

Current Issues in Health Economics

Alison Booth
RSSS, ANU

September 2004

Financing health care systems

Economic analysis is based on insurance models.

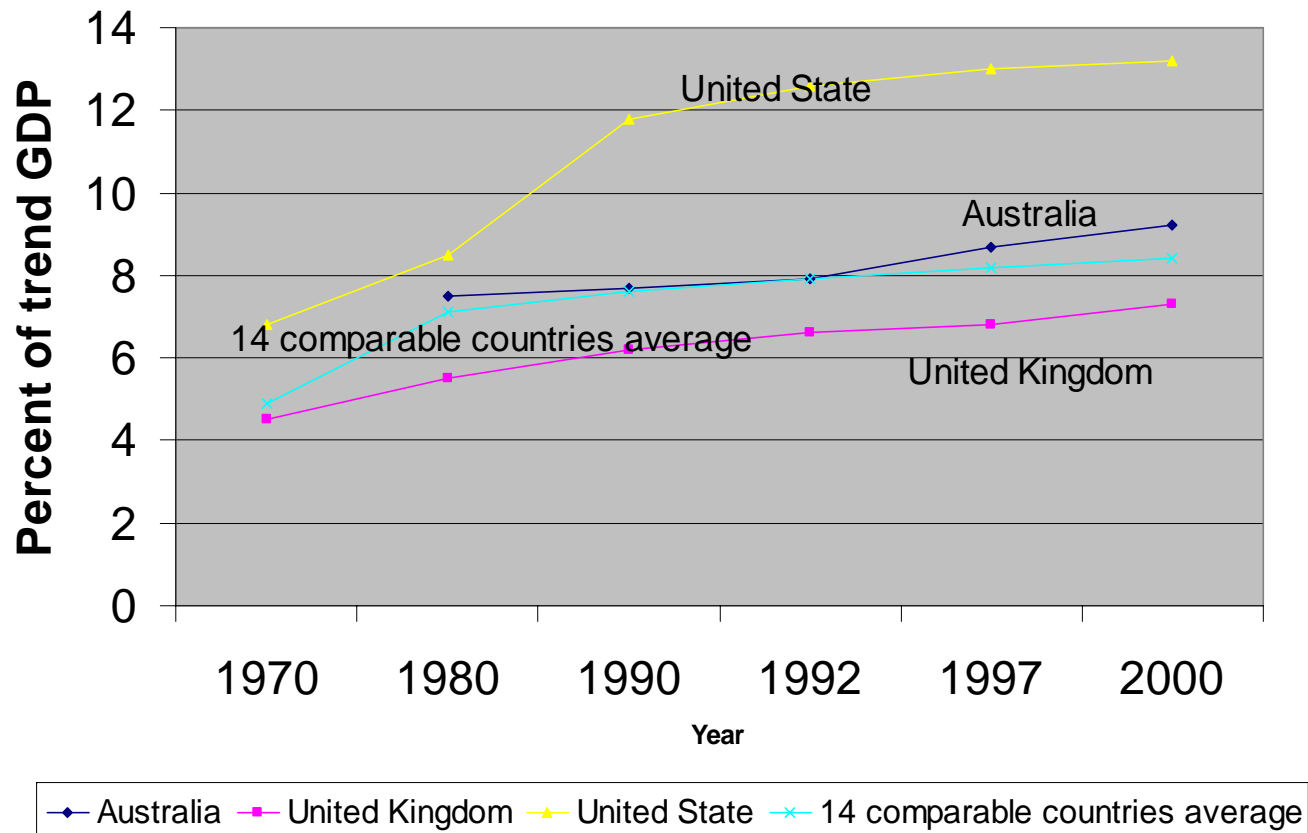
- Ability of insurance to pool financial risk and promote access is weakened in voluntary insurance markets because of
 - (i) **adverse selection**, arising when poor risks are more likely to insure than good risks, leading to under-consumption of health care
 - (ii) **moral hazard**, where the insured person is more likely to consume beyond social optimum

- (iii) There are also problems of **informational asymmetry**. Providers are typically better informed than insurers (or patients) about need, scope and quality of health treatment. This may mean practitioners induce a demand for care.
- Because of these *market failure problems* associated with voluntary insurance, OECD countries typically rely heavily on public insurance and public regulation of health care and private insurance markets.
- Sometimes public sectors also finance and provide health care.

