

Health Care Needs Assessment and Prioritisation

CAPABILITY
Oxford 23 May 2008

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The University of Birmingham

Organising the Health Economy:

Options

- Steady state
- Market mechanisms
- Planned change

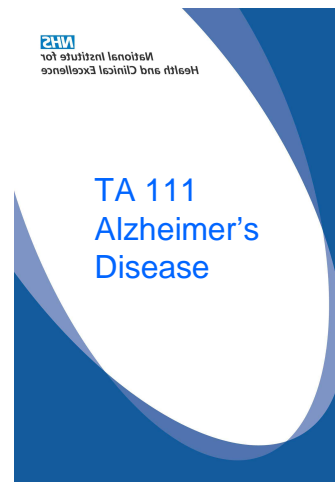
Needs Assessment and Prioritisation

Health Care Needs
Assessment Series



NEED

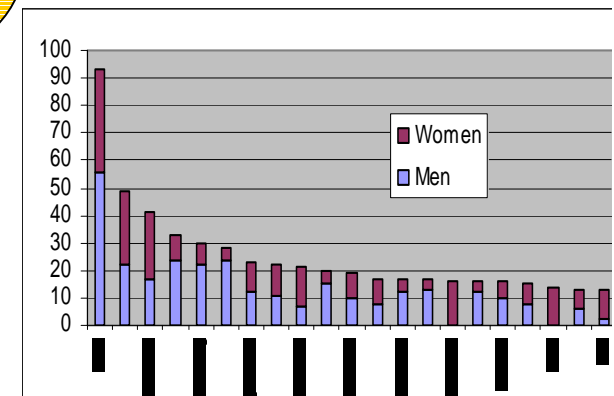
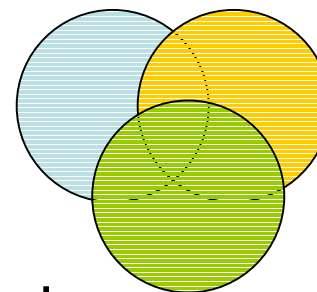
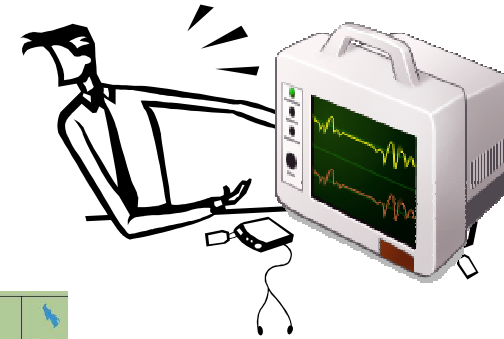
National Institute for
Health and Clinical
Excellence



