



# New Era of National Health Insurance in Taiwan

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October 31, 2014

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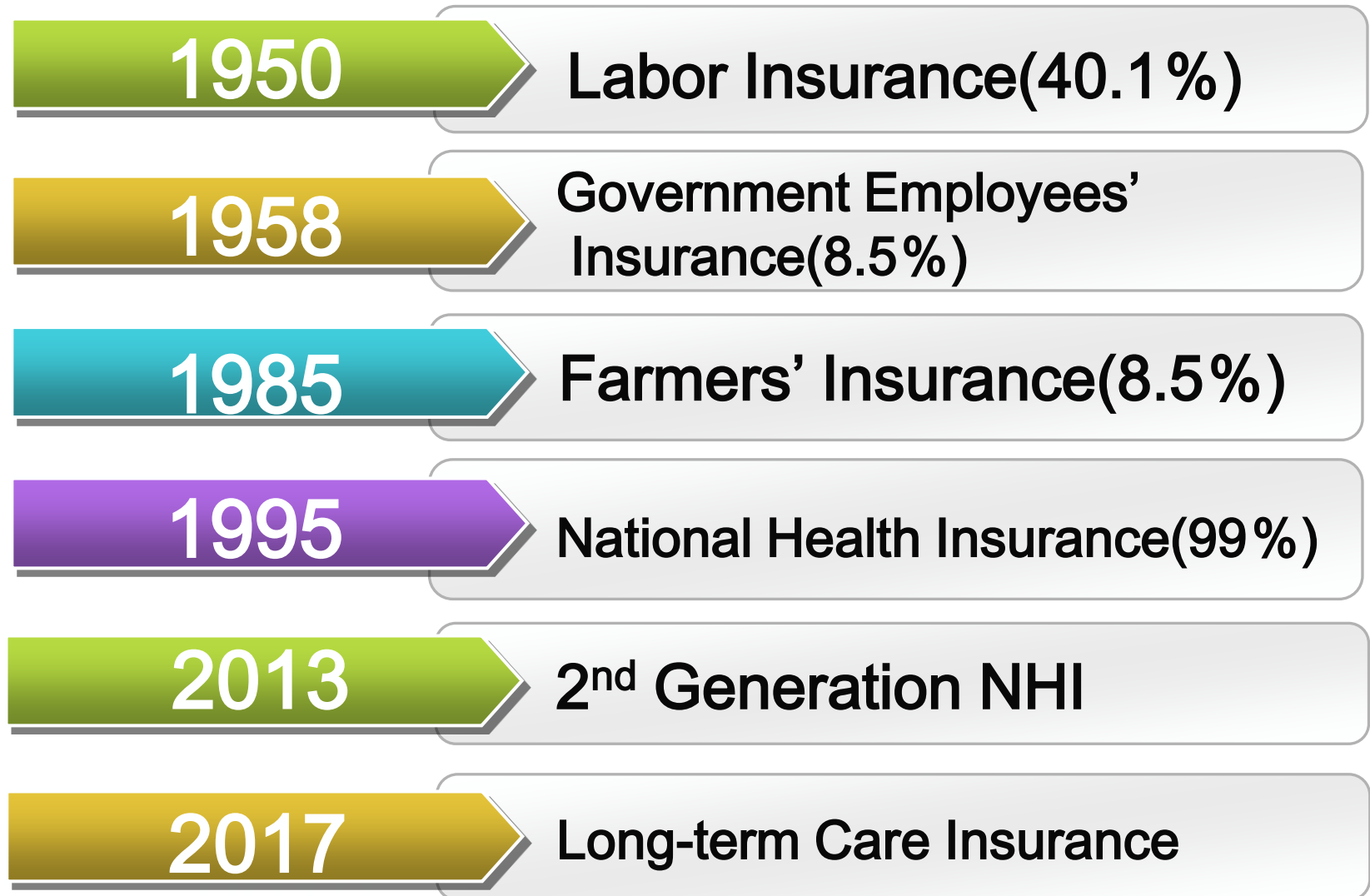
# Profile of Taiwan

Population	23 millions
Land Area	36,191 km <sup>2</sup>
Population aged over 65	11.5%
GDP (2012)	US\$20,423 Per Capita US\$38,462 Per Capita (ppp)
NHE (2012)	US\$1,350 Per Capita US\$2,546 Per Capita (ppp)
NHE in GDP (2012)	6.6%
Life expectancy (2013)	76.69 (M) / 83.25 (F)

**Source:** Directorate-General of Budget, Accounting and Statistics; ROC; MOHW



# Development of social insurance in Taiwan



# Current Development and Challenges

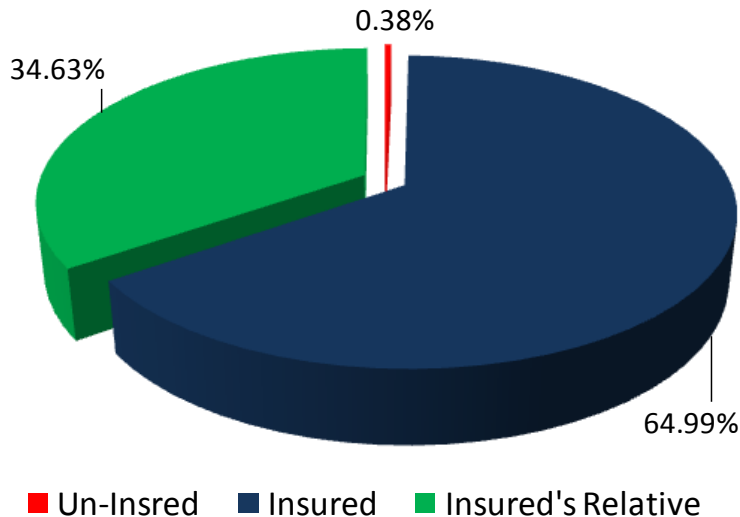




# Current status of National Health Insurance in Taiwan

## Compulsory program / single payer

- Universal coverage
- Guarantee equal access to health care service
- 20,325 contracted providers, including 493 hospitals (100% contracted) in 2013



■ Coverage rate is 99.62%

## Advantage

- Low administrative costs
- Low co-payment, below 10% on average
- Comprehensive medical services, including outpatient services, inpatient services, dental, and traditional medicine, etc.
- Big database



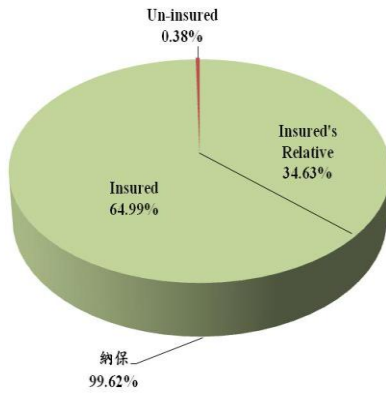
# Major NHI Achievements(1/2)

## 1. Universal coverage

## 2. Easy & Equitable access

## 3. Affordable Cost

**Covered 23 millions population (coverage rate : 99.62%), 2013**



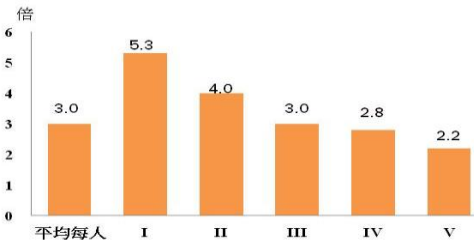
**Benefit/Contribution Ratio for Low-income Households is Higher than 5.2**



