How to make smart insourcing and outsourcing decisions for hospital laboratory services

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Goal of Presentation

- Equip lab professionals to work with health system administration to make smarter business decisions

Vertically Integrate vs. Outsource

- Very common business question
  - Even more so outside of healthcare space
  - Manufacturing <u>and</u> service industries

Reference: Michael J. Mol. *Outsourcing: Design, Process and Performance*. 2007: Cambridge Univ Press.

Vertically Integrate vs. Outsource

Corporate Executive

Electricity Generation

Typically
integrated

Typically
outsourced

Common Clinical Lab Scenarios

- Service outsourcing: call center, website, LIMS, etc.

- Test outsourcing: POC versus centralized lab versus reference lab

- Test services for outreach community: Sell to reference lab

- Lab management service agreements

- Selling hospital lab to reference lab

Common Pitfalls in Outsourcing Decisionmaking

Reason #1:
Treating it as a revenue problem

- "Revenue is under threat so we should outsource"

- Why would we think this way?

  - Fee-for-service healthcare business culture

  - Culture of "Revenue cycle management"

  - Side effect = less focus on costs and clinical operations

Reason #2:
Treating it as a capital problem

- "We need capital for X, so let's sell the lab business"

- Hospitals in a capital crunch lose negotiating leverage

- Puts restraints on future operations

  - How many hospitals really only expect to be around for the next 5 years or so?

Reason #3:
Misunderstanding "Core Competence"

Harvard Business Review
www.hbr.org

May/June 1990

The Core Competence
of the Corporation

by C.K. Prahalad and Gary Hamel

Core Competence Theory

- What it says:

  – Build strategy around those things your organization is uniquely good at.

- What it does <u>not</u> say:

  – Only do the stuff you're good at, and outsource the rest

- Decades-long core competence in clinical care processes
- Tightly linked to clinical informatics
  - In-house developed EHR system (HELP)
- **Software dev not seen as core competence**
- Outsourced EHR to GE in the mid-2000s
  - Failed project with huge opportunity costs

Reason #4:

Treating direct costs as if they were total costs

- Direct costs for lab tests are easy to measure

  – Labor, reagents, instruments

- Indirect costs are hard to measure

  – Pharmacy

  – Length of stay

Are lab tests a commodity?

Healthcare Value Equation

$$\text{Value} = \frac{\text{Net Clinical Benefit}}{\$}$$

- Suppose a lab test can be run by two different laboratories.
- Will clinical benefit be identical?

What should be considered when deciding to vertically integrate vs. outsource?

Vertically Integrate vs. Outsource: Key Considerations

- Direct costs

- Coordination

- Customization

- Organizational learning and improvement

- Cost of (poor) quality

Coordination

- Most clothing manufacturing is outsourced to lowest cost source

- Zara manufactures close to home

  - "Fast Fashion"

  - Rapid design cycles

  - Stay on cutting edge of fashion

Coordination Questions for Clinical Labs

- How well do you fine-tune lab operations in sync with clinical operations?

- How realistically could an outside lab company replicate that level of coordination?

Customization

Automotive Supply Chains ca. 1980

- American auto manufacturers

  - Competitive bidding for components (brakes, steering, etc.)

  - Limited information sharing

  - Lower per-unit costs

  - Higher engineering costs

- Toyota

  - Two preferred suppliers for every category of part

  - Co-located engineers

  - Higher per-unit costs

  - Lower design and engineering costs

Customization Questions for Clinical Labs

- Where different clinical departments have different dx testing needs, can you appropriately customize your services to meet those needs?

- How realistically could an outside lab company replicate that level of customization?

Learning and Improvement

Dell Computer Sourcing circa 1990s

- Focused on assembly and distribution, not part manufacturing

- Sourced circuit boards from Taiwan

- Suppliers provided more and more pre-assembled parts

- Dell lost expertise in assembly; became replaceable

Customization Questions for Clinical Labs

- How does the lab contribute to the overall health system's clinical learning and improvement?

- How realistically could an outside lab company play this function?

Cost of (Poor) Quality

British Railways

British Railways: Outsourced Maintenance

Successful maintenance outsourcing | Growing safety issues | Maintenance insourced

1990

2002
2003

British Rail: What Happened?

- Prior to early 1990s, British Rail was mostly vertically integrated

  - Maintenance could be safely outsourced because verification was in-house

- Early 1990s, infrastructure was broken off into separate company

  - Railtrack didn't have its own measurement equipment

  - No independent verification of repairs

  - Couldn't negotiate good contracts (and costs actually increased)

- 2003 insourcing of maintenance = higher safety, lower costs

British Rail: Summary

- Outsourcing is not inherently:

    - Cost-saving

    - Quality-reducing

- It comes down to capabilities and relationships

    - If outsource provider is more capable

    - If parent company can manage relationship and ensure quality

Quality Questions for Clinical Labs

- Are you measuring quality from a health system perspective, not just a lab perspective?

- How realistically could an outside lab company provide that same level of system-level quality?

Take-Home Messages for Clinical Labs

- Outsourcing versus vertical integration is a core strategic decision

- Because clinical care is a core competence of healthcare orgs,

  – Clinical lab services **have to be** tightly integrated into the health system

Take-Home Messages for Clinical Labs

- Correct financial lens: (Total) costs and operational performance

  – Long-term strategy, not short-term financial engineering

  – Not a revenue problem

  – Not a capital problem

Take-Home Messages for Clinical Labs

- Clinical impact is usually a bigger cost driver than testing costs

  – Every clinical unit has different workflow needs for lab testing

  – Coordination, customization are all key.

Take-Home Messages for Clinical Labs

- Don't neglect cost of poor quality

  - Clinical perspective, not just lab perspective

  - Major quality failures may be infrequent, but incredibly costly

  - "Minor" quality failures are also costly, but often invisible

Any Questions?

- Feel free to contact me after the presentation:

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