The nature and consequences of supply-side incentives in the British NHS

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Why health care

An economic specter haunts the democratic governments of the world's most prosperous economies. The rising cost of health care [. . .] casts a shadow over virtually every election.

-William Baumol, 1993

Why health care

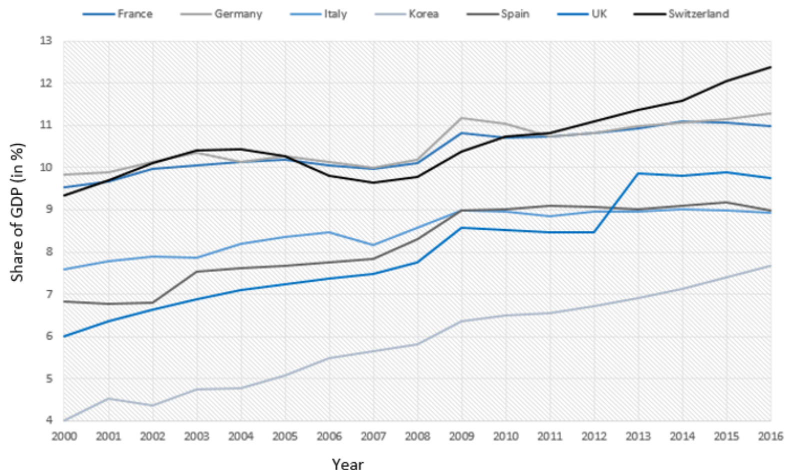


Figure 1: OECD stat

Why primary care

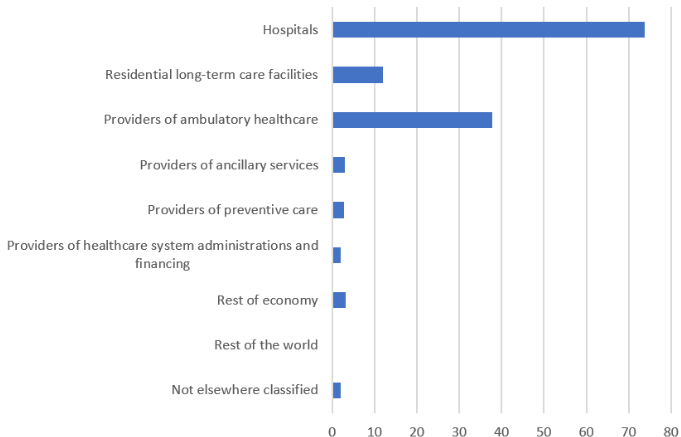


Figure 2: Spending per type of provider in £bn, ONS

Why primary health care

- Nature of the demand
- Expected behavior of the physician
- Product uncertainty
- Barriers to entry

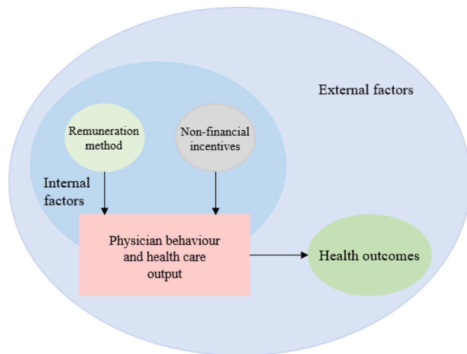
  ..and especially in the case of primary care
- The GP as a gatekeeper - IO of primary care providers
- Productivity lag and wage pressure

Physician as an agent

I will apply, for the benefit of the sick, all measures which are required, avoiding those twin traps of overtreatment and therapeutic nihilism.
- Hippocratic Oath

- "Physicians as any other purveyors"
- Supplier Induced Demand - Nguyen and Derrick (1997), He and Mellor (2012), McGuire and Pauly synthesis