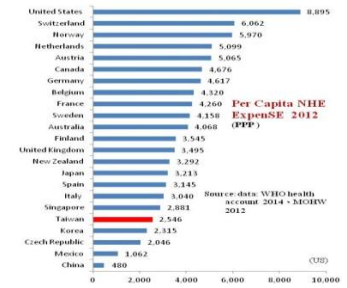
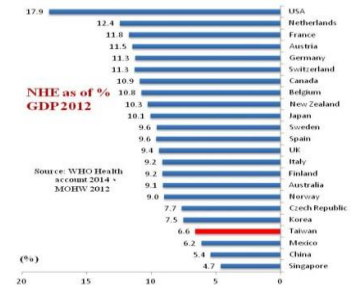
Low income household =5.3



High income household =2.2



**-NHE as to GDP : 6.6%**  
**-Per capita NHE Expenses: US \$2,546**





# Major NHI Achievements(2/2)

## 4.Up-to-Standard Quality

### Five-year Survival Rates for Cancer

	Colon Cancer		Lung Cancer		Breast Cancer
	male	female	male	female	female
Taiwan(2004-2008)	59	61	12	18	86
United States(1999-2005)	65	65	13	18	89
Australia (1998-2004)	61	62	11	14	88

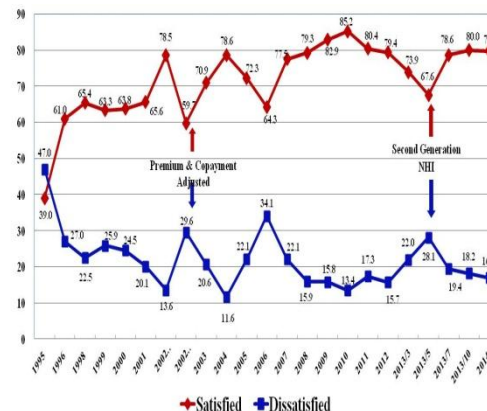
### Organ Transplant Survival Rates

	Taiwan No. of Cases (2001-2011)	3-month Survival Rate		1 Year Survival Rate		3-year Survival Rate				
		Taiwan (2008-2009)	US (2007-2008) deceased living	Taiwan (2008-2009) deceased living	US (2007-2008) deceased living	Taiwan (2006-2008) deceased living	US (2006-2008) deceased living			
Kidney graft	2727	98.3%	98.30%	99.50%	96.9%	96.0%	98.0%	94.5%	90.0%	95.8%
Liver graft	2626	90.7%	94.60%	94.60%	85.6%	88.9%	92.0%	78.3%	79.9%	84.7%
Heart graft	772	87.2%	93.60%	76.2%	88.9%	68.9%	81.7%			

## 5.High Public Satisfaction

The public satisfaction rate as improved from 39% in the first year of the program to 80% recently

(1995~2014)



## 6.International Recognition



2014	The United States Senate Subcommittee Hearing - Access and Cost: What the US Health Care System Can Learn from Other Countries	美國參議院聽證會
2012	Taiwan's Progress on Health Care by Uwe E. Reinhardt	紐約時報
	NGC Documentary featuring "Taiwan's Medical Miracle" to premiere	國家地理頻道
	Health Insurance Is for Everyone: by Fareed Zakaria	時代雜誌
	GPS Special: Global Lessons-The GPS Road Map for Saving Health Care	美國有線電視新聞網
2009	5 Myths About Health Care Around the World by T.R. Reid	華盛頓郵報
2008	Taiwan featured in one of the U.S. Public Broadcasting Service's (PBS)Frontline series called "Sick around the world"	美國公共電視
2005	"Pride, Prejudice, Insurance" by Paul Krugman	紐約時報

**Zakaria: How to save American health care**  
 by Fareed Zakaria, CNN  
 All of them, including the current health care law, have found that they need to use an insurance or government-sponsored model. All of them provide universal health care at a much, much lower cost than we do.  
 The United States has the most maligned system in the world and the most expensive and healthiest one with bad outcomes and low levels of customer satisfaction.  
 Maybe there's a specific model out there that would work. But right now, in the world we are living in, some kind of social health care system is what we need. And that's not to say that we should do it all at once. It should be a process that Americans can get good care at reasonable prices. Use as much of the rest of the world.  
**Zakaria: Health insurance is for everyone**  
 by Fareed Zakaria, CNN.com  
 When Taiwan, another country with a strong free-market economy, decided to create a health care system in the mid-1990s, it studied every possible model. It then chose a model of universal social and universal insurance that included explicit funding through general income taxes, as Switzerland and the U.S. do, instead of creating a single insurer, basically a version of Medicare. The result: universal access and high-quality care at a surprisingly low cost. Taiwan spends only 7% of its GDP on health care.



