

The Role of NHIA in Combating the Development of Antimicrobial Resistance in Taiwan



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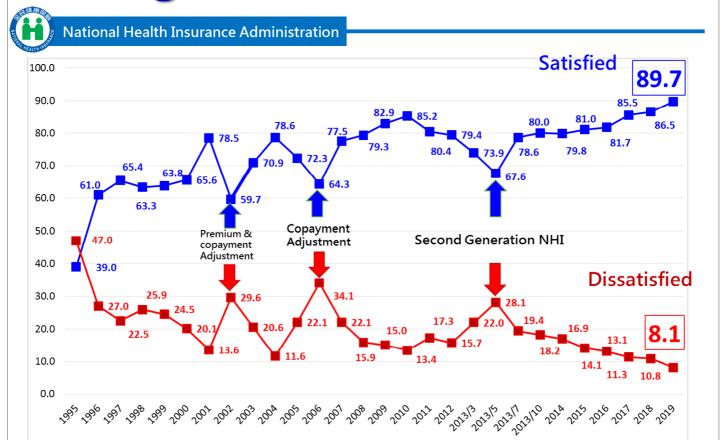
NHI Characteristics



National Health Insurance Administration

	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	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			

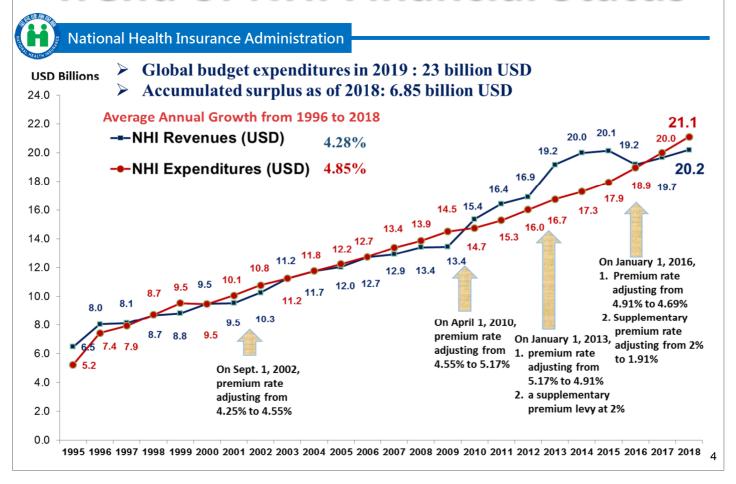
High Public Satisfaction

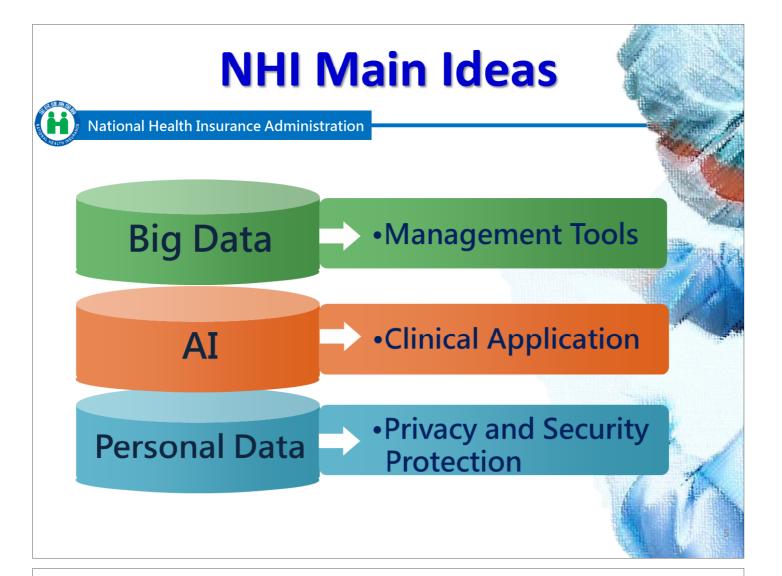


Trend of NHI Financial Status

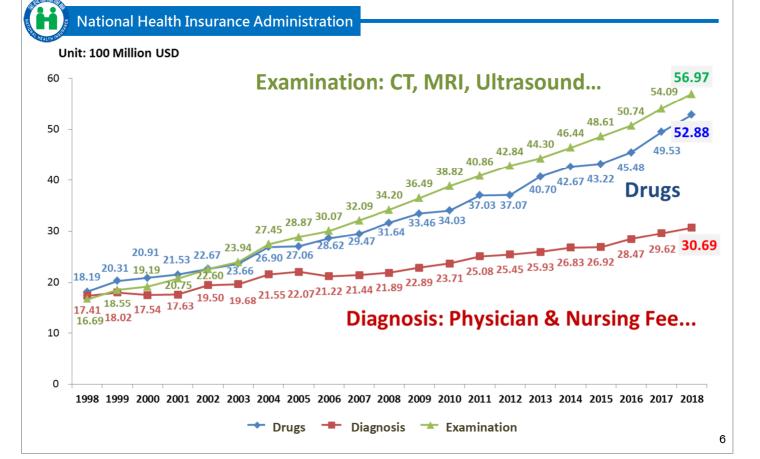
Satisfied Dissatisfied

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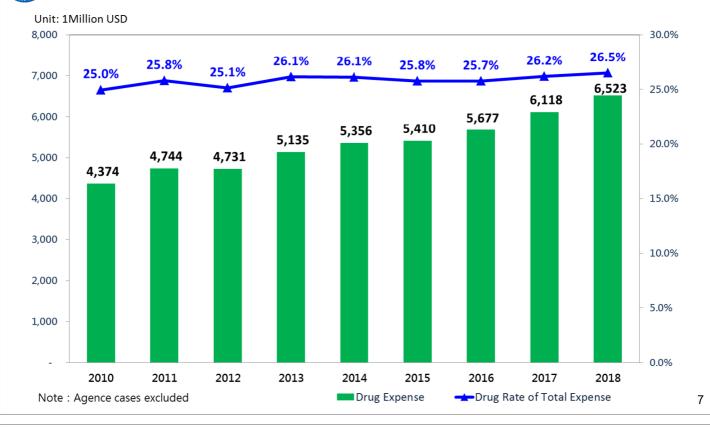


Overview of Outpatient Expenditures



Trend of Drug Expense & Drug Rate of Total Expense

National Health Insurance Administration