COST-
EFFECTIVENESS

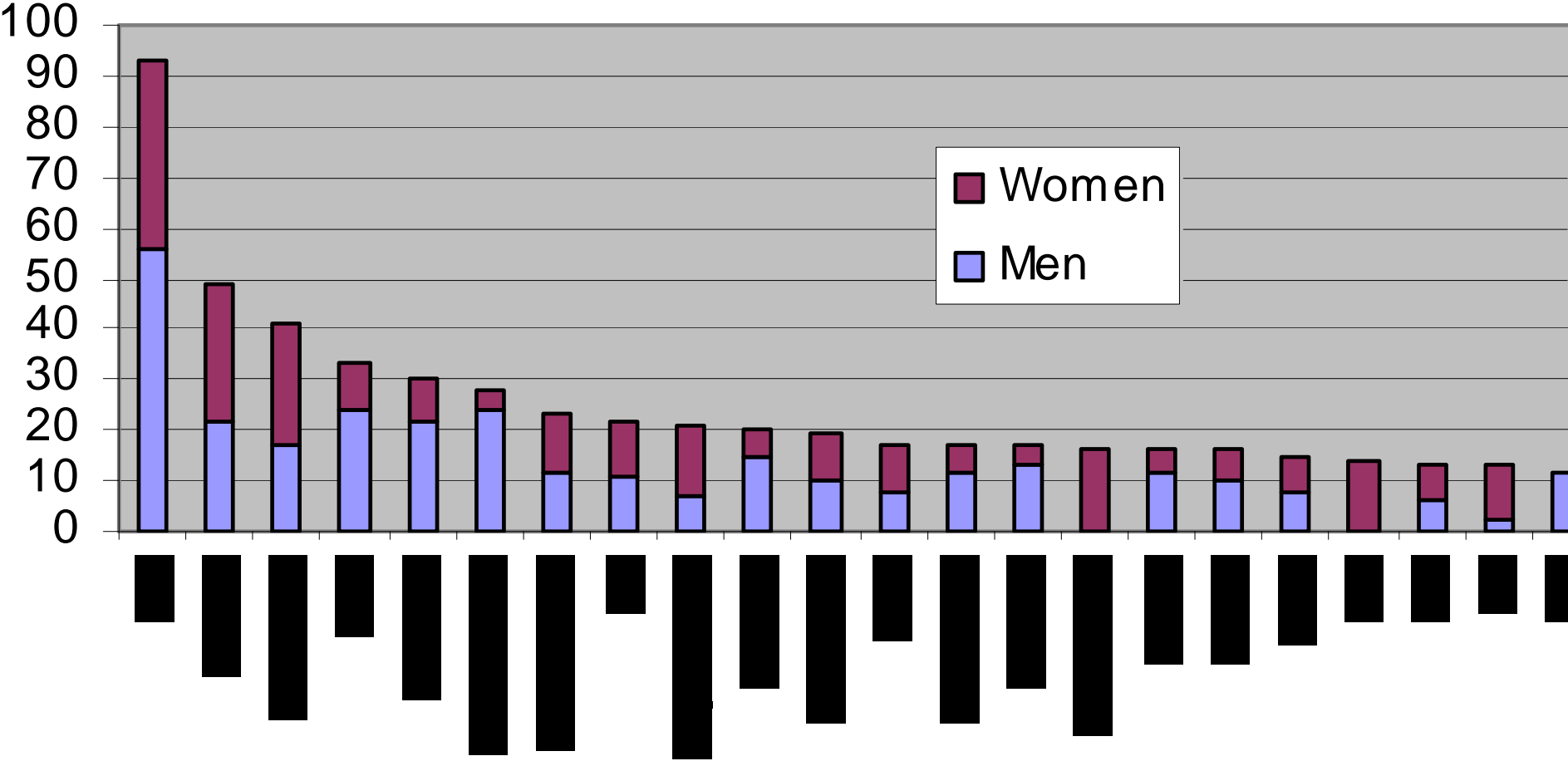
How *Not* To Set Priorities

1. Be persuaded by the latest technology
2. Assume that what is done elsewhere is right for you
3. Assume that demand = need
4. Assume that supply = need
5. Assume that prevalence = need



