COLLOQUIUM ON WAIT LIST MEASUREMENT, MONITORING AND MANAGEMENT, CANADIAN MEDICAL ASSOCIATION, OTTAWA
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OECD PROJECT ON WAITING TIMES FOR ELECTIVE SURGERY

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Excessive waiting times for elective surgery

- **A puzzling phenomenon**
  - About half of OECD countries report having problems – about half do not (including many with universal public insurance, like Canada)
  - Policies to tackle waiting times often end in disappointment
  - It is the biggest public complaint about the health system in a number of countries but surveys of people actually waiting suggest they are not very worried by waits of up to 3-6 months (except for cardiovascular?)

Important features of the supply of surgery

- Need for surgery varies from great to small and from immediate to not-at-all urgent
- Rapid evolution of techniques in recent decades
- Few formal clinical trials
- Huge variations in surgery rates observed across large and small areas
- Demand for surgery managed mainly by the providers - surgeons

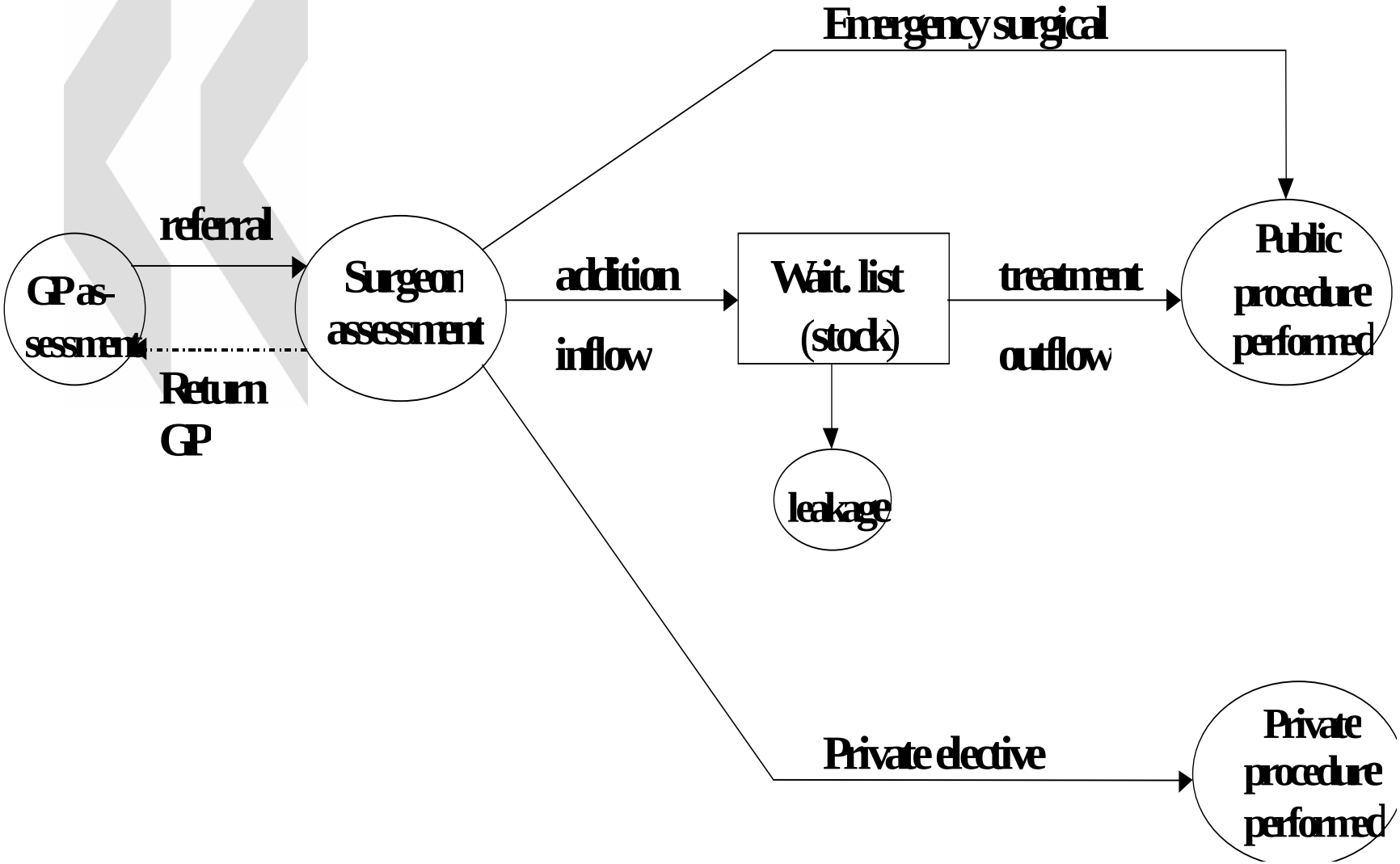
Scope of OECD project on waiting times

- **Involved 12 countries with waiting time problems**
  - Australia, Canada, Denmark, Finland, Ireland, Italy, the Netherlands, New Zealand, Norway, Spain, Sweden, the United Kingdom
- **Also looked at 8 countries without waiting time problems**
  - Austria, Belgium, France, Germany, Japan, Luxembourg, Switzerland, and the United States
- **Focussed on 10 elective procedures**, such as hip replacement and cataract surgery
- **Collected data** on surgery rates, waiting times, capacity etc.
- **Collected information on policies**

Questions addressed

- What are the causes of variations in waiting times?
- What policies are most effective in tackling excessive waiting times (>3-6 months)?
- Are there optimum surgery rates?
- Are there optimum waiting times?

The waiting time phenomenon



Alternative Definitions of Waiting Times

- Outpatient waiting – from GP referral to surgeon assessment
- Inpatient (+day case) waiting – from surgeon assessment to procedure
  - Either average waiting time on the list at a point in time (uncompleted waits)
  - Or average waiting time to procedure (completed waits)

Conclusions about optimum surgery rates

- Yes: in principle there will be optimum surgery rates.