Preventing Antimicrobial Resistance



Reimbursement regulation for prudent use of antimicrobials

Medical claims review of antimicrobial prescriptions

Medical quality indicators of antimicrobials

NHI Expenditure on Antimicrobials



Unit: 1 Million USD

	2012	2013	2014	2015	2016	2017	2018
Hospitals	295.3 (97%)	310.2 (97%)	317.2 (97%)	302.8 (97%)	316.8 (97%)	319.6 (97%)	323.0 (96%)
Clinics	9.3 (3%)	9.8 (3%)	10.5 (3%)	10.6 (3%)	11.4 (3%)	11.6 (3%)	12.1 (4%)

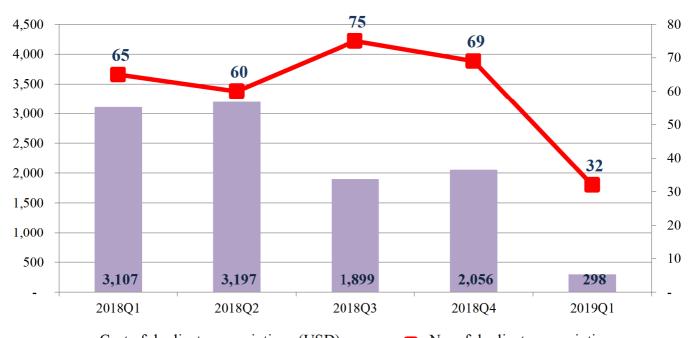
Note: Drugs with ATC code starting with J01 are included

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Medical claims review -- No. of Duplicate Antimicrobials Prescriptions & Saving Cost



National Health Insurance Administration



Cost of duplicate prescriptions (USD)

