of people covered by the insurance.

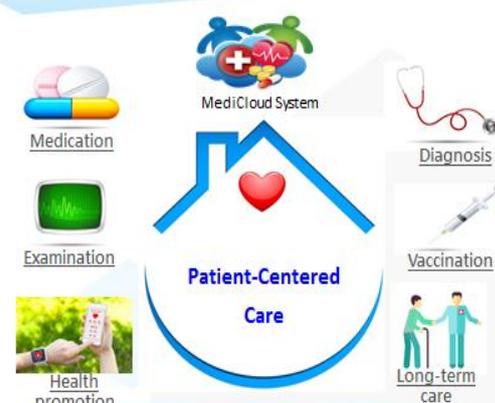
## NHI Characteristics

Coverage	Compulsory enrollment for all citizens and legal residents (99.9% of the population is covered by the NHI)
Administration	Single-payer system run by the government
Financing	Premiums
Benefits	Uniform package, copayment required
Providers	Contract-based 93.03% of healthcare providers contracted with NHI
Payment	Plural payment programs under the global budget payment systems
Privileges	Premium subsidies and copayment waivers for the disadvantaged

## Home Health Care in Remote and Aboriginal Areas Integrated Delivery System (IDS)



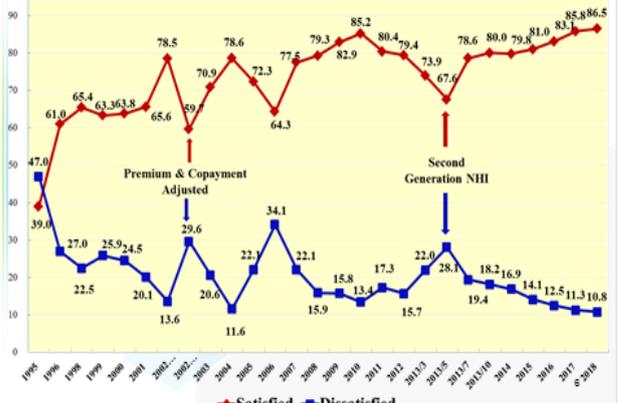
## Universal Health Coverage



Patient-Centered Care

- Medication
- Examination
- Health promotion
- MediCloud System
- Diagnosis
- Vaccination
- Long-term care

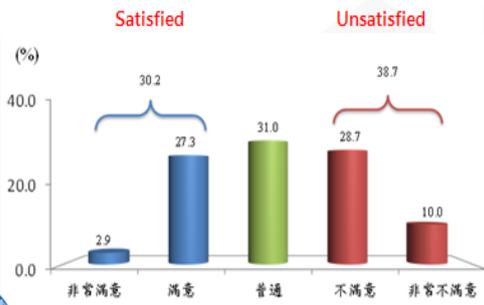
## High Public Satisfaction 1995-2018



Year	Satisfied (%)	Dissatisfied (%)
1995	47.0	39.0
1996	61.0	27.0
1997	65.4	22.5
1998	63.3	25.9
1999	63.8	24.5
2000	65.6	20.1
2001	78.5	13.6
2002	59	29.6
2003	70.9	20.6
2004	78.6	11.6
2005	72.3	22.1
2006	77.5	34.1
2007	64.3	22.1
2008	79.3	15.9
2009	82.9	15.8
2010	85.2	13.4
2011	80.4	17.3
2012	79.4	15.7
2013	73.9	22.0
2014	67.6	28.1
2015	78.6	19.4
2016	80.0	18.2
2017	79.8	16.9
2018	81.0	14.1
2019	83.1	12.5
2020	85.8	11.3
2021	86.5	10.8



## Low Medical Doctors Satisfaction to National Health Insurance (NHI)



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## Deal with Taiwan's Medical Problems Realistically

Cure Patients in consideration of patients' largest benefits  
Pinpoint problems and solve them collaboratively!!

### People's needs?

Government officials' responsibilities for policies!!

Only with providers' supports, we can improve Taiwan's NHI!!

