Future needs:

Examples from HUS Medical Imaging Center

Development director Tomi Kauppinen
Technical director Mika Päivärinta
INVESTMENTS AND CHALLENGES

Tomi Kauppinen
Development Director
HUS Medical Imaging Center

✓ Medical imaging studies and interventional radiology
✓ Studies of clinical physiology and nuclear medicine
✓ Studies of neurophysiology
✓ Services and consultancy in medical engineering

✓ 1200 employees
## Turnover

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radiology</td>
<td>82,6</td>
<td>89,2</td>
<td>93,6</td>
<td>94,4</td>
</tr>
<tr>
<td>Medical Engineering</td>
<td>10,3</td>
<td>11,4</td>
<td>11,1</td>
<td>10,6</td>
</tr>
<tr>
<td>Clinical Physiology</td>
<td>8,9</td>
<td>9,7</td>
<td>10,1</td>
<td>11,0</td>
</tr>
<tr>
<td>and Nuclear Medicine</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical Neurophysiology</td>
<td>4,6</td>
<td>5,3</td>
<td>5,8</td>
<td>6,7</td>
</tr>
<tr>
<td>EUR million</td>
<td>106,4</td>
<td>115,6</td>
<td>120,0</td>
<td>122,7</td>
</tr>
</tbody>
</table>
Over 50 units across the Hospital District of Helsinki and Uusimaa and in most local authorities in Uusimaa
Studies and services

<table>
<thead>
<tr>
<th>Service</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radiology</td>
<td>866 193</td>
<td>897 278</td>
<td>904 196</td>
<td>931 206</td>
</tr>
<tr>
<td>Medical Engineering</td>
<td>65 627</td>
<td>70 228</td>
<td>70 369</td>
<td>70 310</td>
</tr>
<tr>
<td>Clinical Physiology and Nuclear Medicine *</td>
<td>55 667</td>
<td>58 879</td>
<td>56 187</td>
<td>45 161</td>
</tr>
<tr>
<td>Clinical Neurophysiology</td>
<td>19 000</td>
<td>20 420</td>
<td>21 166</td>
<td>21 462</td>
</tr>
</tbody>
</table>

*Digital-ECG not included*
Procurement in HUS MIC

✓ Own purchasing team
  ➢ purchasing manager
  ➢ two x-ray engineers
  ➢ purchasing coordinator

✓ Coordination and handling of investments
  ➢ planning, RFPs, comparisons, decisions, orders, contracts
Procurement models

- Own investments
  - good for “big modalities”, devices and conventional investments

- Investments by leasing financing
  - good devices for new units and renewed facilities / units

- Service based investments
  - good for extensive investments for long period
  - especially services
Digital ECG

✓ Centralised cardiology information system (MUSE)
  ➢ handling, viewing, analyses, archiving

✓ Digital ECG is service based model for users

✓ Client:
  ➢ for physiologists and cardiologists for analyses and data handling

✓ Web:
  ➢ for all units and end users for viewing purposes
### Responsibilities

<table>
<thead>
<tr>
<th>Action</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orders</td>
<td>HUS/ Digi-ECG HelpDesk (Dep. of Clin. Phys.)</td>
</tr>
<tr>
<td>Procurement</td>
<td>HUS/ Technology, purchasing team</td>
</tr>
<tr>
<td>Client installations</td>
<td>HUS/ ICT Department</td>
</tr>
<tr>
<td>Service for end users</td>
<td>HUS/ Digi-ECG HelpDesk (Dep. of Clin. Phys.)</td>
</tr>
<tr>
<td>Technical service</td>
<td>GE/ MUSE HelpDesk</td>
</tr>
<tr>
<td>Maintenance</td>
<td>GE/ MUSE HelpDesk</td>
</tr>
</tbody>
</table>
Service: disadvantages

- challenging tendering procedure
  => careful planning before RFP (what, how, when, how much)
- long contracts and commitment for long period
  => not only negative issue
- fully own decision for the system and devises decreases
Service: advantages

+ costs are predictable and transparent
+ financial planning and reporting
+ harmonised devices
  ⇒ few models, models for different purposes
+ possibility to utilise new technology
+ device maintenance and services
+ destroy old devices

Example: Digital-ECG
COULD MEDICAL EQUIPMENT PROCUREMENT MODELS EFFECT CUSTOMER SERVICE?

Mika Päivärinta
Technical Director, Medical Engineering
What is good medical equipment service?

Customer needs

- Patient safety, access to training and equipment updates
- Uninterrupted equipment availability, fast repairs
- Easy to budget lifetime costs
- Access to latest technology to improve standard of care
- Flexible equipment capacity

Patient safety, access to training and equipment updates

Uninterrupted equipment availability, fast repairs

Easy to budget lifetime costs

Flexible equipment capacity

Access to latest technology to improve standard of care
Analyze different service options for a product group

## Different strengths in service

<table>
<thead>
<tr>
<th>Hospital in-house service</th>
<th>Supplier service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Close to clinical departments</td>
<td>Close to OEM support and resources</td>
</tr>
<tr>
<td>Fast first line response</td>
<td>Full service coverage + (on-line support)</td>
</tr>
<tr>
<td>Wider multivendor expertise</td>
<td>Deep &quot;own&quot; product expertise</td>
</tr>
<tr>
<td>Neutral to triage user, product or wider system level (ICT) service calls</td>
<td>More data to forecast lifetime costs</td>
</tr>
</tbody>
</table>
What role procurement could play to meet customer needs for service?

Play on strengths

✓ Procurement to include both equipment and part of life-time costs
  - Training
  - Updates
  - Spare parts
  - Scheduled maintenance
  - Parts for repairs or replacements

✓ Responsibilities for in-house service
  - Fast first-line support to triage user, product and system issues
  - Work for quick repairs and replacements with parts from life-time contract
  - Monitoring of customer satisfaction and supplier service quality
Thank you!