

An economist's view of pathology

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CHERE:UTS

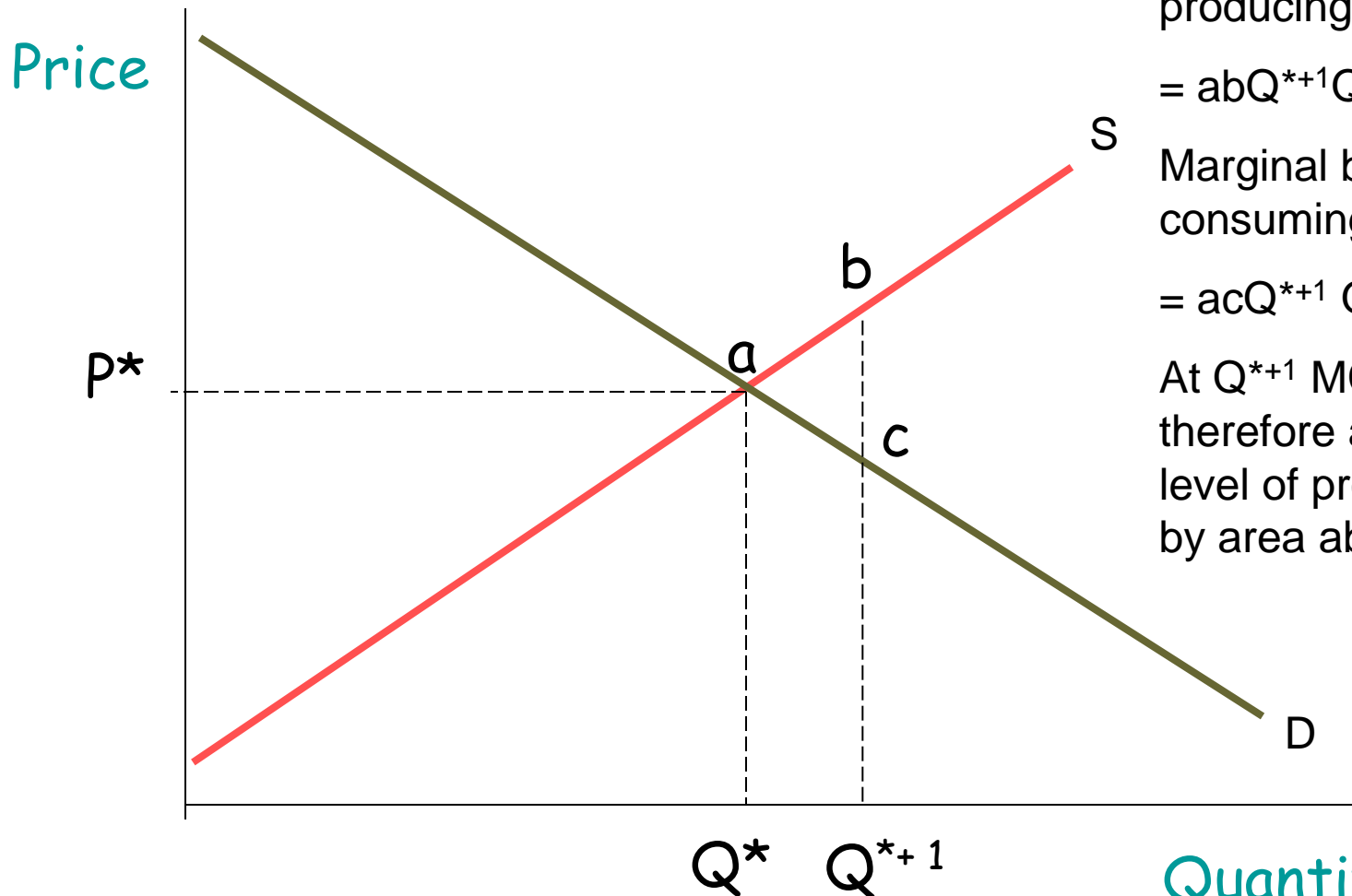
Outline of this talk

- Background: paying for health care
- Pathology contribution to health care
- Pathology as an economic commodity
- What is the value of pathology? To whom
- Health care reform
- Challenges for pathology

