

# Understanding the Taiwanese Health Care System

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# Project Overview

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Background

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Finance

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Delivery

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Technology

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Pharmaceutical

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Compare & contrast with the US Health  
Care System

# Aims

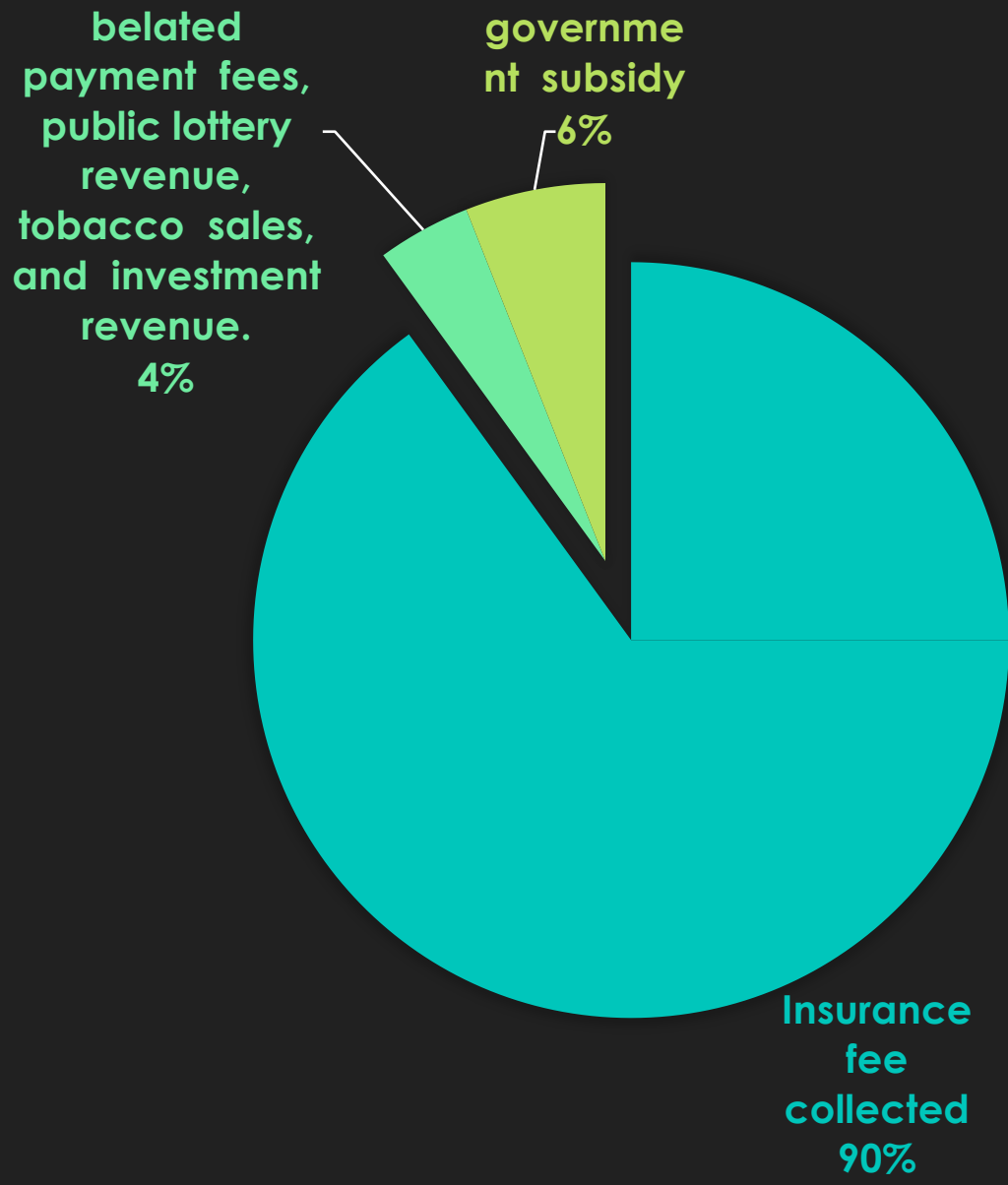
- From 1997-2010, US Health Expenditure increased ~122% (2010, 8889 USD/person)
  - Taiwan increased ~66% (2010, 1324 USD/person)
  - US has the highest Health Expenditure from 1997- 2010
  - Total Health Expenditure of GDP, US 17.85% (Taiwan 6.61%)

