

Health Care Financing

Lecture 3: Purchasing Services

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Objectives

- ▶ Understand what is the agency relationship in health care and why problems can arise
- ▶ List the main payment mechanisms for individual and health care institutions
- ▶ Describe some of the main incentives created by each payment method

Agency relationship

▶ **Principal**

The person who delegate responsibilities to agents to act on their behalf

▶ **Agent**

Person who acts on behalf of the principal

▶ **Information asymmetry**

Agents have greater access to strategic information than principals; Principals cannot observe agent's efforts / performance

Agency relationship in health care (1)

Patient - Doctor



- ▶ When sick, people consult doctors to act on their behalf and prescribe the best course of treatment
- ▶ Doctors have potentially diverging objectives: minimising their efforts, maximising their revenues, patients' benefits.
- ▶ Patients lack medical knowledge to judge whether doctors do the right thing or not

Agency relationship in health care (2)

Payer - Doctor



- ▶ Third party payer hires doctors to provide good quality care to their beneficiaries in an *efficient* way
- ▶ Doctors have potentially diverging objectives: minimising their efforts, maximising their revenues, patients' benefits.
- ▶ Employers cannot directly observe doctors' efforts and/or controlling their decisions is costly

Problems arising from agency in health care

▶ Moral hazard

- Moral hazard occurs when a party insulated from risk behaves differently than it would behave if it were fully exposed to the risk
- Providers often don't know AND don't bear the costs of providing care
=> few incentives to moderate the amount of care they supply

▶ Supplier-induced demand

- Providers can act in their own interest and induce demand if their income is related to it

▶ Lack of effort / lower quality of care

- All things equal, providers will minimise their efforts for a given level of remuneration

Incentives for providers

- ▶ Incentives to influence provider behaviour
- ▶ Payment mechanisms can create incentives that will align the interests of the principal and those of the agent



Main Payment Methods

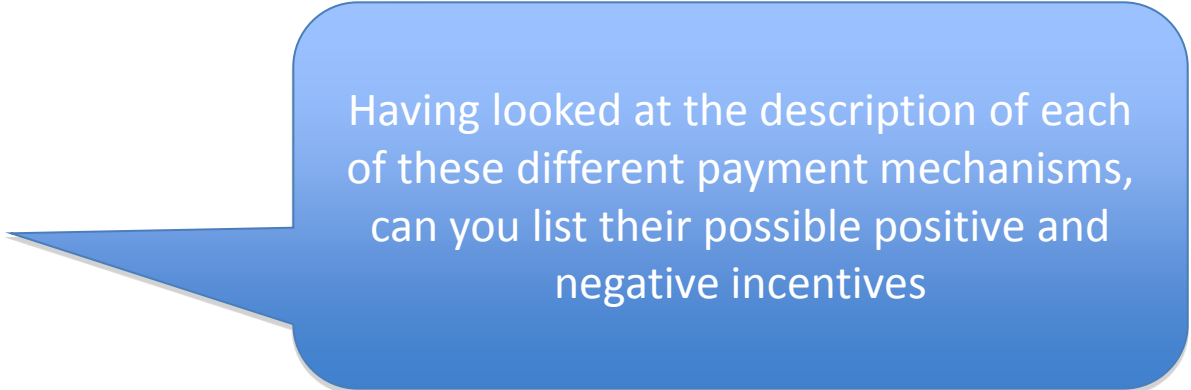
Paying Individual Providers

- Salary
- Fee-for-service
- Capitation

Paying Institutions

- Budgets
- Per-day payments
- Case-based payments

•Paying for Performance



Having looked at the description of each of these different payment mechanisms, can you list their possible positive and negative incentives

Paying individual providers

- ▶ Salary
- ▶ Fee-for-service
- ▶ Capitation



Salary

- ▶ Fixed amount negotiated prospectively
 - Independent from volume of care
 - Found in many countries (public sector)
- ▶ Positive incentives created
 - No incentive to induce demand
 - Scope to reward efforts with promotions?
- ▶ Negative incentives created
 - Little incentive to be responsive to patients' demands and expectations

Fee-for-service

▶ Paying providers for each item of service

- Services can be itemised or bundled
- Fee schedule negotiated prospectively
- Found in many HIC (private sector, sometimes public: France, Germany)

▶ Positive incentives created

- Increased motivation and efforts of providers?
- Can be used to increase volume of under-provided services

▶ Negative incentives created

- Incentive to induce demand (provided fee > cost)
- Little incentive for prevention (future loss in revenue)?