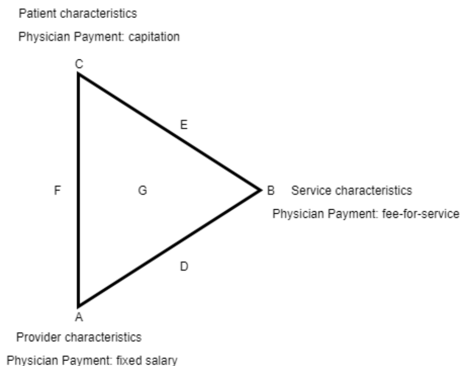
Physician remuneration and its implications



Incentive design

Incentive dimensions:

- Unit of reimbursement



- Size and breadth of payment
- Timing of the payment
- Market saturation and provider competition

Critique of quantity based payment

- Moral Hazard
- In the case of the UK, and especially England, about a third of the population lives with long-term conditions
- Additionally, some poor performance on some quality indicators as compared to other rich countries, e.g. infant mortality

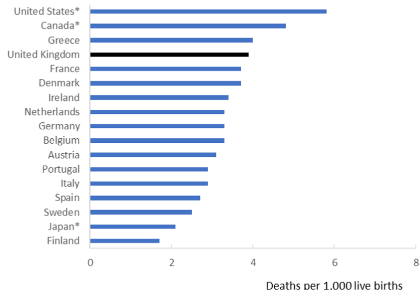
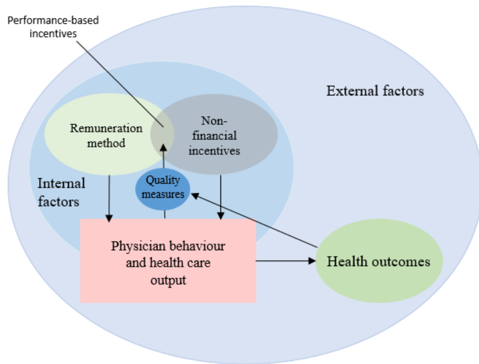
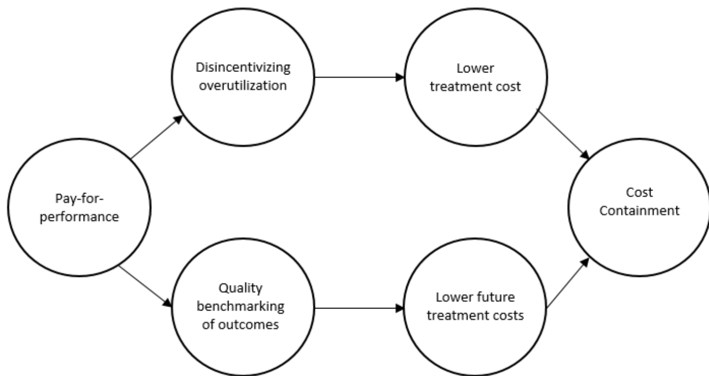


Figure 3: Infant mortality in selected industrialised countries

Including performance incentives



Including performance incentives



Major concerns related to P4P

- Uncertainty regarding the crowding-out of pro-social behavior and preferences
- In the long run any financial incentive could alter the relationship between the worker, the task and the payer in counterproductive ways (especially when a predominantly non-monetary relationship becomes monetary)
- Multitask agency issues

Evidence Review

- Effect on unincentivized procedures - There were substantial improvements in quality for all indicators and these associated with financial incentives seem to have been achieved at the expense of small detrimental effects on aspects of care that were not incentivized
- Choice of incentives - Evidence for lives saved or quality adjusted life years gained was found for 28 indicators accounting for 41% of the total incentive payments; no associations were found between the size of financial payment and the expected health gain at the performance threshold. There is more than one source of financial rewards for a single indicator. Especially in the case of preventive care there was no effect on clinical outcomes.

Evidence Review

- Size and quality threshold - increasing the quality threshold (to 75th percentile) leads to a lower burden on the NHS and a small change in remuneration of each indicator (ca. 7.5%) and no drastic change of physician income
- Direct effect on areas of under-performance - performance incentives do not bridge the gap between urban and rural populations. When examining their effect on premature mortality rates geographical, economic, gender- and race-related discrepancies were found. Similar findings were associated with public health related measures, i.e. smoking cessation

Thank you