RESTRICTURING PRIMARY HEALTHCARE MARKETS IN NZ:
Efficiency and Equity Implications of Provider-Insurers

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OVERVIEW

Theoretical framework
‘two-sided markets’ for health care
contractual risk allocation
application to centrally-planned health care systems

Application of framework to New Zealand
Pre-NZPHCS
NZPHCS
“insurance market side” implications
“health care service delivery side” implications

Summary and Conclusions
THEORETICAL FRAMEWORK

Arrow (1963)

1. “the special structural characteristics of the medical care market are largely attempts to overcome the lack of optimality due to the non-marketability of the bearing of suitable risks and the imperfect marketability of information”
   ⇒ necessity of ‘two-sided’ insurance markets

2. compensatory institutional changes emerge in response to the non-marketability of bearing suitable risks and imperfect marketability of information, but these changes may themselves interfere with optimality
   ⇒ “the social adjustment towards optimality puts obstacles in its own path” during contractual/institutional evolution
‘TWO-SIDED MARKETS’ FOR HEALTH CARE

Extrapolation from work of Rochet and Tirole

Two-sided markets

platforms that help parties “get together in many ways and thereby create value for these parties that they could not readily obtain without the co-ordination of the platform”
(Evans and Schmalansee, 2005)

Application to health care

Insurance provider at the ‘hub’

risk-bearing (insurance) markets on one side (inputs)
health care service delivery markets on the other side (outputs)
TWO-SIDED HEALTHCARE MARKET

Adapted from Van der Ven and Ellis (2000:761) and Rochet and Tirole (2002:552)
GOVERNMENT AND TWO-SIDED MARKETS

Government as sponsor
  structuring coverage, regulating plans, managing enrolment
  reallocating premium burden across consumers
  ‘solidarity contributions’ to effect wealth transfers

Government as insurance hub provider
  distinction between of solidarity payments, premium subsidies

Government as health care service provider
  distinction between purchasing and provision (the ‘purchaser-provider split’)
CONTRACTUAL RISK ALLOCATION

Contracts as mechanism to allocate risk

Insurance contracts
  specify premium paid and patient co-payments (input side)
  specify service provider remuneration terms (output side)

Competition in each of insurance markets, service provision markets when insurers can set the degree of consumer cost-sharing optimally can result in a second-best efficient outcome
  (Gaynor, Haas-Wilson and Vogt, 2000)

Evolution: implications for two-sided health care markets

Managed Care as example
PRE-NZPHCS PRIMARY HEALTH CARE

Insurance Market

Treasury

Vote: Health premium subsidy

Ministry of Health

‘S88’ fee for service contract/payment

targeted patient top-up contract/co-payment

service provider

full fee for service contract/payment

Health Care Service Delivery Market

targeted consumer

Taxation: solidarity contribution

non-targeted consumer
PRE-NZPHCS: KEY FEATURES

Government as sponsor and insurer (risk manager)

Private sector service provision
   practitioner charging autonomy (1938 f.f.s. ‘S88’ payments)
   no risk bearing associated with patient demand uncertainty

Tightly-targeted insurance market
   majority self-insuring
   limited risk-sharing (government = residual risk bearer)
   taxation ‘solidarity payments’ as principal wealth redistribution method (ex ante equity adjustments; cost to all taxpayers)
   ‘S88’ payments = welfare benefit outputs from social insurance

Moral hazard: low
   patient ‘co-payments’ cannot be efficient insurance contracts
   but limited in application (subsidies = 30% of practitioner income)

Adverse selection: non-existent
NZPHCS: STATED DESIGN (King, 2001)

Insurance Market

- Government
  - taxation: solidarity contribution
  - capitation premium subsidy

- PHO
  - premium contribution

PHO Members

Health Care Service Delivery Market

- Service Providers
  - payment
  - co-payment
  - tee-for-service payments

Non-PHO Members
NZPHCS: KEY DESIGN FEATURES

Substantial increase in government expenditure share

Universal capitation funding
  mandatory risk-sharing for registered population

Subsidy becomes premium contribution to private sector competing insurers (PHOs)
  Government ‘risk-free’; private sector become risk managers