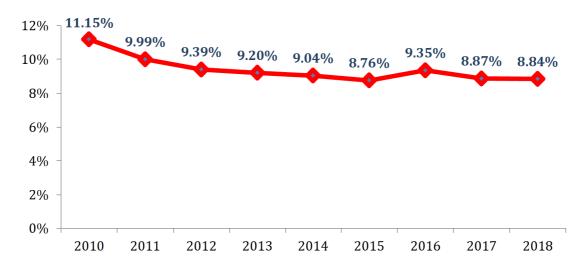
No. of duplicate prescriptions

Medical quality indicators -- Rate of Prescribing Antimicrobials for More than 3 days in Patients Undergone Clean Surgery



National Health Insurance Administration

■ Hospital: 11.15% in 2010, declined steadily to 8.84% (2018) with the total drop of 2.31%



Definition: cases of prescribing antibiotic for more than 3 days / total case of clean surgery

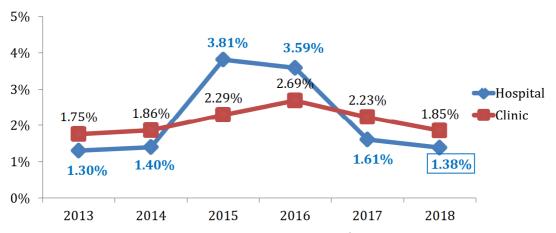
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Medical quality indicators -- Rate of Cases Using Fluoroquinolones for Sinusitis



National Health Insurance Administration

- Hospital: rise sharply from 1.40% to 3.18% in 2015 then declined to 1.38% in 2018
- ☐ Clinic: increased steadily from 1.75% to 2.69% and slightly dropped to 1.85% in 2018



Definition: cases of used the Fluoroquinolones / cases of sinusitis

Incentives in Pricing of New Drugs



National Health Insurance Administration

■Encourage local development of new drugs

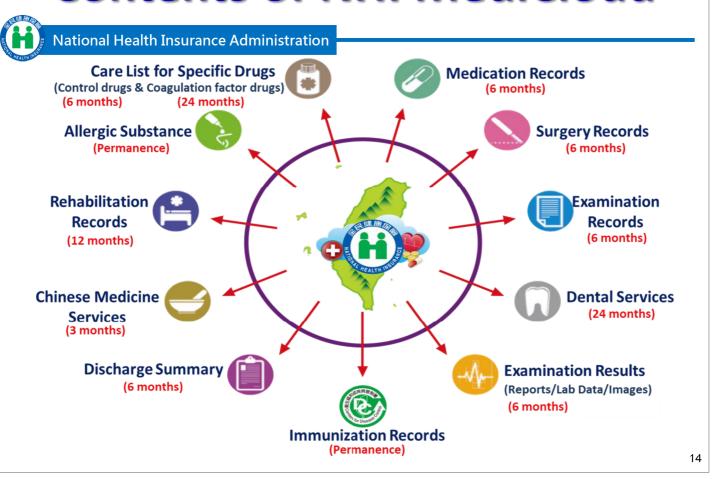
Criteria	Mark-ups		
Performing domestic clinical trials	10%		
Conducting domestic pharmaco-economic (PE) study	Up to 10%		

■Encourage innovation

Criteria	Mark-ups
Superior therapeutic effects, better safety, favorable dosage forms of children's medications compared to the chosen comparators	Up to 15% for each criterion
Better convenience (ex: longer dosing interval, better route of administration, etc.)	Up to 15%

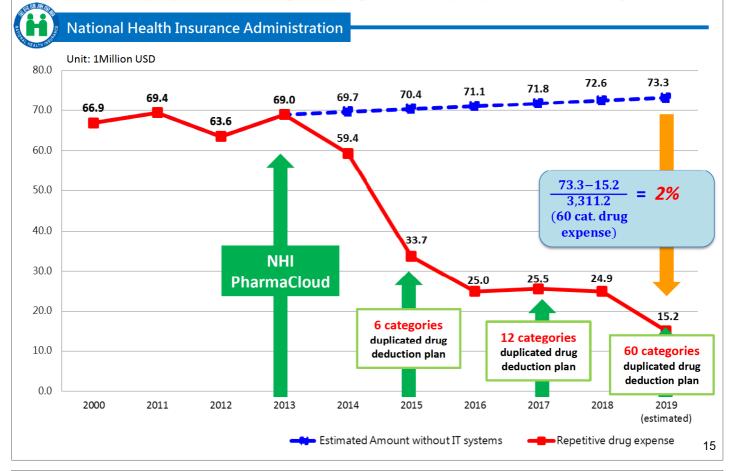
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Contents of NHI MediCloud