- Marginal benefits will decline and marginal costs will increase with additional surgery.
- Optimum will be where marginal benefit equals marginal cost (Note: this implies denying surgery to some patients who could benefit, if b<c)
- Optimum rates will be a matter for local and national judgement.
- National and international comparisons of surgery rates may help to inform these judgements.

Conclusions about optimum waiting times

- Yes: in principle there will be optimum waiting times.
- There will be big savings in capacity from allowing a queue to form.
- But the longer the queue, the higher the administrative and clinical burdens of managing the queue.
- Hence, there will be optimum waiting times greater than zero (at least at the optimum surgery rate).

Main findings: data on surgery rates

- Rapid increase in elective surgery rates over time (e.g. +64% in England in the 1990s)
- Large variations in surgery rates between countries (e.g. more than threefold for 6 procedures, 10 fold for hysterectomy)
- Canada seems to have fairly low rates of surgery for inpatient procedures compared with countries without waiting times (Table A6)
- Canada seems to have middling rates of surgery compared with countries with waiting times (Table A6).

Table A6. Surgical procedures rates (per 100 000 population)

	Hip Replace-ment (inpatient)	Knee replace-ment (inpatient)	Prostate-ctomy (inpatient)	Hystere-ctomy (inpatient)	CABG (inpatient)	Inguinal and femoral hernia (total, inpatient and day surgery)
Countries without waiting times						
Austria	217	120.7	230	95	56.7	
Belgium	195.6		336	150	98[2]	
France	184.6	80.1	286	120	40.1	273
Germany	314.3	149.2	320	236	122.7	349
Japan						
Luxembourg	185.1	105.6	222	375	40.7	307.4
Switzerland						
United States	102.3	115.8	133	143	204.8	
Average[1]	199.8	114.3	254.5	186.5	93.8	309.8
Countries with waiting times						
Australia	126.3	96.8	246	165	89.4	227.4
Canada	93.1	88.5	167	108	68.6	
Denmark	158.6	48.2	195	45	66.2	228.6
Finland	98.2	104.6	175	400	80.3	229.1
Ireland	(136)	29.4	120	53	26.8	125.6
Italy	117.6	40.9	197	74	48	300.1
Netherlands	132	49.5	151	87	92.9	191.9
New Zealand	120.9	65.3	119	63	103.3	111.7
Norway	171.4	46.7	215	206	76.1	165.5
Spain	72.8	48.3		45	17	
Sweden	166.3		194	174	72.8	
United Kingdom	132.5	63.8		42	40.8	209.5
Average[1]	127.1	62.0	177.9	121.8	65.2	198.8

Notes:
[1]Unweighted average.
[2] year = 1997.