# Background

- ! Population: 23 million
- ! Area: 35,980 sq km (smaller than New York)
- ! National Health Care implemented in 1995
  - ! 99.9% Coverage
  - ! Approval Rating: 80%
  - ! Copayment: 3 USD (outpatient service), 30 USD (inpatient service)



Finance



# GDP (Healthcare)

US: 17.9%

Taiwan: 6.2%

gross

product

domestic

unit: billion NTD

	2012	2013	2014	2015	2016	2017
<b>(A) TOTAL REVENUE</b>	<b>5072</b>	<b>5750</b>	<b>5993</b>	<b>6036</b>	<b>5753</b>	<b>5908</b>
Insurance fee revenue	4827	4663	4769	4799	4691	4787
Additional insurance fee	0	398	466	475	443	460
Government subsidize	0	430	510	533	430	487
Bad debts	A31	A37	A38	A40	A39	A39
OTHER INCOME	276	296	285	269	228	214
belated payment	2	2	3	4	3	3
public lottery revenue	14	18	16	17	13	14
tobacco sales revenue	239	248	229	209	172	155
investment revenue	5	8	10	14	13	14
other revenue	16	19	26	25	27	28
<b>(B) INSURANCE COST</b>	<b>4806</b>	<b>5021</b>	<b>5181</b>	<b>5381</b>	<b>5684</b>	<b>6018</b>
AAB	265	728	811	655	70	-110



