The Impact of Taiwan NHI’s 20-Year Journey: How has the market responded and will respond?

Taiwan National Health Insurance: Overview and Future Challenges

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Taiwan
Taiwan - 2014

• Socio-economic and demographic characteristics
  
  – **High-income economy**
    • GDP per capita: USD 20,958 (ranked 36th, IMF)
    • 6.61% of GDP on health (2%+ since 1994)
  
  – **Rapid aging population**
    • 12.0% (of 23.43m) aged 65+
    • Low fertility rate
      – **Total fertility rate: among the lowest**
        » TFR: 1.065 (2012: 1.270)
    • Good life expectancy
      – M/F: 76.9/83.4

NHI in Taiwan

“A car, with parts imported from countries around the world, but domestically made in Taiwan”

- Hong-Jen Chang, former CEO of BNHI
Taiwan tops the expat health care chart
(2014 HSBC Expat Explorer Survey)
Taiwan, which moved 10 years ago from a U.S.-style system to a Canadian-style single-payer system, offers an object lesson in the economic advantages of universal coverage. In 1995 less than 60 percent of Taiwan’s residents had health insurance; by 2001 the number was 97 percent. Yet according to a careful study published in Health Affairs two years ago, this huge expansion in coverage came virtually free: it led to little if any increase in overall health care spending beyond normal growth due to rising population and incomes.

Before you dismiss Taiwan as a faraway place of which we know nothing, remember Chile-mania: just a few months ago, during the Bush administration’s failed attempt to privatize Social Security, commentators across the country - independent thinkers all, I’m sure - joined in a chorus of ill-informed praise for Chile’s private retirement accounts. (It turns out that Chile’s system has a lot of problems.) Taiwan has more people and a much bigger economy than Chile, and its experience is a lot more relevant to America’s real problems.
PBS production by T.R. Reid

http://www.pbs.org/wgbh/pages/frontline/sickaroundtheworld/
T.R. Reid -- Former Washington Post bureau chief in London and Tokyo, T.R. Reid has spent a lot of time abroad studying foreign cultures.
Tagging along with Tsung-Mei Cheng, an expert on Taiwan’s health system, on her recent visit to Taiwan’s Bureau of National Health Insurance, turned out to be a bit humbling for me as someone who focuses mainly on the US health system.

The bureau is the government agency that administers Taiwan’s single-payer national health insurance system. Its staff members first when hospitals and walk-in clinics fail to submit completed claims within the required 24 hours after delivery of service. Private health insurance companies in the United States count themselves lucky if high priced actuaries can tell them in the middle of the year what the carrier ultimately will have to pay the providers of health care for services rendered in the previous year. Taiwan’s bureau can track almost in real time what goes on in the nation’s health care system. In the US even a vague idea of what has been going on a year or two ago can be in Taiwan jumped from roughly 57% of the population before 1 March 1995 to virtually the entire population. For US policymakers and presidential contenders—who for half a century now have engaged in a perpetual “national conversation” on universal health insurance, only to see the number of uninsured people grow at pace over the years—the speed of Taiwan’s move to a national health insurance system seems downright surreal.

Taiwan’s system is financed in roughly equal share by the government, employers, and households in a complex scheme that includes subsidies, payroll taxes, and premiums paid by self-employed people. Health care is delivered by a mixed system that includes private clinics, private nonprofit hospitals, and public hospitals, among which patients have full freedom of choice. The main tool for cost containment has been sectoral global budgets, while effective in the shot run,

top tier, US style care for the rich funded by private insurance, a social insurance system for the employed middle class with highly variable quality of care, and much less or nothing for millions of uninsured poorer citizens.

Taiwan could much improve its health system by allocating an additional, say, 1-2% of its gross domestic product to health care. Some of the additional funds could be used to reduce patients’ own spending, which is still higher than that in most European nations. Furthermore, much more should be allocated to the administrative budget of the Bureau of National Health Insurance, which now accounts for only an inadequate 1.5% of total spending on the health insurance system, compared with the 10% to 12% that premium commercial insurers in the US spend on administration, in addition to another 8% or so for marketing and profits. Recent research indicates that Taiwan’s health care system devotes
Moving to the Cloud

Source: Huang (2015)
THE BIRTH OF TAIWAN’s NHI

Miraculous economic growth in the 1980’s

per capita GNP in US$100

Coverage rate (%)

per capita GNP and Coverage Rate


per capita GNP

Coverage Rate

NHI Law

Source: TL Chiang
Taiwan NHI – Major Features

• Public single-payer approach
  – National Health Insurance Administration
    • Uniform fee schedule, payment varies by accreditation level of providers
    – Mainly FFS-based under global budget
    – DRG gradually phased in