Source: OECD Health Data, 2003.

Main findings: data on waiting times

- Large variations in waiting times among countries with problems
- The few data OECD received for Canada suggest middling waiting times for hips, knees and cataracts (Table 5)
- Low waiting times for coronary artery bypass grafting compared with other countries with problems (Table 5)

Table 5. Median inpatient waiting times of patients admitted by surgical procedure (for eight countries where waiting times are reported to be a policy concern), 2000

Number of days

	Hip Replacement	Knee Replacement	Cataract surgery	Varicose veins	Hysterectomy	Prostatectomy	Cholecystectomy	Inguinal and femoral hernia	CABG	PTCA
Australia	98	120	120	94	38	24	48	46	22	
Canada	112(BC) 105(MN) 162(SK)	136 (BC) 105(MN) 291(SK)	80 (BC)						23(ON) 10(SK)	
Denmark	87	90	36	69			57	46		
Finland	148	202	189	155	70	39	90	74	34	20
Norway	99	132	28	110	37	47	63	74	25	18
United Kingdom (England)	211	261	182	178	110	37	97	95	191	58

Notes: More details on "Sources and methods" are contained in Annex 2 of Siciliani and Hurst (2003). Australia: includes Queensland, South Australia and Western Australia. Canada: BC=British Columbia, MN=Manitoba, ON=Ontario and SK= Saskatchewan. Norway: cataract waiting time refers to 2001. United Kingdom: includes English population only.

Findings on the causes of variations in waiting times

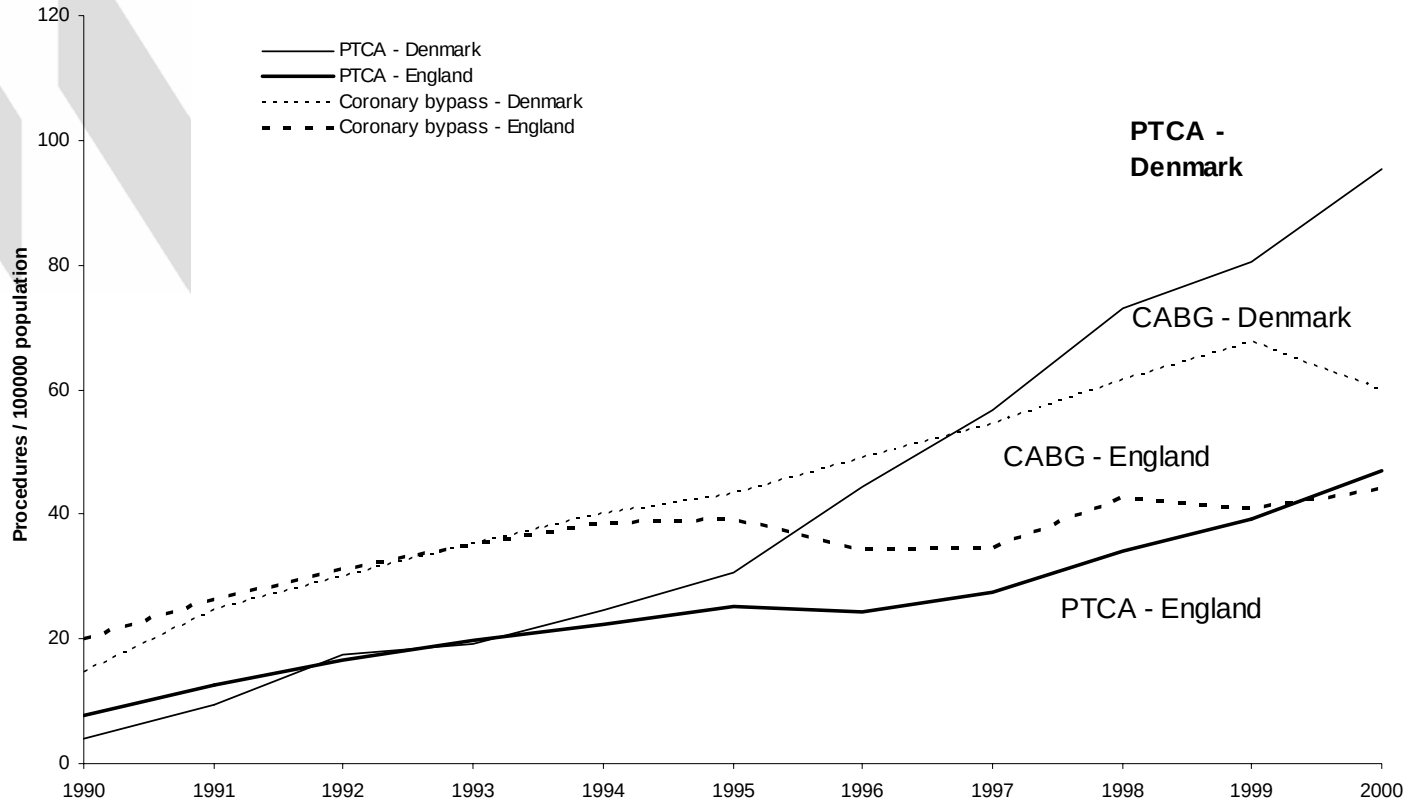
- 1. Varying excess demand for publicly funded surgery
  - Zero or very low money price for patients
  - Varying constraints on supply
  - Waiting times act like a substitute for prices
- 2. Varying propensity to form queues/manage demand
  - Does money follow the patient or the queue?
  - Do surgeons have dual practice?