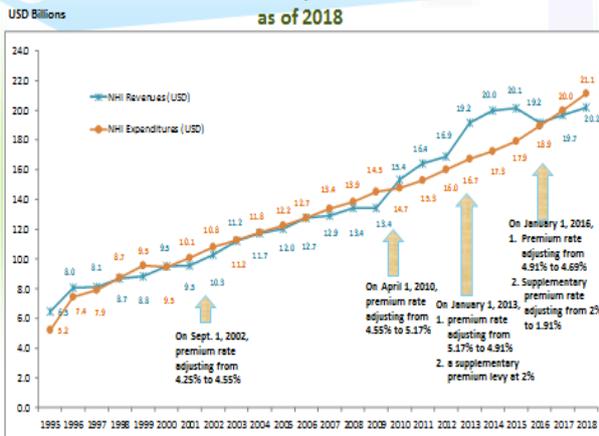
Reforms!! Supporting Measures??

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## Trend of NHI Financial Status

Accumulated surplus of USD7.1 bn as of 2018



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## Ageing Trends and Impact to Healthcare

The elderly people represent 13.2% of population, who use 36.5% NHI medical expenditures in 2016

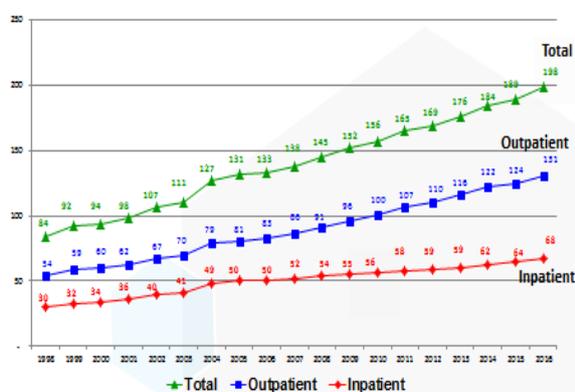


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## Trend of Medical Expenditures

Unit: 100 Million USD

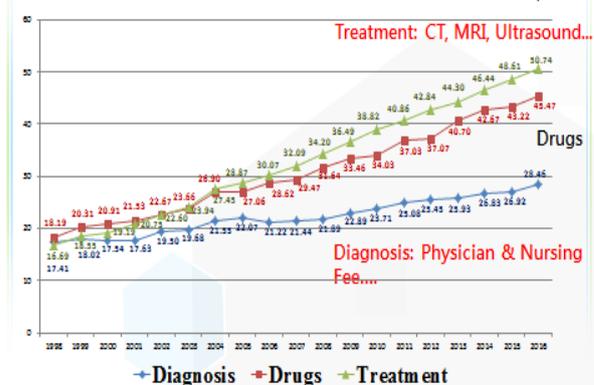


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## Breakdown of Outpatient Expenditures

Unit: 100 million US\$



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## 2016 Cancer Statistics

Items	Cancer (15 categories)
No. of Patients	470,000
Drug Expenses	NT\$29.3 billion
Cancer Drug Expenses	NT\$20.9 billion
Medical Expenses	NT\$73 billion

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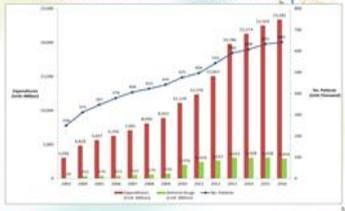
## Top 20 Medical Expenses for Rare Diseases in 2016

