Lecture 10:
Hospital reimbursement.
Integration of provider levels

Jan Abel Olsen
University of Tromsø, Norway
www.janabelolsen.org

A typology for hospital payment systems

<table>
<thead>
<tr>
<th></th>
<th>Retrospective</th>
<th>Prospective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed</td>
<td></td>
<td>Annual global budgets</td>
</tr>
<tr>
<td></td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Variable</td>
<td>Fee-for-service</td>
<td>Per patient/case</td>
</tr>
</tbody>
</table>

Teaching programmes:
- Master of Public Health, University of Tromsø, Norway
- HEL-3007 Health Economics and Policy
- Master of Public Health, Monash University, Australia
- ECC-5979 Health Economics
- Master of Health Administration, Monash University
- ECC-5970 Introduction to Health Economics

Main text:
Units of reimbursement in activity based payment systems for hospitals

- Per item of service
  - Input, effort
- Per diem
  - Day and/or night in hospital
- Per patient
  - Irrespective of diagnosis or treatment
- Per case
  - Diagnosis-related groups (DRGs)

DRGs’ three faces

- Diagnosis classification system
  - Based on the homogeneity of the resource use and clinical characteristics
- Cost information system
  - Based on national average cost in the average hospital
- Reimbursement system
  - 100%, or lower in combination with block grants (in Norway varied between 30% and 60%)
## A history of Norwegian hospital financing

<table>
<thead>
<tr>
<th></th>
<th>Retrospective</th>
<th>Prospective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed</td>
<td></td>
<td>Block grants until 1997</td>
</tr>
<tr>
<td>Variable</td>
<td>Per diem until 1980</td>
<td>DRGs 30% → 60%</td>
</tr>
</tbody>
</table>

## Characteristics of an ideal system

- **Cost containment (budget discipline)**
  - Total expenditures in accordance with overall policy decisions

- **Cost-efficiency**
  - Produce each service (with a specified *quality*) in the cheapest possible way

- **Allocative efficiency**
  - Produce the right combination of health services (in accordance with health policy objectives)
Three reimbursement models

<table>
<thead>
<tr>
<th>Behavioural response</th>
<th>Variable retrospective Fee-for-service</th>
<th>Fixed prospective Global budgets</th>
<th>Variable prospective (e.g. DRG)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Increase provision of services to each patient admitted</td>
<td>Waiting lists</td>
<td>Reduce provision of services to each patient admitted</td>
</tr>
<tr>
<td>Cost containment</td>
<td>Very bad</td>
<td>Very good</td>
<td>Bad</td>
</tr>
<tr>
<td>Cost efficiency</td>
<td>Very bad</td>
<td>?</td>
<td>Very good</td>
</tr>
<tr>
<td>Allocative efficiency</td>
<td>?</td>
<td>Good</td>
<td>?</td>
</tr>
</tbody>
</table>

A dismal fact 😞

- There is no such thing as one hospital reimbursement model that is consistent with the objectives of allocative efficiency and cost-containment

- Attempts with mixed models: Block grants + per case
  - Risk sharing between the micro and the macro-level
Macro vs micro level: Solution to cost-containment

- Productivity incentive at the micro-level
  - The higher the relative activity, as compared with other hospitals, the more revenues

- Cost-containment at the macro-level
  - Global budget, as decided by the Parliament, divided by the total activity in all hospitals

- When unit-prices are determined at the macro-level at the end of the year, hospital revenues at the micro-level cannot be accurately predicted.

Paying for what: A trend?

- Pay for input
  - Labour and other input factors
    ↓

- Pay for output
  - Health services; DRGs
    ↓

- Pay for performance (‘p4p’)
  - All sorts of quality indicators
    ↓?

- Pay for outcome
  - Health improvements; QALYs
Beware of combined incentives

A combination of payment systems that is bad for health sector cost-containment:

• Capitation in primary care;
  – poor gate-keeping
  *and*

• Activity based financing in hospitals;
  – open gates

The key role of GPs within the body of the health care provider system

The arrows indicate referrals of patients, i.e. resource implications of GPs decisions