Risk equalisation in voluntary health insurance markets: a three country comparison

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Outline:

1. Editorial: ‘Risk equalisation in voluntary health insurance markets’ (Armstrong, Paolucci, van de Ven);

2. ‘Risk equalisation and voluntary health insurance markets: The case of Australia’ (Connelly, Paolucci, Butler, Collins);

3. ‘Risk equalisation and voluntary health insurance in Ireland’ (Armstrong);

4. ‘Risk equalisation in the South African voluntary health insurance market’ (McLeod, Grobler);

5. Risk equalisation in voluntary health insurance markets: a three country comparison.
1. Overview of *health financing* in the 3-countries;

2. Voluntary private health insurance (*VPHI*) and risk-equalisation (*RE*) in the 3-countries;

3. Conclusions and discussion.
Part 1.

Overview of health financing in the 3-countries
Australia (1)

- **Mix of public-private financing & delivery** of health services:
  - Out-of-pocket payments. (24% of THE).
  - Competitive **VPHI**. (8% of THE).
Australia (2)

- **Medicare (1984):**
  - Tax funded universal mandatory coverage;
  - ‘Free’ treatment as a public patient in a public hospital;
  - Subsidies for private medical services (Medicare Benefits Schedule) and pharmaceuticals (Pharmaceutical Benefits Scheme).
Australia (3)

- Competitive **VPHI**:
  - *Supplementary* coverage for (parts of) the costs of services not covered by Medicare (e.g. hospital charges levied by private hospitals);
  - *Duplicate* coverage for the costs of services (partly) covered by Medicare;
  - *Non*-substitutive;
  - Individual-based insurance;

- Out-of-pocket payments:
  - VPHI-Deductibles, POS-copayments.
Ireland (1)

- Public/private mix of funding & delivery of healthcare (almost identical to Australia):
  - Tax-funded public health insurance scheme;
  - VPHI market;
  - Out of pocket expenditures.
Ireland (2)

- **VPHI market** commenced in 1957 with establishment of *Vhi Healthcare* & provides:
  
  - *Duplicative* coverage to universal entitlement of public hospitals*;
  
  - *Substitutive* GP-care coverage for non-Medical Card holders;
  
  - *Supplementary* coverage.
  
  - Employer based schemes (60%) or directly by individuals.
## South Africa (1)

### Public/private financing & delivery of healthcare:

<table>
<thead>
<tr>
<th>Public sector (40% of THE)</th>
<th>Private sector (60% of THE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universal tax-funded with allocated budgets for public healthcare facilities.</td>
<td>VPHI market (1889) known as ‘medical schemes’ since 1967 covering on a voluntary basis 15% of the population (i.e. high-income groups)</td>
</tr>
<tr>
<td>64% of the population depends on it for all conventional healthcare services</td>
<td>A further 21% of the population use private GP and pharmacies on OOP-basis and for the rest relies on the public scheme</td>
</tr>
<tr>
<td>Salaried staff</td>
<td>FFS</td>
</tr>
<tr>
<td>Care is virtually ‘free’ at the point of service for unemployed and low-income people (e.g. user charges with exemption policies)</td>
<td>Deductibles and copayments</td>
</tr>
</tbody>
</table>
**VPHI features:**

- *Substitutive* coverage & delivery via private healthcare providers, predominantly fee-for-service.

- Not for-profit MS, owned by their members.

- **Brokers** are paid commissions for taking members to open schemes – 9,742 individual health brokers while there are only 7,000 GPs.

- Fiercely competitive market (i.e. high switching rates).
Part 2.