Name of Disease	Sex Age	Medical Expenses			Drug Expenses		
		Million	Growth Rate(%)	Portion(%)	Million	Growth Rate(%)	Portion (%)
Total for Rare Diseases		4,503.94	16.77	100.00	4,163.15	17.36	100.00
Total for top 20		583.11	9.68	12.95	581.44	9.85	13.97
1 Mucopolysaccharides	F 14	38.86	1.63	0.86	38.77	1.51	0.93
2 Mucopolysaccharides	M 19	38.25	0.02	0.85	38.19	0.00	0.92
3 Glycogen storage disease	M 10	37.75	195.47	0.84	37.66	196.23	0.90
4 Glycogen storage disease	F 9	37.26	18.24	0.83	37.05	18.30	0.89
5 Glycogen storage disease	M 13	36.36	23.93	0.81	36.27	23.99	0.87
6 Glycogen storage disease	M 17	32.90	10.69	0.73	32.74	10.85	0.79
7 Mucopolysaccharides	M 13	29.19	15.53	0.65	29.13	15.53	0.70
8 Mucopolysaccharides	F 24	28.63	-0.01	0.64	28.56	0.00	0.69
9 Mucopolysaccharides	M 39	28.39	0.04	0.63	28.34	0.00	0.68
10 Glycogen storage disease	M 9	26.43	21.56	0.59	26.34	21.79	0.63

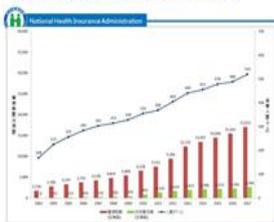
14



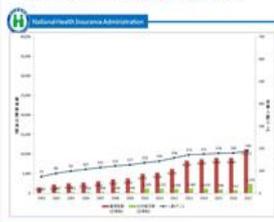
### Medical Expenditures for Hepatitis B and C Patients



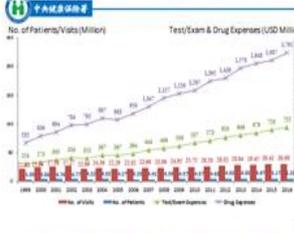
Medical Expenditures for Hepatitis B Patients



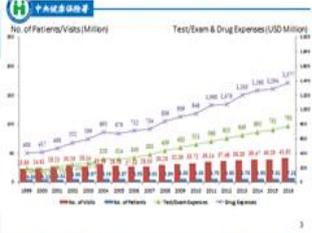
Medical Expenditures for Hepatitis C Patients



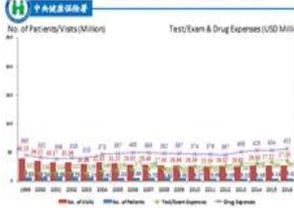
Trend of No. of Patients, No. of Visits, Drug Expenses, Text/Exam Expenses in Outpatient Departments-Academic Medical Centers



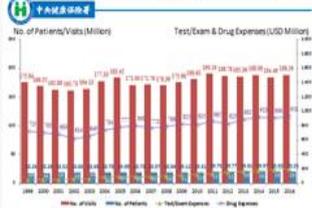
Trend of No. of Patients, No. of Visits, Drug Expenses, Text/Exam Expenses in Outpatient Departments-Regional Hospitals



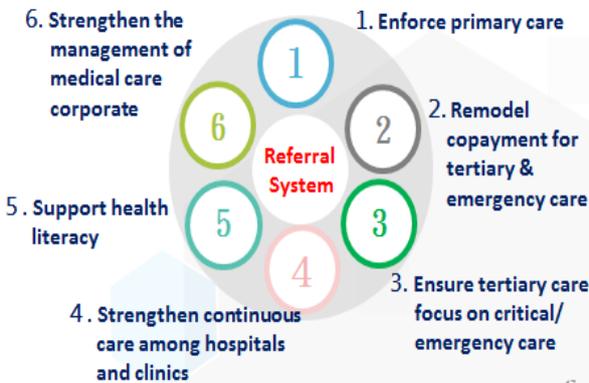
Trend of No. of Patients, No. of Visits, Drug Expenses, Text/Exam Expenses in Outpatient Departments-District Hospitals



Trend of No. of Patients, No. of Visits, Drug Expenses, Text/Exam Expenses in Outpatient Departments-Primary Hospital and Clinics



## Reinforcing Referral System



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## Vertical Integration Between Clinics and Hospitals

Strengthen the collaboration between clinics and hospitals, providing a continuous care



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## Implementing two-way referral, enhancing collaboration between clinics and hospitals

