SVEUS – National collaboration for value-based reimbursement and monitoring of health care in Sweden

OECD Expert group meeting on payment systems
2014-04-07
Content

• Background
• SVEUS
• Example: Bundle payment for spine surgery in Stockholm County
• Some recommendations based on Swedish experience
Background

- Sweden has 21 independent counties responsible for health care
- Health care is primarily financed through county taxation
- Health care is predominantly provided by the counties
  - Increasing number of private providers, especially in primary care
- Counties procure care from public/private provider organizations
  - Physicians are employed
  - Primary care: capitation, sometimes with case-mix adjustment and
  - Specialist care: block budgets or DRG, increasingly with P4P arrangements including bundle payment systems
- Health outcomes measured in about 100 medical quality registries
A transition towards a more ‘value based’ approach requires collaboration between stakeholders

Desired health care system developments
- Improved efficiency and integration – increased focus on patient value
- Attractive working environment for health care professionals

Required transition

Provision
- Health care organised around medical disciplines
- Health care focused and organised around medical conditions

Stewardship
- Follow-up mainly focused on financials, process measures and provider productivity
- Follow-up focused on monitoring of health outcomes and provider/ health system efficiency
- Reimbursement based on activities
- Reimbursement enable and stimulate value and efficiency development

Requires collaboration between government, counties, provider organisations as well as the medical community and patient organisations
Content

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SVEUS
När hälsan räknas

Nationell samverkan för värdebaserad ersättning och uppföljning i hälso- och sjukvården

Swedish National collaboration for value-based reimbursement and monitoring of health care
SVEUS is..

- A project/platform for collaboration on development of value-based monitoring and reimbursement systems
- Organized around medical conditions, sometimes with therapeutic delimitations
  - Starting with eight medical conditions
- Initial phase financed by Ministry of Health and Social Affairs (5 mEuro)
- Goals is to support:
  - Improved efficiency and integration – increased focus on patient value
  - Securing an attractive working environment for health care professionals

Pre-study
Set up organisation
Development
Implementation
Operational phase

<table>
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<th>2012</th>
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<td>Q3</td>
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</table>
SVEUS currently engages ~40 organisations and >150 people

County councils

- Stockholm
- Västra Götaland
- Skåne
- Östergötland
- Uppsala
- Dalarna
- Jämtland

~70% of Sweden's population

Other participants

- Ministry of Health and Social Affairs
- Swedish Association of Local Authorities and Regions
- Medical specialist associations (17)
- National quality registers (8)
- Patient associations (3)
- Universities (2)
- Coordinated by IVBAR
# Initial project deliverables

## 8 Medical

| 1. Osteoarthritis  | • Baseline analysis (including benchmarking)  |
| (THR and TKR)      | • Treatment methods, outcomes, cost          |
| 2. Spine           | • New value based monitoring systems         |
| (Spine surgery)    | • Measuring treatment methods, outcomes, cost through entire cycle of care |
| 3. Obstetrics      | • With case-mix adjustments                  |
| 4. Obesity         | • Predominantly based on already reported data |
| (Bariatric surgery)|  |  |  |
| 5. Stroke          | • New value based reimbursement systems      |
| 6. Diabetes        | • Predominantly bundle payment               |
| 7. Osteoporosis    | • Adjustments for patient initial conditions and outcomes |
| 8. Breast cancer   |  |  |  |
SVEUS is organised in 12 projects
8 medical condition (research projects) and 4 support projects

Steering group on national level
- Ministry of Health and Social Affairs
- Each participating county
- Karolinska Institutet
- IVBAR

<table>
<thead>
<tr>
<th>Program office</th>
<th>Cross country competence groups</th>
<th>Local county groups</th>
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</thead>
<tbody>
<tr>
<td>1- Development group, Hip/knee replacement</td>
<td>Legal</td>
<td>Program office</td>
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<tr>
<td>2- Development group, Spine</td>
<td>Communication</td>
<td>Program office</td>
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<tr>
<td>3- Development group, Obstetrics</td>
<td>Health informatics</td>
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<td>4- Development group, Bariatric surgery</td>
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<td>5- Development group, Stroke</td>
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<td>6- Development group, Diabetes</td>
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<td>7- Development group, Osteoporosis</td>
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<tr>
<td>8- Development group, Breast cancer</td>
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<td>Program office</td>
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<tr>
<td>9- Implementation</td>
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<td>Program office</td>
</tr>
<tr>
<td>10- Other data availability</td>
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<td>Program office</td>
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<tr>
<td>11- Operational phase</td>
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<td>Program office</td>
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<tr>
<td>12- Future conditions</td>
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<td>Program office</td>
</tr>
</tbody>
</table>
Project 1-8
Development of monitoring and reimbursement systems