Findings on the best policies for tackling excessive waiting (1)

- **Comparisons limited by data**
- **Supply side policies**
  - Increase expenditure and/or capacity
    - High benefit, high cost, takes time
  - Increase productivity (e.g. by activity related payments; more day surgery)
    - High benefit, medium cost (?), takes time

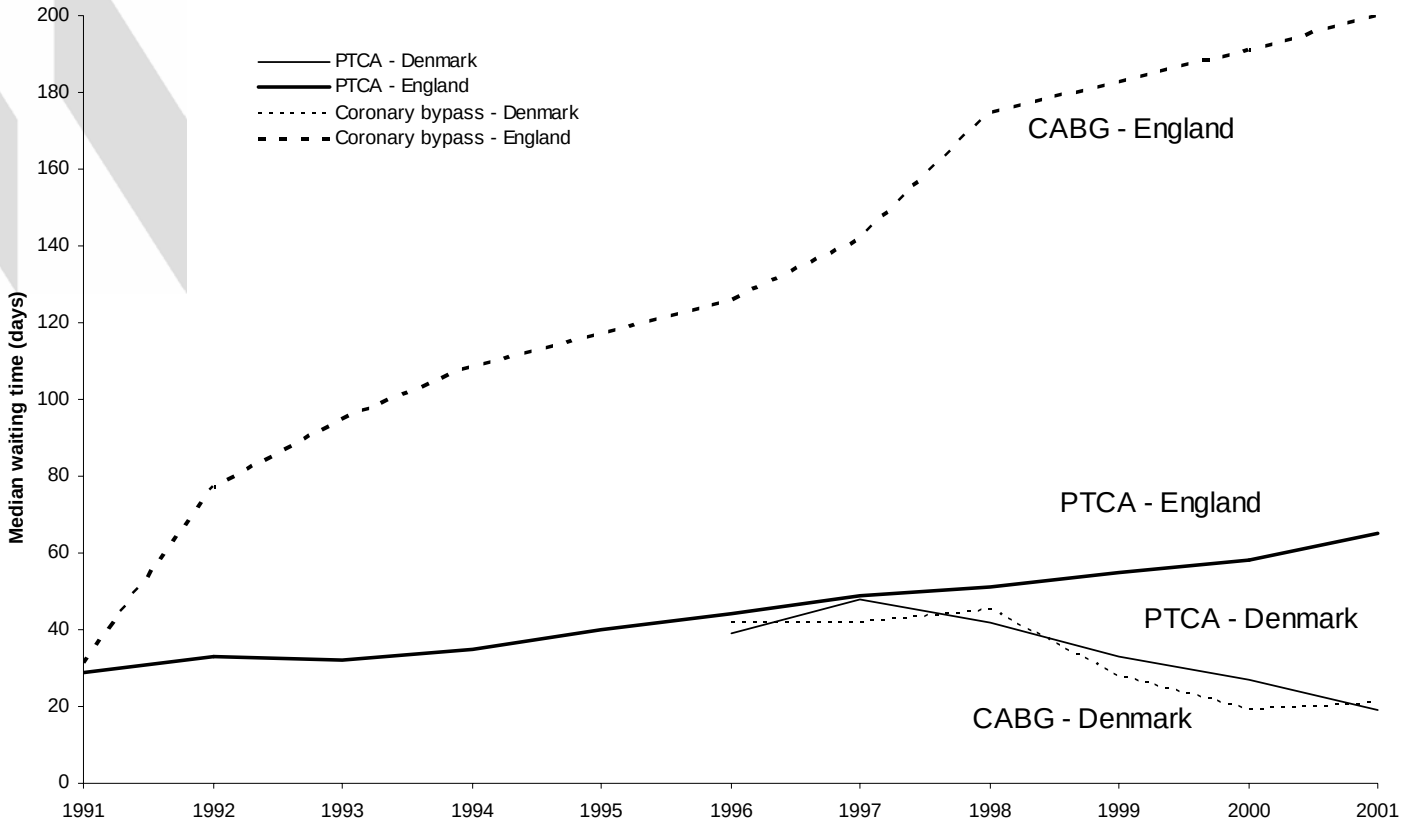
Different supply policies,

Denmark and England Rates of coronary revascularistion procedures,, 1990-2000



Different supply policies,

Median waiting times for coronary revascularisation procedures, Denmark and England, 1991-2001