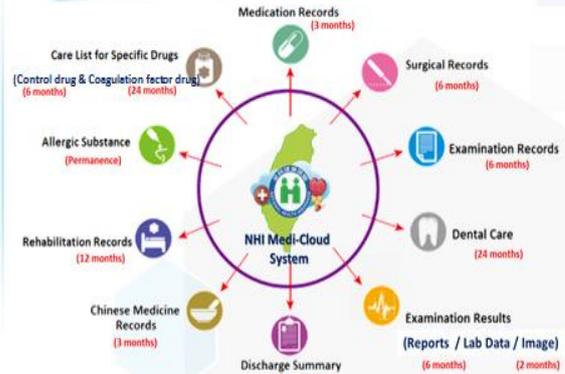
- Vertical Integration Between Clinics and Hospitals (69 medical care referral networks, consist of 5288 hospitals and clinics)
- Decrease No. of outpatient visits in Medical Centers
  - Started from July 1, 2018
  - Increase medical payment for two-way referral



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## Medical Information Sharing & Reducing Medical Waste: NHI MediCloud System



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## Drug Expenditures 80/20 Management (Total 684 Items)

ATC Classification	No. Items	2016 Drug Claims (USD Million)	%
L ANTINEOPLASTIC AND IMMUNOMODULATING AGENTS	102	968	24.0%
C CARDIOVASCULAR SYSTEM	115	734	18.2%
A ALIMENTARY TRACT AND METABOLISM	95	592	14.7%
J ANTIINFECTIVES FOR SYSTEMIC USE	96	523	13.0%
B BLOOD AND BLOOD FORMING ORGANS	67	399	9.9%
N NERVOUS SYSTEM	114	372	9.2%
R RESPIRATORY SYSTEM	29	121	3.0%
M MUSCULO-SKELETAL SYSTEM	18	108	2.7%
G GENITO URINARY SYSTEM AND SEX HORMONES	17	83	2.0%
S SENSORY ORGANS	15	65	1.6%
H SYSTEMIC HORMONAL PREPARATIONS, EXCL. SEX HORMON AND INSULIN	9	45	1.1%
V VARIOUS	3	19	0.5%
D DERMATOLOGICALS	3	6	0.1%
P ANTIPARASITIC PRODUCTS, INSECTICIDES AND REPELLENTS	1	2	0.0%
<b>Total</b>	<b>684</b>	<b>4,037</b>	<b>100.0%</b>



## MediCloud System- PharmaCloud

Multi-Search: 2299 365

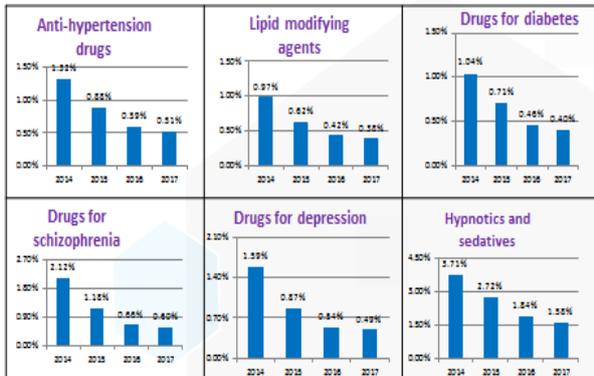
Remind that the patient is on the care list of controlled drugs

Drug name	date of prescribing	No. of visits	Total Amount
1	10312	200	200
2	10401	200	200
3	10402	1	1
4	10403	1	1
5	10404	1	1
6	10405	1	1
7	10312	2	100
8	10401	2	112
9	10402	2	112
10	10403	2	112



## Effectiveness of MediCloud System

A significant improvement on the overlapping days for six selected groups (Drugs) It is expected to reduce USD11million expenditures of these six selected groups (Drugs) from 2014 to 2017



Data source: Index of NHI Medi-Cloud system from Data analysis from NHI

1USD=30NTD 23



## Suspected Therapeutic Inequivalence Reporting Function

Example of a reporting entry:

Drug Name	ATC Code	Brand Name	Manufacturer	Generic Name	Strength	Form	Quantity	Unit Price	Total Price
DRUG A	A	DRUG A	DRUG A	DRUG A	DRUG A	DRUG A	DRUG A	DRUG A	DRUG A

