Chapter 2 PLANNING FOR SUCCESS: BUDGETING

QUESTIONS FOR DISCUSSION

2-1. Planning helps the organization by causing its employees to think ahead and anticipate change. This is done by establishing specific goals and objectives, communicating those objectives to the individuals who must achieve them, forecasting future events, developing alternatives, selecting from among alternatives, and coordinating activities. The activities are summarized in a document called a budget. The budget describes what we hope to achieve and the resources that will be used to carry out the organization's activities.

2-2. The organization's mission represents its reason for existence. For public, health, and not-for-profit organizations, finances often become a means to an end, rather than the end itself. This mission cannot solely be making profits. Financial management must help balance the focus on profit with the public service elements of the organization's mission.

2-3. Strategic plans translate the mission of the organization into an approach or set of approaches that will be used to accomplish the mission, and a broad set of goals that need to be attained to achieve the mission. Strategic plans set the organization's long-term direction. They often do not have specific financial targets. However, they set the stage for the specific, detailed budgets that will be established to achieve the organization's goals.

2-4. Whereas the strategic plan establishes goals, the long-range plan considers how to achieve those goals. Long-range plans establish the major activities that will have to be carried out in the coming three to five years. This process links the strategic plan to the day-to-day activities of the organization. Organizations that do not prepare a long-range plan are often condemned to only sustain current activities, at best.

2-5. Budgets establish the amount of resources that are available for specific activities. However, budgets do not merely limit the resources that can be spent. They represent the detailed plan that supports the organization's efforts to achieve its mission, and help the organization determine and achieve its goals and objectives. The budgeting process is one of exploring possibilities. Organizations determine what things they can and cannot do. They examine alternatives and choose those that are likely to yield the best results. They become attuned to possible problems and can work to find solutions. Budgeting forces managers to think ahead, to have clear expectations against which to measure performance, and to coordinate the activities of the organization so that everyone is working toward a common purpose.

Budgets are also used to control results. That is, budgets not only create plans, but they are also used to help accomplish those plans. This is done by comparing actual results to the budget.

Looking at results, we can assess what needs to be corrected. How good a job did the organization's management do? How well did the organization itself do? In order to evaluate performance, one must have a standard or benchmark to compare with actual results. The budget establishes the organization's expectations.

2-6. An organization may consider undertaking an activity that was not planned for when the annual budget was prepared. At any time an organization can prepare a special budget for a specific purpose. Appropriate approval should be obtained before implementing the budget.

2-7. An organization's budgets are often organized into a strategic plan, long-range plan, master budget, and special purpose budgets.

2-8. Budgets present specific, measurable goals. An individual is much more likely to work efficiently if there is a target to shoot for, assuming that the target is not unrealistic.

2-9. Most employees would prefer salaries that are substantially larger than the amounts they are currently receiving. Organizations lack the revenues to pay for those raises. Most managers would like more office space with new furniture and remodeled facilities. They would certainly like more staff to carry out existing functions. Organizations must make choices concerning how to spend their limited resources.

2-10. The manager should make sure that it is in the staff's best interests to do the things that are in the organization's best interests. The key is to establish a means of making the normally divergent desires of the organization and its employees become convergent, or congruent. Organizations often achieve congruence by setting up a system of incentives.

2-11. Financial incentives include retaining one's job and receiving good raises and bonuses. Bonus systems have a variety of problems. Some bonus systems reward all employees if spending is reduced. This is good unless workers can restrict volume, thus reducing the number of units of service provided in order to save money. Such behavior would likely reduce revenues by a greater amount than it would save costs. Also, if everyone gets a bonus, then no one feels that individual actions have much impact, and each individual may feel that she or he does not have to work particularly hard to reap the benefits of the bonus. If bonuses are given only to some employees, it may create jealousy and discontent. It is also possible that it may create a competitive environment in a situation in which teamwork is needed to provide quality care.

There are incentive alternatives to bonuses; for example, a letter from supervisor to subordinate. In the real world, praise is both cheap and, in many cases, effective. On the other hand, criticism, especially in writing, can have a stinging effect that managers will work hard to avoid in the future.

2-12. If targets are placed out of reach, people probably will not stretch to their utmost limits to come as close to the target as possible. When people work extremely hard and then fail, they often question why they bothered to work so hard. If hard work results in failure to achieve the target, then why not ease off? If you are going to fail anyway, must it be so painful?

2-13. (1) The budget is first prepared. (2) After review by the body with adoption authority, it is adopted, either with or without changes. (3) Once approved, the budget is implemented. It is the responsibility of the management of the organization or the executive branch of the government to assure that the adopted budget is carried out. (4) Finally, the results must be evaluated. Accountability is an element of this evaluation.

