Practical Business Knowledge in Cardiac & Pulmonary Rehabilitation

Thomas A. Draper, MBA, MAACVPR
Vice President, Sanger Heart & Vascular Institute
Atrium Health, Charlotte, NC
Past-President, AACVPR
Agenda and Objectives

- Understand basic financial metrics
- Identify the key and necessary financial variables for cardiac/pulmonary rehab
- Discuss how, and to whom, to ask for financial help within your organization
- Discuss some next generation metrics to be aware of
Importance of Speaking the “Financial Lingo”

• Understand the business of Cardiac/Pulmonary Rehab

• Provide knowledge of financial impact when developing programs

• Credibility when seeking resources

• Align strategies with financial trends/opportunities

• Understand the impact of Healthcare macro trends on cardiac/pulmonary rehab program
Financial Vocabulary

Gross/Total Revenue

Operating Expense

Variable Expense

Fixed Expense

Adjusted Net Revenue

Contribution/Operating Margin

Net Margin
Gross Revenue

- **Gross revenue** is what is billed to insurance providers or patient
- Represents what the hospital deems is the “cost” of an encounter
  - Determined by Hospital’s “Charge Master” process
  - Sometimes done in collaboration with Rehab Department
- Usually inflated 2-3 times greater than expected reimbursement
  - In particular Medicare reimbursement
- Typically is not reflective of the reimbursement that will be received
Adjusted Net Revenue

- **Adjusted Net Revenue** is what is **actually paid** to the Hospital
- Typically is a set amount for specific service OR a percentage of charges
- Department’s actual cash before any expenses are paid

GROSS REVENUE

Contractual Amount Insurance Will Pay
Operating Expenses

- **Variable Expenses** are what it takes to **run your CR/PR program**
  - Varies by volume of patients
- **Fixed Expenses** are the **overhead** of being part of your Hospital System
  - Are fixed and allocated to Department based on size and location
Contribution Margin is the profit or loss of running only your Department.

- Varies by volume of patients
- Typically number provided when adding new services/programs in existing space
Net Margin

- **Net Margin** is the **final margin** after all expenses are accounted for.
  - The profit or loss to the Hospital
<table>
<thead>
<tr>
<th>Department Volumes</th>
<th>Visits - I/P</th>
<th>4,632</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Visits - O/P</td>
<td>28,965</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Total Volume</td>
<td>33,597</td>
<td></td>
</tr>
<tr>
<td>Revenue</td>
<td>Inpatient Revenue</td>
<td>465,524</td>
<td>100.50</td>
</tr>
<tr>
<td></td>
<td>Outpatient Revenue</td>
<td>1,965,245</td>
<td>67.85</td>
</tr>
<tr>
<td></td>
<td>Other Operating Revenue</td>
<td>102,587</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Intercompany Revenue</td>
<td>98,874</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Gross Patient Revenue</td>
<td>2,632,230</td>
<td>78.35</td>
</tr>
<tr>
<td>Deductions</td>
<td>1,458,963</td>
<td>43.43</td>
<td></td>
</tr>
<tr>
<td>Adjusted Net Patient Revenue</td>
<td>1,173,267</td>
<td>34.92</td>
<td></td>
</tr>
<tr>
<td>Operating Expenses</td>
<td>Salaries &amp; Wages</td>
<td>505,847</td>
<td>15.06</td>
</tr>
<tr>
<td></td>
<td>Professional Fees</td>
<td>48,512</td>
<td>1.44</td>
</tr>
<tr>
<td></td>
<td>Purchased Services</td>
<td>16,547</td>
<td>0.49</td>
</tr>
<tr>
<td></td>
<td>Pharmaceuticals</td>
<td>205</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>Medical Supplies</td>
<td>5,214</td>
<td>0.16</td>
</tr>
<tr>
<td></td>
<td>Other Supplies</td>
<td>4,587</td>
<td>0.14</td>
</tr>
<tr>
<td></td>
<td>Maintenance and Repairs</td>
<td>1,154</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>Travel and Education</td>
<td>6,250</td>
<td>0.19</td>
</tr>
<tr>
<td></td>
<td>Total Operating Expenses</td>
<td>588,316</td>
<td>17.51</td>
</tr>
<tr>
<td>Operating Margin</td>
<td>584,951</td>
<td>17.41</td>
<td></td>
</tr>
<tr>
<td>Fixed Expenses</td>
<td>Lease and Rental</td>
<td>198,321</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Utilities</td>
<td>2,541</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Intercompany Expense</td>
<td>45,268</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Fixed Expenses</td>
<td>246,130</td>
<td></td>
</tr>
<tr>
<td>Net Margin/Income</td>
<td>338,821</td>
<td>10.08</td>
<td></td>
</tr>
</tbody>
</table>
Key Uses of the “Per Unit” Statistics