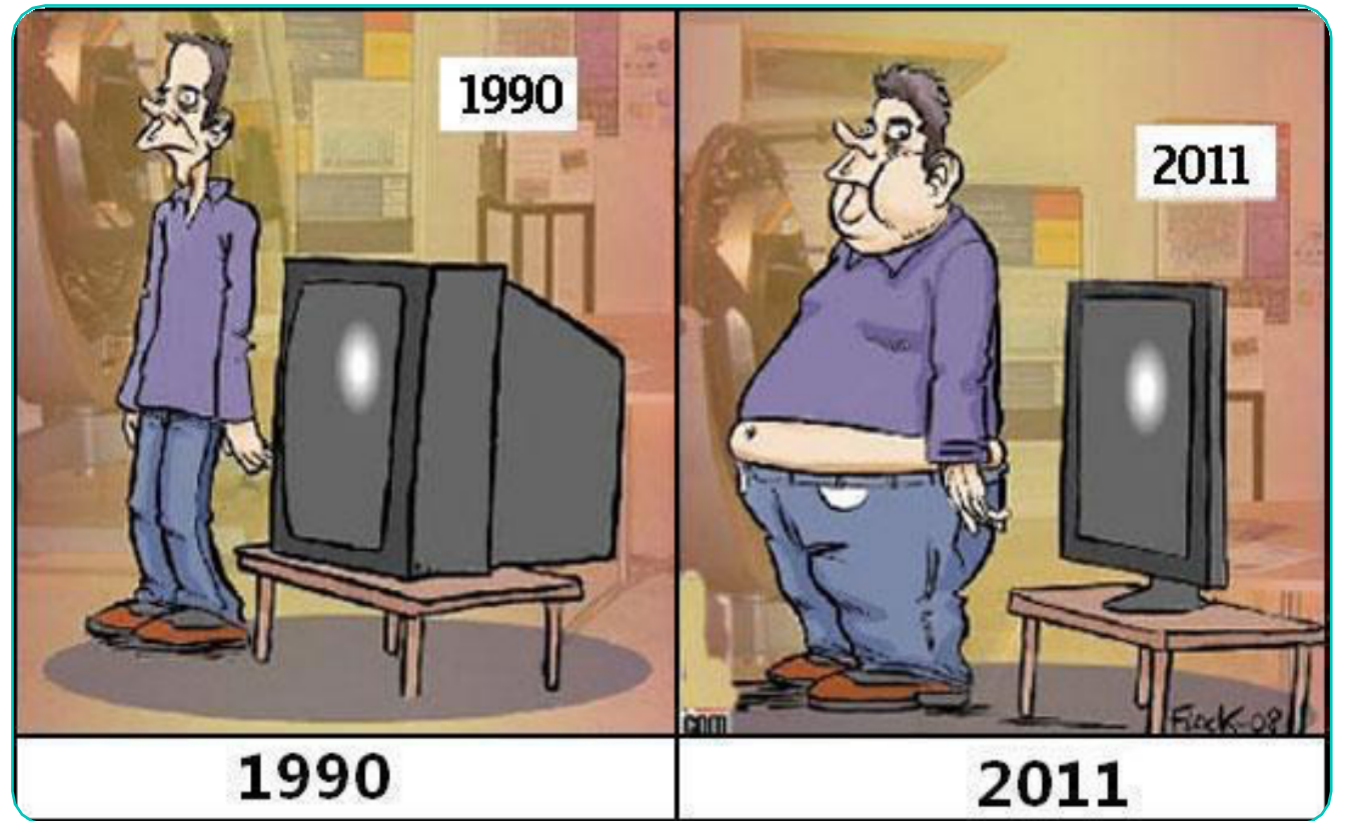
# Delivery

Accessibility, % of doctors, % of clinics/hospitals

	Taiwan	US
Hospital Beds per person	0.007	0.002
Physicians	49019	870,900
# of physicians/100 people	1.7	2.5
Average Hospitalized days	9.9	6.1
Hospitals	486	6200
Private Medical Practices	11452	230,187

