



**Atrium Health**  
Sanger Heart & Vascular Institute

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# **Practical Business Knowledge in Cardiac & Pulmonary Rehabilitation**

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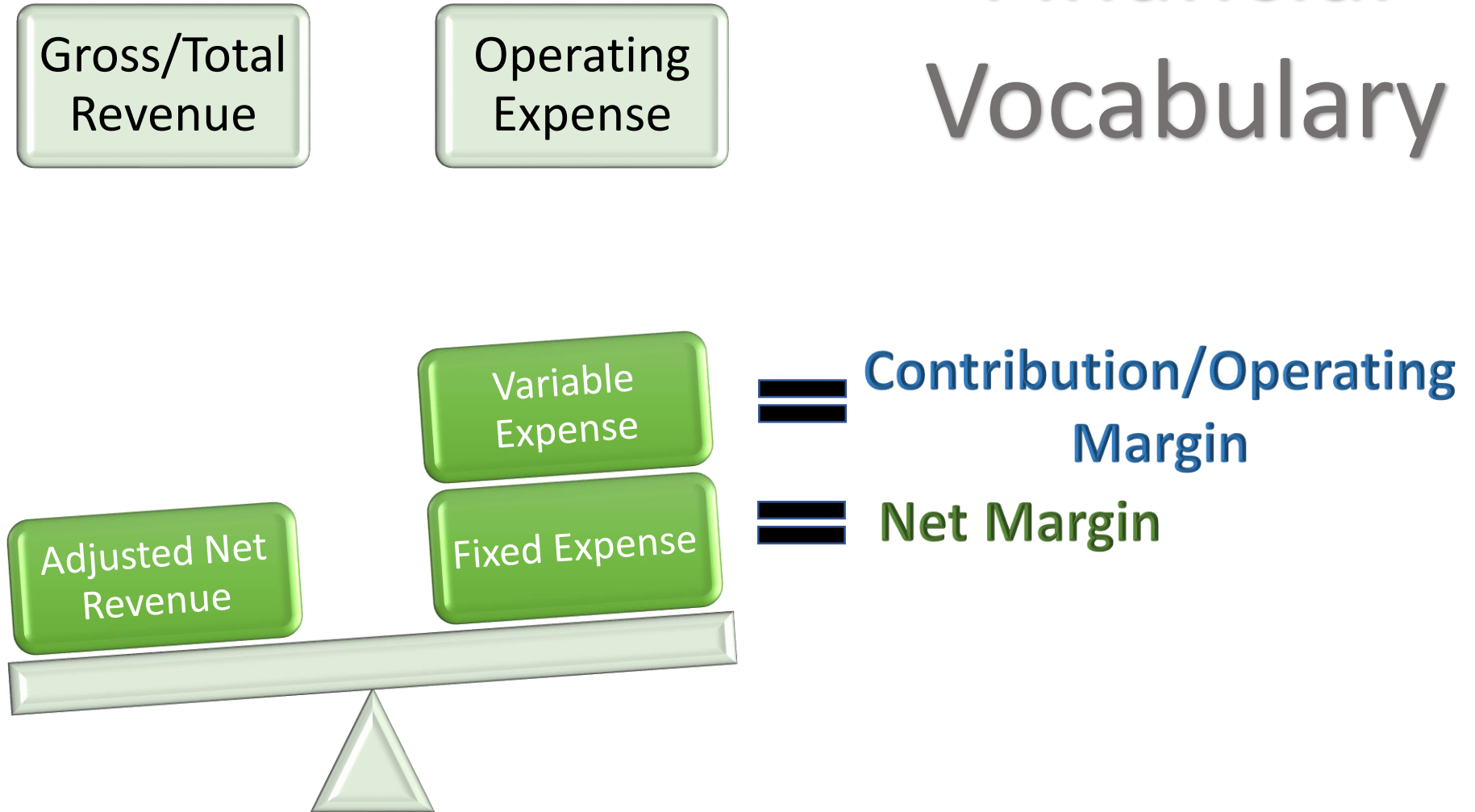
# Agenda and Objectives

- 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

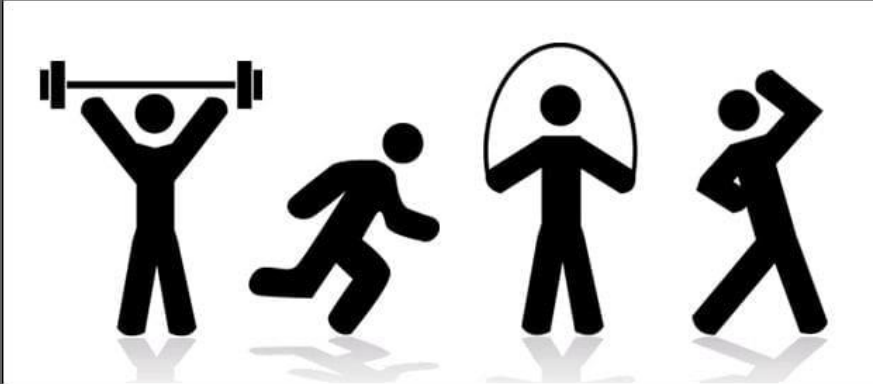
# Importance of Speaking the “Financial Lingo”