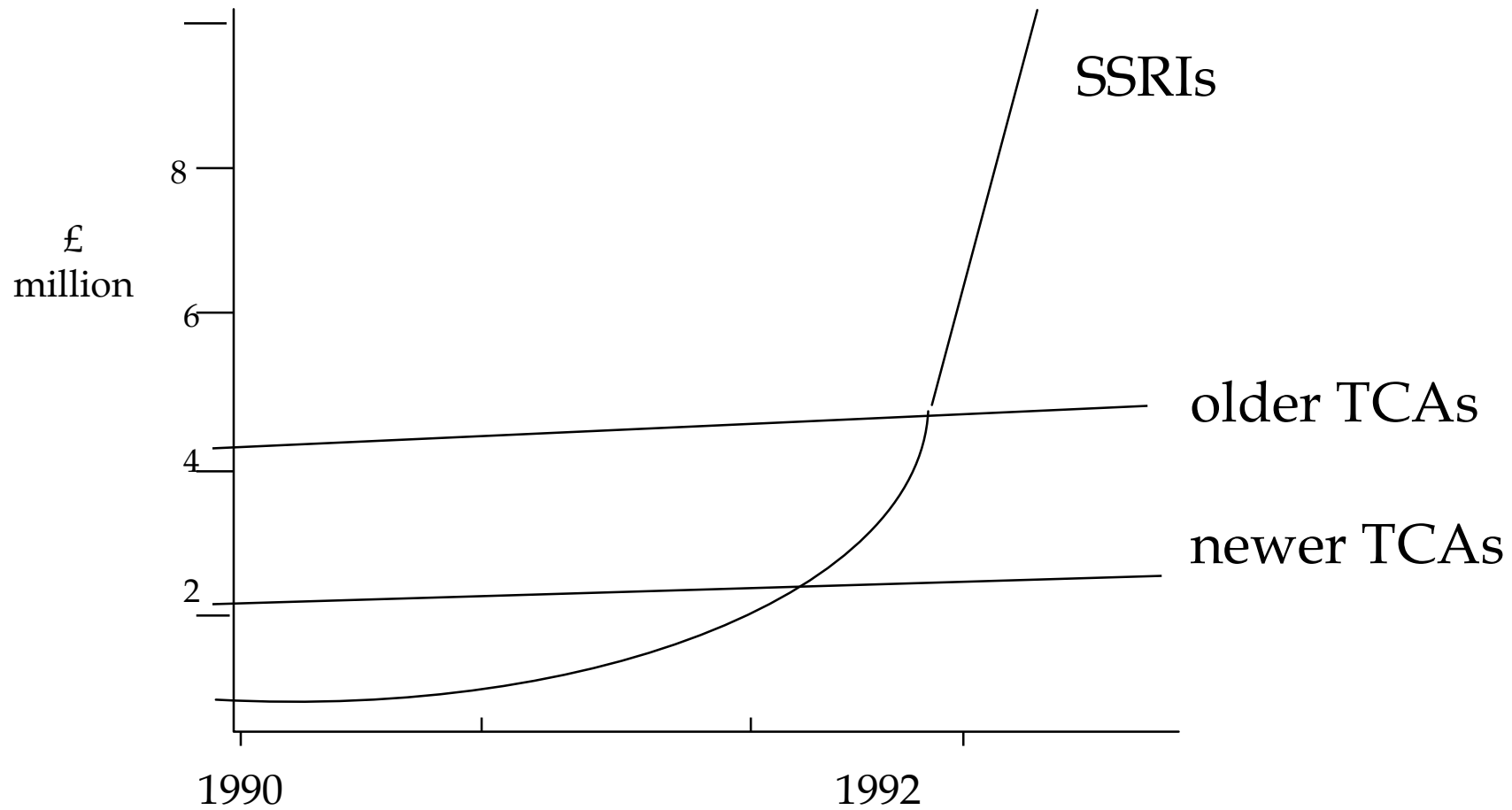
Burden of Disease Established Market Economies

100,000 DALYs lost



Rising Costs

Quarterly Total NHS Antidepressant Prescribing Costs in England



Defining Need

The need for health care:

The **population's ability to benefit** from health care.

- How many people ?
- How effective services ? (And how reliable is the evidence)

Aim of Needs Assessment

To plan, negotiate, change services
for the better

Typically by influencing priorities

Objectives Of Needs Assessment?

- (1) To understand services
- (2) to change services for the better
- (3) to set priorities
- (4) to improve equity
- (3) to audit appropriateness

Why Might Services Need Changing For The Better?

- 1) Historical pattern of services was not needs based
- 2) Shifts in pattern of disease
- 3) **Shifts in medical technology**: drugs, devices; procedures; settings; **genetics**
- 4) **Shifts in medical knowledge** of what works and for whom
- 5) Shifts in expectations

Needs Assessment and Prioritisation

- (1) Need (old-fashioned) = Population Burden**
- (2) Need (modern) = Population Ability to Benefit**
- (3) Relative need = Relative Ability to Benefit**
- (4) Relative priority = Relative Ability to Benefit per £/\$**
- (5) Cost-effectiveness = £/\$ per unit Benefit**

