Improving Laboratory Efficiency and Cost

February 19, 2015
Hospital Key Indicators

Number of U.S. Hospitals
5,754

Staffed Beds
941,995

Admissions
36,915,331

ED Visits
123.8 million

Expense
$921 BILLION
Hospital Operating Performance

Percentage of Systems with Negative Operating Margins

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>12.6%</td>
</tr>
<tr>
<td>2012</td>
<td>9.5%</td>
</tr>
<tr>
<td>2013</td>
<td>14.5%</td>
</tr>
</tbody>
</table>

Average Operating Margin

<table>
<thead>
<tr>
<th>Year</th>
<th>Margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>3.4%</td>
</tr>
<tr>
<td>2012</td>
<td>3.6%</td>
</tr>
<tr>
<td>2013</td>
<td>3.1%</td>
</tr>
</tbody>
</table>
### Value of Hospital Laboratory Services

<table>
<thead>
<tr>
<th></th>
<th>Hospital Lab Expenditures ($ Billions)</th>
<th>National Hospital Expenditures ($ Billions)</th>
<th>% Share</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2010</strong></td>
<td>42.1</td>
<td>815.9</td>
<td>5.2%</td>
</tr>
<tr>
<td><strong>2011</strong></td>
<td>44.3</td>
<td>850.6</td>
<td>5.2%</td>
</tr>
<tr>
<td><strong>2012</strong></td>
<td>48.0</td>
<td>884.7</td>
<td>5.4%</td>
</tr>
<tr>
<td><strong>2013P</strong></td>
<td>47.1</td>
<td>920.7</td>
<td>5.1%</td>
</tr>
</tbody>
</table>

- **Salaries and Benefits, Supply Cost, and Reference Testing** expense comprise 80% of laboratory spend.
- **Laboratory testing** is “mission critical.”
  - 75% of all healthcare intervention requires lab data or information while 80% of a hospital EMR is composed of lab data and information.

Source: G2 U.S. Clinical Laboratory and Pathology Testing 2013-2015: Market Analysis, Trends and Forecasts, Figure 3.4; CMS.
Value of Hospital Laboratory Services (cont.)

- Estimated Lab Spend: $10.0M
- Estimated Hospital Spend: $200.0M
- Average Hospital Margin: 3.1% or $6.5M

- Lab Expense Improvement Initiatives:
  - Every $ falls to the bottom line with an exponential impact to operating margin percentage. For example, a 10% improvement to annual laboratory spend (0.5% overall expense improvement) adds a 15.4% improvement to operating margin.
Improving Laboratory Efficiency and Cost – Labor Cost

- Labor (salaries and benefits) comprise 49% of the laboratory operating expense spend.
  - Opportunities
    - Benchmarking – sets the stage
    - Labor Expense Premiums
      - Overtime, Temporary Agency
    - Fixed/Non Clinical Vacancies
    - Consolidation Opportunities
    - Labor Efficiency Improvement
    - Program/Process Evaluation
Supply Chain comprises 21% of the laboratory operating expense spend.

- Opportunities
  - Vendor Review – Pricing and Alternative Vendors
  - Reagent Rentals – “Fool’s Gold”
  - Quality Control – Repeated Testing, Expired Reagents
  - Program/Process Evaluation
Improving Laboratory Efficiency and Cost – Reference Testing

- Reference Testing comprises 10% of the laboratory operating expense spend.
  - Vendor Lab Management – Minimum number of Reference Labs used (five is considered best practice).
    - Request for Proposal (RFP) every three years (i.e., does not mean changing reference labs every three years)
- Test Utilization Management
- Loss Management
- Make versus Buy
- Miscellaneous/Wild Tests
Chi’s Low-Risk Three Step Performance Enhancement Program

**Qualify**
- Data Collection
  - Volume
  - Expenses
  - Paid FTEs
- Determine Opportunity
- Presentation and Case Study
- Go or No-Go

**Validate**
- Validation of Opportunity Onsite
- Detailed Financial Analysis
- Presentation of Findings

**Accelerate**
- Speed to Outcomes Approach
- Implementation of Key Targeted Opportunities
CALL US TO GET STARTED TODAY WITH NO COST ASSESSMENT!

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Turning laboratories into economic engines for hospitals.