- 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 Revenue



“Cost of Session”  
(Charges)

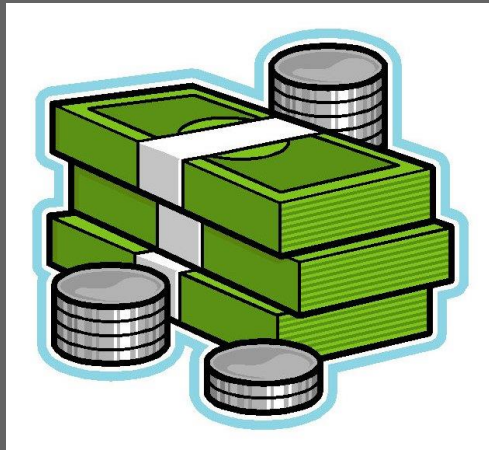
<https://www.vitalabo.com/info/magazine/types-of-exercise> - accessed 03/31/19

- **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



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# Adjusted Net Revenue



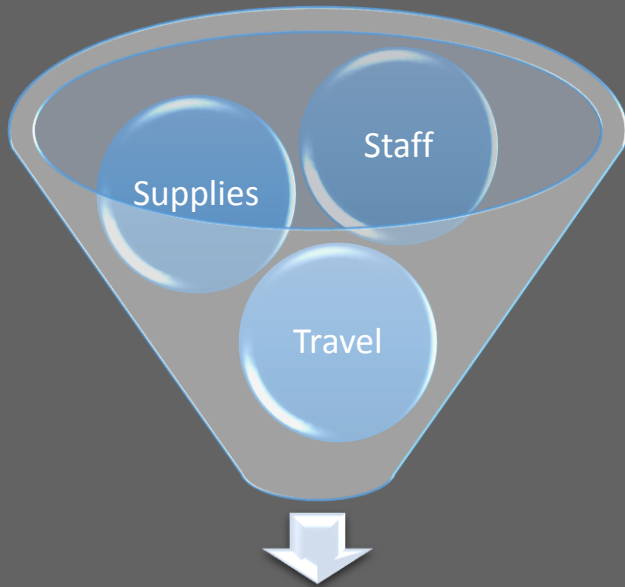
GROSS REVENUE



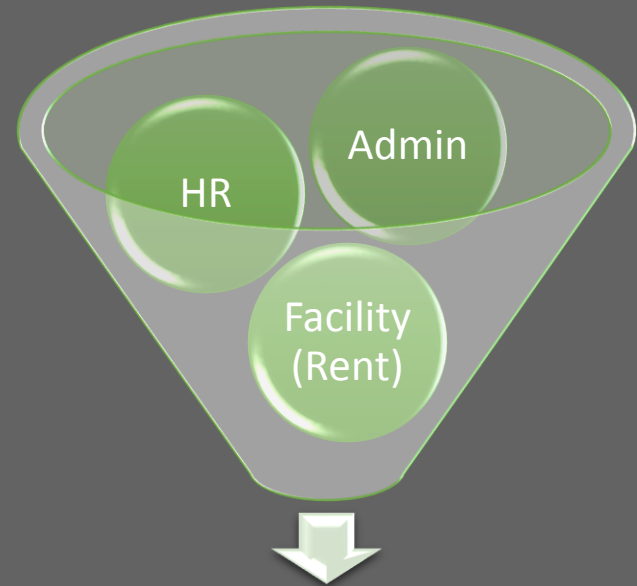
Contractual Amount  
Insurance Will Pay

- **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

# Operating Expenses



**Variable Expenses**



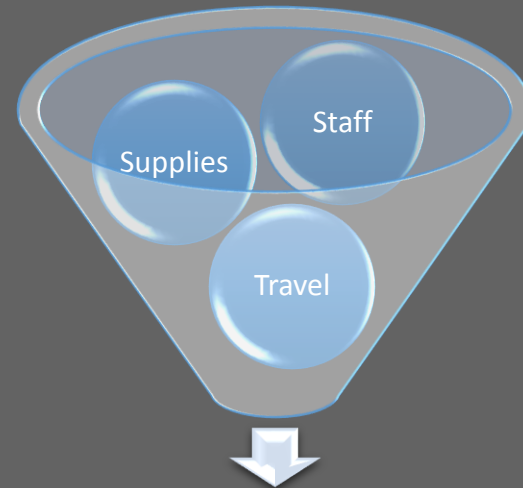
**Fixed Expenses**

- **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/Operating Margin



ADJUSTED NET REVENUE



Variable Expenses

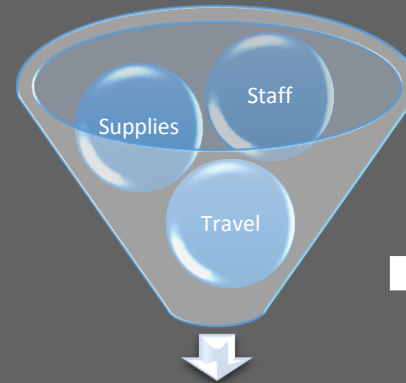
- Contribution Margin is the profit or loss of running only your Department
  - Varies by volume of patients
- Typically number provided when adding new services/programs in existing space

# Net Margin



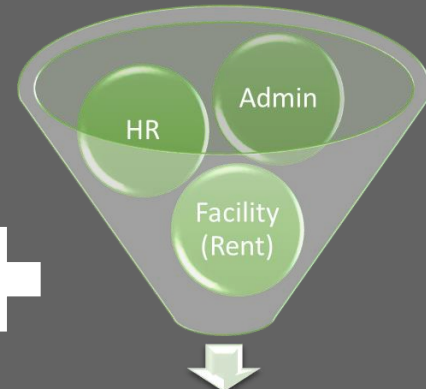
ADJUSTED NET REVENUE

-



Variable Expenses

+



Fixed Expenses

- Net Margin is the final margin after all expenses are accounted for
  - The profit or loss to the Hospital



# Cardiac Rehab Financial Report

Dec-18  
Actual

Actual  
Per Unit

## SUMMARY INFORMATION

### Department Volumes

Visits - I/P	4,632	-
Visits - O/P	28,965	-
<b>Total Volume</b>	<b>33,597</b>	



Patient Encounters

### Revenue

Inpatient Revenue	465,524	100.50
Outpatient Revenue	1,965,245	67.85
Other Operating Revenue	102,587	
Intercompany Revenue	98,874	-
<b>Gross Patient Revenue</b>	<b>2,632,230</b>	<b>78.35</b>



Gross Revenue

Deductions	1,458,963	43.43
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Insurance Deductions

<b>Adjusted Net Patient Revenue</b>	<b>1,173,267</b>	<b>34.92</b>
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### Operating Expenses

Salaries & Wages	505,847	15.06
Professional Fees	48,512	1.44
Purchased Services	16,547	0.49
Pharmaceuticals	205	0.01
Medical Supplies	5,214	0.16
Other Supplies	4,587	0.14
Maintenance and Repairs	1,154	0.03
Travel and Education	6,250	0.19