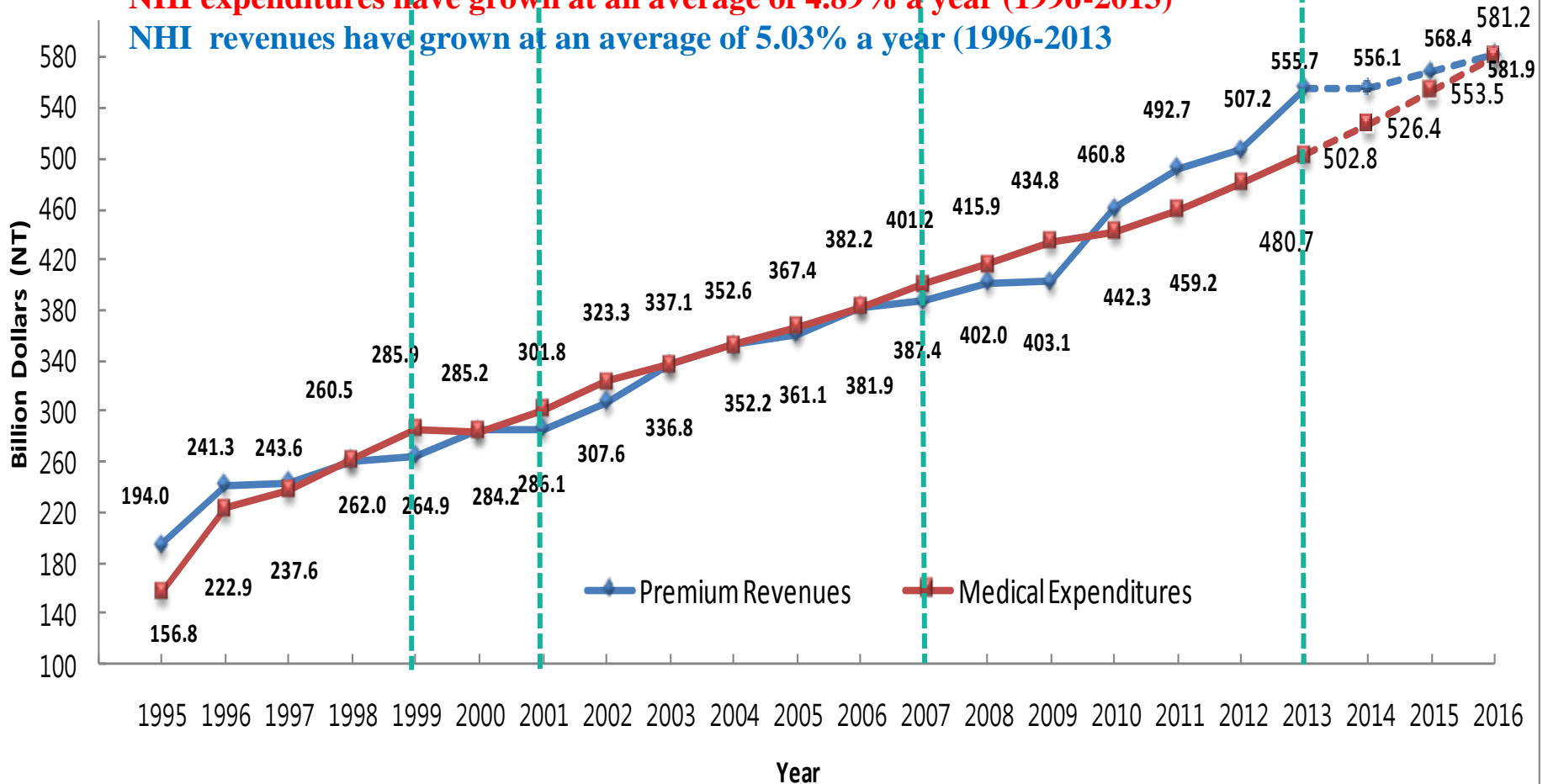


# NHI revenues and costs

NT\$ billion

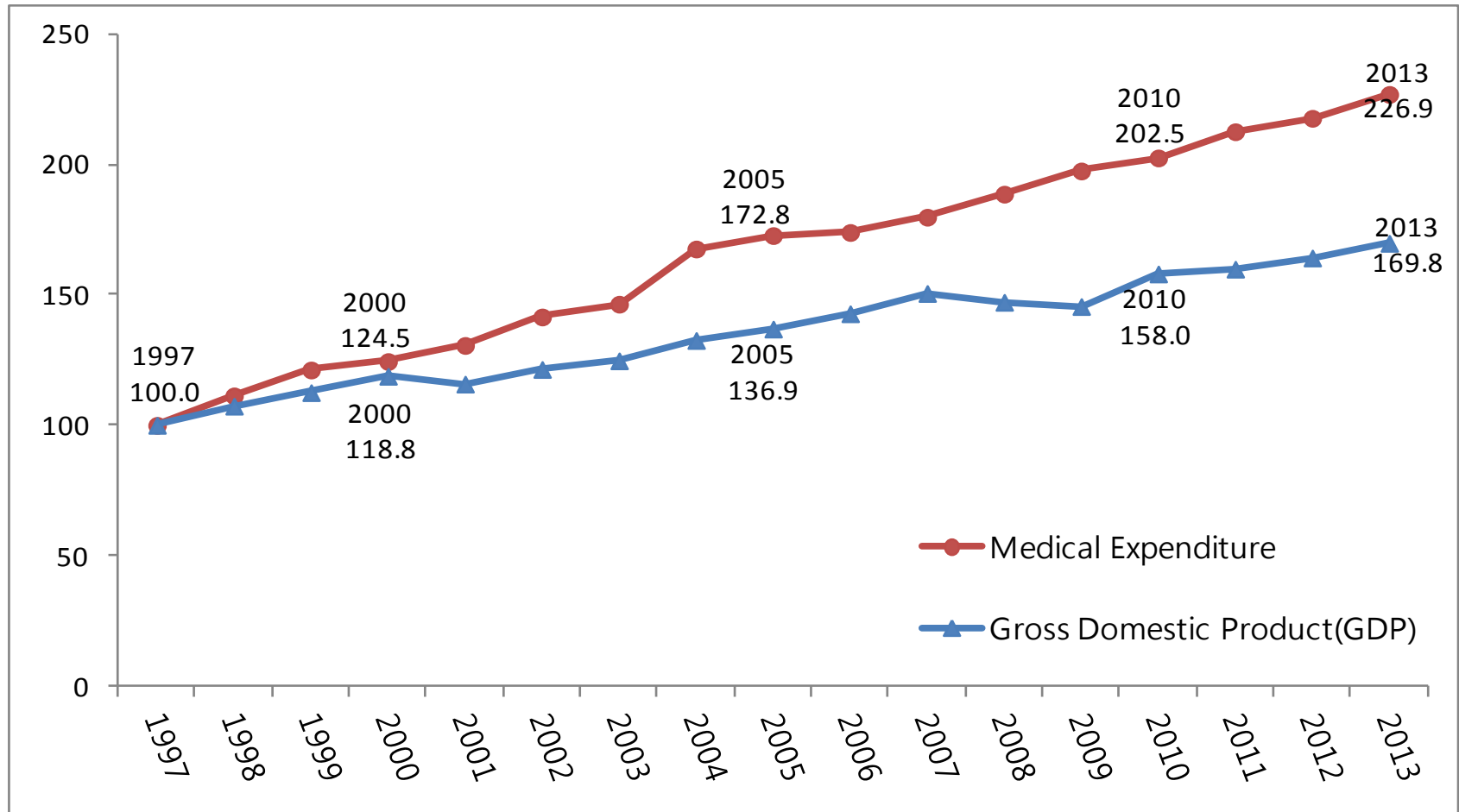
**NHI expenditures have grown at an average of 4.89% a year (1996-2013)**

**NHI revenues have grown at an average of 5.03% a year (1996-2013)**





# Medical expenditure vs. GDP



Note1 : GDP(1997) is reference year · Ratio=100x[GDP(Year)/GDP(1997)] ·

Note2 : GDP(1997) is 8.57T-NTD · 2013 is 14.56T-NTD and growth rate is 69.8% ;

Medical expenditure is 259.69B-P in 1997 · 589.27B-P in 2013 and growth rate is 126.9% ·



# Aging Across Region

2009			2050		
Country	15-59:60+	Rank	Country	15-59:60+	Rank
Japan	1.92	1	Japan	1.01	1
Australia	3.24	2	Taiwan	1.14	2
USA	3.45	3	S.Korea	1.17	3
Hong Kong	3.97	4	Singapore	1.24	4
Singapore	4.51	5	Hong Kong	1.25	5
S.Korea	4.51	6	China	1.73	6
Taiwan	4.75	7	Australia	1.82	7
China	5.71	8	USA	2.03	8
Vietnam	7.63	9	Vietnam	2.13	9

**Source:**

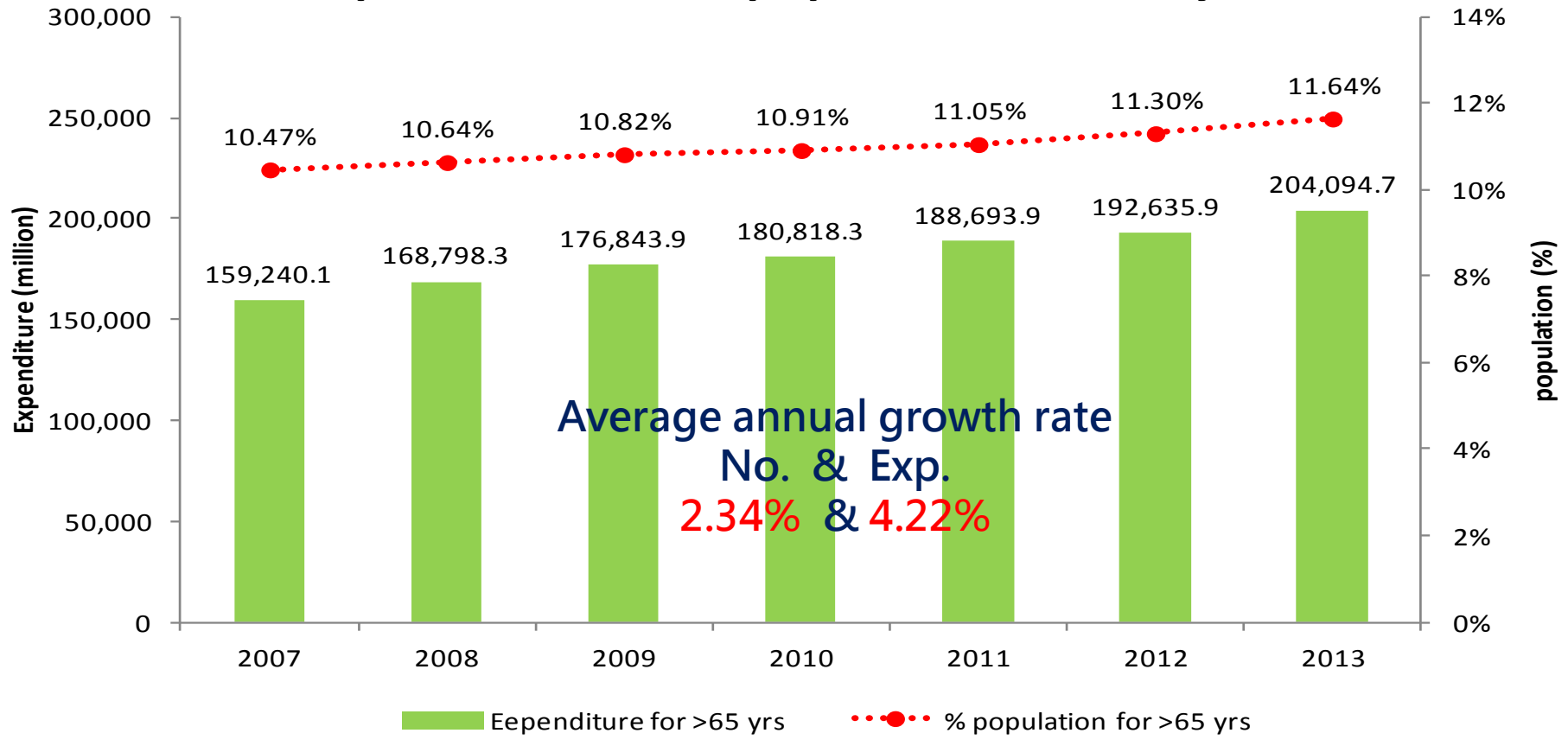
Prof. Alan Cass  
 Senior Director  
 The George Institute for Global Health  
 Chair, Scientific Committee, Australasian Kidney Trials Network