- Financial impact of growth
- Cost of adding a new staff member
- Payor mix impacts
- Trends over time
Breakeven Analysis - Revenue
Staff Analysis for Adding a New PAD Program

**Current State**
- 20,000 encounters/year
- $900,000 adjusted net rev/year
- $400,000 salaries/year
- $100,000 variable expenses/year
- $80,000 fixed expenses/year
- $400,000 contribution margin/year
- $320,000 net margin/year
- $45/encounter in net revenue
- $20/encounter in salaries
- $5/encounter in variable expenses

**New PAD Rehab Program**
- + 2,200 encounters/year
- $56/encounter in net revenue
- + 1.0 FTE at $50K/year
- +$10K in supplies/marketing

Should you do it???
Breakeven Analysis - Revenue
How Many Encounters Do You Need to Breakeven with an Incremental 1.0 FTE

Breakeven Point = \( \frac{\text{New Costs (Salaries/Supplies)}}{\text{Revenue/Encounter}} \)

1,071 Incremental Encounters = \( \frac{$60,000}{\$56/\text{Encounter}} \)

21,071 Encounters/Year to Breakeven Via Revenue Analysis
# Breakeven Analysis - Revenue

Projected Growth Shows Profitability

<table>
<thead>
<tr>
<th>Current State</th>
<th>Future State</th>
</tr>
</thead>
<tbody>
<tr>
<td>20,000 encounters/year</td>
<td>22,200 encounters/year</td>
</tr>
<tr>
<td>$900,000 adjusted net rev/year</td>
<td>$1,023,200 adjusted net rev/year</td>
</tr>
<tr>
<td>$400,000 salaries/year</td>
<td>$450,000 salaries/year</td>
</tr>
<tr>
<td>$100,000 variable expenses/year</td>
<td>$110,000 variable expenses/year</td>
</tr>
<tr>
<td>$80,000 fixed expenses/year</td>
<td>$80,000 fixed expenses/year</td>
</tr>
<tr>
<td>$400,000 contribution margin/year</td>
<td>$463,200 contribution margin/year</td>
</tr>
<tr>
<td>$320,000 net margin/year</td>
<td>$383,200 net margin/year</td>
</tr>
<tr>
<td>$45/encounter in net revenue</td>
<td>$46.09/encounter in net revenue</td>
</tr>
<tr>
<td>$20/encounter in salaries</td>
<td>$20.27/encounter in salaries</td>
</tr>
<tr>
<td>$5/encounter in variable expenses</td>
<td>$4.95/encounter in variable expenses</td>
</tr>
</tbody>
</table>
Labor Productivity

• Labor Productivity is an important metric of efficiency
  • Efficiency improves when more patients are seen with the same amount of staff
  • Volume decreases negatively impact labor productivity
• Labor productivity can often be benchmarked to national standards
• Can be a tool to advocate for increase staffing
Labor Productivity Analysis
Measuring Staff Efficiency

**Current State**
- 20,000 encounters/year
- 769.23 encounters/pay period
- 8 Full-Time Employees
- 40 hours/week
- 80 hours/pay period
- 640 total hours/pay period
- Labor Productivity
  - Worked Hours/Unit
  - .83 worked hours/unit
- Budget/Benchmark
  - .86 worked hours/unit

**New PAD Rehab Program**
- +2,200 encounters/year
- +84.61 encounters/pay period
- +1.0 incremental FTE
- +80 hours/pay period

Should you do it???
Breakeven Analysis
How Many Encounters Do You Need to Breakeven with an Incremental 1.0 FTE

Breakeven Point/Pay Period = \frac{\text{Total Hours/Pay Period}}{\text{Budgeted WHpU}}

