Financial Communication in the Life Sciences: Focus on Intellectual Capital Reporting

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Accounting and Financial Communication: Course Schematic

Stakeholders

Make decisions and take actions based on information

- Institutional Investors
- Retail Investors
- Creditors
- Customers
- Employees
- Competitors
- Government
Information Package

**Information Channel/Form:**
Designed to attract attention of targeted stakeholders and intermediaries

**Information Intermediaries:**
Combine information package with other information and analyze, then report to stakeholders

**Stakeholders:**
Make decisions and take actions based on information

**Information Content:**
Designed to communicate economic events and satisfy targeted stakeholders

- Disclosure to further explain accounting
- Disclosure to go beyond accounting
- Mandatory accounting treatment
- Discretion to attract targeted stakeholders

**Information Package:**
Press Release, Annual Report, Conference Call, Investor Meetings

- Media
- Analysts

**Stakeholders:**
- Institutional Investors
- Retail Investors
- Creditors
- Customers
- Employees
- Competitors
- Government
Financial Communication is Crucial in the Life Sciences Industry, Where:

- Access to capital is critical for success.
- Drug development costs are high.
- Hospital equipment is costly to acquire and maintain.

The Life Sciences Industry Faces Unique Challenges Because:

- Scientific inquiry can have uncertain outcomes.
- Future returns to viable innovations are unclear.
- Investor time horizon is limited.
- Venture capitalists adopt a portfolio approach to investing, spreading risk exposure thinly.
- Public equity markets respond poorly where there is no clear, standardized means of evaluating R&D.
- Investment returns do not sufficiently compensate for added risk.
How Well is Capital Typically Allocated?

- Most biotech firms are short-lived and unprofitable—Companies like Genentec and AmGen are exceptional.
- Most hospitals are ailing financially.
- There are wide differences in costs and quality between providers across geographical areas.
- Many medical procedures are not appropriate to the diagnosis.
- Medical services are restricted and rationed.
Reasons for Sub-Optimal Performance of Biotech Firms:

• Drug development is siloed; needs to be more interdisciplinary.
• Emphasis on start-ups and short-term monetary alliances does not foster knowledge accumulation.

Key Success Factors:

• Fewer, closer, longer-term collaborations.
• More cross-disciplinary research.
• More “translational” research.
Reasons for Sub-Optimal Performance in Healthcare Delivery:

• Hospitals depend on large infrastructures with many fixed costs.
  – Adoption of low-cost ("disruptive") innovations is difficult.

• Emphasis on complex conditions creates large, expensive bureaucracies.

• Because it is difficult to innovate themselves, healthcare institutions are vulnerable to external competition from "disruptive" technologies.
  – Maintaining the status quo may result in more costly, less efficient treatments reaching fewer patients.

• Inflexibility leads to increased competition for high-cost services.

• Zero-sum competition is focused on shifting costs via bargaining, rather than reducing them through innovation.
Key Success Factors:

• Mitigate risk associated with disruptive innovation; seize opportunities introduced by low-cost alternatives.
• Develop critical workflow that identifies when, where, and in what sequence care should be delivered.
• Develop an effective learning environment. Success may depend more on team dynamics than the experience levels of members.
• Invest in infrastructure and technology that can reduce redundancy and medical errors.
How Can Enterprises in the Life Sciences Sector Credibly Communicate Their Value in Order Access Capital?

- **Accounting:** Drawback is that traditional financial reporting does not recognize value creation over long development cycles.

- **Disclosure of R&D Efforts:** Evidence suggests this can reduce investor perceptions of risk.

- **Supplemental Disclosures, such as:**
  - Conference call transcripts.
  - R&D Open Houses.
  - Intellectual capital reports designed to lengthen the investor’s horizon beyond 2-3 years.
# Evidence on Two Enterprises: Works in Progress

<table>
<thead>
<tr>
<th>Center for Molecular Medicine</th>
<th>HELIOS Kliniken GmbH</th>
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</thead>
<tbody>
<tr>
<td><strong>Business Focus</strong></td>
<td>Diagnostic and therapeutic processes, drug and medical device development, scientific discovery</td>
</tr>
<tr>
<td><strong>Main Source of Funding</strong></td>
<td>Public, donor grants</td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td>Stockholm, Sweden</td>
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**Research** → **Development** → **Manufacturing** → **Healthcare Provision**

- **CMM**
- **HELIOS**
Center for Molecular Medicine (CMM)
Stockholm, Sweden

Enterprise Overview:

• Established in 1997 with funding from private donors.
• Public support constitutes 10-15% of resource base.
• “Swedish Exception” – Law confers ownership of all patented results to researchers.
• Employs 400 researchers, including scientists from nearby Karolinska Institute and Karolinska University Hospital.
• Tax-exempt, non-profit.

Key Objectives:

• Research the molecular genetic basis of common, chronic conditions.
• Develop treatments and diagnostic methods with clinical relevance.
• Transfer knowledge to wider society.
• Attract cutting-edge researchers and cultivate young talent.
• Generate competitive spin-off companies and patents.
Center for Molecular Medicine (CMM): Genesis of Intellectual Capital Reporting in 2003

Internal Motives:

• To educate researchers about their colleagues’ work.
• To avoid duplication of effort, encourage cross-pollination.
• To identify value drivers on which to model a sister institution.