# Current Aging Trends and Impact to Healthcare

- The elderly people represent 11.6% of population, who used 34.6% NHI medical expenditures in 2013.

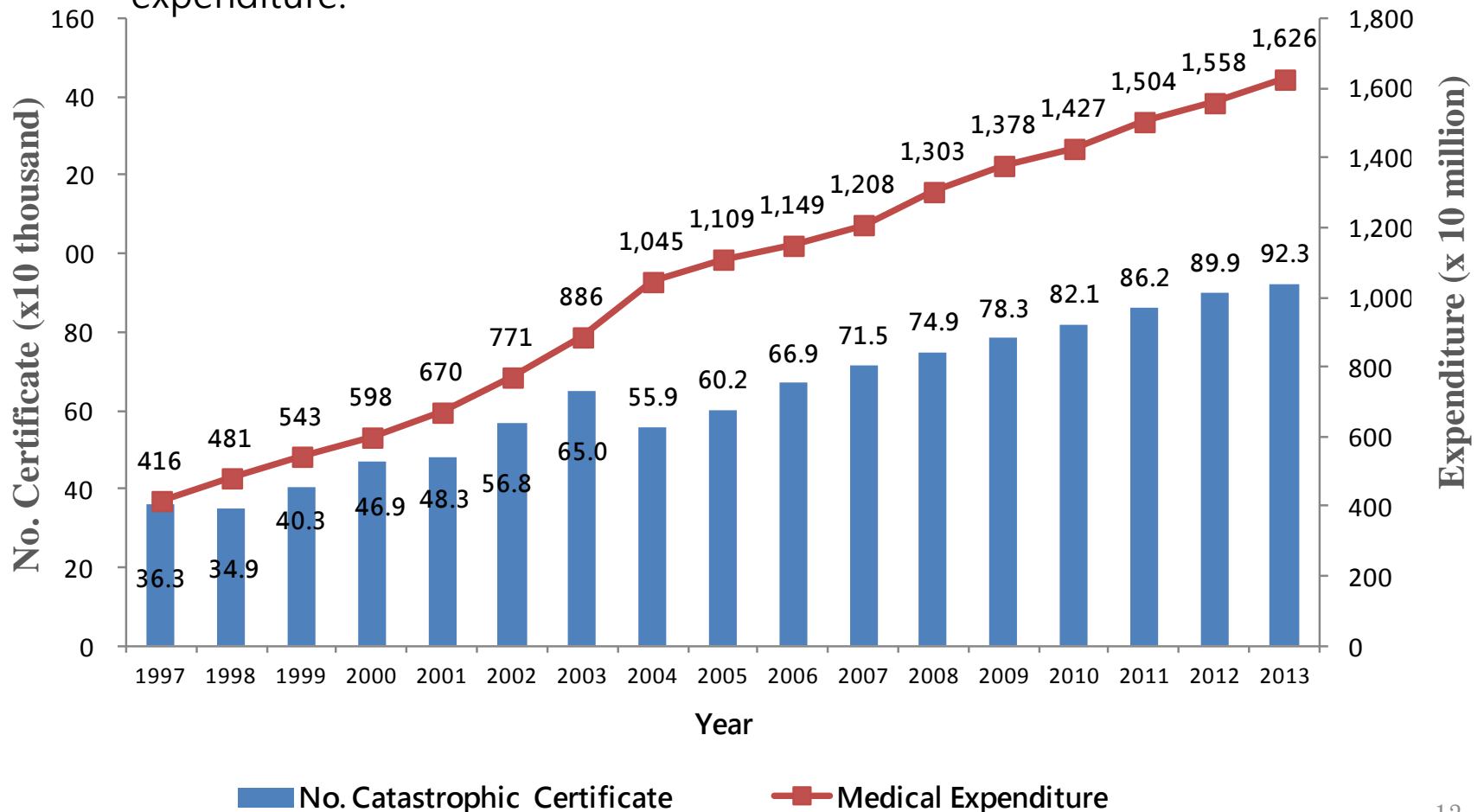
## Expenditure and % population for >65 yrs





# Catastrophic Illnesses

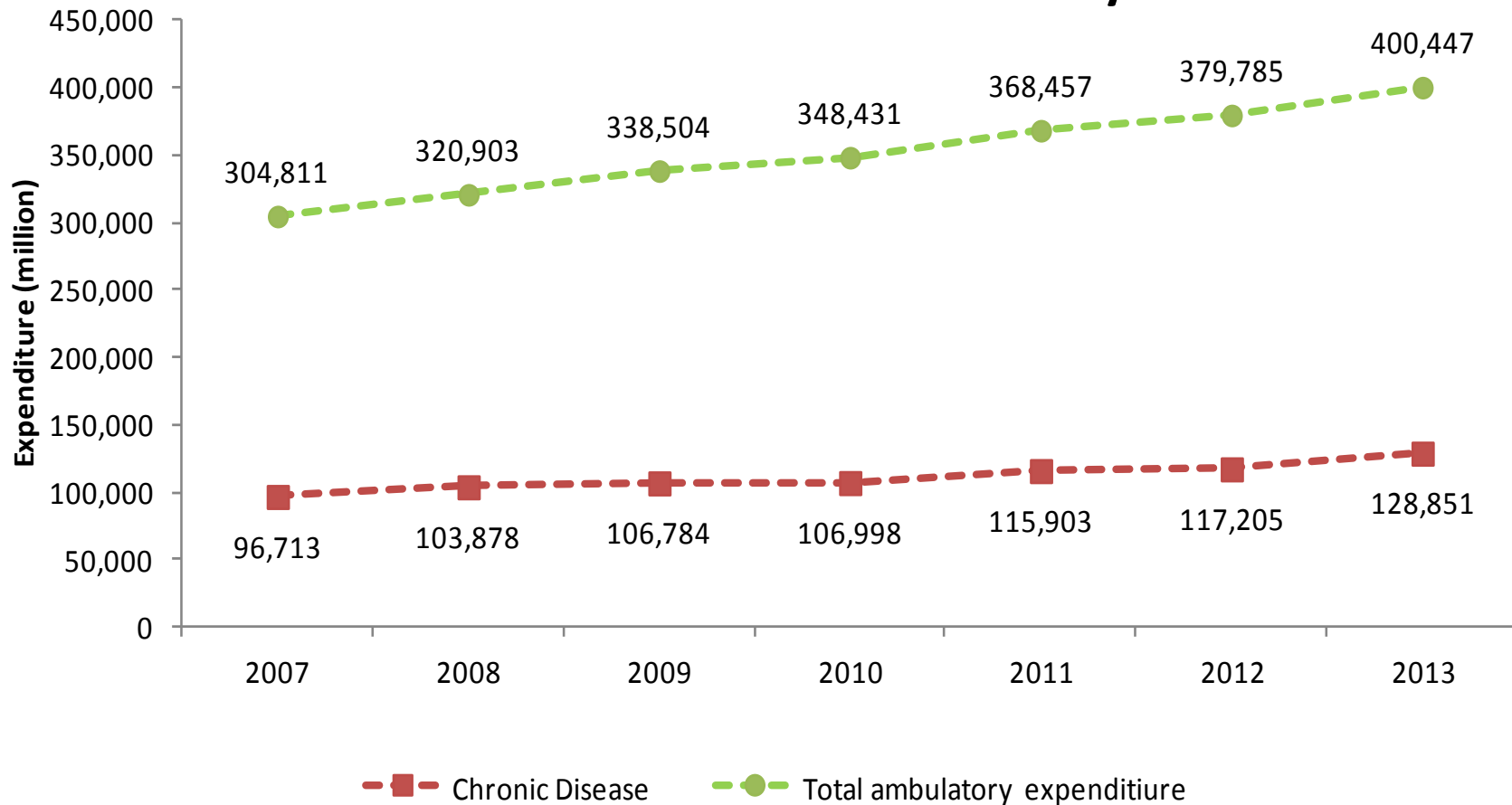
- There are more than 920 thousand catastrophically ill patients, or about 3.9% of all those insured under NHI program.
- Their medical expenditure in 2013 costs NT\$ 162.6 billion, or 27.1% of all NHI expenditure.