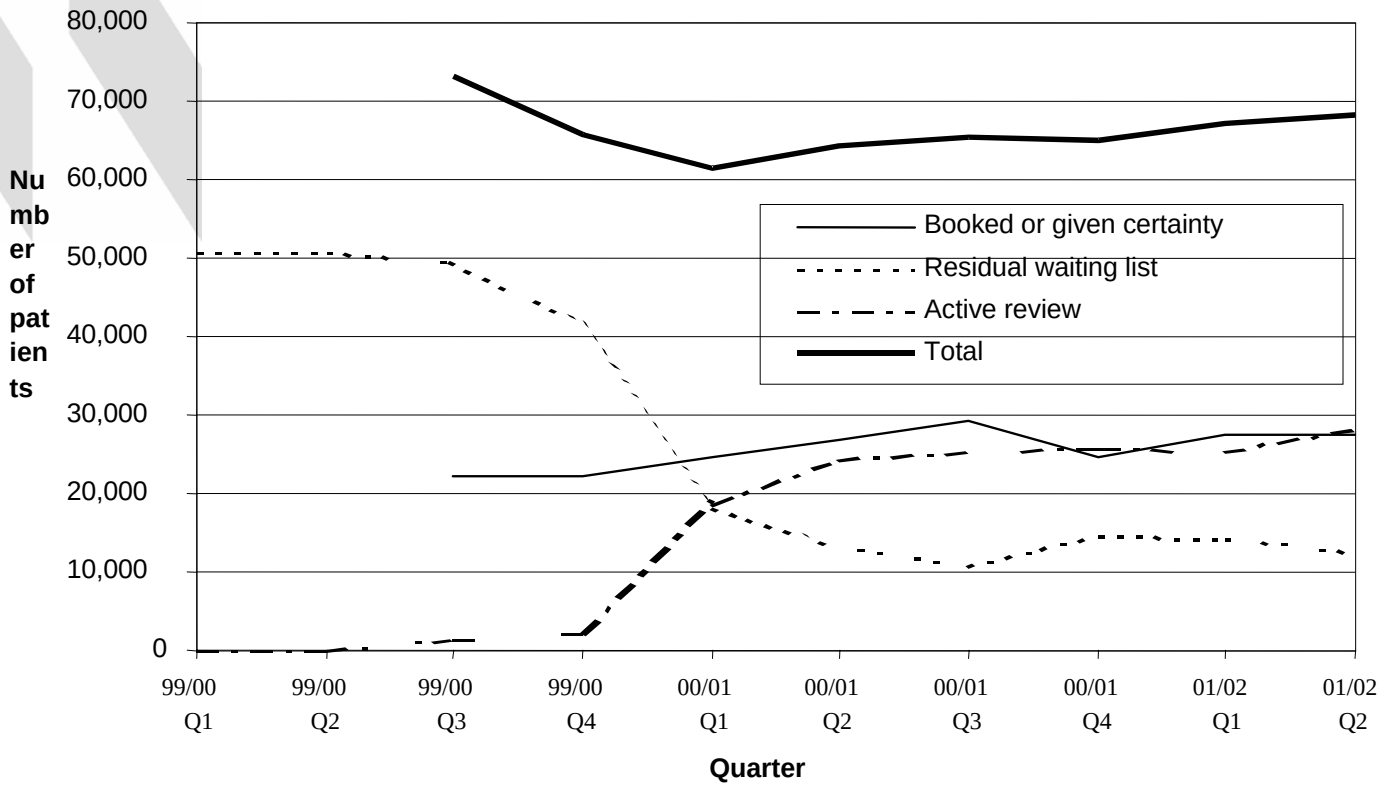


Denmark: Development in waiting time and number of operations for the 18 specific operations (inpatients)

Findings on the best policies for tackling excessive waiting (2)

- **Demand side policies**
  - Clinical prioritization
    - should increase efficiency and equity
  - Manage demand (raise clinical thresholds)
    - Some benefit (does not increase surgery rate and can be seen as increasing ‘waiting to join the waiting list’), low cost, quite quick to implement?

Status of the patients on the waiting list

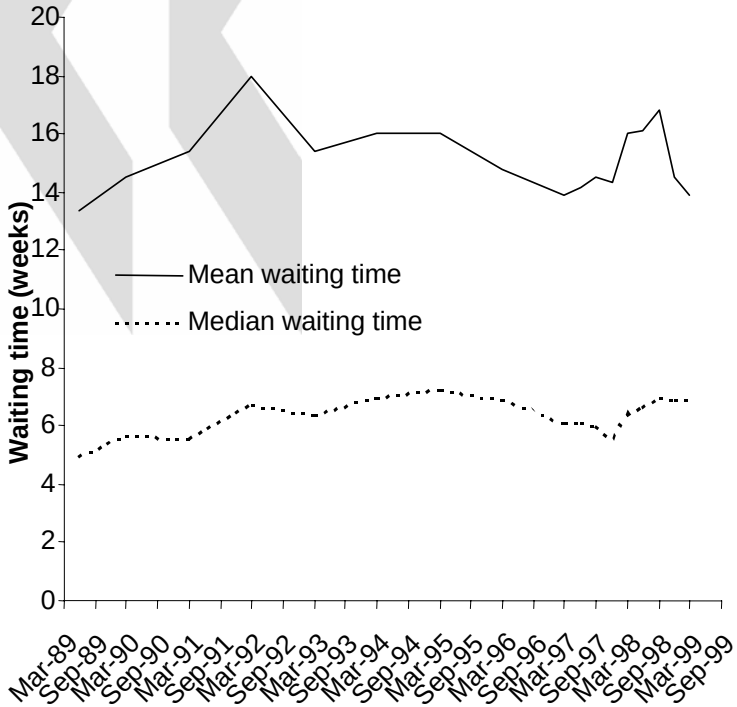


Findings on the best policies for tackling excessive waiting (3)