## Taiwan vs US

# Technology





全民健康保險  
NATIONAL HEALTH INSURANCE



Very Healthy

G123456789  
70/01/01



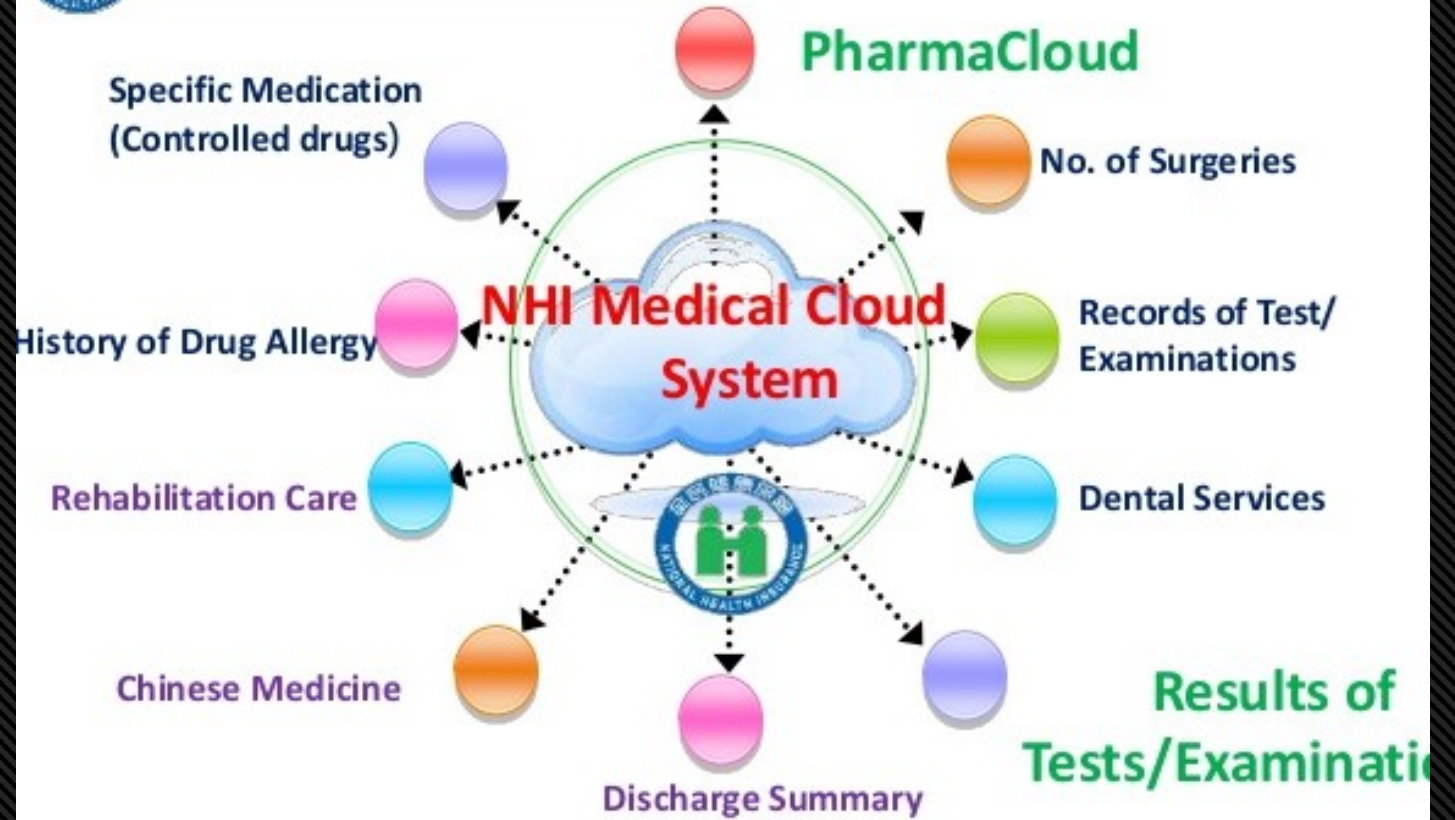
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# NHI Medi-Cloud System---Real Time!!



National Health Insurance Administration



# Pharmaceuticals



Approved by FDA



“Suggest drug to NHI”