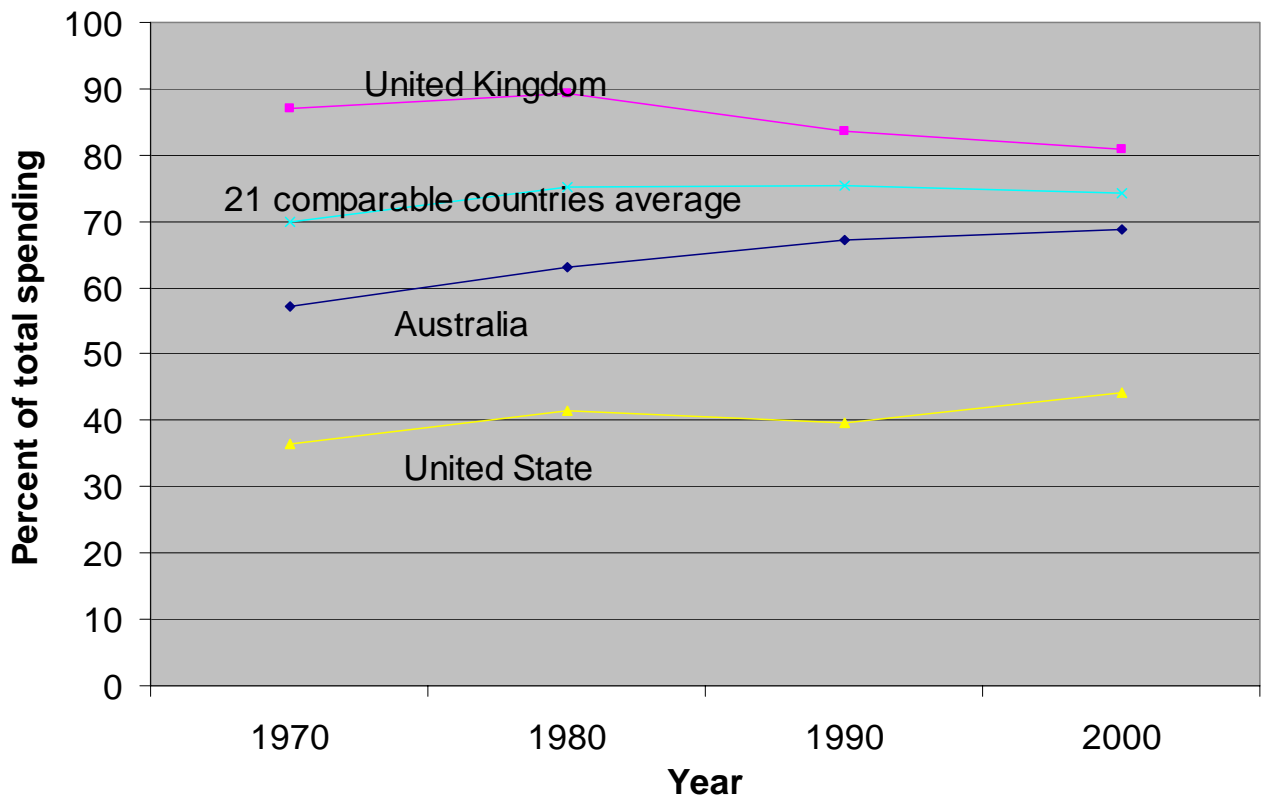
What is the appropriate level of spending?

- Social welfare might be improved by increased health spending (externalities to society from healthier population). But on the other hand market failures associated with health care suggest risk of possible over-spending. Price signals not really appropriate for health (demand relatively inelastic and equity issues too).
- And anyway health spending is growing faster than economic growth in many OECD countries

Total Expenditure on Health Care as a percent of trend GDP, 1970-2000



Public Share of total expenditure on health care, 1970-2000



—●— Australia —■— United Kingdom —▲— United States —×— 21 comparable countries average

Table 1: Public and Private Health Insurance Schemes, 2000

	Australia	France	UK	USA	Ave Comparable OECD
<u>A. Public health care coverage</u> (% total population)	100.0	99.9	100.0	24.7	98.3
<u>B. Share public financing sources</u>					
Soc. Security Schemes	0	73.3	0	15.0	32.5
Other public	68.9	2.5	80.9	29.2	40.1
Total public	68.9	75.8	80.9	44.2	72.6
<u>C. Share private financing sources</u>					
Pte health ins	7.3	12.7		35.1	6.4
Out-of-pocket	18.5	10.4		15.2	18.7
Other private	5.4	1.0		5.6	2.6
Total private	31.1	24.2	19.1	55.8	22.7

- **Panels B and C** illustrate how financing affects equity. Private insurance and high cost-sharing distributes costs of health care to higher-risk groups and users (since income is linked to health status). Notice that the OECD average for private financing as a share of total health expenditures is 23%, while in the UK it is 19% and Australia 31%, and in the US it is a staggering 56%.
- The health and income gradient suggests that private financing can fall disproportionately on low-income households potentially hindering access where costs serve as financial barriers.
- Financing schemes are more equitable in their financial impact - and foster greater equity of access - if they are: (i) related to ability to pay (taxes, social insurance contributions) and (ii) use a low degree of cost-sharing. But they may also be more subject to moral hazard, as there is no cost-sharing.