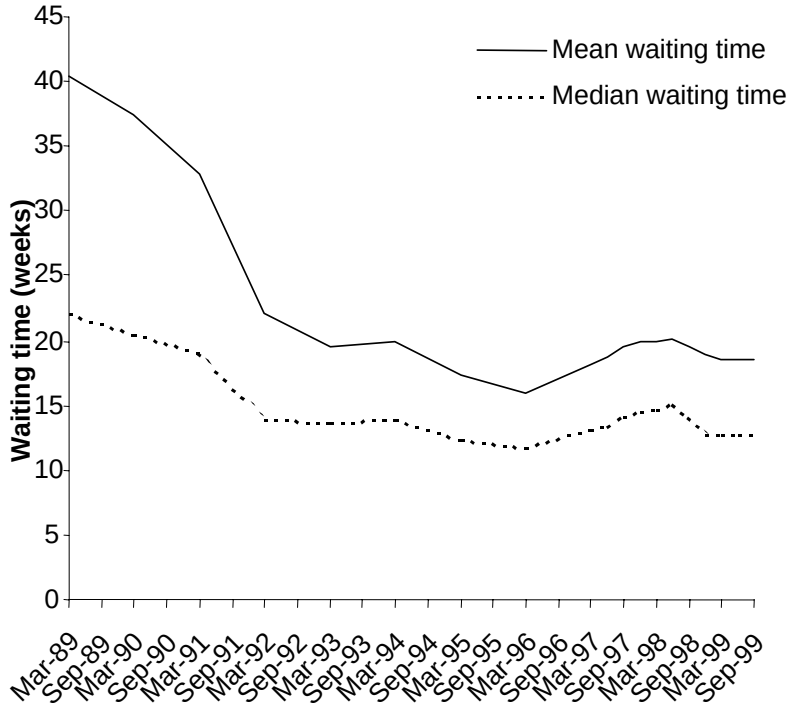
- **Policies aimed directly at waiting times and mixed policies**
  - Maximum waiting time targets
    - Like squeezing a balloon; can clash with clinical priorities, but cheap to implement?
  - Mixed policies
    - Best buy?