Turning Relative Need Into Relative Priority

\$1000 Total

Options: **A**: \$500 on treatment A for group X yields 50
life years

B: \$500 on treatment B for group B yields 30
life years

C: \$500 on treatment C for group C yields 20
life years

\$1000 on **A plus B** yields 80 life-years

\$1000 on **A plus C** yields 70 life years

\$1000 on **B plus C** yields 50 life years

Practical Approaches To Needs Assessment

- Corporate approach
- Comparative approach
- Health Economic and Epidemiological approach

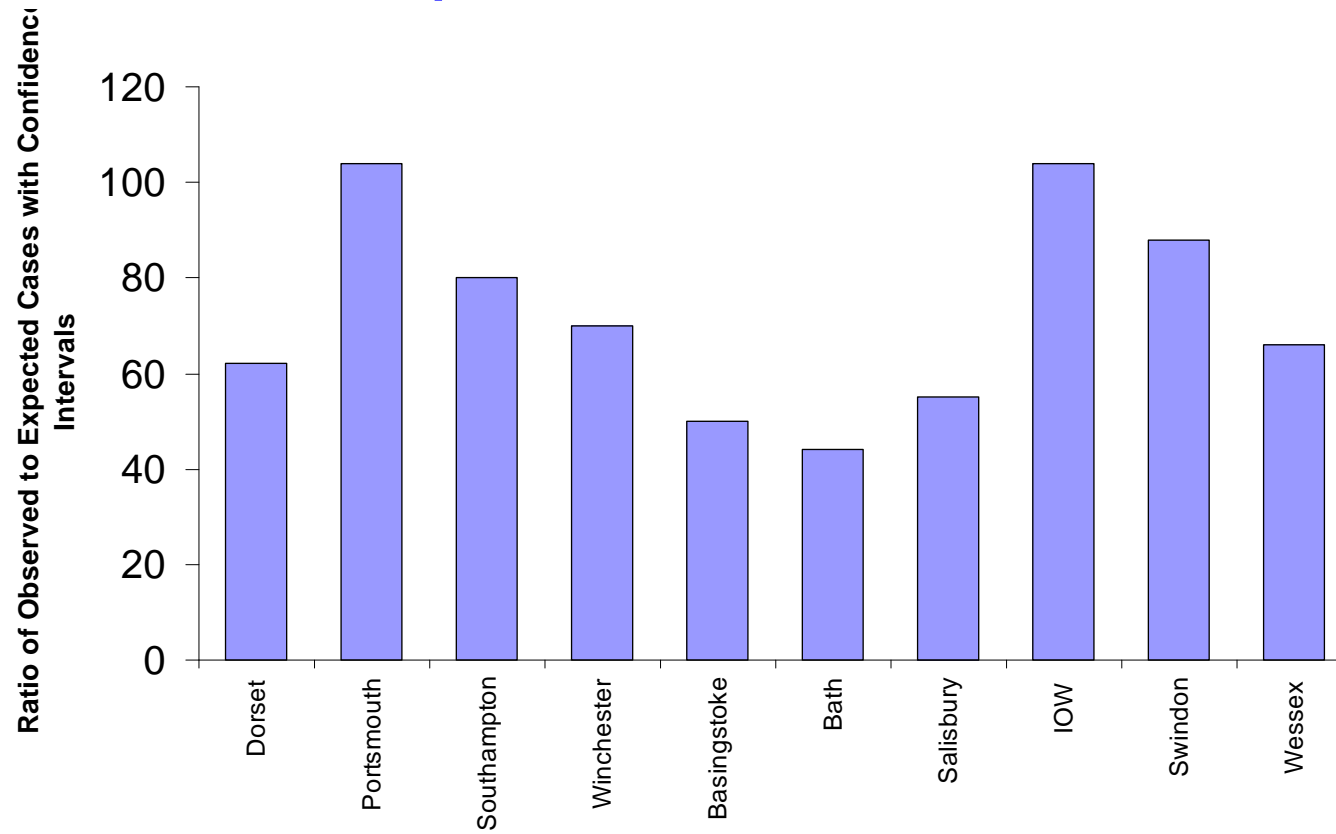
Comparative Approach to Needs Assessment

Essentially a comparison of provision of health care services.