Resource allocation and markets

- Allocation decisions for most goods made in markets
- Demand: consumers as utility maximisers
 - Consume at highest value: allocative efficiency
- Supply: producers as profit maximisers
 - Produce at least cost: technical efficiency
- Price and role of price mechanism
 - “Invisible hand”
 - Price conveys information about value to producers and consumers

The competitive market



Marginal cost of producing Q^{*+1}

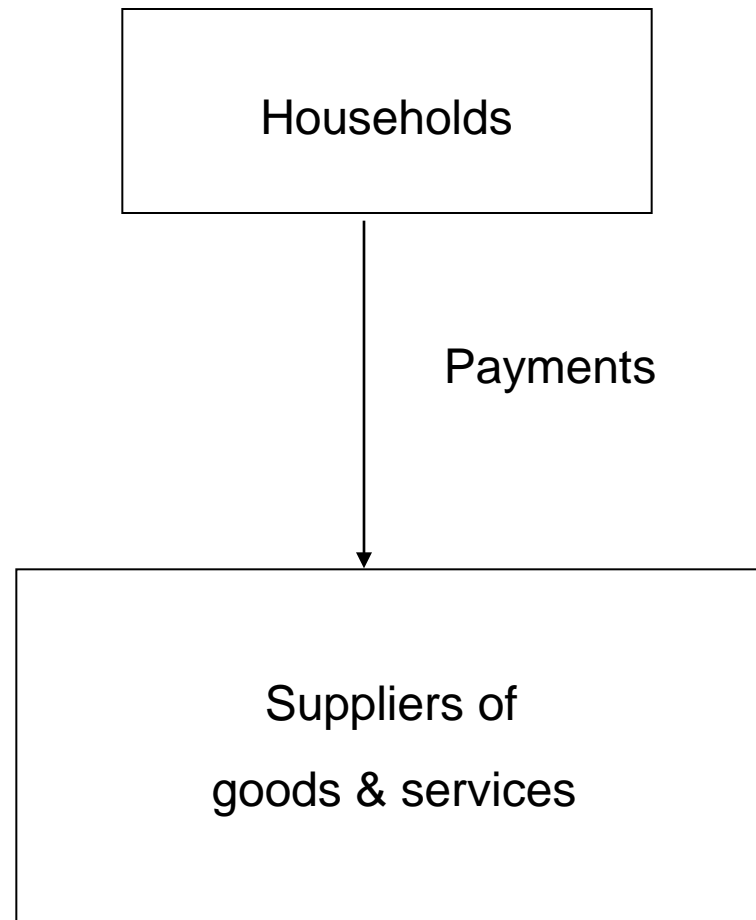
$$= abQ^{*+1}Q^*$$

Marginal benefit of consuming Q^{*+1}

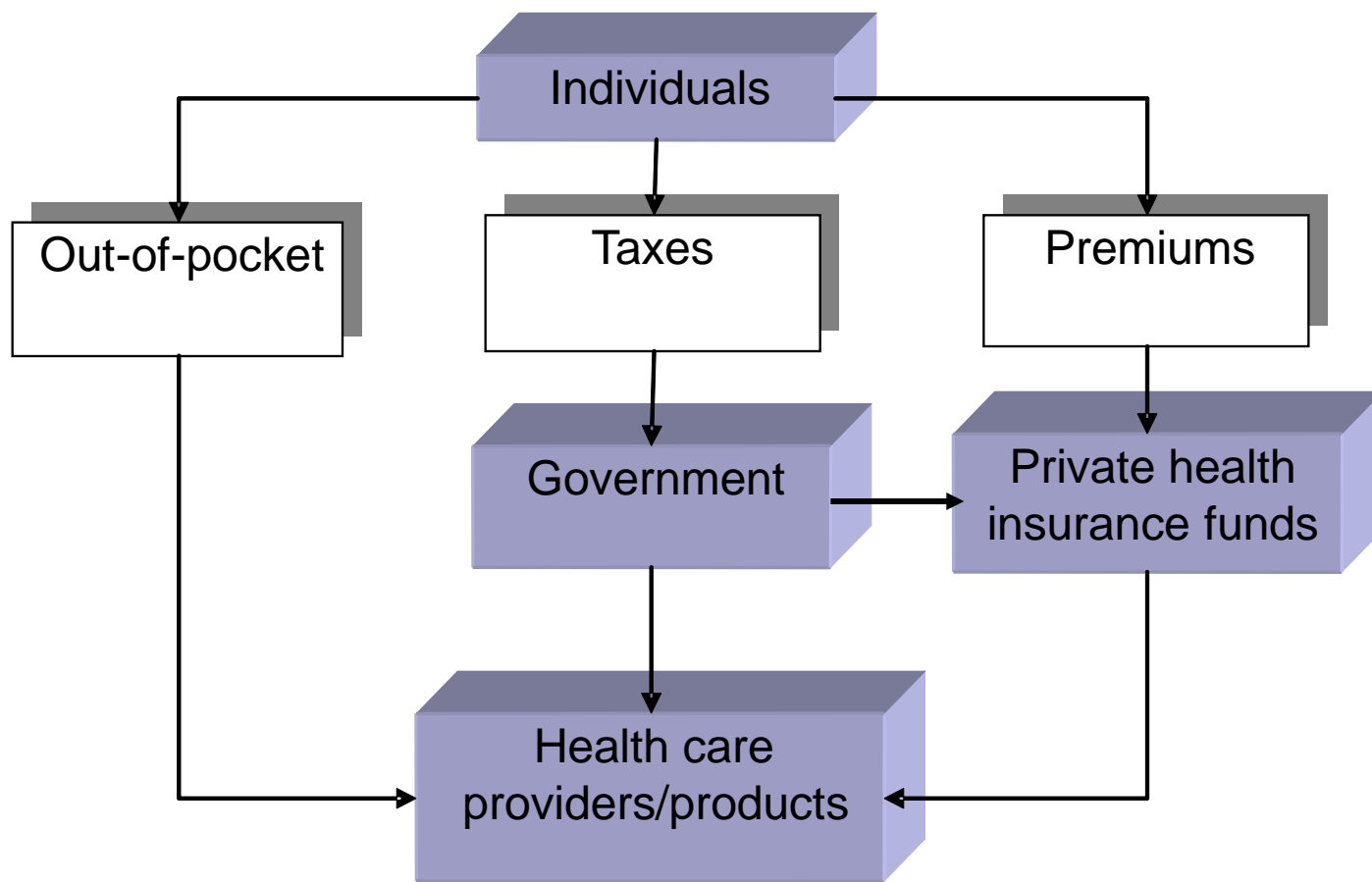
$$= acQ^{*+1}Q^*$$

At Q^{*+1} $MC > MB$ and therefore an inefficient level of production (given by area abc)