Maximum waiting time guarantees, England

Mean and median waiting time of patients admitted

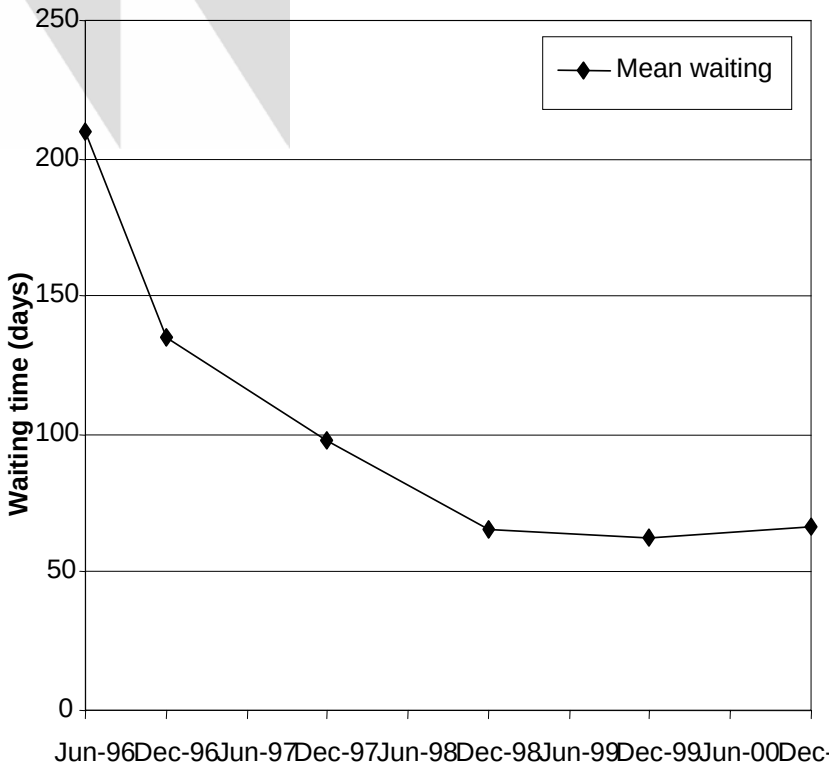


Mean and median waiting time of patients on the list

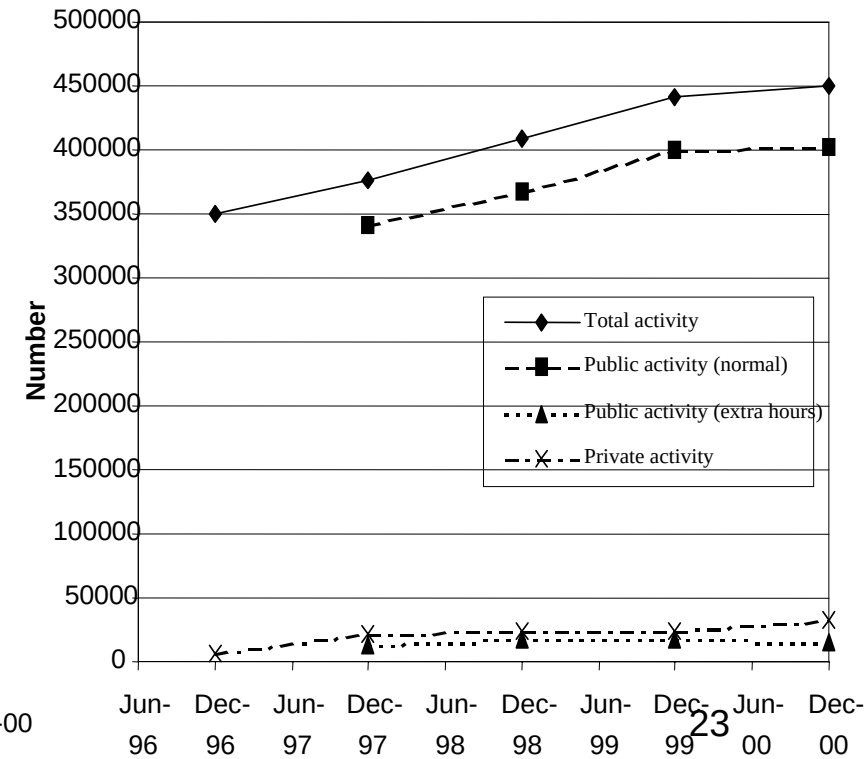


Mixed policies, Spain

Mean waiting time for patients on the list (Insalud, Spain)



Surgical treatments provided (Insalud, Spain)



Towards solving the puzzles

- Why international variations in waiting times?
  - **Surgical capacity differs**
  - **Surgical productivity probably differs**
  - **Incentives to form queues differ**
- Why do policies to tackle waiting times often end in disappointment?
  - **Demand is increasing rapidly through time**
  - **There may be backlogs in demand**
  - **lower waiting acts like a price to encourage higher demand**
- Why is the public so alarmed by waiting when patients are less worried?
  - **an inescapable aspect of public opinion or poor communication?**

Questions about waiting in Canada (1)

- Why are wait times reported in Canada (spending 9.7% of GDP on health) when, say, while they are not in France (spending 9.5%)?
- All or nearly all surgery patients are publicly funded in both countries
- Capacity seems to be higher in France (e.g. 60% more physicians and 30% more acute beds per thousand than Canada).
- Scanty data on 5 inpatient surgery procedures gives a mixed picture of relative rates France/Canada

Questions about Canada (2)

- Could Canada be handicapped by its long border with the US (high prices)?