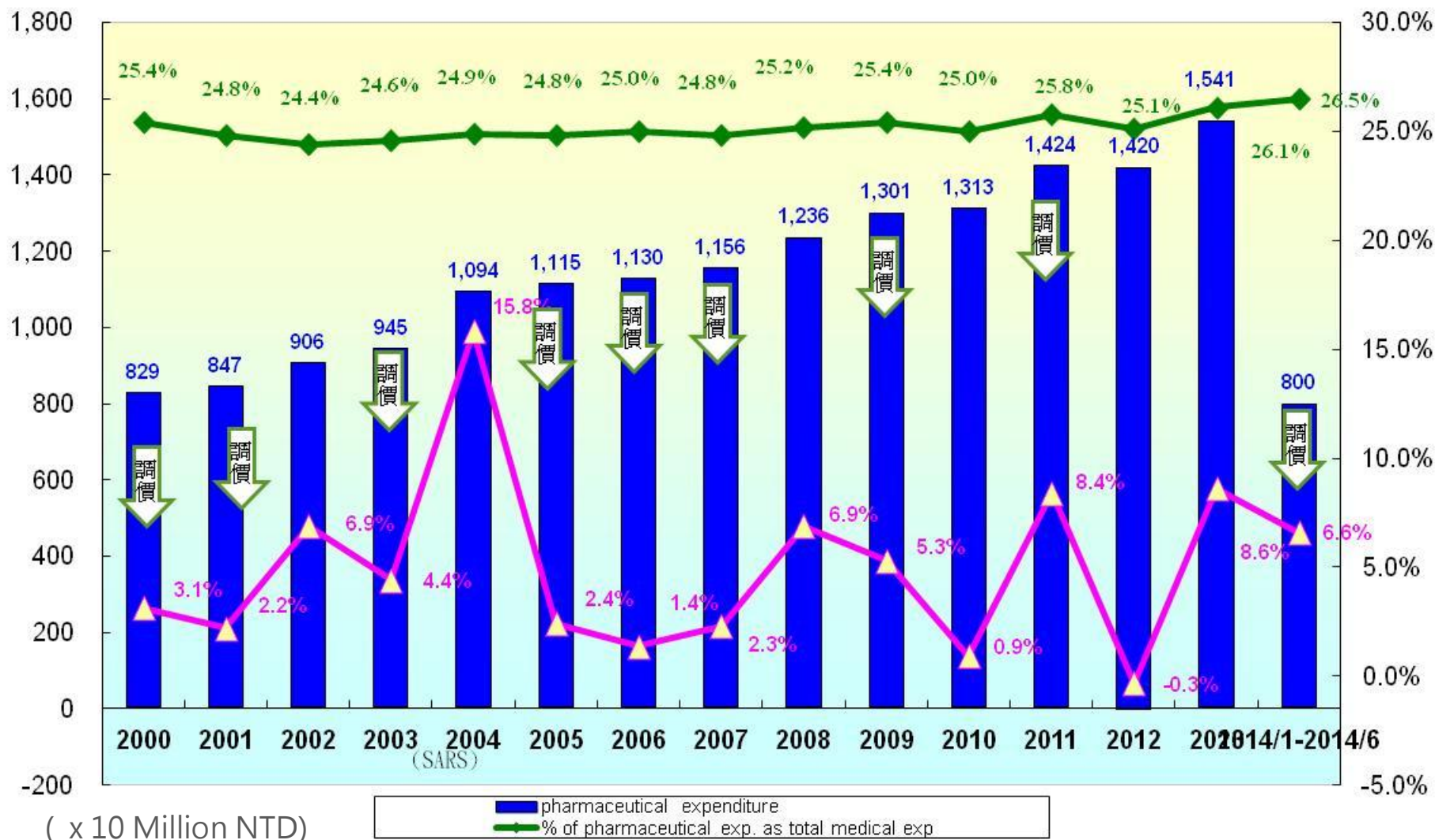
# Medical Expenditure of Chronic Disease