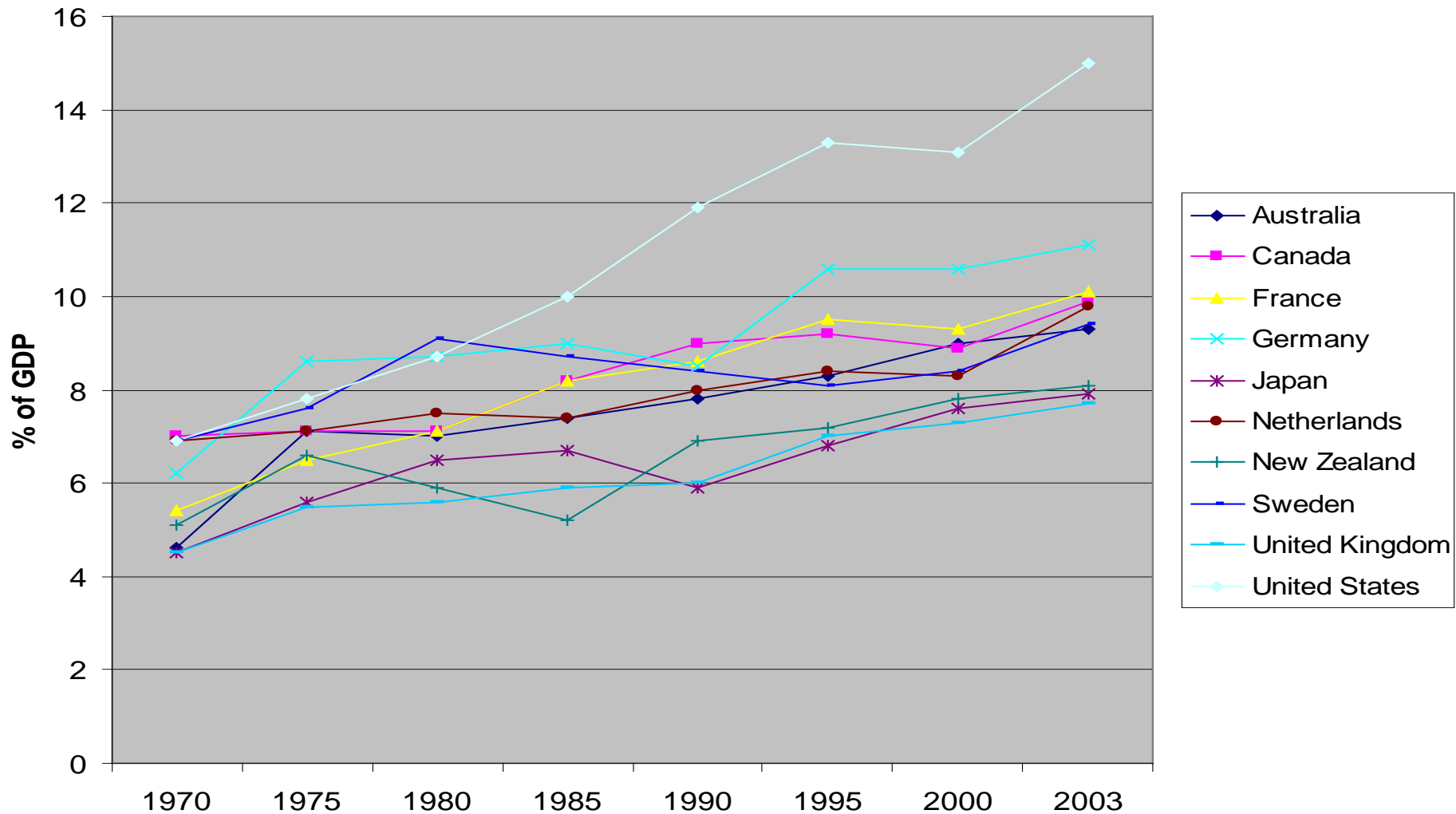
Simple market financing:



Financing health care: a simplified model



Growth in health expenditure

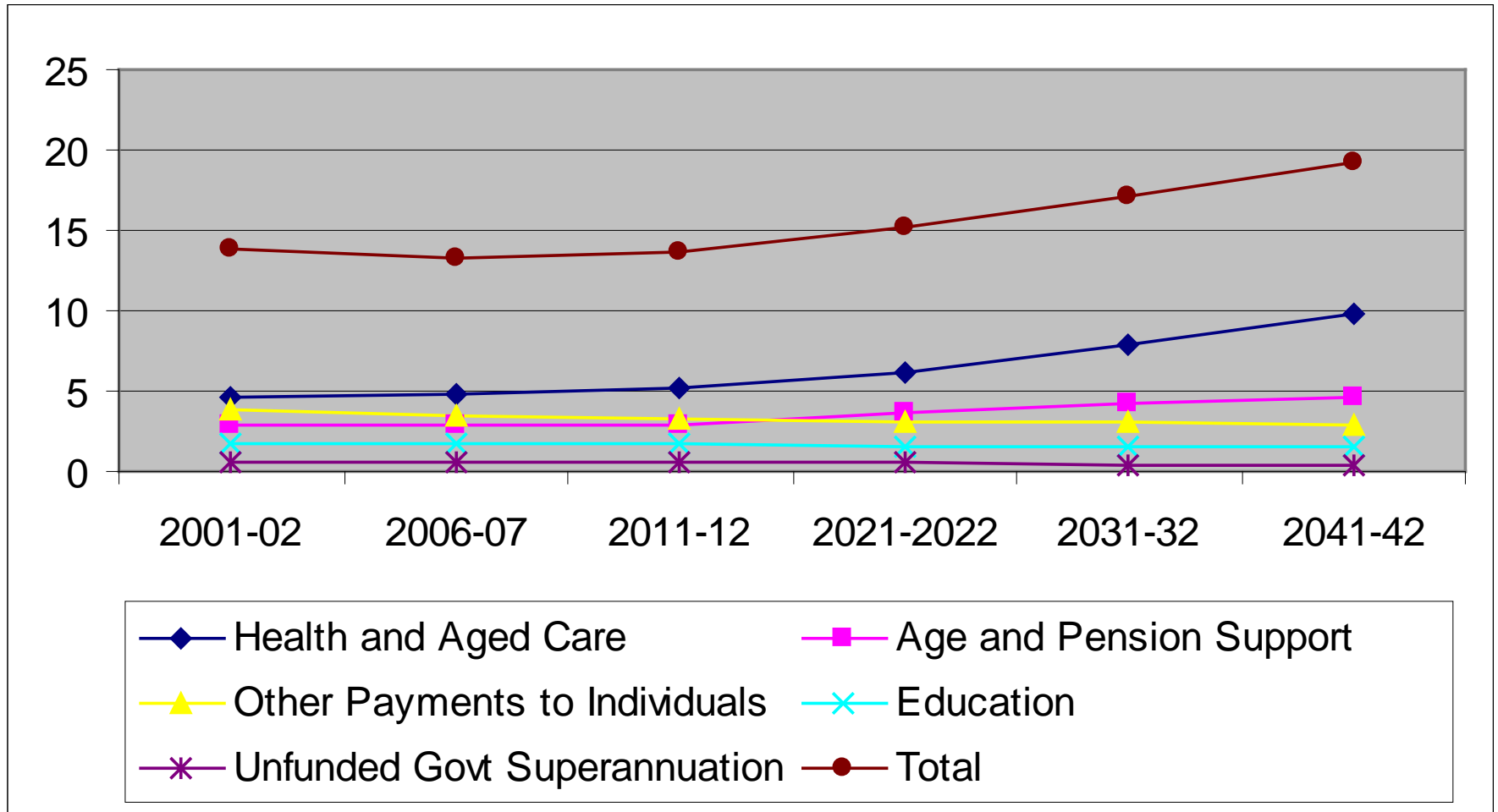


(Source: OECD health data 2005)

More services for more people

	Nominal growth: 1995-2005	Health inflation	Population	Utilisation
Australia	8.2	3.1	1.2	3.7
Canada	6.2	2.1	1.0	3.1
United States	6.9	3.2	1.1	2.5

Projections of Commonwealth spending (% of GDP)

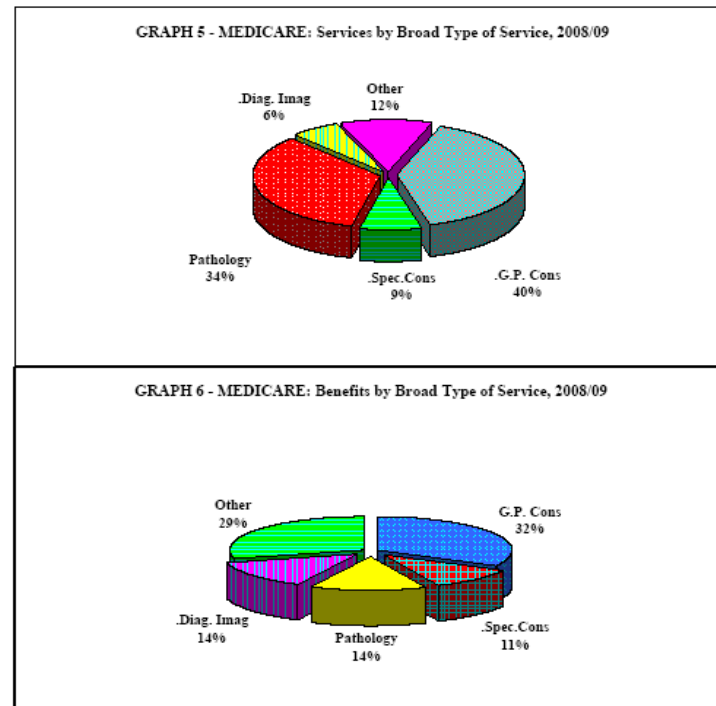


Source: Commonwealth Government Intergenerational Report 2002-03

- All health care systems are grappling with the key issue of how to determine value for money
 - total expenditure
 - value of component services
 - efficiency in production
 - safety and quality
 - technology