OECD countries' approaches to financing and delivery:

- **Integrated public model.** Insurance and provision are combined and operated like a government dept.. Examples: the Nordic countries, Australian public hospitals, Italy, Greece and Portugal.
- **Public contract model.** Public paymasters (State agency/SS funds) contract with private health-care providers (typically non-profit). Examples: Canada, other EU countries incl. UK, Japan and to some extent NZ.
- **Private insurance/private provider model.** Providers are often profit-making. Private insurance might be either mandatory (Switzerland) or voluntary (US).

Some Important Current Issues in Health Economics

- Relationship between child health and family income
- Promoting universal access
- Measuring the effectiveness of health care systems
- The quality of health care and patient safety.

Relationship between child health and family income

- Poor health in childhood is associated with lower educational attainment, worse health in adulthood, and worse labour market outcomes.
- Case *et al* (2002) AER found, using the US NHIS, a significant income gradient (kids from poorer families have significantly worse health than kids from richer families). Moreover the income gradient steepened with child age, with the protective effect of family income accumulating over the childhood years. A similar result was subsequently found for Canada.
- But a recent paper for the UK by Currie, Shields and Wheatley-Price (2004) finds that there is a very much smaller income gradient and it does not widen across the childhood years. They interpret this as evidence that the UK NHS has a protective effect on child health.
- Our planned work on NHS and NHS(I)

Promoting Universal Access

- OECD countries have near-universal access (except Mexico, Turkey, US). Coverage varies from comprehensive, to exclusion of some services, to cost-sharing for some services.
- Tradeoff between equity and public cost containment. Political economy factors play a role. Maintenance of full coverage acts as a potential constraint on some reform options (eg shifting to voluntary coverage).
- How to achieve universal coverage? OECD countries either establish default, or all-inclusive public program, or mandate purchase of private coverage.
- Where insurance has gaps or requires patient cost-sharing, might need to consider programs for vulnerable populations on a targeted basis (eg low income, unemployed, indigenous/remote groups).
- Even with universal coverage, still need policies for equitable access.
- (i) Practitioner shortage/misdistribution. (Remote areas or unattractive urban areas). Regulatory planning measures, financial incentives, peripatetic supply practised in various OECD countries. Plus extend scope of free public health care services to uninsured/disadvantaged groups.
- (ii) Timely availability of services instead of long waiting lists. UK has recently begun to allow patients to go abroad for certain procedures
- (iii) Socio-cultural barriers (language, geographical isolation, cultural norms, economic status or combination thereof). Important in US, Oz and NZ.

