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Incentives and payment systems in dentistry

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Payment systems in dentistry

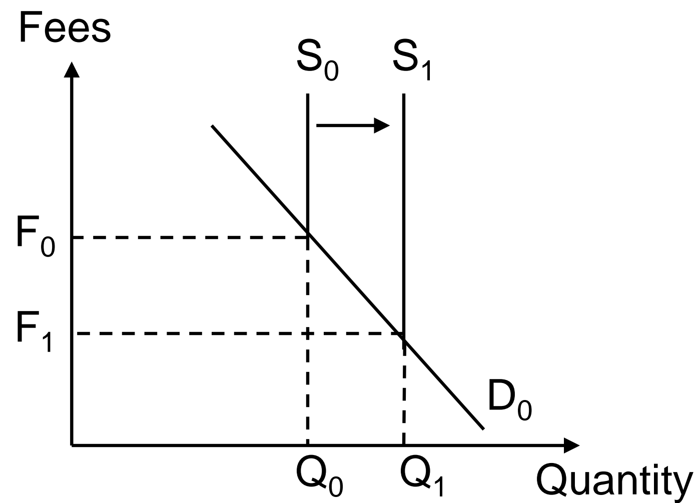
- Dominant payment systems
  - Fee-for-service
  - Capitation
  - Salary
- New payment systems
  - Pay-for-performance
  - Payment according to public reporting
- Overall aim of any payment system
  - Intended outcomes
    - access to high quality dental care
  - Unintended outcomes
    - unnecessary treatment
    - avoidance of care for patients in need for care

Fee-for-service

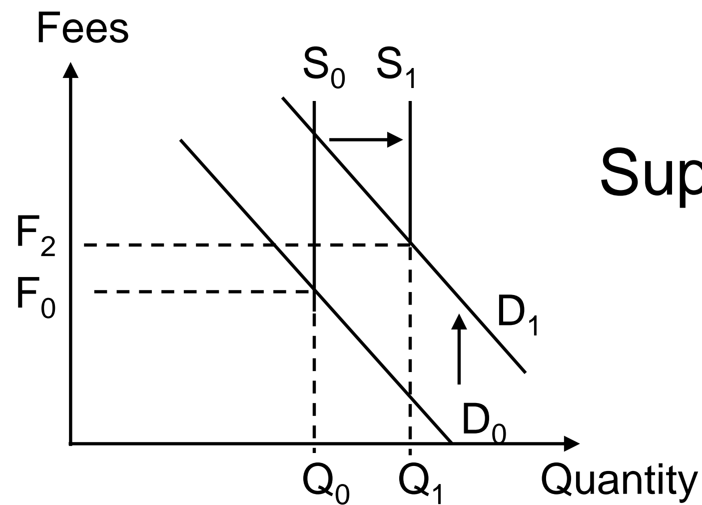
- Fees either: set administratively or by market forces
- Income is directly related to the level of activity
- Suitable for services that are
  - easy to measure
  - low measurement costs
- Concern
  - Diverting dentists' attention away from areas that are important, but difficult to measure
  - Supplier induced demand
    - Dentists more concerned about their own personal economic interests rather than patient's welfare
    - May encourage more treatment than is necessary

Fee-for-service and dentists' self-interest

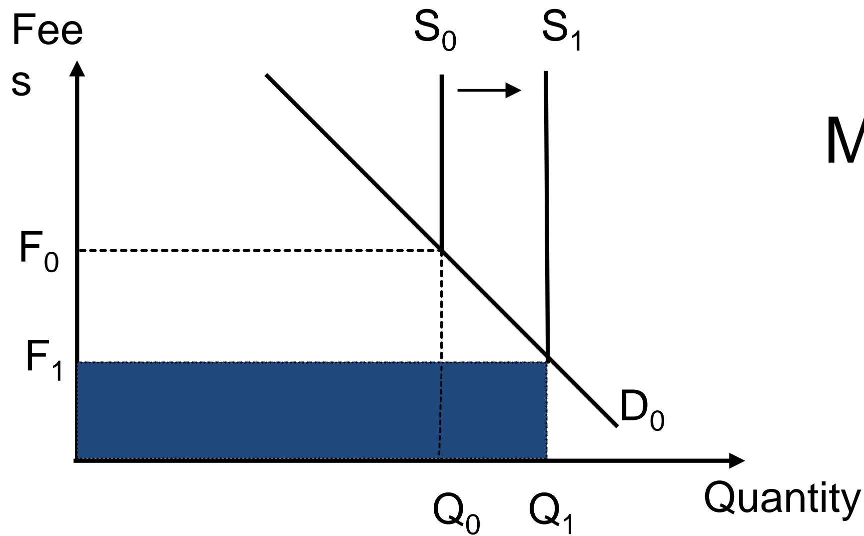
- An ideal payment system neutralizes the dentist's self-interest
- Patients poorly informed
  - The dentist has the possibility to influence the amount of care provided
- Does competition lead to supplier induced demand?
  - Supplier induced demand: a way to counteract fall in income, caused by increased competition