## Chronic Disease in Ambulatory





# NHI Pharmaceutical Expenditure



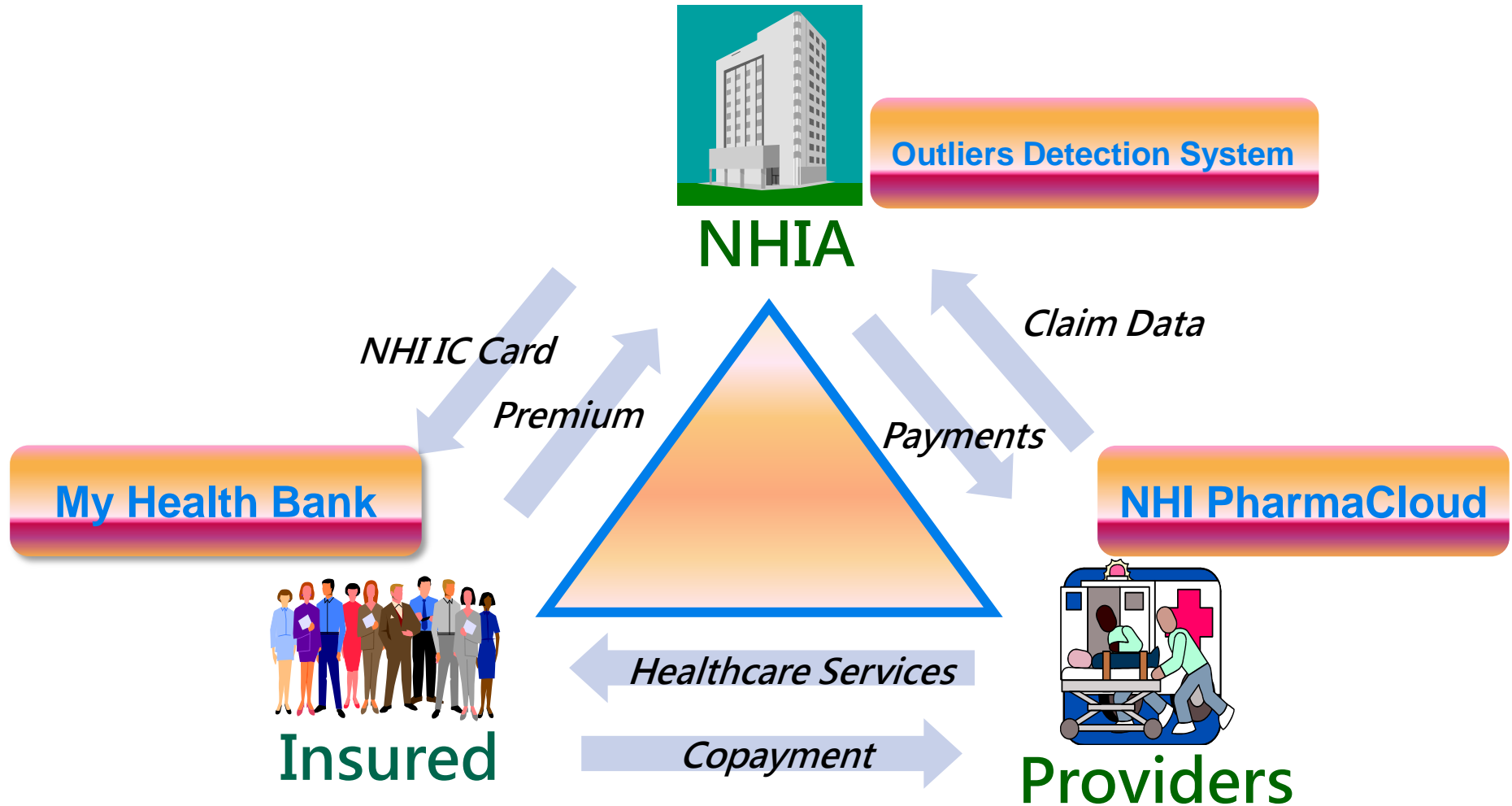
# Innovation in NHI







# Healthcare Innovation 2014



全民健保  
健康存摺



MY  
HEALTH  
BANK

**-My Health Bank-**



# My Health Bank



衛生福利部中央健康保險署  
NATIONAL HEALTH INSURANCE ADMINISTRATION,  
MINISTRY OF HEALTH AND WELFARE



全民健保健康存摺系統 / MY HEALTH BANK

ID  
PIN

>>身 分 證 號

>>自然人憑證密碼

請插入自然人憑證後按確認

確認





# Multiple Sources

## Scope of Benefits

- **Inpatient care**
- **Outpatient care**
- **Prescription drugs and certain OTC drugs**
- **Dental services**  
(orthodontics, prosthodontics excluded)
- **Traditional Chinese medicine**
- **Day care for the mentally ill**
- **Home nursing care**
- **Allergy & Vaccine records\***



# High Quality-Medical Claim Data

## *Medical Claim Data Flow (Monthly)*

### **Claim reception**

- Network
- Electronic media
- Paper(<1%)

### **Provisional payment**

- 80-90%  
(according to previous deduction rate)

### **Claim review**

- Automatic adjudication rules
- Profile analysis
- Professional Peer Review

### **Approval & payment**

- Web site

### **Calculate point value**

- Global budget



*Data warehouse system*



# NHI IC Card for Each Patient

NHI IC Card



## Functions of NHI IC Card

Simplification of management process

Daily update of medical visit data

Infectious disease tracing & monitoring

Heavy-user detection & management



# Providing Personal Medical Data

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- **Personal medical data accessibility**
  - Self-managing healthcare records
  - Alerting hospital to claim accurate data
  - Facilitating discussion between doctors and patients
- **Personal privacy**
  - Certificate identity
  - Security for downloading files





# How soon to get the data?

登出



## 全民健保健康存摺系統

- 本系統提供 台端自申請日前2日起近一年醫事機構申報及健保卡上傳之醫療資料，並於每日更新健保卡上傳資料之內容，例如：  
103年09月16日申請可查詢102年09月01日至103年09月14日之醫療費用申報及上傳資料，以此類推。全民健保健康存摺並非病歷，相關診斷及詳細罹病情形，請洽相關醫事機構。
- 請於申請日之隔日8時再至本網頁下載申請結果，本網站依據 台端申請產製資料後保留7日（例如：103年09月16日提出申請，請於103年09月17日8時至103年09月23日23時59分至本網站下載），下載檔案密碼為您的「身分證號」（首碼英文為大寫）。

**Medical Data Period:  
2013/9/1~2014/9/14**

**Apply Date: Sep 16, 2014**

**Download Date: Sep 17, 2014**

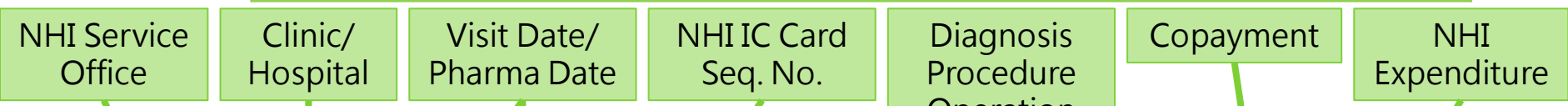
### 申請情形

	申請日期	資料起迄期間	可下載期間	狀態
	103/09/16	102/09/01 至 103/09/14	103/09/17 至 103/09/23	可下載





# My Health Bank – Outpatient



衛生福利部中央健康保險署 門診及交付機構資料+醫令明細表

ID	Period	健保署服務單位	醫事機構 醫編代碼	就醫日期 醫編名稱	交付調劑、檢查 或復健治療日期	健保卡 就醫序號	疾病 分類碼	疾病 分類名稱	處置碼	處置名稱	部分負 擔金額	健保支 付點數
醫編總量												
		東區	****診所	103/05/14		0022	7140	類風濕性關節炎			250	1,438
			00110C	一般門診診察費—基層院所門診診察費 1·每位醫師每日門診量在三十人次以下部分(3-1)未開處方或處...								1
			05211C	門診藥事服務費—慢性病處方給藥28天以上(山地離島地區每人每日100件內)								1
			08005C	紅血球沈降速度測定								1
			12015C	C反應性蛋白試驗—免疫比濁法								1
			59018C	肌腱注射								1
			A047570100	"汎宇"樂悠錠								56
			AC29575100	舒腦膠囊 10公絲(服納利林)								28
			AC316761G0	"柏理"康速龍錠 5毫克(培尼皮質醇)								56
			AC346701G0	"強生"葉酸膜衣錠 5公絲								24
			AC367491G0	舒肌痛膠囊(鋁箔/膠箔)								56
			AC42899100	"健亞" 羧痛膜衣錠 200公絲(硫酸羥氧奎寧)								56
			AC47371100	"強生"易除痛膠囊200毫克								56
			B022726100	滅殺除癌錠 2·5公絲								24
		南區	**檢驗所	103/05/14		0022	7140	類風濕性關節炎			0	275
			12015C	C反應性蛋白試驗—免疫比濁法								1