- Or is it that public patients in France can choose to go to lots of small independent (but publicly funded) hospitals for elective surgery (accounting for 30% of acute beds and perhaps half of elective surgery) which compete with public hospitals (surgeons are paid by ffs)?
- Note that the British are now investing heavily in ‘plurality of provision’ for NHS patients in an attempt to tame the queues
- public patients will be able to choose to go to ‘Independent treatment centres’ for elective surgery (see BMJ, 2004, 328:340-2)

Questions about Canada (3)

- Is there a need for better data in Canada?
  - Lack of day surgery rates in some jurisdictions and hence overall surgery rates (day surgery rate a possible indicator of efficiency)?
  - Shortage of comparative data on surgical productivity?
- Limited comparable waiting time data in Canada
- Only median waiting times supplied to OECD – most countries supply mean waiting times (or both).

Further international work?

- There is still some way to go to understand this complex phenomenon
- Need further investigation of variations in surgery rates, surgical productivity and waiting times across OECD countries
- Need to develop understanding of how to improve public ‘purchasing’ of surgery?
- Need to understand wait times for therapeutic procedures other than surgery

Conclusion

- There is much that governments can do to tackle excessive waiting for elective surgery.
- Mixed policies = best buy
  - Capacity
  - Productivity/efficiency
  - Management of demand