VPHI & RE in the 3-countries
## Outline of VPHI markets

<table>
<thead>
<tr>
<th></th>
<th>Australia</th>
<th>Ireland</th>
<th>South Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>% population covered by VPHI</td>
<td>47%</td>
<td>52%</td>
<td>15%</td>
</tr>
<tr>
<td>People covered by VPHI</td>
<td>10.9 million</td>
<td>2.2 million</td>
<td>7.8 million</td>
</tr>
<tr>
<td>VPHI expenses as % of total national hc expenses</td>
<td>8%</td>
<td>12%</td>
<td>55%</td>
</tr>
<tr>
<td>Do consumers have free choice of insurer to enroll within?</td>
<td>Yes, 93% are in open schemes</td>
<td>Yes, 95% are in open schemes</td>
<td>Yes, 67% enrolees in open schemes</td>
</tr>
<tr>
<td>Financial responsibility of individual insurance entities</td>
<td><strong>Very low.</strong> Costs &gt;AU$50,000 are shared.</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>Australia</td>
<td>Ireland</td>
<td>South Africa</td>
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<tr>
<td>--------------------------------</td>
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</tr>
<tr>
<td><strong>Number of open undertakings</strong></td>
<td>25</td>
<td>3</td>
<td>41</td>
</tr>
<tr>
<td><strong>Market share largest insurer</strong></td>
<td>30%</td>
<td>66%</td>
<td>25%</td>
</tr>
<tr>
<td><strong>Market share largest 4 insurers</strong></td>
<td>70%</td>
<td>100%</td>
<td>44%</td>
</tr>
<tr>
<td><strong>Premium subsidies and/or tax-credits for PHI purchase?</strong></td>
<td>Yes (Rebate and Medicare Levy Surcharge)</td>
<td>Yes</td>
<td>Yes (but no subsidies for people earning below tax-threshold)</td>
</tr>
<tr>
<td><strong>Premium restrictions?</strong></td>
<td>Community-rated premiums</td>
<td>Community-rated premiums</td>
<td>Community-rated premiums</td>
</tr>
<tr>
<td><strong>Flexibility for benefit package design</strong></td>
<td>Very high</td>
<td>Very high</td>
<td>Very high</td>
</tr>
</tbody>
</table>
Flexibility for benefit package design is an effective tool for market segmentation and thereby undermines community rating: indirect premium differentiation via product differentiation.

Adverse and risk selection are significant problems!
## Risk selection: tools

<table>
<thead>
<tr>
<th>Preferred risk selection by insurers</th>
<th>Australia</th>
<th>Ireland</th>
<th>South Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Selective advertising;</td>
<td>▪ Selective marketing;</td>
<td>▪ Selective marketing;</td>
<td></td>
</tr>
<tr>
<td>▪ Premium differentiation via</td>
<td>▪ Restricted product enhancement;</td>
<td>▪ Benefits above the prescribed minimum benefits.</td>
<td></td>
</tr>
<tr>
<td>Product differentiation;</td>
<td>▪ Voluntary deductibles.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ Voluntary deductibles.</td>
<td></td>
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</table>
Subsidising VPHI: HOW?

- Competitive VPHI markets require the enforcement of regulations/subsidies to achieve affordability, efficiency and prevent selection.

- The current forms of subsidies for VPHI in the 3 countries:
  
a. Premium-adjusted subsidies;
b. Community rating per insurer per product;
c. Risk-adjusted subsidies (e.g. risk-equalisation)?
a. Premium-adjusted subsidies

- Effective in achieving affordability.

- But, not optimal:
  - They reduce the consumers’ and insurers’ incentives for efficiency:
    - Less effective price-competition and risk of *premium inflation*;
    - A welfare loss because of the *moral hazard* due to over-insurance.
  - They create a *misallocation* of subsidies.

→ tradeoff affordability - efficiency
b. Community rating

- **Goal:** to create implicit cross-subsidies from the low-risks to the high-risks.

- **Effect:** Such pooling of people with different risks creates substantial predictable profits and losses for subgroups and thereby create incentives for *risk-selection*.

→ tradeoff affordability - selection
c. Risk-equalisation

- A usual definition of **risk equalisation**: ‘A mechanism to **equalise** the risk profiles among insurers with the objective that the **ex-ante** risk profiles of each insurer become identical.’

- This is done by calculating premium **subsidies** based on **risk-adjusted predicted** individual health expenses. These subsidies are given to the insurer who deducts it from the premium of the relevant consumer.
Modalities of risk equalisation

Modality 1:

REF

Consumer → Insurer
C ← S

Modality 2:

REF

Consumer → Insurer
P-S+C

S-C

C=Contribution; S=Subsidy; P=Premium.
Effects of RE

- Eliminate incentives for risk-selection;
- No distortions of premium competition (efficiency);
- Achieve affordability in competitive PHI markets.
Although in Australia it is called ‘risk equalisation’, it is a claims cost equalisation (CE):

‘A mechanism to equalise the claims-costs among insurers with the objective that the ex-post costs per person of each insurer become identical.’