Effectiveness of Cost Reduction due to Duplicated Prescription

Remain by Application Programming Interface (API) PharmaCloud System

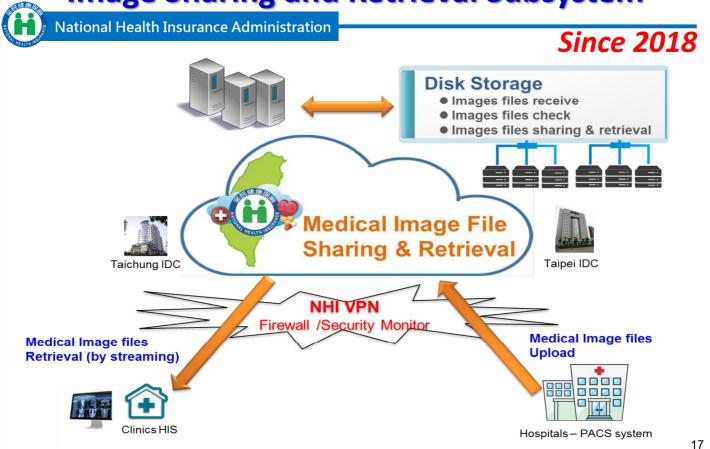


Screenshots of Sharing Medical Images

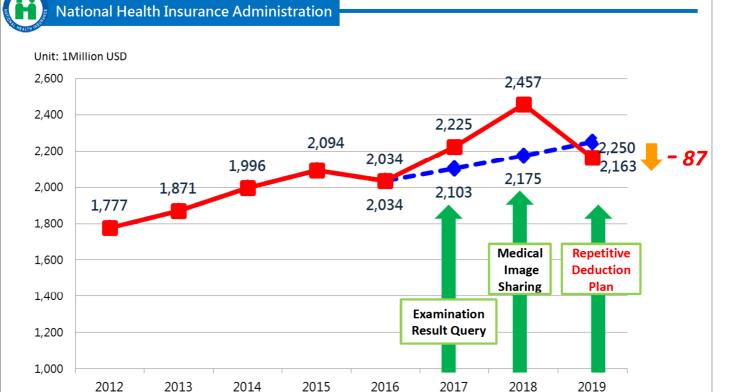




Overall Architecture Diagram of Medical Image Sharing and Retrieval Subsystem



Effectiveness of Cost Reduction due to Repeated **Examination after Medical Images Sharing System**



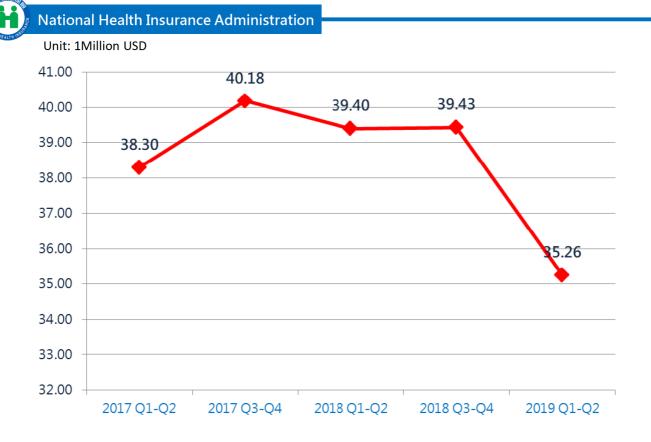
Examination claim fee

Estimated Fee

(estimated)

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Effectiveness of Cost Reduction due to Repeated Examination after Medical Images Sharing System within 28 days



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

National Health Insurance Administration



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