Check documents, ask for advice from experts, ask for opinions from patients



Release preliminary results, discuss with companies



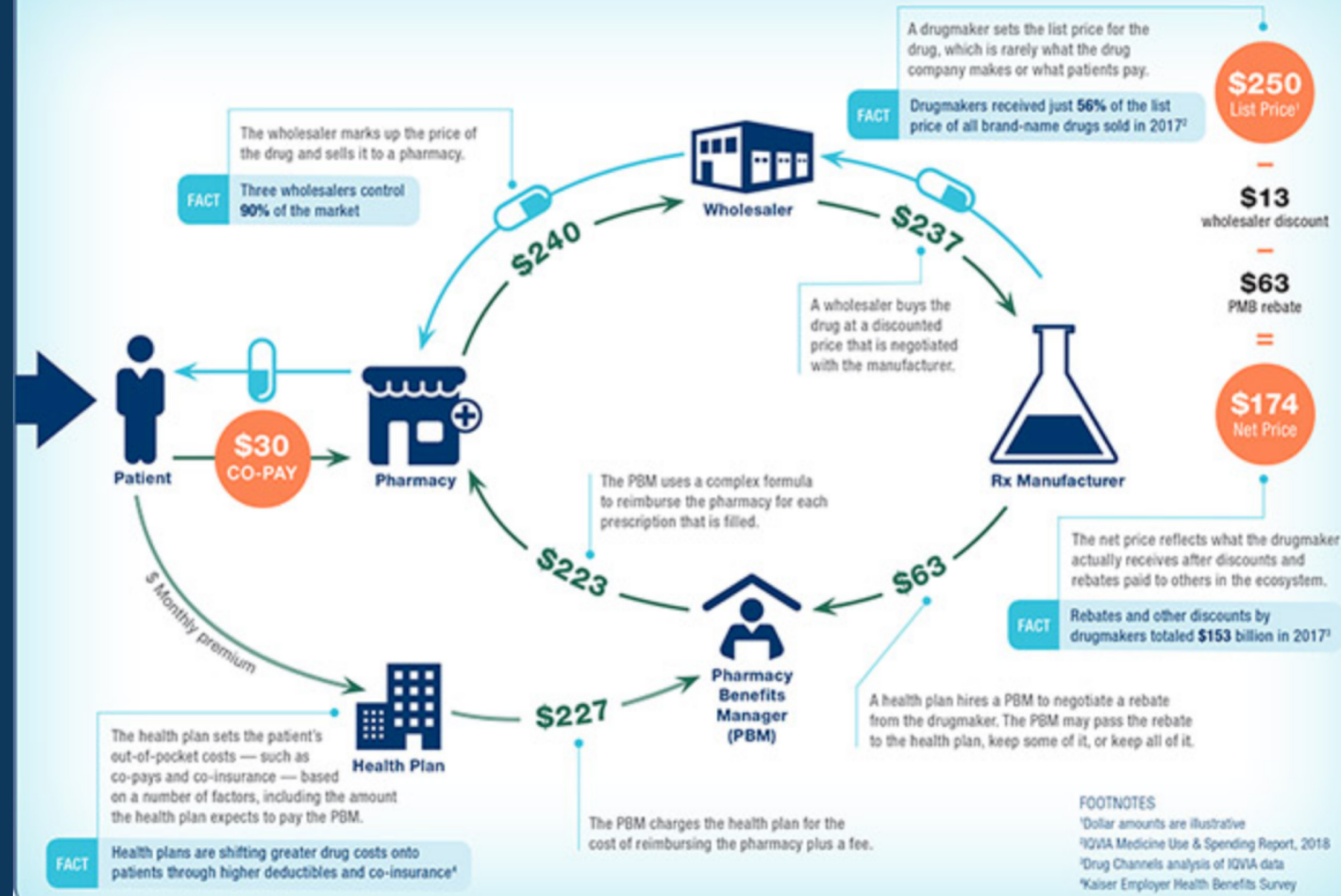
[Rare] If companies refuse, but there is a demand for the drug. Further negotiation.