This is done by enforcing ex-post costs-based compensations between insurers.
Services covered under the Australian scheme (figures in parentheses are the proportion of the total benefits being equalised):

- Hospital benefits (97.6%)
- Hospital substitute benefits (0.05%)
- Chronic Disease Management Program benefits (0.07%)
- High Cost Claimant benefits (2.28%)
Sum of payments into the RETF = Sum of payments out of the RTF (zero sum game)

Individual insurers make or receive a net transfer, depending on claims experience

All insurers notionally deposit into AND withdraw from the RETF
‘Risk’ vs. ‘Claims cost’

- **Risk equalisation:**
  A mechanism to equalise the risk profiles among insurers with the objective that the *ex-ante* risk profiles of each insurer become identical.

- **Claims cost equalisation:**
  A mechanism to equalise the claims cost among insurers with the objective that the *ex-post* costs per person of each insurer become identical.
Effects of CE

- Highly imperfect matching with the ‘true’ risk structure of insurers’ population resulting in over/under compensations (i.e. misallocation of subsidies).
- Strong incentives for selection (historically a constant threat to the stability of PHI market in Australia).
- Lack of incentives for efficiency.
The preferred strategy

- **Effects of PAS’ and ‘CE’**: reduction of incentives for efficiency;

- **Effects of ‘CRP’**: risk selection; and premium differentiation via product differentiation.

- Risk equalisation (RE) first-best strategy to escape from the tradeoffs between affordability, efficiency and selection (van de Ven & Schut 2008-7; Paolucci et al. 2006):
  - In the case of perfect risk equalisation there is no need for any other strategy and no tradeoff exists.
  - Each of the other strategies inevitably confronts policymakers with a tradeoff.
## ‘Risk Equalisation’

<table>
<thead>
<tr>
<th></th>
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<th>South Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘RE’: year of</td>
<td>2007</td>
<td>No transfers (most recent regulations 2003)</td>
<td>planned for 2010, but legislation still not passed</td>
</tr>
<tr>
<td>implementation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Policy rationale for ‘RE’</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ To support CRP (risk-solidarity)</td>
<td></td>
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<td>▪ To support CRP (risk-solidarity)</td>
</tr>
<tr>
<td>▪ To increase industry stability i.e. prevent selection</td>
<td></td>
<td>▪ To increase industry stability</td>
<td>▪ To facilitate the introduction of Social Health Insurance</td>
</tr>
<tr>
<td><strong>Risk factors</strong></td>
<td>▪ age</td>
<td>▪ age, gender;</td>
<td>▪ age;</td>
</tr>
<tr>
<td></td>
<td>▪ health status proxy, i.e. a cap on the maximum insurer’s costs per person over a rolling 12-month period.</td>
<td>▪ reserve power for health status proxy, i.e. private bed nights.</td>
<td>▪ numbers with 25 defined chronic diseases, with HIV and with multiple chronic diseases; ▪ maternity events.</td>
</tr>
</tbody>
</table>
Part 3.

Conclusions and discussion
Similarities between A, I & SA

Similarities:

- Universal basic *public* system;
- Voluntary private health insurance (VPHI) market with consumer choice of ‘level’ of coverage and competition among ‘risk-bearing’ insurers;
- Regulation & *subsidies* in VPHI markets:
  - Restrictions on the ability of insurers to charge risk-related premiums (i.e. community rating);
  - Other incentives and subsidies in place for particular policy objectives.
  - *Risk equalisation*. 
Differences between A, I & SA

Differences:

- history;
- relative level of wealth;
- the role of VPHI in the overall health system;
- ........
- Definition of ‘Risk Equalisation’!
Conclusions and discussion

- **Risk selection** is a significant problem;
- In case of voluntary health insurance: *adverse selection* is an additional problem;
- Risk equalisation is very complex, both technically and politically; and also the *legal* issues;

- Community rating: goal or tool?
- Rationale for (subsidising) VPHI?
- From VPHI towards NHI?
Community rating: goal or tool?

- As a **Goal**: Each person in the community pays more or less the same premium.

- As a **Tool**: Regulation that creates predictable profits/losses, and thereby incentives for selection that undermines the **goal** of community rating;

- Are there more effective **tools** to achieve the **goal**?
Rationale for (subsidising) VPHI?

1. What is the rationale for buying voluntary private health insurance (VPHI), given a universal basic public system? **Answer:** to pass the queue and reduce *waiting times* and to receive care with better (perceived) *quality*.

