

Module 3

Using Financial Statements to Make Business Decisions

- A. The Income Statement as a Tool to Manage the Clinic**
- B. Pricing: Managing Revenues and Expenses**
- C. Allocating Costs to Service Areas**
- D. Loss Leaders: What, Why, and Ideas to Manage Them**
- E. Defining Profitability Among Service areas in the Clinic**

Module 3: Using Financial Statements to Make Business Decisions

The business life of a clinic relies on your ability to understand how each service contributes to the its profitability.

By the end of this session, you will

- describe how to use information from the income statement to better manage a clinic
- know the steps to cost products and services
- calculate how services and products relate to each other in terms of overall profitability of a clinic
- use financial ratios to better understand the profitability of your services
- develop strategies for incorporating loss-leader services into a medical clinic business

A. The Income Statement as a Tool to Manage the Clinic

By breaking down revenue and cost per product it is possible to get a better understanding about which products and services contribute the most to the profitability of a clinic.



$\text{Revenue from service} - \text{Cost of sale} = \text{Gross profit}$
$\text{Product A revenue} - \text{Cost of sales for product A} = \text{Gross profit for product A}$
$\text{Product B revenue} - \text{Cost of sales for product B} = \text{Gross profit for product B}$
$\text{Product C revenue} - \text{Cost of sales for product C} = \text{Gross profit for product C}$

- To separate revenue and cost, accurate financial records must be kept.
- Good financial management of a clinic means understanding which products contribute the most and least to its profitability.
- Knowing your cost and pricing for profits are essential steps in managing a clinic.

Exercise: ABC Clinic Faces Challenges—Understanding the Profitability of Business Lines, Parts A and B

ABC clinic has been having problems paying all its monthly expenses during the last few months. The owner of the clinic recently hired a bookkeeper to track the money coming into and going out of the clinic. The owner has asked the bookkeeper to come to his office so that they can put together the profit and loss statement for the previous month. Base on the bookkeeper's records, they know the following:

- Four hundred and fifty patients visited the clinic during the month and paid birr 15 each for medical cards for a doctors consultation. The monthly cost of sales for the doctors consultation is birr 2,250.
- Sixteen babies were delivered. The mothers paid birr 200 for each delivery.
- Laboratory fees collected during the month amounted to birr 19,200 and lab costs were birr 8,800.
- One hundred ninety-eight patients paid birr 11,550 for injection services.
- Deliveries cost the clinic birr 80 in direct cost per delivery. The total amount spent on injection services for the month was birr 10,494.
- General and administrative costs for the clinic during the month was birr 17,200.

Part A: Construct a profit and loss statement for the clinic

ABC Higher Clinic	
Monthly revenue	Revenue
Injection services	
Laboratory services	
Delivery services	
Doctor consultations	
Total monthly revenue	
Monthly cost of sales	Cost
Injection services	
Laboratory services	
Delivery services	
Doctor consultations	
Total monthly cost of sales	
Gross margin	
General and administrative cost	
Net profit	

Part B: Complete the spreadsheet to see if it helps determine what services lead to profitability

**Lines of Service
ABC Higher Clinic**

	Injection services	Laboratory services	Delivery services	Doctor consultation
Revenue				
Cost of sales				
Gross margin				
Gross margin %				



B. Pricing: Managing Revenue and Expenses

Introduction to Pricing

An issue to think about when considering the percentage of gross margin for specific lines of service is that the service must be priced to ensure that costs are covered and there is some profit margin.

Three major variables influence price:

- competition
- your business's costs
- your profit objective

The right price has to be low enough to attract customers and high enough to make them profitable. It is part art and part science, and there are several factors that go into the development of an optimum price:

- labor costs
- material costs
- indirect costs

Labor is the cost of work directly applied to a service. Work not directly applied to the service, such as cleaning, is an overhead cost. Benefits also can be included in this cost.

Material costs relate to the cost of materials used directly in delivering the service.

Indirect costs (or operating expenses) represent the costs of doing business that are not identified with a service. They include rent; office supplies; utilities; transportation; advertising; depreciation; taxes; clerical, secretarial, and administrative support; and insurance.

Service: Time Is Money

Service business prices are driven by the need to balance billable time with available time.

- Like any other business, a service needs to have a target profit objective.
- Rates per service hour must cover the costs of all personnel (billable and non-billable), administrative activities, and materials, as well as the target profit.

Service businesses sell time. Skilled labor hours or specialized machine time form most of their direct costs; material costs are often insignificant. The challenge for a service business is to correctly price time.