PHOs as managed care providers
  contracts with insured individuals
    no apparent barriers to optimal ex ante contracts, ex post co-payments
  contracts with service providers
    as agents of insured individuals
    ability to design optimal incentive contracts
NZPHCS: IN PRACTICE

Insurance Market

- Government
  - taxation: solidarity contribution

- PHO Members
  - bundled premium contribution and co-payment

Health Care Service Delivery Market

- PHO
  - capitation premium subsidy
  - contract payment

- Service Providers
  - fee-for-service payments

- Non-PHO Members
TRANSITION IMPLICATIONS

Retention of provider charging autonomy
negates ability to design optimal provider incentive contracts
leads to bundling of ex ante premium contributions and ex post co-payments into a single ex post payment

Price ‘regulation’ expectations
ex post ‘bundled payments used to effect social/political wealth transfers
increased government subsidies must lead to compensatory decreases in ex post payments for government subsidy categories

Conflict: insurance wealth transfer objectives and social/political wealth transfer objectives
neither achieved, or one ‘crowds out’ other implications for efficiency, equity
INSURANCE CONSEQUENCES (I)

Selective increase in subsidies
  increase in moral hazard in subsidised group only

Insurance response
  increase ex post premiums only to the newly-subsidised

Regulatory response
  ex post payments for newly-subsidised must directly reflect increases in subsidies

Insurance response to regulatory response
  spread additional moral hazard costs across all individuals
  ex post premiums rise, even for those not receiving increased subsidies
INSURANCE CONSEQUENCES (II)

Efficiency outcome
prices rise for low-subsidised
consumption falls below optimum => lower welfare
prices to higher-subsidised less than optimal given increase in
moral hazard risk => lower welfare

Equity outcome
extra costs arising from lower welfare collected only from ill
ex post collection becomes a consumption ‘tax on falling sick’
perfectly risk-rated ex post premium contribution
wealth transfer from the low-subsidised sick to the high-
subsidised sick
wealth transfer from the sick to the well

Contrary to efficiency raising objectives of
insurance instruments
EVIDENCE

Prices rising for all categories of patients
  higher charges in practices receiving lower subsidies, even for
  patients of same subsidy class (Consumer, 2005 Survey)

Patient charges not reflecting increases in
  subsidies  (King, 2004: Cabinet paper)

Introduction of Care Plus after less than 2 years
  targeted at the chronically ill
  acknowledgement that the burden of the system design
  outcomes falls most heavily on the frequently ill?
SERVICE DELIVERY CONSEQUENCES

Retention of practitioner charging right
removes ability for PHOs to strike efficient incentive contracts
with service providers

“If you can’t manage the risk, don’t bear it”
‘passing on’ capitation contracts to service providers

Service providers become insurers
inefficiently small – 1200-2000 patients
risk management costs rise
first recourse to manage => pass on to consumers in higher
prices (replicating pre NZPHCS risk-free provider status)
incentives for adverse selection (screening) increase

Welfare reduces further (relative to pre-NZPHCS,
efficient insurance market)
PROVIDERS AS INSURERS

Combined Insurance Market and Health Care Service Delivery Market

Government

PHO Members

taxation: solidarity contribution

PHO

capitation premium subsidy

Service Providers

capitation premium subsidy

Non-PHO Members

bundled premium contribution and co-payment

fee-for-service payments
COMPETITIVE RESTRICTIONS

Unlikely to see evolution to more efficient model

Provider-governors mandatory in PHOs
  formed around existing provider groups
  conflict of interest – on both sides of the ‘passing on’ contracts
  unlikely to be party to contracts to restrict their practitioner
  charging autonomy

Patients ‘locked in’
  Government subsidies non-transferrable; payable only to PHOs
  patients don’t face full cost of service delivery => less
  competition from unsubsidised providers

Providers may also be ‘locked in’ to PHOs
  local geographic monopolies; strong network effects
CONCLUSIONS

NZPHCS does not appear to be a centrally-planned iteration towards a more efficient system. Rather, appears to be a consequence of an attempt to use health care system institutional design to ‘fix’ a perceived problem on the health care service delivery side. With disastrous consequences for the efficiency of the entire system. Restructuring of the primary health care sector in NZ “has put obstacles in its own path”