2. What then is the rationale for subsidising (tax penalties, premium subsidies 30-40%, ‘risk equalisation’), and regulating (open enrolment, community rating) VPHI? **Answer:** reduce pressure on *public system* (& finance) and increase *choice*. 
All 3-countries have been considering the introduction of *Social Health Insurance (NHI)* in the sense of universal mandatory insurance with consumer choice of (competing) health funds:

- **Australia**: National Health & Hospitals Reforms Commission (NHHRC) – “Medicare Select”;  
- **Ireland**: Fine Gael’s “FairCare”;  
- **South Africa**:  
  - ‘*Social Health Insurance*’ proposed since 1994;  
  - New elected Government in 2009: “within 5 years” National Health Insurance.
From VPHI to NHI: Preconditions

- Good *risk equalisation*;
- Effective competition policy;
- Consumer information (price, quality);
- Transparency (e.g. insurance products);
- Product classification system;
- Supervision of quality of care;
- Sufficient contracting freedom (price, quality, selective contracting);
- Political support (bi-partisan) for sequential implementation;
- ......, ......, ......
Risk equalisation is critical

- Good risk equalisation is an essential (but not the only) precondition to efficient competitive health insurance/provision markets (with open enrollment & community rating).

- Without good risk equalisation the disadvantages of competition might outweigh advantages of a competitive market.

- Risk equalisation should not only be based on age/gender, but also on health status.
US reforms?

The Patient Protection and Affordable Care Act (ACA) establishes various tiers of health insurance coverage for three primary purposes:

• To set the universal mandatory coverage for a minimum standardised package of services (or pay a federal tax penalty beginning in 2014).
• Premium and cost-sharing subsidies provided to lower and middle income people buying their own insurance in Exchanges.
- **Four actuarial value levels**: 60% (a bronze plan), 70% (a sliver plan), 80% (a gold plan), and 90% (a platinum plan).
- The ACA also requires that plans cap the maximum out-of-pocket costs for enrollees, based on the out-of-pocket limits in high-deductible plans that are eligible to be paired with a Health Savings Account.
- Most people will be required to have insurance that is at least at the bronze level (a 60% actuarial value) or pay a federal tax penalty.
People who buy coverage on their own through an Exchange and have family income up to four times the poverty level ($89,400 for a family of four and $43,560 for a single individual in 2011) may be eligible for premium and cost-sharing subsidies:

- The premium subsidies are based on family income and the premium (adjusted for age) of the second lowest cost silver plan (70% actuarial value) in an Exchange.
- Low and modest income people buying insurance in Exchanges may be eligible for coverage with a higher actuarial value and lower out-of-pocket maximum.
Subsidies

a. Premium-related subsidies;
b. Cost-sharing subsidies;
c. Community rating per product.

- **Effects of a and b**: reduction of incentives for efficiency (e.g. premium inflation, moral hazard…);
- **Effects of c**: risk selection; and premium differentiation via product differentiation.

Why not **risk-adjusted** subsidies?
Many OECD countries have introduced universal mandatory coverage for a uniform benefits or services package (BP).

Policy-makers see universal/uniform mandatory coverage as a tool to achieve the goal of affordable access to (the coverage of) health care services to vulnerable groups (e.g. low-income or high-risks individuals).
Problem

- If the financing/insurance of uniform BP is not sustainable/affordable for certain groups of individuals it does not make sense to mandate to buy it;

- If subsidies guarantee affordable access to health care services/coverage for vulnerable groups, what is the rationale for universal/uniform mandatory coverage?
Proposition

- **Proposition**: the arguments that motivate a system of mandatory cross-subsidies differ substantially from those that motivate mandatory coverage.

- What are the economic rationales for governments to enforce a system of *mandatory cross-subsidies* and to implement *mandatory coverage* for a set of predefined services?
Promising directions to proceed

- Single-option scheme with voluntary income-related deductibles (i.e. the higher the income, the higher the deductible).
- Allow insurers to risk rate & replace community rating by a premium rate band;
- Replace the premium and cost-sharing subsidies by risk-adjusted subsidies.

Effects:
- Less selection, both by consumers and by insurers;
- Policy goal of affordability more likely to be achieved;
- Increase incentives for efficiency (consumers, insurers).