External Motives:

• To attract holistic support from donors rather than earmarks for specific projects.
• To achieve transparency and accountability to benefactors.
• To shape CMM’s institutional identity and strengthen its image as a global competitor.
Annual Intellectual Capital Reporting: The CMM Model
Benefits From CMM’s Intellectual Capital Report:

• Easier for management to assess overall performance.
• More efficient use of resources.

External Reception:

• Donors continue to prefer direct conversations with CEOs.
• Well-received by media and competitors.
• Link between intellectual capital and efficiency measurement remains unclear.
• Information overload.
Helios Kliniken GmbH
Germany

Enterprise Overview:

- Owns 61 hospitals throughout Germany, with over 17,200 beds, including both acute care and long-term rehabilitation facilities.
- Nine HELIOS hospitals are affiliated with major teaching universities.
- HELIOS Research Center coordinates and funds clinical research in cooperation with the Max Delbrück Center for Molecular Medicine.
- Offers 94% of all medical services available in Germany.

Key Objectives:

- To expand market share in the German healthcare services industry, with a goal of € 2.3 billion in revenue by 2010.
- To increase hospital capacity and efficient use of internal resources.
- To assert a leading presence in the global research community.
- To attract and retain talented specialists.
- To acquire smaller hospitals.
Helios Kliniken GmbH

Genesis of Intellectual Capital Reporting in 2003

External Motives:

• To portray HELIOS as a competitive acquirer in an increasingly consolidated, privatized market.
• To communicate HELIOS’ unique value to the investor community and government; to improve upon speculative grade ratings.
• To promote image as a desirable workplace and prevent loss of talent to neighboring Switzerland.
• To achieve transparency and accountability, particularly to workers’ unions, which have strong bargaining power in Germany.

Internal Motives:

• To streamline operations in light of rising healthcare costs.
• To develop explicit performance targets.
• To refine and improve institutional design.
Annual Reporting

The HELIOS Model: Three Complementary Reports

- **Annual Report**: Traditional fiscal report, including corporate development, M&A data, and financial reporting.

- **Medical Report (since 2000)**: Discloses routine quality assurance data as well as self-reviews and peer reviews carried out by the Medical Advisory Board and other independent experts.

- **Intellectual Capital Report (since 2003)**: Describes knowledge assets, human capital, and process-oriented value.
Intellectual Capital Reporting
The HELIOS Model

- Human Capital
- Structural Capital
- Relational Capital

Performance Processes

- Patient-Related Results
- Economic Results
- Scientific Results
- Communication Results
Benefits of HELIOS’ Intellectual Capital Report:

• Establishment of Helios Research Center, New European Surgical Academy, and online library.
• Improvement of training processes.

External Reception:

• Acquisition by Fresenisus in 2005.
• Won “Knowledge Prize” Awarded by German Labor Authority in 2005.
• Link between intellectual capital and financial outcomes remains unclear.
• Investors generally ignore the report.
To What Degree Does Intellectual Capital Reporting Convey Value?

<table>
<thead>
<tr>
<th>Key Success Factors</th>
<th>CMM’s Report</th>
<th>HELIOS’ Report</th>
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<tbody>
<tr>
<td>Inter-Departmental Synergies</td>
<td>Diagrams depicting links between different research groups and with external clinics</td>
<td>Number of “expert groups”; number of cases in the peer-review process</td>
</tr>
<tr>
<td>“Translational” Value of Current Research</td>
<td>Descriptions of how specific research areas can be applied in a clinical setting</td>
<td>Number of research contracts; number of current clinical trials sponsored; number of patients treated</td>
</tr>
<tr>
<td>Technology/Infrastructure Capacity</td>
<td>Descriptions of significant new equipment recently acquired; description of unique workspace</td>
<td>Lists of beds per hospital, IT workstations; hospital information systems; use of web resources</td>
</tr>
<tr>
<td>Effectiveness of Learning Environment</td>
<td>Descriptions of projects run by junior researchers</td>
<td>Number of apprenticeships,</td>
</tr>
<tr>
<td>Skill Level of Workforce</td>
<td>Breakdown of employees by employment type</td>
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<tr>
<td>External Visibility</td>
<td>Numbers of journal articles, PhD theses</td>
<td>Numbers of users of the library portal, PubMed articles</td>
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<tr>
<td>Efficient Use of Capital</td>
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Conclusions:

• Intellectual capital reporting seems to encourage the efficient direction of resources by promoting cross-disciplinary synergies.

• The role of intellectual capital reporting in fundamentally altering external capital flows remains in question, because:
  – Key success factors are hard to quantify and communicate in a parsimonious and credible fashion.
  – Investor models are not designed to integrate non-financial information.
  – There is a danger of overload when analyst knowledge is limited.

• Financial and non-financial data are complementary.