Market model

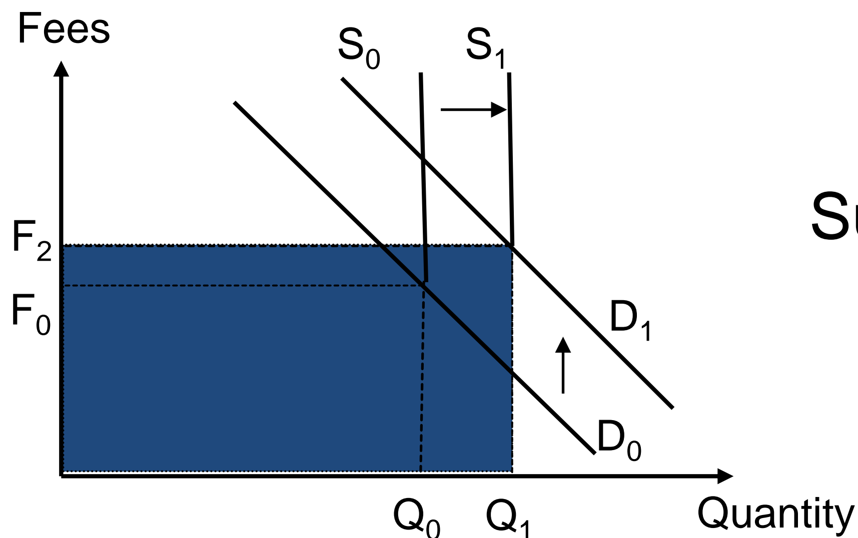


Supplier induced demand



Market model

Patient's total costs



Supplier induced demand

Pay-for-performance - targeting provider behaviour

- Provider reimbursements linked directly to performance indicators measuring:
  - Health outcomes
  - The quality of the services
- "Doing the right thing, at the right time, in the right way delivered to the right patient"
- Meant to contain costs
- No clear evidence of positive effects
  - Difficult to identify indicators that lead to improvements in health
  - Programmes suffer from significant design and implementation obstacles
  - Lack of provider acceptance

Pay-for-performance in dentistry

- Not used very much in dentistry
  - Lack of clinical markers that are valid indicators of the severity of dental diseases
- Criteria for a successful pay-for-performance programme:
  - Objectives have to be clear
  - Performance indicators need to be valid
  - Analysis and interpretation of performance data need to be unambiguous
  - Provider acceptance needs to be high

Per capita payment and cost containment

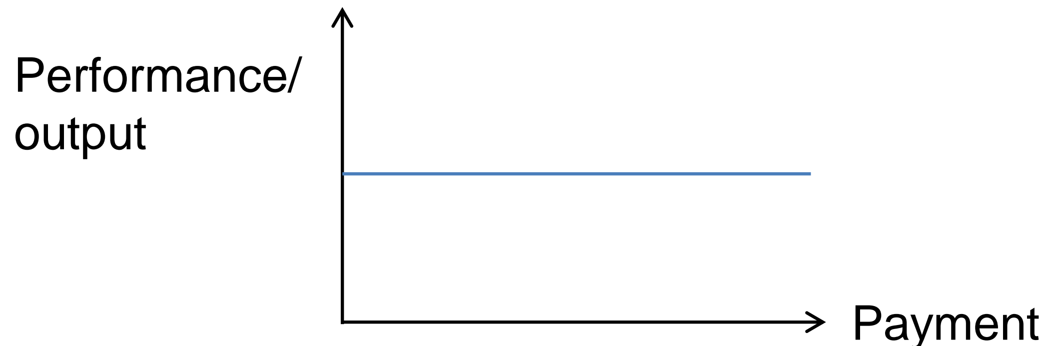
- Dentists who wish to work a lot get rewarded for their efforts
- A per capita contract leads to higher production per dentist. Fewer dentists would be needed
- Contain costs per patient, but might lead to underprovision of services and patient selection
- Risk adjustments are difficult

Mixed payment system

- The best of fee-for-service and per capita payment
- Produce results somewhere between over- and under-treatment
- Prospective component, i.e. per capita payment, promotes efficiency
- Retrospective component, i.e. fee-for-service payment secures the quality of care

Intrinsic motivation

- Desire to perform an activity for its own inherent rewards
- Incentives unrelated to profit