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## NHI MediCloud System- Images Sharing

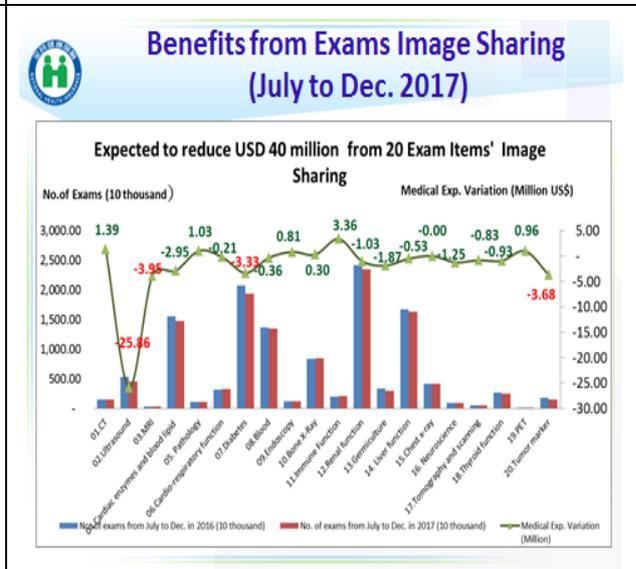
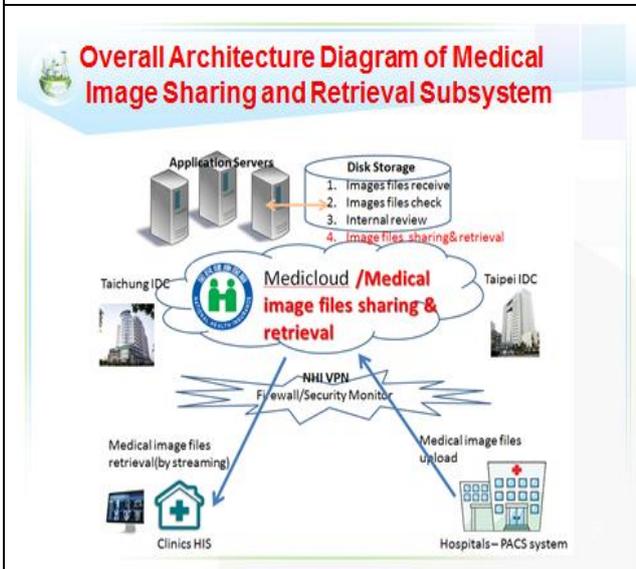
Examination results

The screenshot shows a web-based interface for medical image sharing. At the top, there are navigation tabs for 'Examination results', 'Medical image sharing', 'Medical image retrieval', 'Medical image storage', 'Medical image backup', 'Medical image maintenance', and 'Medical image monitoring'. Below this, there are search filters for 'Examination type', 'Examination department', 'Examination date', 'Examination center', and 'Examination status'. A table lists examination results with columns for 'Examination type', 'Examination department', 'Examination date', 'Examination center', 'Examination status', and 'Link to images'. A red box highlights the 'Link to images' column. Below the table, there is a detailed report for a specific examination, including a 'Pre & post-contrast MRI of the brain' and a '44-year-old patient'.

## Enhancing Medical Information Sharing

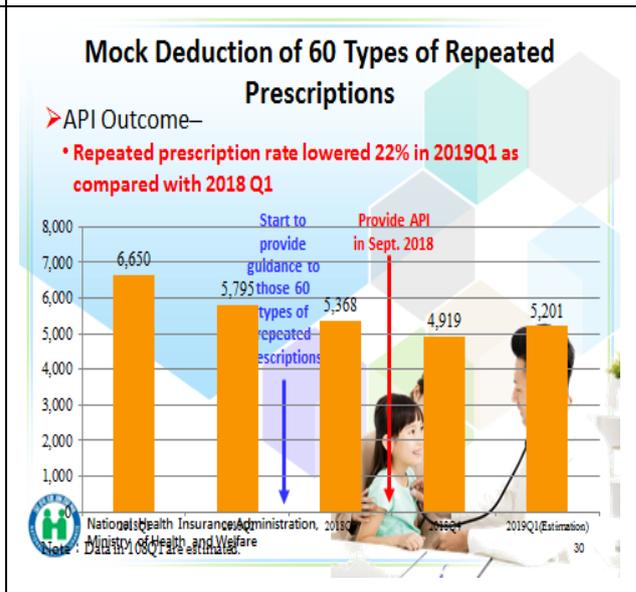
### 36 Medical Images for Access in 2018