2-14. In some organizations, support and revenues are only acknowledged if they have been received in cash. In those cases, expenses are recognized when they have been paid. For organizations that record their revenues and expenses in that way, the cash budget would be identical to the operating budget. They are said to use a *cash basis of accounting*. In contrast, if revenue is recorded in the year the service is provided, whether cash has been received yet or not, then the organization is said to be using an *accrual basis of accounting*.

Cash accounting is easier, but does it enable us to understand how well our organization is doing? With accrual accounting we accrue, or anticipate, the eventual receipt of money for services provided, as well as recording expenses for resources consumed, even if they have not yet been paid for. When accrual accounting is used, the operating budget gives us a good idea of how profitable we expect the organization to be. However, it does not give an accurate idea of how much cash we will have.

2-15. Modified cash is a system that treats most revenues and expenses on a cash basis. However, capital acquisitions are depreciated over time, rather than all being treated as an expense in the year cash is paid for them.

2-16. The budget process can be quite complicated and time consuming. The process may take one to three months in small organizations and four to six months or even longer in larger ones. In order to assure that the budget is ready for adoption sufficiently early to be implemented at the start of the coming year, many organizations prepare a budget calendar or *timeline*. Government timelines are often set by law or regulation.

PROBLEMS

The exhibits below are embedded Excel objects. Double-clicking on them will open an Excel spreadsheet.

2-17

First Year	Cash Budget	Operating Budget
Collections/Revenues	$ 45,000	$ 60,000
Disbursements/Expenses	$ 52,000	$ 58,000
Net Cash Flow/ Profit or Loss	$ (7,000)	$ 2,000

Second Year	Cash Budget
Collections	$ 15,000
Disbursements	$ 6,000
Net Cash Flow	$ 9,000
Plus First-Year Cash Balance	$ (7,000)
Cash at End of Year Two	$ 2,000

i. The first year cash profit is $(7,000).
ii. The accrual basis profit is $2,000.
iii. If Finn Fixes were to stop operations at the end of the first year, it's second-year cash profit would be $9,000
iv. Finn' second-year ending cash balance would be $2,000 - exactly the same amount as the 1st-year's accrual budgetpredicted.
v. Accrual better reflects the long-term stability of the organization.

2-18. 4
3

2-19

1. Earns
   Uses
2. depreciation
3. cash or cash flows; or the full project life

2-20.

Monroe Outpatient Surgery Center
Operating Budget
June 2018

Revenues	$ 200,000	80 procedures x $2,500/procedure
Expenses		
Professional Fees	$ 120,000	80 procedures x $1,500/procedure
Surgical Supplies	24,000	80 procedures x $300/procedure
Salaries	10,500	Given
Occupancy	8,200	Given
Communications	1,200	Given
Depreciation	4,000	$240,000 / 60 months
Total Expenses	$ 167,900	
Profit/(Loss)	$ 32,100	

2-21. (Capital Assets and Depreciation Expense)

	Cost	Salvage	Depreciable Base (Cost - Salvage)	Useful Life	Annual Depreciation
Building:	$ 40,000,000	$ -	$ 40,000,000	40	$ 1,000,000
Equipment:	6,000,000	1,200,000	4,800,000	10	480,000
Total					$ 1,480,000

2-22.

Operating Budget	**March**
Total Revenue	$ 240,000
Expenses	
Payroll	$ 160,000
Supplies	48,000
Depreciation	12,000
Interest	6,000
Total Expenses	$ 226,000
Profit/(Loss)	$ 14,000

Cash Budget	**March**
Beginning Balance	$ 26,000
Cash Receipts	
February Billings	$ 150,000
March Billings	60,000
Total Collections	$ 210,000
Total Cash Available	$ 236,000
Disbursements	
Payroll Payment	$ 170,000
Supply Payments	45,000
Building Acquisition	$ 250,000
Total Disbursements	$ 465,000
Cash Surplus/(Shortfall)	$ (229,000)
Borrowing/(Repayment)	250,000

Capital Budget	
Building Acquisition	$ 250,000
Mortgage	$ 250,000

2-23. (Cash and Operating Budgets)