If all other things are equal there might be

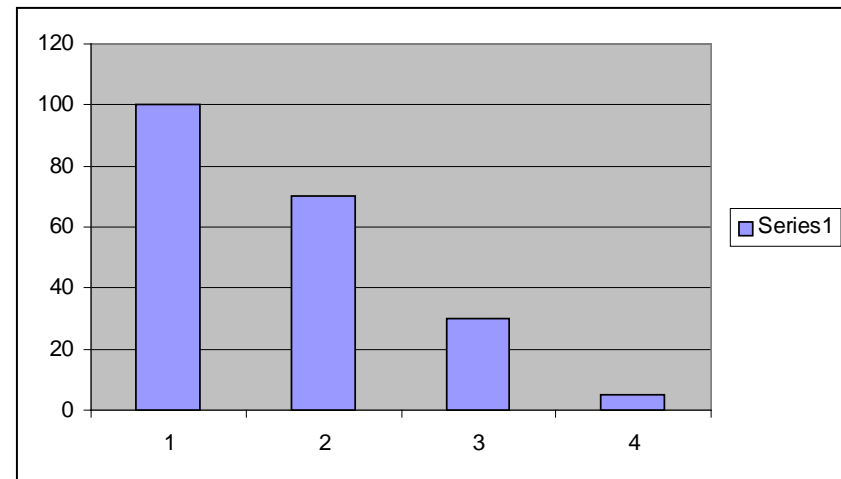
- (1) undermet need in the underprovided area, or
- (2) overmet need in the overprovided area, or
- (3) both.

Standardised Ratio of the Observed to Expected Cases of ESRF



Variations in Medical Genetic Services?

- Counselling for common problems including consanguineous marriage
- Genetic Family History taking
- Screening Programmes for haemoglobin disorders
- Maternal and Child health services including maternal nutrition advice



Corporate Approach to Needs Assessment

Don't ignore what is already known either formally or informally

- Assemble the right advice and interest groups
- Enable useful participation
- Filter and distil

Health Economic / Epidemiological Approach

Takes affordable “ability to benefit” on directly.