This slide displays a collection of 36 medical images. The images are organized into six categories: CT (3 items), MRI (2 items), Scopy (2 items), X-Ray (3 items), Ultrasound (25 items), and X-Ray for Dentist (1 item). Each category shows representative images from that type, such as axial CT scans of the head, MRI scans of the spine, a scopy image of a colon, a chest X-ray, an ultrasound image of a liver, and a dental X-ray.



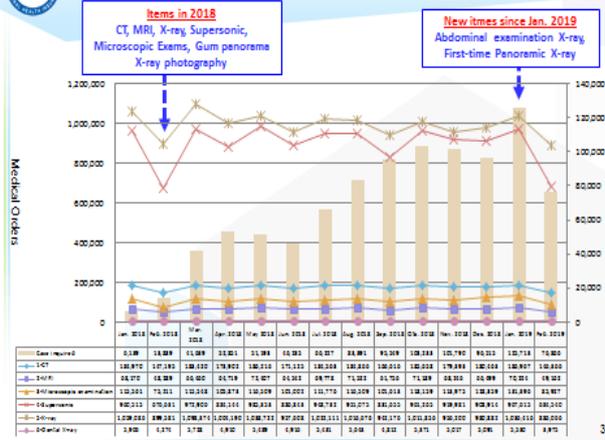
## Poor Quality Images Reporting Function

This slide shows the 'Poor Quality Images Reporting Function' interface. The interface includes a form for reporting image quality issues, with fields for 'Report number', 'Image name', 'Image type', 'Image size', 'Image format', 'Image resolution', 'Image quality', and 'Image description'. The form also includes a 'Report' button and a 'Cancel' button. The interface is designed to allow users to report poor quality images and provide feedback to the system.





### Real-time Upload of 6 Types of Medical Images Jan. 2018-Feb. 2019

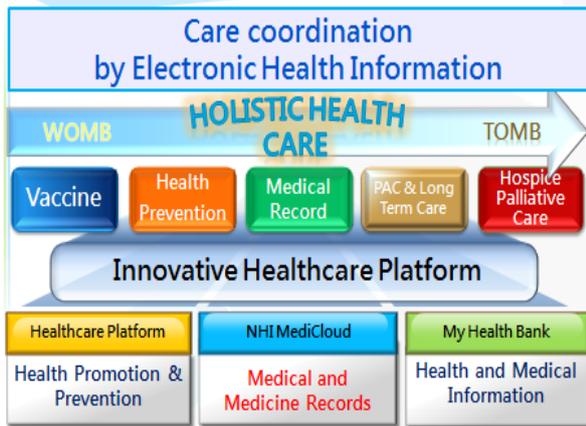


### Reinhardt's Comment

- Economic vs. Political sustainability
- Healthcare is sustainable as long as not waste
- Waste is sinful. God will not forgive.



### Future Perspectives



### Progressive Medicine is based on the Cooperation in the Multiple Fields of Expertise



THANK YOU FOR YOUR ATTENTION



#### 肆、 心得及建議

本次參與國際性會議並發表全民健保成就報告有助宣揚我國政府政績並提升國際形象，同時也增加國際交流經驗，不僅能讓政府人員了解世界健康照護的趨勢，也能增加與各國高階醫藥衛生官員交換意見的機會。讓醫藥衛生行政單位的人員有機會多參與國際性研討會議甚具意義。利用資通科技提升行政效率是目前趨勢，建議未來政府應投入更多資源於醫療科技之研發，包括人工智慧在醫療上的應用等等。