Middleboro Township Operating Budget Fourth Quarter			
Revenues			
Income Tax	$ 750,000		(earned equally throughout year)
Loan	35,000		(revenue under modified accrual)
Total Revenue	$ 785,000		
Expenditures			
Salaries	$ 720,000		
Interest	437.50		($35,000 x 5% - $2,800 /4 = $437.50 per quarter
Supplies	390,000		(expenditure when legal obligation to pay; i.e., when supplies received)
Total Expend.	$ 1,110,438		
Surplus/(Deficit)	$ (325,438)		

Middleboro Township Cash Budget Fourth Quarter			
Beginning Cash	$300,000		Given
Tax Receipts	600,000		Cash rather than accrual basis
Loan Receipt	35,000		
Cash Available	$935,000		
Salaries	-720,000		
Supplies	-300,000		From first quarter due to payment lag
Ending Cash	($85,000)		

Note that operating budget and cash budget results are not the same, because of timing differences of when things are recorded under an accrual approach.

2-24. (Special Purpose Budget)

Budget	
Revenue	
Supermarket Subsidy	$1,000
Total Revenue	$1,000
Less Expenses	
Equipment rental	$500
Nurses $50 10 hours 7 days	3,500
Test Costs 700 $1	700
Total Expenses	$4,700
Surplus/loss	($3,700)

No, it is not necessarily financially bad. This program may discover patients with hypertension or other medical problems who will become patients of the hospital, generating additional revenues. Also it provides the hospital with a way to advertise their services, generating future patient volume and revenue.

2-25. (Cash Budget)

	January	February	March
Beginning Balance	$500,000	$1,300,000	$1,200,000
Cash Receipts			
Property tax	4,500,000	3,600,000	2,250,000
Sales Tax	0	0	230,000
Total Cash Available	$5,000,000	$4,900,000	$3,680,000
Less Cash Disbursements	3,700,000	3,700,000	3,700,000
Net Cash Available	$1,300,000	$1,200,000	($20,000)
Borrow/(repay)	0	0	120,000
Ending Cash Balance	$1,300,000	$1,200,000	$100,000

2-26

Assessed Valuation	300,000,000	
Exempt Properties	5,000,000	
Tax Delinquency rate	10%	
General Fund Need	3,500,000	
Amount drawn from Rainy-Day Fund	500,000	
	300,000,000	
Less: Exempt Property	5,000,000	
Property Subject to Taxation	295,000,000	**# 1**
Amount Needed	3,500,000	
Less: Amount drawn from Rainy-Day Fund	500,000	
Adjusted Taxes to be Billed	3,000,000	
Plus: Uncollectible taxes	333,333	
Total value of tax bills to be sent	3,333,333	**# 2**
Tax Rate (# 2 / # 1)	0.011299	**# 3**
Mill rate (# 3 * 1000)	$11.299	

2-27

1. a) increase
2. b) decrease
3. b) decrease

2-28. Capital Budget

Item to be Acquired	**Quantity**	**Estimated Useful Lifetime**	**Cost**	**Total Cost**
Garbage Trucks	2	10	$150,000	$300,000
Bulldozer	1	8	240,000	240,000
Riding Mowers	3	5	16,000	48,000
Activity Center	1	40	650,000	650,000
Total				$1,238,000

2-29. (Operating Budget) The zoo expects the following number of visitors per month:

Visitor Type	**Monthly Number of Admission Tickets**	**Price per Admission ($)**	**Admission Revenues**	**Total Admitted**
Adult	800	8	$6,400	800
Child	950	5	4,750	950
School child	1,000	3	3,000	1,000
Families	300	20	6,000	1,200
Total			$20,150	3,950

Budget	
Revenues	
County Grant	$7,000
Admissions	20,150
Total Revenues	$27,150
Expenses	
Administration	$12,000
Staff	10,000
Train Costs	1,317
Maintenance	3,950
Total Expenses	$27,267
Profit/(Loss)	($117)

2-30. (Cash Budget)

	Total	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Admissions by Quarter		30%	25%	15%	30%
Admission Revenue	$180,000	$54,000	$45,000	$27,000	$54,000

Cash Budget	**Quarter 1**	**Quarter 2**
Beginning Cash	$5,000	$5,000
Cash Receipts		
Admissions	54,000	45,000
County Grant	0	0
Total Cash Available	$59,000	$50,000
Cash Disbursements		
Administration and Staff	$55,000	$55,000
Train Costs	5,400	6,000
Maintenance	10,800	9,000
Total Cash Disbursements	$71,200	$70,000
Subtotal	($12,200)	($20,000)
Borrow (Repay)	17,200	25,000
Ending Balance	$5,000	$5,000
Note Payable	$17,200	$42,200

2-31.

March cash receipts	
60% of $13,000	$ 7,800
40% of $12,500	5,000
Total cash receipts	$12,800

2-32.