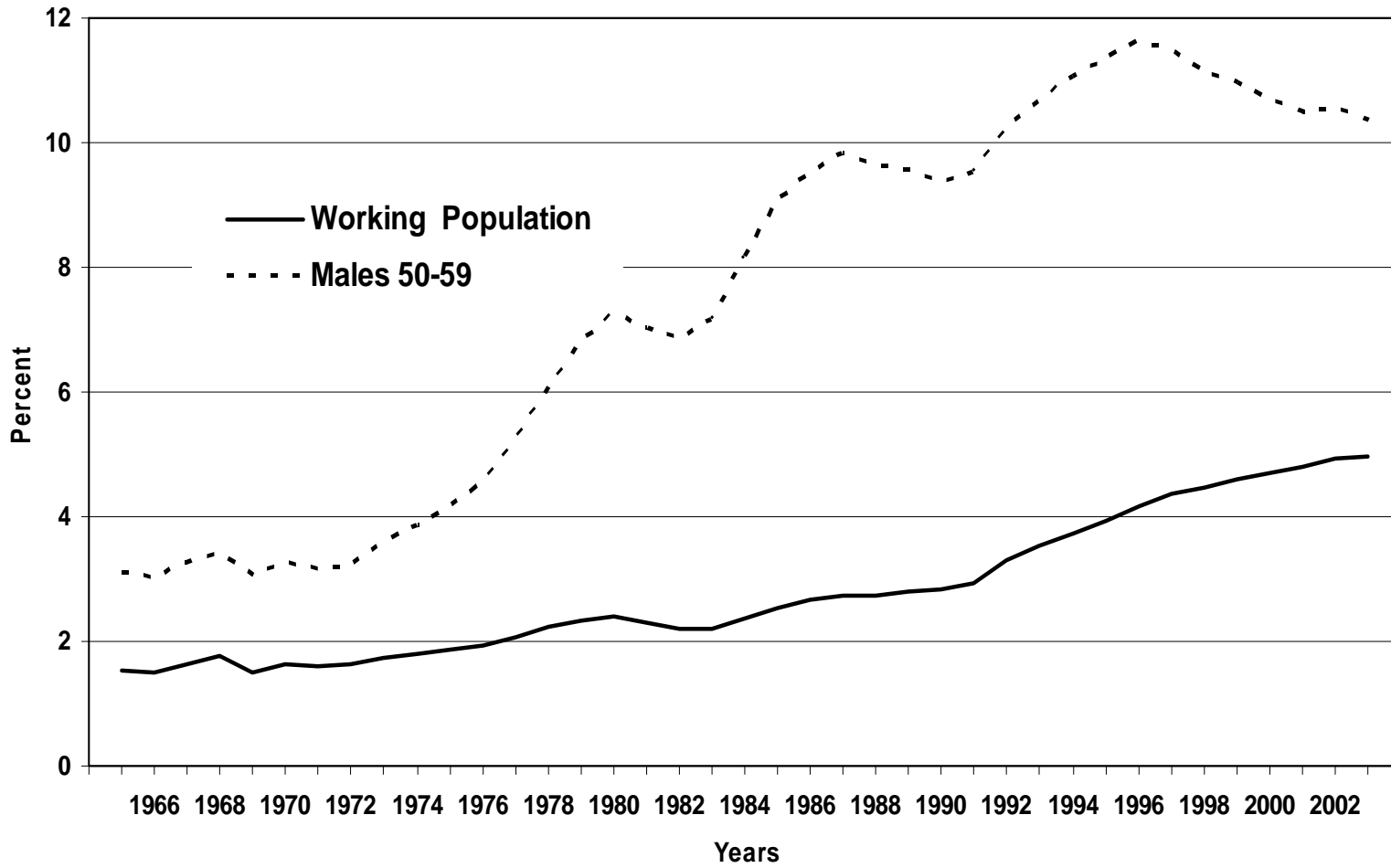
Measuring the effectiveness of health care systems

- **Consumer satisfaction** (eg Eurobarometer survey).
- **Population health status and patient outcome measures such as life expectancy; child mortality etc.** Improving over time –Australia is doing really well on average
- **Indigenous** people account for 2.4% of the Australian population more than half of whom live in NSW and Qld.. For 1999-2001 life expectancy at birth was 56 yrs for Indigenous men and 63 for Indigenous women, compared with 77 for all Australian men and 82 for all Australian women – ie a roughly twenty percentage point difference.
- **Disability** – why has proportion on disability pension being growing over time? Consistent with effective health care and pension systems?
- **Growth in proportion of population overweight and obese** – important subject for future public health initiatives.

Distribution of self assessed health by age/sex and indigeneity status, 2001

		Indigenous				Non-Indigenous			
		15-24	25-44	45-64	65+	15-24	25-44	45-64	65+
female	Excellent	20%	12%	10%	9%	22%	23%	17%	11%
	V. good	27%	25%	17%	9%	40%	38%	31%	23%
	Good	35%	39%	20%	25%	28%	27%	30%	34%
	Fair	16%	16%	34%	47%	8%	9%	16%	23%
	Poor	2%	8%	18%	10%	2%	2%	6%	10%
		15-24	25-44	45-64	65+	15-24	25-44	45-64	65+
male	Excellent	22%	14%	8%	4%	29%	21%	14%	10%
	V. good	39%	29%	18%	8%	38%	35%	29%	20%
	Good	31%	33%	34%	33%	25%	32%	33%	36%
	Fair	9%	18%	24%	40%	7%	10%	17%	23%
	Poor	0%	6%	15%	16%	1%	3%	7%	11%

Percent of Working Population on Disability Pension
Australia 1965-2003



Quality of care and patient safety

- Only relatively recently has information emerged suggesting such problems are more common than previously believed.
- Evidence suggests it's due to poor design of health care delivery processes rather than technical incompetence. Need special incident data and this is what is just being introduced in Australia. Systems for monitoring processes and outcomes of health care are still in their infancy across OECD countries. Vital to obtain full support of medical profession and to do so in a way that doesn't increase admin costs.
- Kohn, Corrigan and Donaldson (2000) found that, in the US, medical errors were responsible for more deaths annually than car accidents. This also emphasises a really important aspect of health economics – the need for good systematic Australia-wide information sources for analysts wanting to address health care services.