Detail Orders:  
Medicines  
Medical Devices

Order  
Quantity



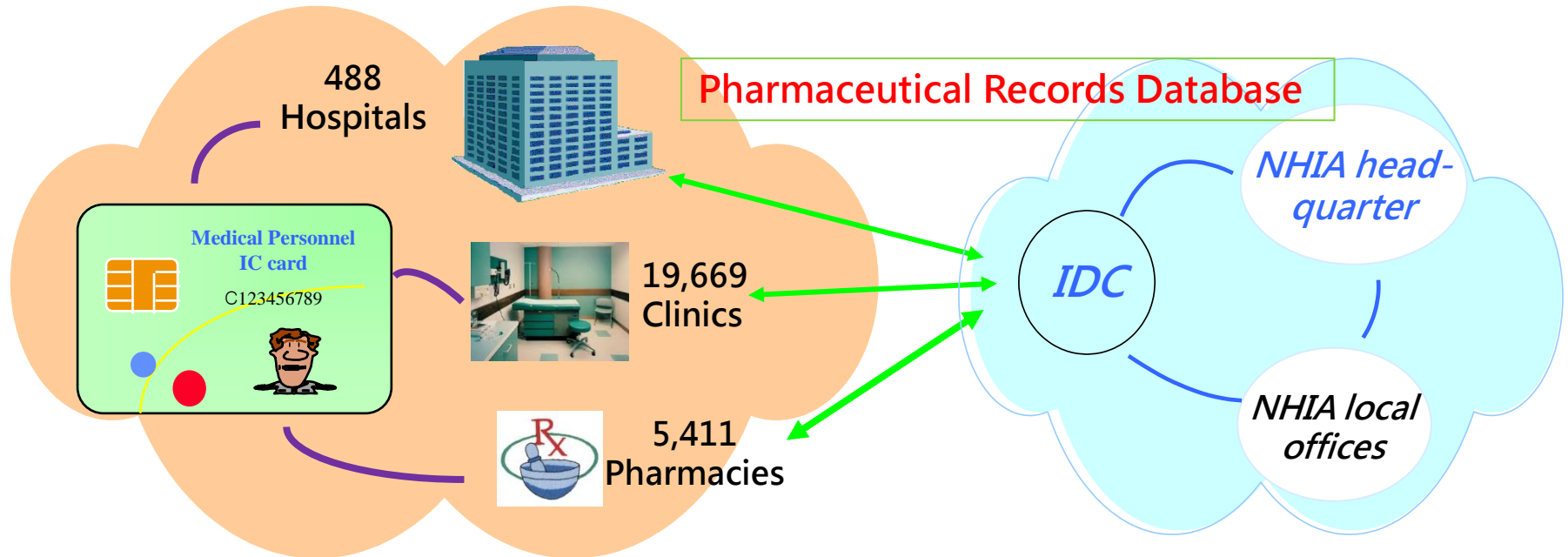
健保雲端藥歷系統  
Pharma Cloud

**-Pharma Cloud-**

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# The NHI Pharma Cloud



- ✓ A patient-centered medication information system established in July 2013
- ✓ Information updated on a rolling daily basis
- ✓ Allowing practitioners to view real-time medication records with patient's consent
- ✓ Subject to strict privacy and security through VPN network



# Inquiry Platform

網站地圖 親愛的訪客 您好! 請先從下方登入

**衛生福利部中央健康保險署**  
National Health Insurance Administration, Ministry of Health and Welfare  
**健保資訊網服務系統(VPN)**

本系統於每日 18:00~19:00、1:00~1:30 例行維護, 請儘量勿於該時段使用系統。

首頁

**服務項目**  
保險對象特定醫療資訊查詢作業  
院所申報醫師別概況作業

**常用服務**  
新手上路  
下載專區  
醫療資訊揭露  
健保分區業務組資訊交流區  
[服務時間: 上班日8:30至18:00]  
臺北業務組  
北區業務組  
中區業務組  
南區業務組  
高屏業務組  
東區業務組

**其它應用系統**  
衛生福利部國民健康署-兒童健康管理系統  
衛生福利部國民健康署-口腔癌篩檢系統  
衛生福利部疾病管制署(致醫界通函)  
衛生福利部國民健康署-新生兒聽力篩檢系統  
衛生福利部全民健康保險爭議審議會-醫療費用爭議案件系統

**下載專區**  
服務項目: 健保雲端藥歷系統 [查詢]

檔案說明	檔案	更新日期
健保雲端藥歷系統使用者手冊	<a href="#">UserGuide_IMM(VPN).pdf</a> <a href="#">UserGuide_IMM(VPN).doc</a>	102/08/08

**服務登入**

憑證登入 一般登入

憑證種類:

- 醫事機構卡
- 政府單位憑證卡
- 醫事人員卡
- 健保卡
- 自然人憑證

\*PIN:

讀卡機種類:

- 健保讀卡機
- 晶片讀卡機

憑證登入

Insert the medical personnel IC card and enter password (PIN code)



# Inquiry Page of Hospital

健保雲端藥歷系統查詢結果 [回首頁](#)

1、本系統資料不含自費藥品且簡表藥品可能低報；資料傳輸會有24~48小時之時間落差。  
2、建議須向病人詢問藥品服用情形，方能掌握病人所有用藥品項。  
3、本系統呈現之「主診斷」欄位係特約醫事服務機構醫療費用申報資料，僅供參考，確實診斷應以病歷記載為主。

身分證號： Z299\*\*\*965

查詢其他保險對象健保卡資料：

ATC5名稱  成份名稱  就醫區間  餘藥

藥品名稱  來源  本院  他院  藥局

項次	來源	主診斷	ATC5名稱	成份名稱	藥品健保代碼	藥品名稱	藥品規格量	用法用量	就醫日期(住院用藥起日)	慢速箋領藥日(住院用藥迄日)	藥品用量	給藥日數	單筆餘藥日數試算
1	他院門診	SECONDARY SYPHILIS OF SKIN OR MUCOUS MEMBRANES	Solutions Affecting The Electrolyte Balance	Sodium Chloride	AC48699209	Ktolac Injection 30mg/MI (Ketorolac)	1ML		102/01/10		12	8	0
2	他院門診	第二期(續發性)皮膚或粘膜梅毒	Solutions Affecting The Electrolyte Balance	Sodium Chloride	AC48699209	Ktolac Injection 30mg/MI (Ketorolac)	1ML		102/01/10		12	8	0
3	他院門診	PRIMARY TUBERCULOUS COMPLEX. TUBERCLE BACILLI NOT FOUND BY BACTERIOLOGICAL EXAMINATION. BUT TUBERCULOSIS CONFIRMED HISTOLOGICALLY	Fluoroquinolones	Moxifloxacin	A019799212	Pyridoxal Phosphate Injection "Tai Yu"	2ML	IV	102/07/01	102/07/01	56	4	0
4	他院門診	細菌學檢查未發現結核菌但組織學確認為結核病之原發性結核複合症	Fluoroquinolones	Moxifloxacin	A019799212	Pyridoxal Phosphate Injection "Tai Yu"	2ML	IV	102/07/01	102/07/01	56	4	0
5	他院門診	細菌學檢查未發現結核菌但組織學確認為結核病之原發性結核複合症	Fluoroquinolones	Moxifloxacin	A019799212	Pyridoxal Phosphate Injection "Tai Yu"	2ML	IV	102/07/01	102/07/01	56	4	0
6	他院門診	SECONDARY SYPHILIS OF SKIN OR MUCOUS MEMBRANES	Fluoroquinolones	Moxifloxacin	A019799212	Pyridoxal Phosphate Injection "Tai Yu"	2ML	IV	102/07/01	102/07/01	56	4	0

1. Search criteria can be set.
2. "ATC5 name", "Drug name", "Date of consultation", "Remaining drugs" can be selected to set search criteria.