Pathology as share of total services

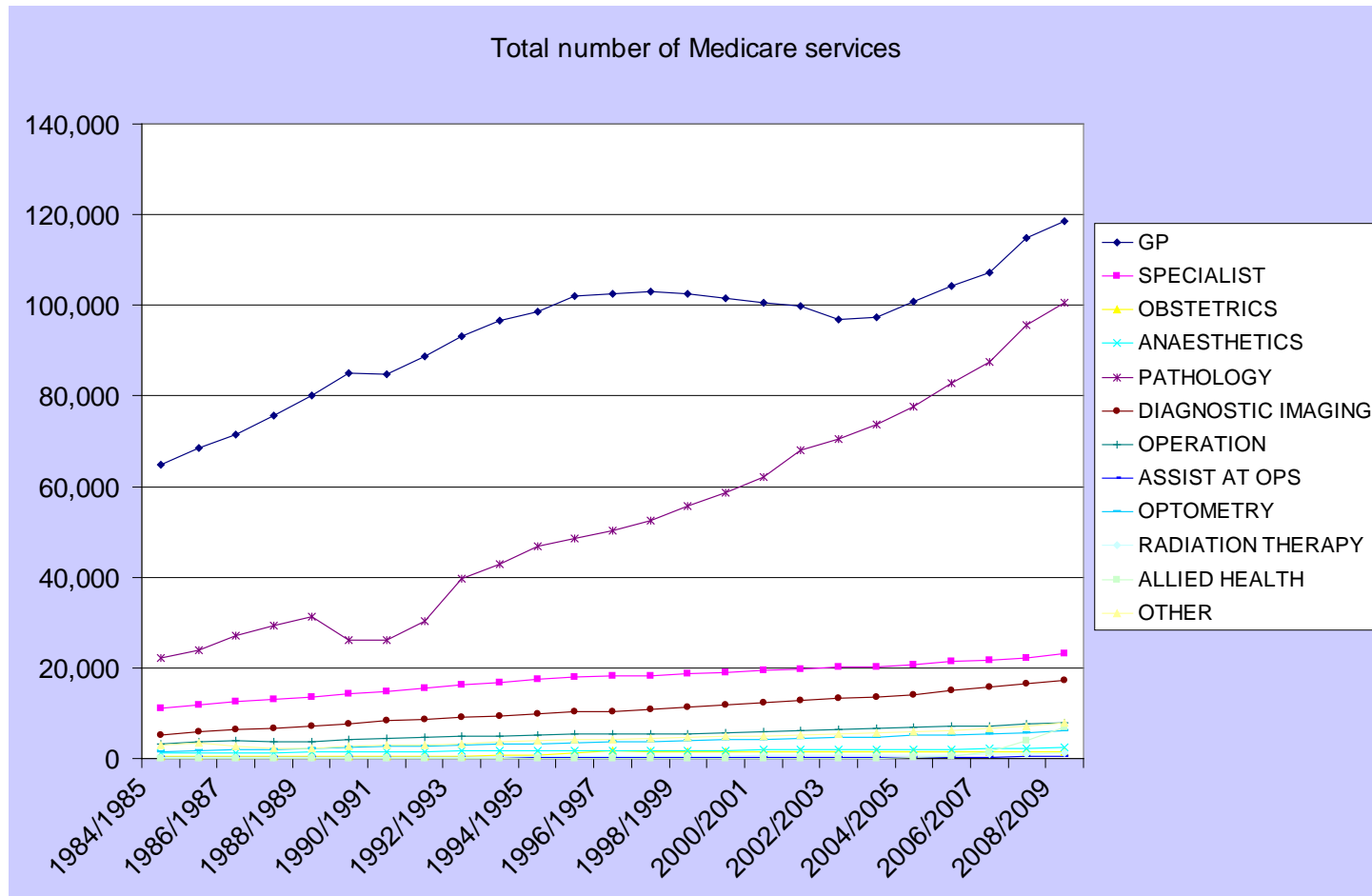
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Pathology share of total