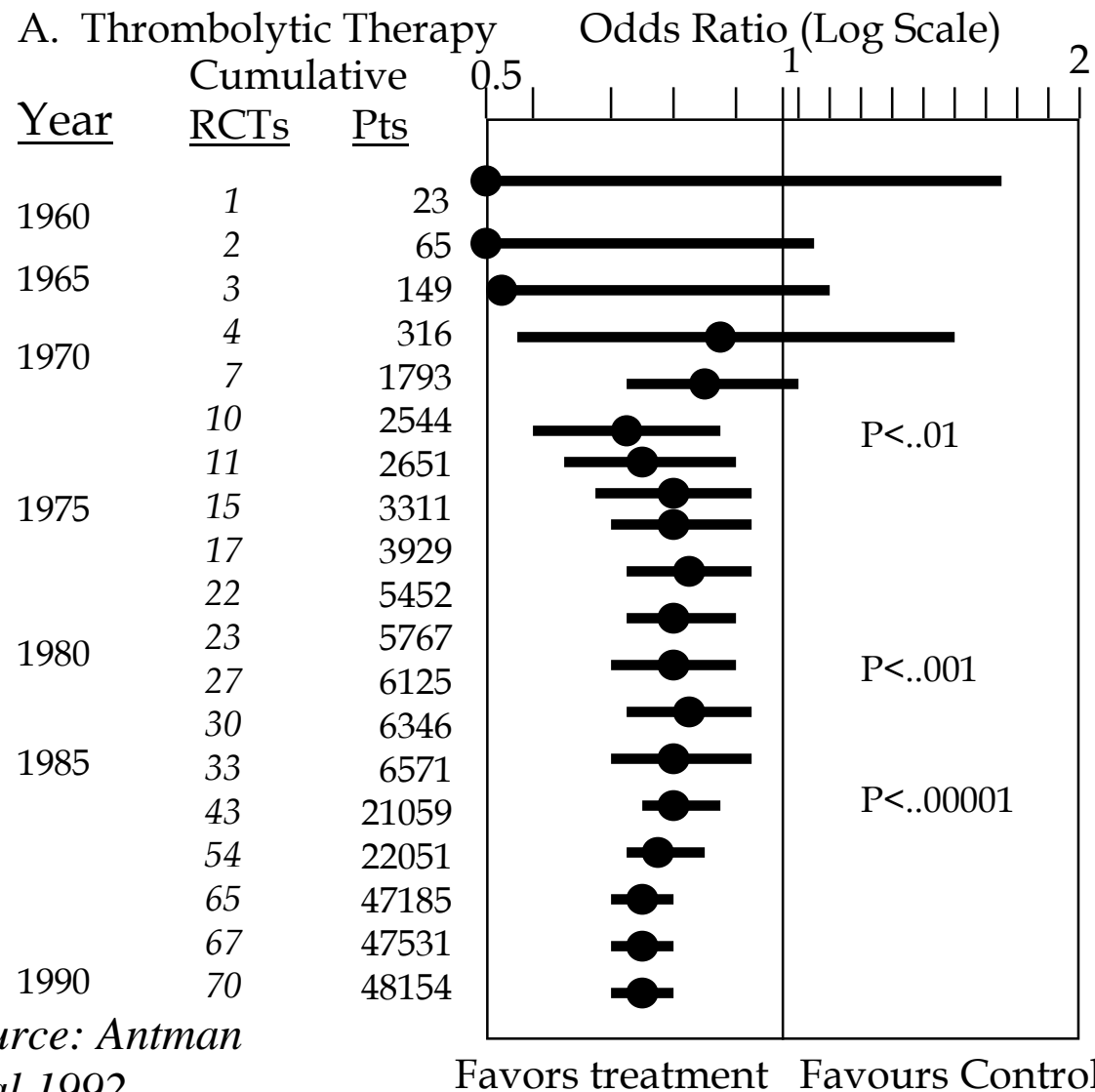
- 1) Select and define the service and patient group
- 2) Do the relevant interventions work?
How well (What is the benefit)?
With what certainty?
At what cost?
- 3) If so, how many would need it?
- 4) How are these needs ranked in terms of cost-effectiveness and affordability?

Basis for Recommendations About the Use of Interventions, Treatments or Service

Evidence	<£3000 per QALY	£3000 - £20,000 per QALY	£20,000 - £30,000 per QALY	>£30,000 per QALY	Negative QALYs
I	Strongly Supported	Strongly Supported	Supported	Borderline	Not Supported
II	Strongly Supported	Supported	Borderline	Borderline	Not Supported
III	Supported	Borderline	Borderline	Borderline	Not Supported
IV	Not Proven	Not Proven	Not Proven	Not Proven	Not Proven



Evidence Based Medicine: the Delay



Source: Antman
et al 1992

Textbook/Review
Recommendations

Routine	Specific	Rare/Never	Experimental	Not mentioned
				21
				5
			1	10
			1	2
			2	8
				7
				8
	1			12
	1		8	4
	1		7	3
5	2		2	1
15	8			1
6	1			

Some ICERS

- **Cost per QALY less than £3,000**

- Neurosurgery - benign brain tumours
- Laser treatment for DM retinopathy
- Folic acid fortification of cereal grain products (D)
- Surgery for newborns with congenital ano-rectal malformation

- **Cost per QALY £3,000 to £30,000**

- CABG for left main vessel disease
- Neonatal ITU for very low birth weight
- Haemodialysis