"No content available" will be displayed if the patient has no drug history

健保雲端藥歷系統查詢結果 [回首頁](#)

1、本系統資料不含自費藥品且簡表藥品可能低報；資料傳輸會有24~48小時之時間落差。  
2、建議須向病人詢問藥品服用情形，方能掌握病人所有用藥品項。

身分證號： Z299\*\*\*956

查詢其他保險對象健保卡資料：

ATC5名稱  藥品名稱  就醫區間  餘藥

查無資料



# Pharma Cloud Query Result

source

active ingredient

drug code

drug name

date of prescribing

date of dispensing

day

健保雲端藥歷系統查詢結果 [回首頁](#)

1、本系統資料不含自費藥品且簡表藥品可能延誤；資料傳輸會有24~48小時之時間落差。2、建議須向病人詢問藥品服用情形，方能掌握病人所有用藥品項。  
3、本系統呈現之「主診斷」欄位係特約醫事服務機構醫療費用申報資料，僅供參考，確實診斷應以病歷記載為主。

身分證號： Z299\*\*\*965

查詢其他保險對象健保卡資料：

ATC5名稱  成份名稱  就醫區間  餘藥

藥品名稱  來源  本院  他院  藥局

項次	來源	ATC5名稱	成份名稱	藥品 健保代碼	藥品名稱	就醫日期 (住院用 藥起日)	慢速發 領藥日 (住院用 藥迄日)	藥品 用量	給藥 日數	單筆 餘藥 日數 試算
1	他院門診	Solutions Affecting The Electrolyte Balance	Sodium Chloride	AC48699209	Ktolac Injection 30mg/MI (Ketorolac)	102/01/10		12	8	0
2	他院門診	Fluoroquinolones	Moxifloxacin	A019799212	Pyridoxal Phosphate Injection "Tai Yu"	102/07/01	102/07/01	56	4	0
3	他院門診	Fluoroquinolones	Moxifloxacin	B023712265	Avelox Infusion Solution 400mg/250ml	102/01/01		56	4	0
4	他院門診	Fluoroquinolones	Moxifloxacin	B023712265	Avelox Infusion Solution 400mg/250ml	102/02/20		8	1	0
5	藥局	Solutions Affecting The Electrolyte Balance	Sodium Chloride	AC48699209	Ktolac Injection 30mg/MI (Ketorolac)	102/01/10		12	8	0
6	藥局	Solutions Affecting The Electrolyte Balance	Sodium Chloride	AC48699209	Ktolac Injection 30mg/MI (Ketorolac)	102/01/14		12	8	0
7	藥局	Solutions Affecting The Electrolyte Balance	Sodium Chloride	AC48699209	Ktolac Injection 30mg/MI (Ketorolac)	102/01/22		12	8	0
8	藥局	Solutions Affecting The Electrolyte Balance	Sodium Chloride	AC48699209	Ktolac Injection 30mg/MI (Ketorolac)	102/02/10		12	8	0
9	藥局	Solutions Affecting The Electrolyte Balance	Sodium Chloride	AC48699209	Ktolac Injection 30mg/MI (Ketorolac)	102/02/14		12	8	0



# Pharma Cloud Benefits

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- Offer comprehensive medication information to healthcare professionals to provide patients with high quality care
- Prevent duplication of prescriptions and **prescription fraud**
- Protect patients from drug interactions and dosage errors
- Save the cost of drug expenditure



# Development and applications

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- Upgrade the bandwidth of the VPN
- Continuous improvement of system stability and inquiry efficiency
- Allow the information to be downloaded into hospitals' system if patient's consent was obtained.
  - Integrate patients' allergy history and drug interaction alarm check into the HIS system of hospitals
- The application of the system will be gradually expanded
  - **2,459 hospitals and clinics** have the access to the system so far and increases continuously.
  - **2,492,698 patients** were inquired until **September 2014**.



# Future Perspectives





# Solution for Healthcare

Insured

## My Health Bank

Outpatient,  
Inpatient,  
Prescriptions,  
Medical Test,  
Rehabilitation

## NHI Pharma Cloud

Prescriptions, Prevent  
and Drug Interaction

## ODS

Outliers Detection  
System

Providers

## Quality Relevant

Routine Statistical Reports, Quality Index  
revealed

## Information Querying

Fee Schedule, Drug, Self-paid Medical Devices  
etc.



# Next step in the Healthcare

Microsoft



Softbank

ソフトバンクで、健康生活。  
毎日のカラダの状態をチェックして、より健康的な自分を  
目指しましょう。

Fitbit Flex      スマート体組成計 SoftBank 301S

Apple



Google

Security Channel

## Healthcare Platform

Prevention

Health Promotion

Medical Records

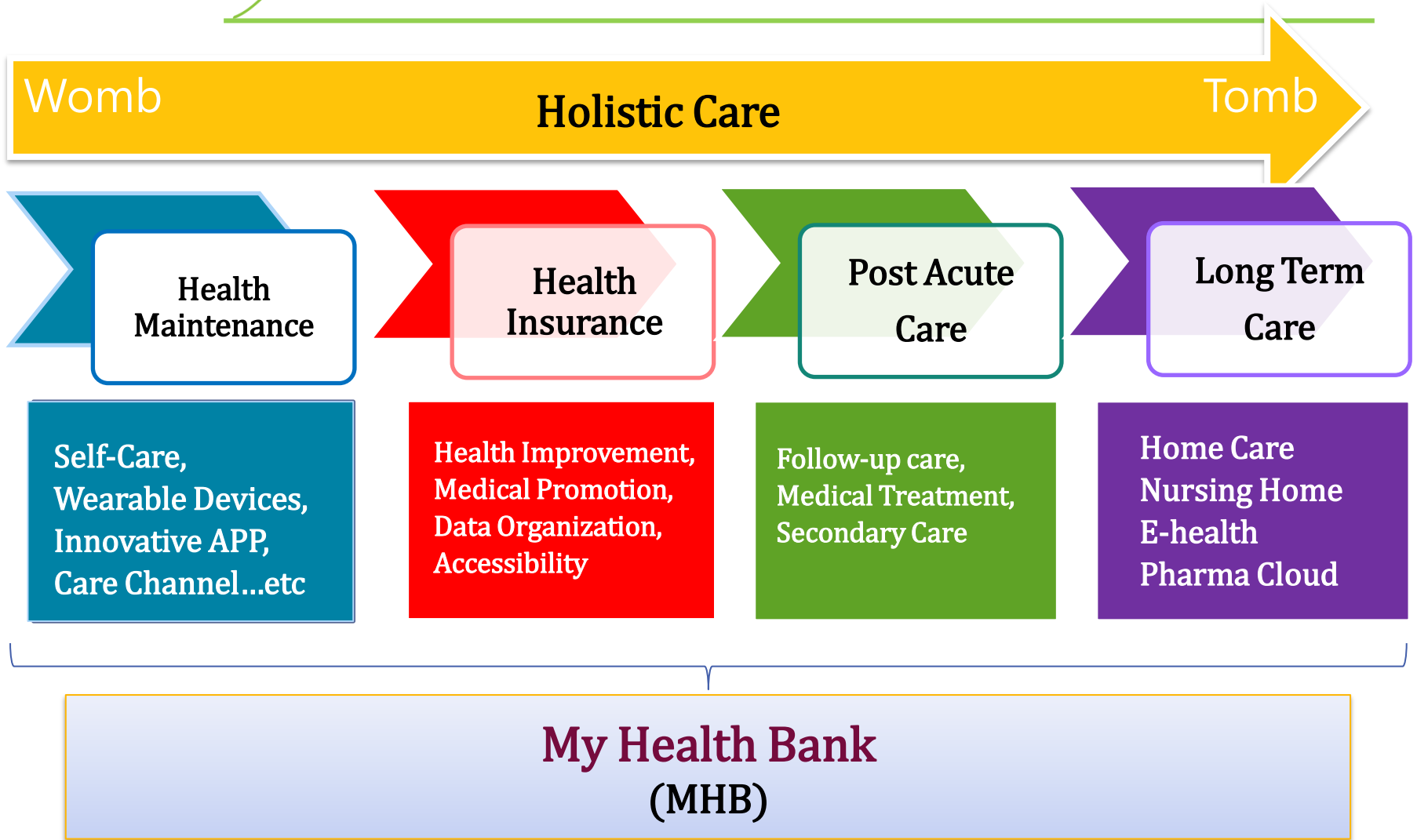
L.T.C.

Hospice





# Vision to Holistic Care





*Thanks For Your Attention*

Chia-Ming Lake (the Tears of Angel) Taiwan photo by Joe Joe Huang