	No of services	Benefits paid
GP consults	40%	32%
Spec consults	9%	11%
Diag Imag	6%	14%
Path	34%	14%
Other	12%	29%

Growth over time



The business of pathology

- Big and growing
 - 84/85 2.9 GP visit for each pathology test
 - 08/09 1.2 GP visit for each pathology test
 - Medicare statistics
 - 00/01 14% visits generate pathology
 - 2.15 tests/ batteries
 - 07/08 17% visits generate pathology
 - 2.49 tests/batteries

Drivers of increasing utilisation

- Availability of new tests
- Protocols and guidelines
- Monitoring therapy
- Targeting therapy
- Prevention and risk factor checks

Features of pathology

- Rapid growth in utilisation and costs
- New technology has delivered greater efficiency
- New technology has provided new services
- Workforce shortages
- New developments
 - Point of care testing - substitute
 - Personalised interventions – new market

2009-10 Budget

- Pathology MOU expired 30 June 2009
- New bulk billing incentives
- Reduced fees for collection
- Changes to fees for some items
 - Increases for 8 items
 - Decreases for 259 items
- Improving competition
 - Remove limit on collection centres
 - Patient may select any accredited provider
- Increase training places
- Improve quality

Pathology as a commodity

- Component of health service
- Demand initiated by clinician
- Non-personalised delivery
- Discomfort
- Automation allows standardisation
- Product is information

Value of information

Accepted approach to understanding value added

- standard HTA

- Objective is to improve health outcomes
- Value therefore is gain in health
- Does test provide new information
- Does information change clinical practice
- Does practice deliver better outcome for patient

Issues for evaluation of tests

- The test itself is only part of the intervention
 - Direct evidence from RCTs is rare and often infeasible
 - Evaluation relies on linked evidence
 - Population treated and population tested may be different
- Information is rarely certain
 - There may be no gold standard
 - New test may more accurate

Does test information have a direct value to patients?

- Outcomes are patient relevant
- Disutility of sampling
- Results are interpreted through an agent
- In some circumstances, reassurance from negative result

Value to clinicians

- Reduce uncertainty
 - ? Reassurance
- Better targeted treatment
 - Reduce trial
- Monitoring treatment

Pathology as a market

- Increasing demand
- Constrained supply
- Usual solution is rising prices
 - Tempering demand
- Encouraging additional supply
 - New suppliers and/or substitute services

But

- Government (or insurer) as payer
- Profession influences market entry
- Less reliance on prices
- Search for alternatives to influence demand

Broader health care reforms

- Consumer incentives
 - Information
 - Co-payments
- Provider incentives
 - Price regulation
 - Price volume agreements
 - Competition
- Reorganisation
 - Bundled payments
 - Budget holding
 - Purchasing and commissioning
- Changes to financing and flows of funds
 - New forms of organisation eg medical homes
 - Possibility of managed competition

Translating these to pathology

- Consumer incentives
 - Encourage patients to choose pathology provider
 - Co-payments for non-preferred providers
- Treating clinician incentives
 - Bundled payments (case mix only the first step)
 - Budget holding
- Pathology provider incentives
 - Competition from contracting
 - Incentive payments around quality
- Reorganisation
 - New forms of organising treatment services
 - Managed competition

Conclusion

- Pathology has contributed to increasing service use and
 - less so, to costs
- Increased pressures
 - Workforce shortages
 - New technologies
 - Extended use of old technologies
- Substitutes from POCS
- Conventional HTA assesses value as contribution to improved health outcomes
- Pathology services will be affected by general reform
 - Standardisation and non-personalised service may facilitate this

Challenges

- Demonstrate value of information
 - Understanding how to develop evidence
 - Assess value of information
- Competition
 - Ensure quality as well as price
- Customer focus
 - Improve responsiveness to patients