Service businesses include doctors, lawyers, accountants, and all people who offer professional services. The price for services is usually expressed in terms of an hourly rate. This figure is the rate per service hour.

Direct costs per half-hour	+	Charge to cover indirect costs and provide a profit	=	Rate per service half-hour
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Example

Dr. Tsagaye works at a medium clinic that provides general services to the local community. The clinic has two doctors including Dr. Tsagaye. Each doctor is paid birr 75,000 per year. There are two nurses who work at the clinic and each is paid birr 40,000 per year. There is a clinic administrator who greets patients, prepares bills, and collects fees. He is paid 25,000 per year. Building rent is 40,000 per year, and utilities, office supplies, and other expenses amount to 30,000 each year.

Dr. Tsagaye knows that on average he spends half an hour with each patient. What should he charge clients for each half-hour of service?

Step 1: How Many Service Half-Hours Will You Provide this Year?

Determine the number of service half-hours that you expect your firm to provide this year. At certain times of the year, there may not be much work. Even when you work 50 hours in a week, not all of those hours can be billed to clients. Also remember everyone gets a vacation, holidays, and sick leave.

Let's assume the following for Dr. Tsagaye's clinic:

Number of doctors	X	Average service half- hours per week	X	Weeks worked per year	=	Service half- hours per year
2	X	80	X	48	=	7,680

Service firms must strive for the maximum utilization (billable time) of their capacity (total time).

Calculate your service hours per year:

Number of	X	Average service half-	X	Weeks worked per	=	Service half- hours per
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doctors		hours per week		year		year
	X		X		=	

Step 2: What Will Be Your Total Costs this Year?

Estimate your firm’s total costs for this year. Look at last year's records for help.

	Dr. Tsagaye’s clinic	Your clinic’s costs for this year
Two doctors at birr 75,000 per year	150,000	
Two nurses at birr 40,000 per year	80,000	
One administrator	25,000	
Building rent and utilities	40,000	
Cost of sales	30,000	
Expected total costs for this year	325,000	

Step 3: What About a Profit?

If you base the rate per service half-hour on your costs alone, there will be no profit. You must now decide on your target profit. If your profit (and price) is too high, you may lose patients who will go to other clinics that are cheaper. As you started the clinic yourself, you want to make a profit equal to 50% of your salary, so (being a good manager of clinic finances) you decide on a profit of 37,500 for the year.



Step 4: What Is Your Rate per Service Half-Hour?

Now you are ready to calculate how much you should charge your clients per half-hour.

Based on the information from Dr. Tsagaye’s clinic, calculate the rate per service half-hour.

Total costs + Profit
Number of service half-hours

 =

Rate per service half-hour 47.20
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Calculate your rate per service half- hour

Total Costs + Profit
Number of service half hours

 =

Rate per service half hour

Establishing the rate of labor is one way to establish costing and pricing of services.

This method is one way to estimate the average price that you should charge for the time of the physicians in your practice. The next unit provides another pricing method.

C. Allocating Costs to Service Areas: Indirect Expenses (or Operating Expenses)



Another method to cost and price services is to look at the three components that contribute to costing—labor, material, and indirect expenses (operating expenses)—on the basis of the different services and products a clinic provides, as opposed to only the physician’s time in a generic sense.

To do so we need to think about how to allocate a clinic’s indirect expenses to the business service lines.

There are many techniques that can be used to allocate costs depending on how simple or sophisticated you would like to be.

Simple Allocation Method to Distribute Indirect Expenses

In this approach, you identify a percentage markup and add it to the purchase price of each service. You determine this markup based on the amount of your estimated general operating costs. If your indirect costs tend to be 25 percent of your total revenue, then you can use that amount to apply to your direct cost. Your volume of sales is also important because if your number of patients decreases, you might not generate enough money to cover your indirect costs. The best way to set this markup is to estimate your volume of patients and revenue first. This information will give you a sense of whether you will cover all of your operating costs through the markup.

Proportional Allocation Method to Distribute Indirect Expenses

This method allocates a different proportion of general operating costs to different services and products depending on the proportion of sales these items are to your overall revenue. For example if you offer two services, one of which represents 70 percent of your total sales, then you would allocate 70 percent of your general operating costs to this service. The second service represents 30 percent of your total sales. Therefore 30 percent of the general operating costs will be allocated to this service.

To simplify you can group similar services. For example, categories can include laboratory, x-rays, and tuberculosis (TB). The percentage of sales will be the same proportion of costs that you would allocate to that category. The total for all products and services will be 100 percent.