- Incentive-based payment systems weaken intrinsic motivation

Intrinsic motivation and crowding-out effects

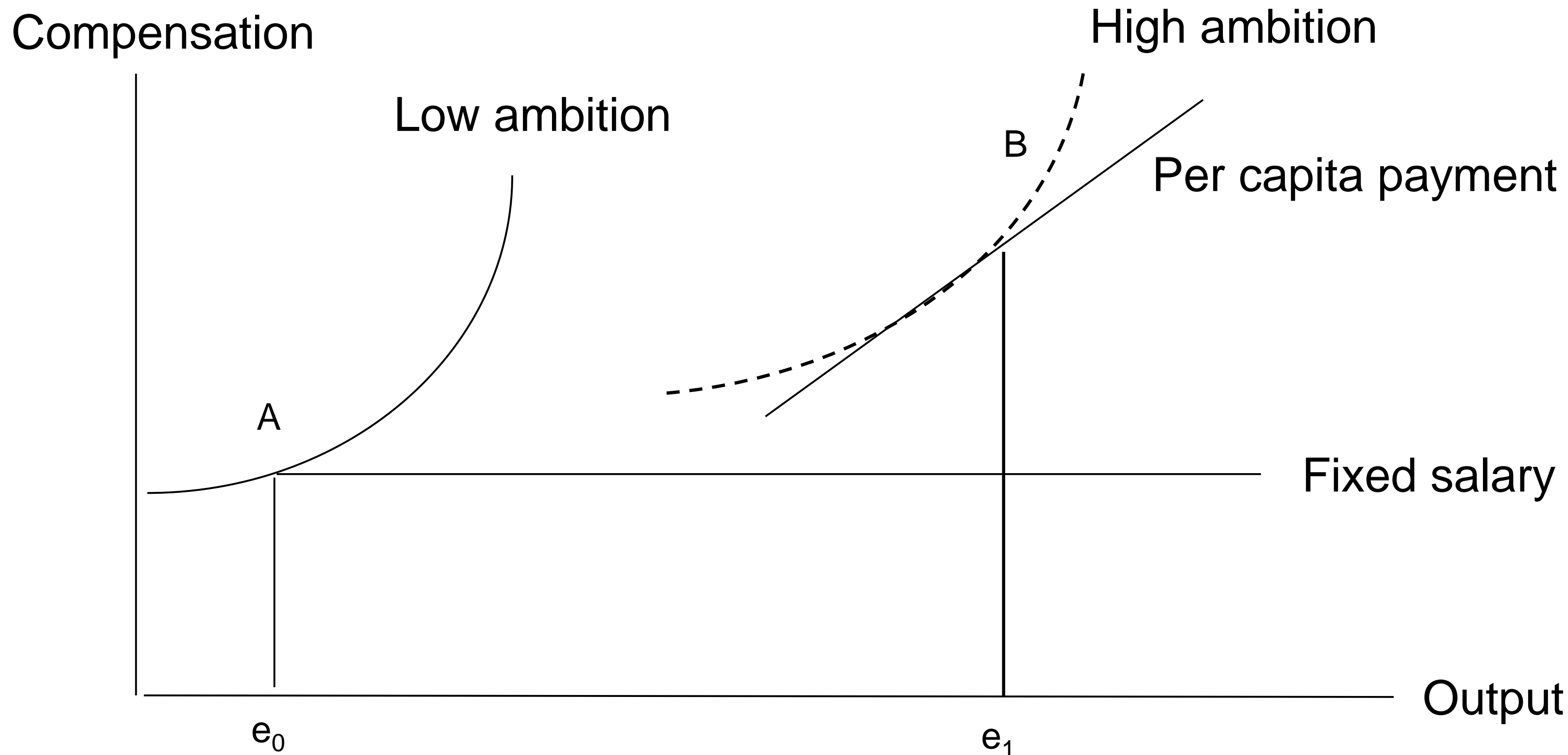
- Crowding-out effect
  - Reduces the incentive effect from monetary rewards
  - Strong for care that is cognitively demanding and complex (dentistry)

- Empirical evidence:
  - "The intrinsic response to quality information leads to a significant decline in mortality rates and is large relative to the response from monetary rewards" (Kolstad 2013)
  - The intrinsic response is four times as large as the extrinsic response (Kolstad 2013)

Crowding-out and dentistry

- Lack of empirical research on crowding-out
- Fee-for-service and pay-for-performance
  - High level of contractual detail. More may not be better
  - Unnecessary measuring might undermine the dentists' sense of autonomy
  - Danger that dentists would only do something because they are paid for it, not because they are professionally and ethically obliged to do it

Rewards under the control of the dentist – the advantages of flexible contracts



Lazear (2000)

Fee-for-service and dentistry

- Fee-for-service is the dominant payment system within dentistry, third party payers not common
- Fee-for-service – how to reduce adverse side effects to a minimum?
  - Focus on ethical aspects, supervision and continual monitoring of quality
  - Neutral fee-for-service system: takes dentists' self-interest out of the picture (requires third party payers)

Conclusion

- Existing dental systems: determined by the institutional, historical and political context in which they have developed
- Whatever system: adverse side-effects of each type of financing system should be reduced to a minimum
- If possible (requires a third party payer) offer the dentists' a flexible type of contract