- **Cost per QALY > £30,000**

- Inpatient detoxification for drug abuse
- Pre-op HIV screening

- **More harm than good**

- PSA Screening
- Antiarrhythmics after MI

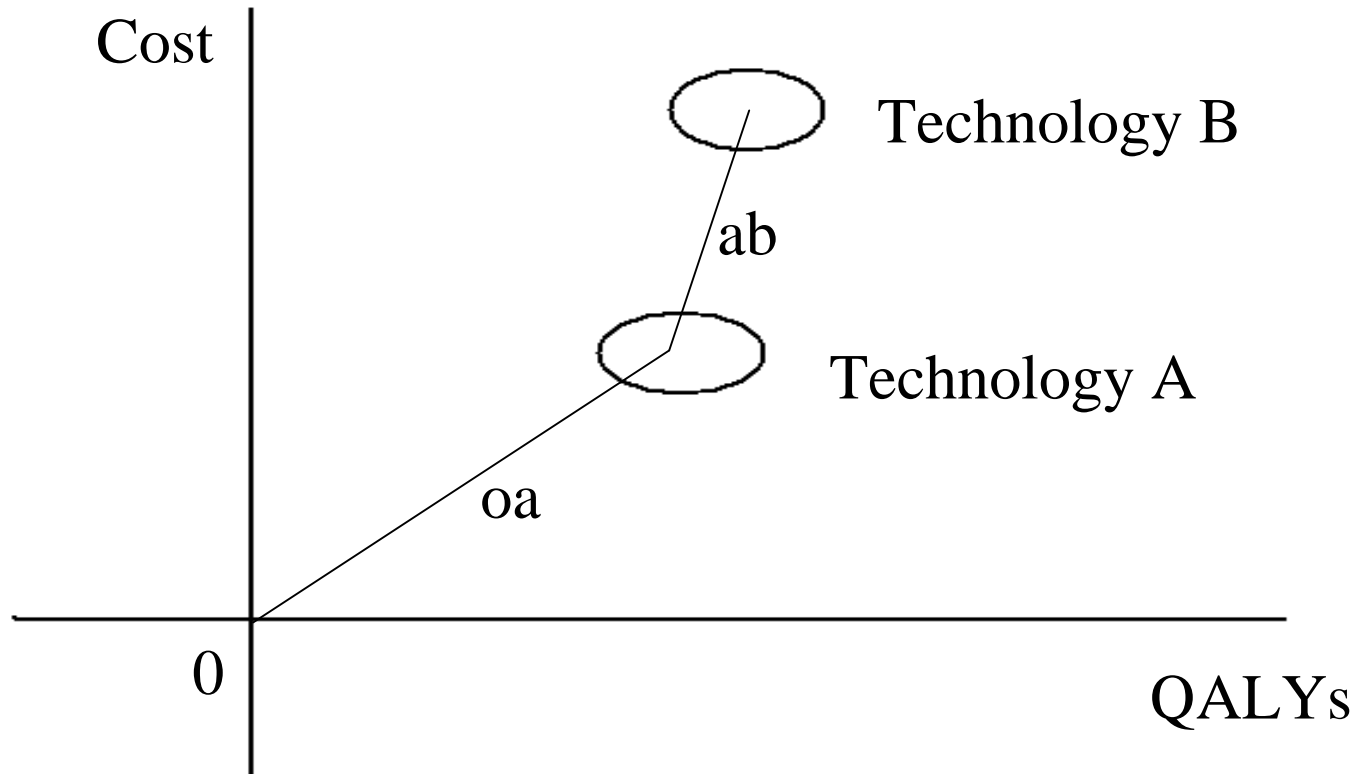
-FAP tracing, testing treating (D)

-Neonatal CF screening (\$12000)
needs updating if symptom delay proven

- BRCA-1 screening (\$2000 per mutation detected, NOT = cost per QALY)

-Familial Hypercholesterolaemia (genotype testing dominated by phenotype testing)

ICER



Conclusion – Setting Priorities

“Big ticket problems” and “Low hanging fruit”

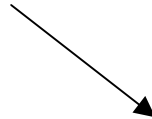
- (1) Where are the greatest health problems:
(numbers, severity, duration)?
- (2) What are the most cost-effective
interventions?
- (3) Get started

Stages of Needs Assessment

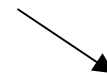
Exploration, Negotiation/collaboration,



Disease/client group review:
What is the population?
What are the interventions



Guideline/intervention focus:
Where can we make a big impact
cost-effectively?



Audit and monitoring

QALYs