To understand how to allocate indirect expenses across several lines of service you need to follow two steps:

1. Calculate the percentage of revenue for each service line:

$\frac{\text{Line of service revenue}}{\text{Total revenue}}$	Percentage of total revenue
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2. Calculate the amount of indirect expenses that should be allocated to each line of business:

$$\frac{\text{Percentage of total revenue for a line of service} \times \text{Total indirect cost}}{\text{Amount of indirect cost to allocate to the line of service}}$$

Exercise: Calculating Allocation of Operating Expenses—The Proportional Method

Instructions:

1. Calculate the percentage of revenue for each service line (Revenue / Total revenue = Percentage of revenue)
2. Calculate the amount of indirect expenses that should be allocated to the line of business (% of revenue x Total indirect cost)

Lines of Service ABC Clinic				
Total revenue = 40,700/month Total indirect Costs = 17,200/month				
	Injection services	Laboratory services	Delivery services	Doctor consultations
Revenue	11550	19200	3200	6750
Percentage of revenue				
What is the allocated cost using the proportional method?				

Cost of Materials and Products

The kinds of materials and products you need to consider when pricing the clinic's services include supplies used to deliver services:

- drugs
- syringes
- plaster of Paris
- sutures
- elastic bandages
- laboratory test kits and stains
- x-ray material

When factoring in the costs of materials and products, you need to include their shipping and handling costs.

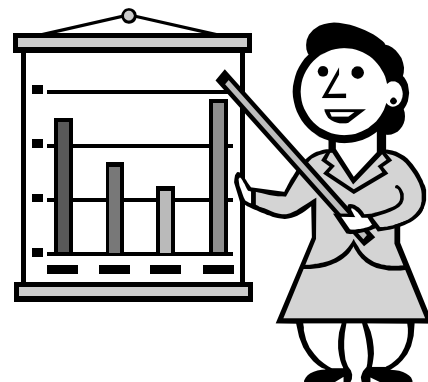
	Item	Purchase price	Additional costs	Total purchase price
1				
2				
3				

D. Loss Leaders: What, Why, and Ideas on How to Manage Them

Loss leader: What does it mean?

A loss leader is a business strategy in which a business offers a product or service at a price that is not profitable for the sake of offering another product/service at a greater profit or to attract new customers.

This is a common practice when a business first enters a market; a loss leader introduces new customers to a service or product in the hope of building a customer base and securing future recurring revenue. The loss leader strategy is more than just a nifty business trick—it is a successful strategy if executed properly.



A classic example is that of razor blades. Companies like Gillette essentially give their razor units away for free, knowing that customers will have to buy their replacement blades, which is where the company makes all of its profit. Giving units away for free, knowing that customers will have to buy their replacement blades, which is where the company makes all of its profit.¹

¹ Investopedia definition.

E. Defining Profitability Among Service Areas of the Clinic

This case study is a comprehensive look at how to understand the profitability of service lines in a clinic.

TLC Higher Clinic

Dr. Armani does not know what he is going to do. He just has completed a meeting with the investors in the clinic who are not happy with the financial results for the year. In the past the clinic provided 10 to 15 percent net profit per year. This year net profit is running less than 5 percent. The investors are surprised, as Dr. Armani had told them at the beginning of the year that profits would increase this year because of the new laboratory facilities, new x-ray equipment, and an expansion of service lines with the addition of TB services. In fact Dr. Armani told them that new TB clients increased the patient load by 20 percent by the end of the year.



The investors reviewed this income statement:

TLC Higher Clinic	
Income statement	
REVENUE	BIRR
Card registration income	104,560
Laboratory exam fee	347,080
X-ray fee	164,200
Injection service fee	115,260
Dressing fee	15,720
Minor surgery fee	14,320
Other medical care fee	8,820
Blood pressure measurement fee	6,208
Miscellaneous medical service income	900
Other income	-
Total revenue	777,068
DIRECT EXPENSES	
Laboratory expenses	79,828
X-ray expenses	38,675
General medical-service supplies	28,450
Supplies for the TB services	25,055
Total direct expenses	172,008
Direct labor	
Laboratory staff	104,124
X-ray staff	62,560
TB staff	48,000
Specialist	53,890
Direct labor—Salaries and wages	268,574
Total direct expenses	440,582
GROSS PROFIT	336,486
Salary and wages—General clinic management	125,000
Sanitary and other supplies	29,400
Office and shop rent	72,000
Communication expenses	12,030
Utilities	7,000
License fees	817
Repairs and maintenance for furniture and the office	4,650
Professional fees	6,550
Equipment rent	30,000
Other expenses	4,555
Uniforms	4,000
Transport charges	7,500
Total general and administrative expenses	303,502
Total expenses—Direct and indirect	744,084
NET PROFIT	32,984

The director of the board finished the meeting by asking Dr. Armani to work with the clinic accountant to develop a better understanding on why profitability for the year was so low.