<b>Total Operating Expenses</b>	<b>588,316</b>	<b>17.51</b>



Variable Expenses

<b>Operating Margin</b>	<b>584,951</b>	<b>17.41</b>
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### Fixed Expenses

Lease and Rental	198,321	
Utilities	2,541	
Intercompany Expense	45,268	
<b>Total Fixed Expenses</b>	<b>246,130</b>	



Fixed Expenses

<b>Net Margin/Income</b>	<b>338,821</b>	<b>10.08</b>
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# 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

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

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

**21,071 Encounters/Year to Breakeven  
Via Revenue Analysis**

# Breakeven Analysis - Revenue

Projected Growth Shows Profitability

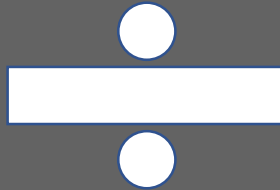
## Current State

- 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

## Future State

- 22,200 encounters/year
- \$1,023,200 adjusted net rev/year
- \$450,000 salaries/year
- \$110,000 variable expenses/year
- \$80,000 fixed expenses/year
- \$463,200 contribution margin/year
- \$383,200 net margin/year
- \$46.09/encounter in net revenue
- \$20.27/encounter in salaries
- \$4.95/encounter in variable expenses

# Labor Productivity



Encounters

Worked Hours by Employees

- **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 encounter/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

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

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

**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 in to 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



The ACSM  
**World Heart  
Games**

**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

Thomas 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

# LENOIR-RHYNE UNIVERSITY

- Located in Hickory, NC
- Private Liberal Arts College
- Affiliated with the Evangelical Lutheran Church

North Carolina



# World Heart Games Video

- [LSI Video](#)

# How Affiliates Can Lead

- Spread the Message
  - Distribute Materials
  - Promote the Events
- Create Affiliate Combined Team
- Volunteer

# Questions?

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