Project set-up

- 8 separate research projects
- Based on patient data from >20 databases
- Standardised development process
- Not started until after decision to participate from concerned medical associations

Development group
- Clinical project manager
- IVBAR project manager and analyst
- County council participants
- Medical associations
- Quality registries
- Patient associations

Working group
- Clinical project manager
- IVBAR project manager and analyst
- Other resources when needed

Reference groups

Development process

1. Perform pre-study and develop project plan
2. Define preliminary monitoring and reimbursement systems
3. Perform quantitative analysis, refine preliminary systems
4. Define how to present KPIs to stakeholders
5. Complete final documentation and prepare publications
Project 9
Implementation of value-based monitoring systems

Provider prerequisites
- Local reporting systems
- Internal 'improvement-culture'
- Internal financial allocation principles
- Organizational conditions

Agreements
Reporting instructions
Technical report
Monitoring and reimbursement syst.
Algorithms

PAS
Quality registries
Other data sources
SW for analysis
Benchmarking db

Enterprise service bus

SW for reimbursement

Information
Reimbursement
Content

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- Example: Bundle payment for spine surgery in Stockholm County
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A bundled payment system for spine surgery was implemented in the Stockholm County in October 2013

- Developed in collaboration between
  - Stockholm county: www.sll.se
  - Swedish Society of Spinal Surgeons: www.4s.nu
  - IVBAR: www.ivbar.com

- Package price with complication warranty
- Reimbursement based on Patient Reported Outcome
- Case-mix adjustment
- Implemented October 2013

3 data sources, 11 years of patient data
- VAL – Care consumption, 7500 patients
- SWESPINE – outcomes, 25 000 patients
- Stockholm Spine Center– cost per patient data, 2 000 patients
Package prices was based on Patient reported pain reduction

10% of total reimbursement (on average) is based on patient reported outcome

Global Assessment: How is your pain now compared to before the operation?

• Outcome based reimbursement with two components
  – Based on actual GA score anchored at the historical GA average
  – Difference between predicted level and actual (case-mix adjustment)

Outcome reimb. = GA-Score + Case-mix adjustment

Bob1 = 3 000 SEK + 1 000 SEK = 4 000 SEK
Bob2 = 1 000 SEK + -1 000 SEK = 0 SEK

Source:
8 April 2014
Screen-shot from calculator - ’Pain is gone’
Screen-shot from calculator - ’Pain is worse than before treatment’

### Module

- **B1 (Stenosis - Decompression)**

### Patient Characteristics

- **Treated levels**: 1-2
- **Age**: 80
- **Sex**: Female
- **Smoker**: No
- **Previous spine surgery**: No
- **Comorbidity**: None
- **Pain duration**: <3 months
- **Preop VAS spine**: 80
- **Working full time**: Yes

### Actual Outcome

- **Global assessment legs**: Worse pain

### Reimbursement Calculation

<table>
<thead>
<tr>
<th></th>
<th>Prospective Payment</th>
<th>Initial Individual Adjustment</th>
<th>Performance Adjustment</th>
<th>Final Reimbursement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Base Reimbursement</strong></td>
<td>43 314</td>
<td>1 701</td>
<td></td>
<td>45 016</td>
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<tr>
<td><strong>Warranty Reimbursement</strong></td>
<td>1 718</td>
<td>1 420</td>
<td></td>
<td>3 138</td>
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<tr>
<td><strong>Performance Reimbursement</strong></td>
<td>4 503</td>
<td></td>
<td>-12 094</td>
<td>-7 591</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>49 536</td>
<td>3 122</td>
<td>-12 094</td>
<td>40 563</td>
</tr>
</tbody>
</table>

**Graph:**

- **Prospective Payment**
- **Initial Individual Adjustment**
- **Performance Adjustment**
- **Final Reimbursement**

Source: IVBAR

8 April 2014
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Some recommendations based on the Swedish experience

- Development and design
  - Engage both patients and physicians when deciding on relevant outcome measures
  - Perform legal analysis early as patient data protection legislation can effect design decisions
  - Develop techniques to adjust for case-mix if necessary to avoid ‘cream skimming’
  - Consider risk and mitigations related to gaming with data
  - Harmonize outcome measures with ICHOM (see www.ichom.org)

- Implementation of value based monitoring and reimbursement systems
  - Identifying care activities in data related to the episode might require adjustment of provider reporting in terms of “episode-ID” or equivalent
  - Expect new requirements on IT-systems
  - Important to secure harmonization with existing payment systems such as DRG

- General recommendations
  - Secure “top-management” support
  - Identify and engage all concerned stakeholders early
  - Start with pilot implementations in collaboration with providers -> show results and publish them
  - Use experiences from other countries
Thank you!

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