Capitation payments

▶ Paying providers for each patient covered/year

- Provision of certain services for a given period
- Capitation rate set prospectively ; can be adjusted by socio-demographic/health status of population served
- Found for GPs in several countries (UK, Italy, Spain, etc.)

▶ Positive incentives created

- Break link between income and services => no supplier-induced demand
- Encourage competition to attract patients
- Increased attention to prevention

▶ Negative incentives created

- Incentive to reduce efforts and quality
- Discrimination between patients ('cream-skimming') in favour of the healthy?

Paying physicians in practice

- ▶ Very little evidence available (Gosden et al. 2000)
 - Difficult to isolate effect of remuneration mechanism
 - FFS result in higher rates of utilisation and resource use
- ▶ A variety of situations
 - Reflection of providers' bargaining power, broader health care market, third party payers' objectives
 - Capitation seems to be dominant model in social health insurance systems (less financial risk) and FFS in private sector
 - Mixed systems to adjust incentives (eg FFS + capitation)

Paying institutions

- ▶ Budgets
- ▶ Per-day payments
- ▶ Case-based payments



LINE-ITEM BUDGETS

	YR 01	YR 02	YR 03	TOTAL	TOTAL FUNDING	TOTAL FUNDING
I. Personnel	\$323,001	\$330,816	\$341,794	\$995,612	\$373,905	\$621,707
II. Other Direct Costs						
A. Office Operations	8,500	8,700	8,600	25,800	0	25,800
B. Communications	5,000	2,000	2,000	9,000	7,000	2,000
C. Meetings	4,000	9,000	4,000	17,000	0	17,000
D. Travel	6,930	4,650	4,650	16,230	16,230	0
Subtotal	24,430	24,350	19,250	68,030	23,230	44,800
III. Indirect Costs	7,826	6,344	5,688	19,857	19,857	0
IV. Equipment	5,000	0	0	5,000	0	5,000
V. Contractual	20,000	20,000	20,000	60,000	30,000	30,000
Total	\$380,257	\$381,510	\$386,733	\$1,148,499	\$446,992	\$701,507

- ▶ Amount allocated prospectively, per input
 - Formally used in Soviet Union and other HIC ; still used in many LMIC
- ▶ Positive incentives
 - No supplier-induced demand
 - Control of costs
- ▶ Negative incentives
 - No incentive to improve efficiency/quality
 - Rationing / under-provision of services if budget inadequate
 - No flexibility

Global budgets

- ▶ Facility receives lump-sum of money prospectively
 - Typically based on adjusted historical trends
 - And/or calculated according to population covered (adjusted by risk/sex, etc.)
 - Used in many countries
- ▶ Positive incentives
 - Increased efficiency of resource use (if surplus kept)
 - No incentive to over-supply
- ▶ Negative incentives
 - Rationing to stay within budget
- ▶ Incentives no longer hold if soft budget constraints

Per-day payments (per diem)

- ▶ Facility receives set amount of money per bed-day
 - Introduced in Eastern European countries in early 1990s
- ▶ Positive incentives
 - No rationing on number of hospitalisations
 - Possibly increase efficiency of resource use
- ▶ Negative incentives
 - Increase length of hospitalisations beyond necessary (beyond marginal cost < per-day rate)
 - Rationing of resource use to increase surplus per day
 - Patient selection (avoid costly patients)

Case-based payments

- ▶ Facility receives set amount per case (hospitalisation)
 - Simple form – standard payment, regardless of costs
- ▶ Positive incentive
 - Improve efficient use of resources (stay within costs)
- ▶ Negative incentives
 - Patient selection (avoid costly patients)
 - Rationing to increase surplus

Case-based payments adjusted for Case-mix

▶ **Techniques from industrial management**

- To improve hospital efficiency, Fetter and Thompson identified ways in which inputs could be linked to hospital outputs
- Creation of 467 classes of patients or Diagnosis-Related Groups (DRG) grouped according to resource use
- Facility receives set amount per patient - more complex cases attract higher funding
- Sometimes adjustments to local costs

▶ **Very popular payment method for hospitals**

- Diagnostic Related Groups (US)
- Most HIC have introduced such systems: Healthcare Resource Groups (UK)
- Sometimes complex to define patient groups

▶ **Incentives**

- Improve efficient use of resources (stay within costs)... but rationing/patient to increase surplus
- Patient selection (avoid costly patients) – less an issue with DRG?.. Evidence of patient shifting
- Gaming of coding ('DRG creep')

Paying hospitals in practice

▶ Hardly any rigorous empirical evidence

- Per-day payment increases length of stay
- DRGs improve efficiency of resource use per case.. But not necessarily overall (increase in admissions)
- Concerns over quality of efficiency-enhancing measures

▶ Blending of hospital payments

- Move away from retrospective payments (reimburse expenditures incurred)
- Towards prospective mechanisms: a mix of global budgets + DRG-type funding
- Increase efficiency of resource use in view of cost escalation
- But concerns over quality remain...