The next day Dr. Armani sat down with the accountant at the clinic, explained the request, and asked if he and his staff could provide a more detailed explanation about why profitability was less than expected. The accountant, having participated in a training course on financial management during the year, started to organize revenue and expenses based on the four services areas the clinic offers. The first thing he needed to decide was how to allocate indirect or fixed costs. He decided that as the rental of the new x-ray equipment was specific to that service, he would allocate those indirect costs to the x-ray service. For the remaining indirect costs, he wanted to use the proportional-allocation method.

With his new skills and techniques he was confident that he would be able to provide Dr. Armani with the information he needed before the next board meeting.

Part 1

The first thing the accountant decided to calculate was the cost-to-revenue ratios to find out how the clinic did in comparison to the previous year.

Instructions:

1. Calculate the cost-to-revenue ratios for 2008.
2. Compare and analyze the 2007 and 2008 results.
3. Identify four areas that require further analysis.

TLC Higher Clinic			
	2007 results	2008 birr	2008 results
REVENUE		777,068	
Total direct materials expenses	22%	172,008	
Direct labor—Salaries and wages	30%	268,574	
Total direct expenses	52%	440,582	
GROSS PROFITS	48%	336,486	
Total expenses—Direct and indirect	86%	744,084	
NET PROFIT	14%	32,984	

Based on the comparison of ratios from 2007 to 2008, he identified the areas he believed required further analysis:

1. _____
2. _____
3. _____
4. _____

Part 2

As a second step the accountant developed revenue and expense-allocation templates.

Instructions:

1. Use the information from the income statement to identify the revenue each service line generated.
2. Record the revenue information in the appropriate space.
3. Calculate the percentage allocation of revenue for each service line.
4. Provide a written summary of the clinic's revenue.

TLC Higher Clinic					
Revenue by service line					
REVENUE	Laboratory services	X-ray services	TB services	General services	TOTALS
Card registration income					
Laboratory exam fee					
X-ray fee					
Injection service fee					
Dressing fee					
Minor surgery fee					
Other medical care fee					
BP measurement fee					
Miscellaneous medical service income					
Other income					
Total revenue					
Percentage allocation of revenue					

Part 3

Instructions:

1. Use the information from the income statement to identify the direct expenses for each service line.
2. Record the expense information in the appropriate space.
3. Calculate the gross margin for each line of service and the gross margin percentage.
4. Provide a written summary of the clinic's direct expenses.

DIRECT EXPENSES	Laboratory expenses	X-ray expenses	TB expenses	General expenses	TOTAL
Laboratory expenses					
X-ray expenses					
General medical service supplies					
Supplies for the TB services					
Total direct expenses					
Direct labor					
Laboratory staff					
X-ray staff					
TB staff					
Specialist					
Direct labor—Salaries and wages					
TOTAL DIRECT EXPENSES					
Gross margin					
Gross margin percentage					

Part 4

Instructions:

1. Use the information from the income statement and the other worksheets to determine how to allocate indirect expenses for each line of service.
2. Calculate how much the allocation of indirect expenses is for each line of service.
3. Provide a written summary of the clinic's general and administrative expenses.

GENERAL AND ADMINISTRATIVE EXPENSES	Laboratory expenses	X-ray expenses	TB expenses	General expenses	TOTAL
Salary and wages— General clinic management					
Sanitary and other supplies					
Office and shop rent					
Communication expenses					
Utilities					
License fees					
Repair and maintenance for furniture and the office					
Professional fees					
Equipment rent					
Other expenses					
Uniforms					
Transport charges					
<i>Percentage allocation of indirect expenses</i>					
Total indirect expenses allocated					
Total expenses— Indirect					

Part 5

The last step the accountant completed was to compile all of the information in a summary statement. This summary statement synthesized the financial information to look at profitability by service area.

Instructions:

1. Use the information compiled in the worksheets to complete the summary statement for TLC Higher Clinic.
2. Analyze this information to draw conclusions regarding the profitability of the lines of service for the TLC Higher Clinic.

TLC Higher Clinic					
Income statement by lines of service					
	Laboratory services	X-ray services	TB services	General services	TOTAL
REVENUE					
TOTAL DIRECT EXPENSES					
GROSS PROFITS					
Gross profit percentage					
TOTAL INDIRECT EXPENSE					
TOTAL DIRECT AND INDIRECT EXPENSES					
NET PROFIT					
Net profit percentage					