Sets price, decides coverage

# Follow the Pill

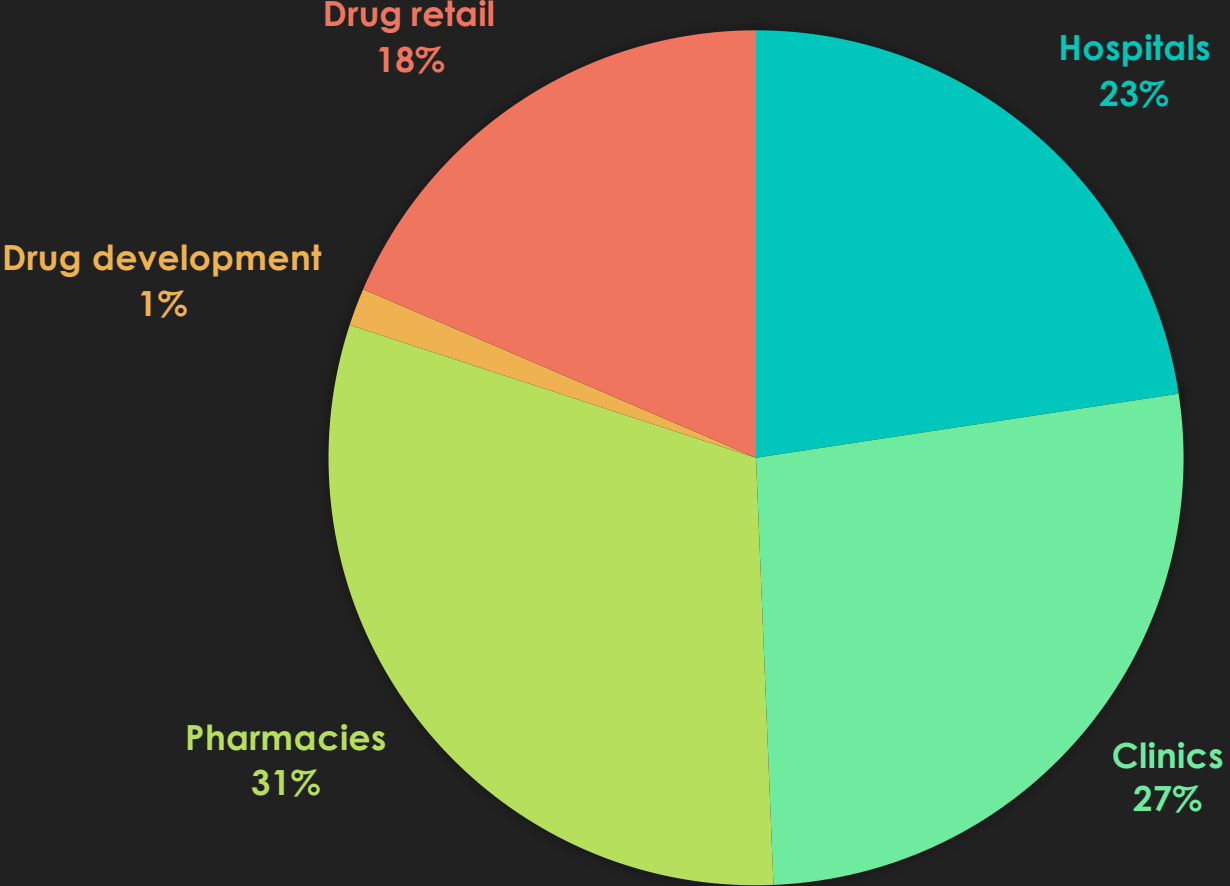
Multiple actors impact what patients pay for prescription drugs. This is a snapshot of how the drug cost ecosystem works. It provides a simplified example of how medicines get to the pharmacy, and it shows how patients' out-of-pocket costs are determined by health plans and other middlemen within the system.





# PHARMACISTS

23,162 Pharmacists  
6839 Assistant pharmacists



	US approval date	Taiwan Approval date	NHI full coverage	Estimated Savings	Patent expiration	NHI approved before patent expiration
Promataca	2008	2010	2018	2.2 million (2500 USD/month)	2019	YES
SigniforLar	2014	2015	2018	4500 USD/month	2016	NO
Epculsa	2016	2018	2019	-	2028	YES
Kadcyla	2013	2013	-	-	2032	N/A
Everolimus	2009	2015	2011	-	2019	YES

# Significance

## Pros

- ! Accessible
- ! Affordable (Care, Drugs)
- ! Short wait times
- ! Powerful database
- ! Equal right to care, regardless of status
- ! Uniform and comprehensive care
- ! Adequate pharmacists

## Cons

- ! Wasted resources/System abused
- ! Overworked and underpaid health professionals
- ! Lack of resources in innovation
- ! Slower access to drugs
- ! Shorter consultation times
- ! poor gatekeeping of specialist services

# Lessons Learned

- ! Be "consciously" aware of bias
- ! Evaluate data sources
- ! Be careful of numbers (years, currency)

# Acknowledgements

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