Paying for performance

- ▶ Rationale and definition
- ▶ Recent examples
- ▶ A confusing terminology
- ▶ Debates around P4P



Pay-for-performance (P4P)... as it was born

- ▶ Concerns over trade-off between quality and efficiency
- ▶ Financial incentives to health care providers for improved performance on measures of quality and efficiency
- ▶ Trying to align the incentives of all parties (patients, health providers, purchasers) by measuring performance to reduce asymmetry of information
- ▶ Different measures of performance
 - Targets, various actions in process of care, relative performance

Examples of P4P schemes (1)

▶ **US: Premier Ltd Hospital Quality Incentive Demonstration (HQID)** (Ryan 2009)

- Large pilot providing bonus payments to hospitals (Medicare patients) based on a composite measure of inpatient quality for specific conditions.
- Hospitals performing in the top (second) decile on a composite measure of quality receive a 2% (1%) bonus payment in addition to usual Medicare reimbursement rate. Penalty of 1 to 2% of Medicare payment given to hospitals failing to exceed performance of year 1 hospitals in lowest two deciles.
- Positive but small impact on quality but not on health outcomes ; no impact on costs

▶ **UK: Quality and Outcomes Framework (QOF)** (Campbell et al. 2009)


- Nationwide P4P scheme introduced for GPs in 2005 that remunerates performance against a multitude of quality of care indicators.
- Complex calculations – provider awarded points on a sliding scale on the basis of the proportion of eligible patients for whom target is achieved. No points are awarded over a maximum threshold.
- Improved the quality of care for some conditions ; worsened quality of care for those not incentivised ; deteriorated interactions with patients
- Once targets were reached, improvements in the quality of care slowed

Examples of P4P schemes (2)

▶ Rwanda: Performance-Based Financing national programme (Basinga et al. 2010)

- National scheme providing bonus payments to health providers based on quantity and quality of priority health services.
- FFS payment multiplied by quality score
- Positive effect on institutional delivery care and child health visits, but no impact on prenatal care visits or immunisation rates
- Positive effect on the quality of prenatal care
- Difficult to disentangle the FFS and performance measure effect...

P4P... evolved into a confusing terminology



The Alphabet Soup of Results-Based Financing (RBF)



September 14, 12-2pm
Lunch and presentation of the RBF Glossary

At the World Bank, I Building
1850 I Street, NW, Room 2-250

Ever wondered what all the acronyms mean?
How they are different from each other?
Which is best used in which setting?

Author Philip Musgrove and panelists from the World Bank, Inter-American Development Bank, and the Global Partnership on Output Based Aid will share their thoughts and experiences in RBF.

RSVP is required.



Pay-for-performance (P4P)
Performance-based payment (PBP) or financing (PBF)
Results-based financing (RBF)

Is Fee-for-Service a P4P mechanism??

Debates around Pay-for-Performance

▶ Single mindedness

- “you get what you pay for” – no more, no less

▶ Measurement error

- Some measures can be “gamed” or manipulated

▶ Crowding out of intrinsic motivation

▶ Evidence still scarce

- Mixed evidence of positive effects ; some evidence of unintended consequences
- Threshold effects
- Multiple design features of payments (size, timing, frequency)
- No evidence on cost-effectiveness (monitoring too costly?)

Summary

- ▶ Wide range of payment methods
 - Remuneration of individual providers
 - Reimbursement of health care institutions
- ▶ Mechanisms by which the money for health care is used creates multiple incentives
 - Incentives for influencing provider behaviour
 - Trade-offs between provision of good quality care and efficient use of resource use
- ▶ Limited evidence base
 - lack of good opportunities to compare systems (not able to set up experiments)
 - Observed behaviour being consistent with competing hypotheses

Conclusions

- ▶ A large array of tools available to health care authorities to shape providers' behaviours
- ▶ No remuneration system is a magic bullet
 - All create various incentives
 - Use of mixed systems to compensate each other
- ▶ Utilisation of and judgments made on payment systems should depend on objectives sought

References and further reading

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