Case Mix Payment ("DRGs")

Perspectives from the Global Experience

Knowledge-sharing and collaboration on DRG development between Vietnam, Indonesia, Philippines, Thailand, and Malaysia
The President Has a Request
Hospitals: Diagnosis-Related-Groups (DRGs) is the payment mechanism towards which most developed systems are converging, having also positive implications in terms of efficiency.

Case mix/activity-based payment systems have been introduced in many countries, including Eastern Europe. The years of utilization of DRG-type financing vary across countries, as shown in the diagram.

Benefits and drawbacks for implementing activity-based reimbursements:

**Benefits**
- Facilitates competition between providers
- Improve responsiveness to patient needs
- Improves cost transparency and increase efficiency within providers
- Increases complexity in financial flows and data recording

**Drawbacks**
- Faces risk of significant increase in costs (due to increase in volume of activities) if not properly implemented and controlled
- Leaves space for frauds (e.g., up-coding)

The diagram also illustrates the average length of stay in hospitals, with countries like U.S., Germany, Switzerland, Czech Republic, and Australia having different lengths depending on the number of years since the implementation of DRG-type financing.

SOURCE: OECD report, 2002
OECD…plus…Emerging Economies

Country overview

1. Croatia
2. Estonia
3. Ghana
4. Hungary
5. Indonesia
6. Kyrgyzstan
7. Macedonia
8. Mexico
9. Mongolia
10. Poland
11. Romania
12. Thailand
13. Tunisia
14. Turkey

- 14 countries with a DRG payment system
- 11 countries piloting a DRG payment system
- 9 countries exploring a DRG payment system
Methodological Issues
Case-Based Groups – Complex!

**Data collection**
- Demographic data
- Clinical data
- Cost data
- Sample size, regularity

**Patient classification system**
- Diagnoses
- Procedures
- Complexity
- Frequency of revisions

**Price setting**
- Cost weights
- Base rate(s)
- Prices/ tariffs
- Average vs. “best”

**Actual hospital payment**
- Volume limits
- Outliers
- High cost cases
- Negotiations

2 Options or Paths Globally
Option 1

“BUILD YOUR OWN”
Challenges: Data (!) Availability (?) and IT Requirements

Availability of diagnosis data is a prerequisite for DRGs, but often only once a DRG system is in place, are systems set up to generate the necessary data.

1) Lack of standardized and systematized data generation and coding has been slowing down the introduction of DRGs

Many countries in Europe: clinical data = all patients; but, US used 5% sample of claims with inconsistent coding of Dx

2) Cost data, cost accounting data from hospitals to adjust cost weights to local context and to assure adequate reimbursement perceived as equitable.
Option 2

BUY AND MODIFY AN EXISTING GROUPE
Borrowed a DRG Grouper for Categories and Weights

Alternative

Clinical Patterns and Cost Structures Similar?
Borrowed a DRG Grouper for Categories and Weights

Alternative
Clinical Patterns and Cost Structures Similar?

Failed

Indonesia...
Ongoing Refinement

Ireland
Portugal
Poland
Estonia
Going Forward:
Avoiding Grouper Failure
Classification: Refine Your Categories to Reflect National Clinical Practice

Costing: Adjust the Weights Based on Local Cost or Charge Data

Coding: Build a national cadre of expertise on a platform of coding standards

Develop Impact Analysis
How Many Facilities’ Cost Data are Needed?

Note: Green = % admissions. Finland surveyed only 5 reference hospitals
Red = Top down costing; others used bottom up costing
Always, Always...do an Impact Analysis ...before phase-in
Build or Buy the Grouper?

1. How Much Time Will the Minister Provide?

2. Patient Claims through MOH or Insurer? Data Quality?

3. Use Charges or Costs? Have charges, for costs do hospitals have standardized accounting systems?

4. Physician Advisor Teams: Review Groupings by MDCs and create finer groupings over time

Summary: Questions for Future Development
Implementation Issues

Avoiding Mistakes of Other Countries
Policy Tools/Responses
Address Negative Impacts on Quality + Fiscal Exposure

Five (5) Things Are Done Globally

1. **Unnecessary Admissions** which could be treated at outpatient level. So, Admission criteria/pre-certification programs needed

2. **Utilization review** in Hospital-- to prevent skimping on needed services and to prevent early discharge

3. Payment reductions for **re-admissions** which tend to increase because hospitals then receive “double payment”

4. Review of **Coding** practices….code creep tends to occur in every country

5. **Phase-in** payment formula over 4-5 years...this helps protect the Ministry of Finance and protect providers, too – especially if data and Grouper not precise.
Phase in Slowly: Purchasers and Providers Need Time
How to Phase-In?
Transition to a case-based payment system

- Incremental inclusion of hospitals (e.g., geographic region...in US, New Jersey)
- Incremental inclusion of reimbursed costs (e.g., start with variable costs)
- Incremental inclusion of types of cases (Philippines, Korea, China Taiwan)
- Incremental movement from hospital-specific to system-wide base rate (US, Germany)
Thank You

jclangenbrunner@gmail.com
Annex
## Incentives and Impacts in OECD Countries

<table>
<thead>
<tr>
<th>Incentives of DRG-based hospital payment</th>
<th>Strategies of hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Reduce costs per patient</strong></td>
<td>a) Reduce length of stay</td>
</tr>
<tr>
<td></td>
<td>• optimize internal care pathways</td>
</tr>
<tr>
<td></td>
<td>• inappropriate early discharge</td>
</tr>
<tr>
<td></td>
<td>b) Reduce intensity of provided services</td>
</tr>
<tr>
<td></td>
<td>• avoid delivering unnecessary services</td>
</tr>
<tr>
<td></td>
<td>• withhold necessary services (‘skimming’)</td>
</tr>
<tr>
<td></td>
<td>c) Select patients</td>
</tr>
<tr>
<td></td>
<td>• specialize in treating patients for which the hospital has a competitive advantage</td>
</tr>
<tr>
<td></td>
<td>• select low-cost patients within DRGs (‘cream-skimming’)</td>
</tr>
<tr>
<td><strong>2. Increase revenue per patient</strong></td>
<td>a) Change coding practice</td>
</tr>
<tr>
<td></td>
<td>• improve coding of diagnoses and procedures</td>
</tr>
<tr>
<td></td>
<td>• fraudulent reclassification of patients, e.g. by adding inexisten secondary diagnoses (‘up-coding’)</td>
</tr>
<tr>
<td></td>
<td>b) Change practice patterns</td>
</tr>
<tr>
<td></td>
<td>• provide services that lead to reclassification of patients into higher paying DRGs (‘gaming/overtreatment’)</td>
</tr>
<tr>
<td><strong>3. Increase number of patients</strong></td>
<td>a) Change admission rules</td>
</tr>
<tr>
<td></td>
<td>• reduce waiting list</td>
</tr>
<tr>
<td></td>
<td>• admit patients for unnecessary services (‘supplier-induced demand’)</td>
</tr>
<tr>
<td></td>
<td>b) Improve reputation of hospital</td>
</tr>
<tr>
<td></td>
<td>• improve quality of services</td>
</tr>
<tr>
<td></td>
<td>• focus efforts exclusively on profits</td>
</tr>
</tbody>
</table>

---

23