• Compulsory payroll-tax financed
• Comprehensive service coverage
• Freedom of choice
Taiwan NHI – Major Features

• Public single-payer approach
  – National Health Insurance Administration

• Compulsory payroll-tax financed
  – Plus a supplementary tax levied on 6 categories of non-payroll income introduced in 2013
  – Supplemented by government direct subsidies (25%) and employer contributions (38%)

• Comprehensive service coverage

• Freedom of choice
Dual-track premium system

Basic premium
- Premium rate: 4.69%
- Premium base: payroll

Supplementary premium
- Premium rate: 1.91%
- Premium base: 6 categories of non-payroll income
Taiwan NHI – Major Features

• Public single-payer approach
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    • Government direct subsidies (25%)
    • Employer contributions (38%)

• Comprehensive service coverage

• Freedom of choice
### Health care use and supply of physicians, 2013

An average of 12 visits per capita

<table>
<thead>
<tr>
<th>Country</th>
<th>No. of physician visits per capita</th>
<th>No. of physicians per 1,000 population</th>
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<tbody>
<tr>
<td>Korea</td>
<td>14.6</td>
<td>2.17</td>
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<tr>
<td>Japan</td>
<td>12.9</td>
<td>2.29</td>
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<tr>
<td>Taiwan</td>
<td>12.1</td>
<td>1.79</td>
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<td>Germany</td>
<td>9.9</td>
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<td>Canada</td>
<td>7.7</td>
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<tr>
<td>Australia</td>
<td>7.1</td>
<td>3.39</td>
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<tr>
<td>France</td>
<td>6.4</td>
<td>3.1</td>
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<tr>
<td>United States</td>
<td>4.0</td>
<td>2.56</td>
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<tr>
<td>Finland</td>
<td>2.6</td>
<td>3.02</td>
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<tr>
<td>OECD average</td>
<td>6.6</td>
<td>2.80</td>
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<td>OECD median</td>
<td>6.4</td>
<td>2.76</td>
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OECD avg: 8.2 visits

**Data source:** OECD Health Data, 2015; Data for Taiwan, MOHW 2013
For physician visits, year of data for Japan and Canada is 2012 and for US is 2010. For physician-population ratio, year of data for Japan and Canada is 2012.

High no. of visits (OECD avg 8.2 visits) produced by a rather small no. of physicians.
Market-Driven Delivery System

- Predominant private sector
  - 84% of hospitals and 66% of hospital beds
- Large hospital OPD
  - Compete with clinics in ambulatory services
- Lack of coordination in service provision
- No gate-keeping mechanism
Financial insolvency and inequity
NHI premium income and medical expenditure

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<tr>
<th>Year</th>
<th>Premium revenues</th>
<th>Medical benefits</th>
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<td>1995</td>
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<td>2012</td>
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“Consensus”

• No bankruptcy
• No cut-back on benefits
• No increase in premium

健保不能倒、給付不能少、保費不能調
NHI premium income and medical expenditure

System performance assessment

- Public satisfaction rate
- Efficiency
- Equity
High Public Satisfaction

Source: NHIA, 2015
Taiwan NHI – System performance

• Efficiency
  – Administrative efficiency
    • Uniform schedule, claim filing procedures
    • IC Smard card for real-time monitor
    • Adm exp: 1.07% (total medical bill)
      – Adm exp is a separate budget appropriated by the government
  – Allocative efficiency?
    • Geographical location
    • Service sectors
  – Technical efficiency?
    • High no. of visits produced by a rather small no. of physicians
Progressivity indices for Taiwan, 1994-2014

Kakwani > 0, rich people are paying more
Kakwani < 0, poor people are paying more

Social insurance - proportionally distributed in 2006-2009; pro rich, 2010-2014
OOP payment - proportionally distributed in 2008-2014
No. of valid commercial health insurance policies per capita and per capita national income, 1979-2014

Source: No. of valid commercial health insurance policies per capita: Annual report of life insurance Republic of China 2014, Taiwan Insurance Institute. Per capita national income: Directorate-General of Budget, Accounting and Statistics, Executive Yuan, ROC.

Statistical significant, $p<0.05$

Statistical insignificant, $p>0.05$
Unintended system responses

• **Fragmented delivery system**
  – Dominated by *private sector providers*
  – Overuse (abusive uses) of the finite sources
    • 15 OPD visits per insured per year!
    • Futile care
      – USD 2b+ on renal dialysis and ventilation

• **Distortion in specialty choices**
  – Difficulty in recruiting residents for major specialties
Unintended system responses

• Impact on service market
  – Declining trend for small private hospitals
  – Expansion of large-scale hospitals

Polarized patient service-seeking behavior
Thanks for your attention