837.20 Encounters/Pay Period = \frac{720 \text{ Hours/Pay Period}}{.86 \text{ Budgeted WHpU}}

21,767 Encounters/Year to Breakeven Via Productivity Analysis
Labor Productivity Analysis

Incremental Growth has a Positive Impact on Productivity

**Current State**
- 20,000 encounters/year
- 769.23 encounters/pay period
- 8 Full-Time Employees
- 40 hours/week
- 80 hours/pay period
- 640 total hours/pay period
- Labor Productivity
  - Worked Hours/Unit
  - .83 worked hours/unit
- Budget/Benchmark
  - .86 worked hours/unit

**Future State**
- 22,200 encounters/year
- 853.84 encounters/pay period
- 9 Full-Time Employees
- 40 hours/week
- 80 hours/pay period
- 720 total hours/pay period
- Labor Productivity
  - Worked Hours/Unit
  - .84 worked hours/unit
How to Obtain Financial Information

• Program Manager/Director
• Service Line Leader
• Finance Department

• Know What Measure Matters
  • Revenue vs. Productivity

• Be Prepared with Statistics
  • Encounters
  • Key Ratios
  • Trends
  • Projections
Other Measures of Profitability

- Ancillary Testing
  - Stress Tests
  - Transition/Clinic Visits

- Readmission Reduction
  - Impact on HRRP Penalties
  - Know Readmission Rates
  - Know Hospital Penalties
  - Articulate Readmission Reduction Strategies

- “Revolving Door of Your Hospital”
  - Rehab Patients Seeking “Other” Hospital Services
  - Direct Marketing about Hospital Services
  - Difficult to Measure
    - Match Rehab Patients to “Other” Services
    - Financial Analysis Department
Role in Continuum of Care

- Bundled Payment Models
  - Readmission Reductions
  - Improved Quality

- Track and Trend Performance
  - Enrollment
  - Adherence
  - Quality Performance
  - Impact on Overall “Payor” Spend
Summary

• Important to understand the different components of financial metrics
  • Provides key insights into performance of entire program
• Utilize breakeven point analysis when building a new program
  • Be able to articulate key financial ratios
  • Know what metric matters
    • Revenue vs. productivity
• Find out who has the financial information
  • Articulate your story
• Explore evolving financial metrics
• Know how your program performs in the continuum of care
June 7-8, 2019
Lenoir-Rhyne University
Hickory, NC

World Heart Games Committee

F. Stuart Sanders, M.D. FACSM, FACP, MAACVPR, Chair
John P. Porcari, Ph.D., FACSM, MAACVPR
Carl N. King, Ed.D., MAACVPR
William G. Herbert, Ph.D., FACSM, FAACVPR
J. Larry Durstine, Ph.D., FACSM, FAACVPR
Debra B. Lund, MS, RCEP, FAACVPR
Korey Sixbury, President, LSI
James A. Draper, MBA, MAACVPR
James R. Whitehead, Executive Vice President and CEO, ACSM
Tiffany N. McCall, Event Coordinator
World Heart Games History

- Began in 1990
- AACVPR International Heart and Lung Games, 2003 and 2006
- ACSM World Heart Games, 2010
Olympic Style Competition

- June 7-8, 2018
- Lenoir-Rhyne University in Hickory, NC
- Team-based and individual events
- Wide variety of challenging but safe activities
Events

Individual Events
- Basketball
- Pickleball (single)
- Softball Throw
- Disc Golf
- Game of Knowledge

Team-Based Events
- Bean Bag Toss
- Pickleball (doubles)
- Golf
- Tennis (doubles)
- Volleyball
How to Participate

• Individual Sign-Up
• Cardiac Rehab Teams
  ▪ Recruit from maintenance program
  ▪ Create Internal Competition
  ▪ Each team needs to identify leaders and captain
• Volunteer
Raising Funds to Support Teams

- AACVPR Scholarship
- Relay for Rehab
- Paper Medal Sales (Like AHA Heart sale)
- Hospital Foundation
- Program Specific Fundraisers
• Located in Hickory, NC
• Private Liberal Arts College
• Affiliated with the Evangelical Lutheran Church
World Heart Games Video

- LSI Video
How Affiliates Can Lead

• Spread the Message
  ▪ Distribute Materials
  ▪ Promote the Events

• Create Affiliate Combined Team

• Volunteer
Questions?
thomas.draper@atriumhealth.org
@tomdraper1424