	Q1	**Q2**	**Q3**	**Q4**
Sources of Revenue				
Contributions	$ 25,000	$ 35,000	$ 35,000	$ 50,000
Federal Grants	250,000	375,000	350,000	250,000
City Contracts	240,000	300,000	320,000	360,000
Total Revenue	$ 515,000	$ 710,000	$ 705,000	$ 660,000

Collections by Quarter and Sou	**Same Qtr.**	**One Qtr. Later**	**Two Qtrs. Later**	**Three Qtrs. Later**
Contributions	100%			
Federal Grants		100%		
City Contracts		25%	25%	50%

Collections	**4th Quarter**
Contributions	$ 50,000
Federal Grants	$ 350,000
City Contracts	
3rd Qtr	$ 80,000
2nd Qtr.	75,000
1st Qtr.	120,000
Total City Contracts	$ 275,000
Total Collections	$ 675,000

2-33.

Re:Plate
Annual Operating Budget
Fiscal Year 2017

Revenues & Support	
Grocery sales	$1,650,000
Class fees	39,000
Total revenues & support	$1,689,000
Expenses	
Food	$1,250,000
Rent	120,000
Salaries and benefits	294,000
Interest	400
Depreciation	11,750
Total expenses	$1,676,150
Profit /(Loss)	$12,850

Re:Plate
Semiannual Cash Budget
Fiscal Year 2017

	First Half	Second Half	Annual
Beginning Balance	$ 21,000	$ 37,000	$ 21,000
Receipts			
Grocery sales	825,000	825,000	1,650,000
Class fees	19,500	19,500	39,000
Total	844,500	844,500	1,689,000
Available Cash	$ 865,500	$ 881,500	$ 1,710,000
Payments			
Food	625,000	625,000	1,250,000
Rent	60,000	60,500	120,500
Salaries and benefits	143,500	147,000	290,500
Interest	-	400	400
Total	828,500	832,900	1,661,400
Subtotal	$ 37,000	$ 48,600	$ 48,600
Borrowing	-	40,000	40,000
Repayments	-	(10,000)	(10,000)
Investments	-	(40,000)	(40,000)
Ending balance	$ 37,000	$ 38,600	$ 38,600

2-34.

A & B

Unit Revenues	
Monthly parent tuition	$10
Monthly County tuition	$200
Unit Costs	
Inside teachers per hour	$50
Outside teachers per hour	$60
Software per year	$2,400
Supplies per student per session	$1.50

	Month 1	Month 2	Month 3
Students	25	41	52
Student to teacher ratio	5	5	5
Number of teachers	5	8.2	10.4
Whole number of teachers	5	9	11
Number of inside teachers	5	5	5
Number of outside teachers	0	4	6
Tutoring sessions per month	8	8	8
Hours per session	2	2	2
Teacher Hours			
Inside	80	80	80
Outside	0	64	96

Revenue	Month 1	Month 2	Month 3	Full Qtr.
Tuition - Parents	$ 250	$ 410	$ 520	$ 1,180
Tuition - County	5,000	8,200	10,400	23,600
Total Revenue	$ 5,250	$ 8,610	$ 10,920	$ 24,780
Expenses				
Inside teachers	$ 4,000	$ 4,000	$ 4,000	$ 12,000
Outside teachers	-	3,840	5,760	9,600
Supplies	300	492	624	1,416
Software	200	200	200	600
Total Expenses	$ 4,500	$ 8,532	$ 10,584	$ 23,616
Surplus/(Deficit)	$ 750	$ 78	$ 336	$ 1,164

C – Monthly detail shown to illustrate the solution

Cash Budget	Month 1	Month 2	Month 3	Full Qtr.
Beginning Balance	$ -	$ (6,450)	$ (9,372)	$ -
Receipts				
Parent Tuition	$ 250	$ 410	$ 520	$ 1,180
County Contract		$ 5,000	$ 8,200	$ 13,200
Total Receipts	$ 250	$ 5,410	$ 8,720	$ 14,380
Available Cash	$ 250	$ (1,040)	$ (652)	$ 14,380
Disbursements				
Salaries	$ 4,000	$ 7,840	$ 9,760	$ 21,600
Software	$ 2,400			$ 2,400
Supplies	$ 300	$ 492	$ 624	$ 1,416
Total Disbursements	$ 6,700	$ 8,332	$ 10,384	$ 25,416
Cash Surplus/(Shortfall)	$ (6,450)	$ (9,372)	$ (11,036)	$ (11,036)

2-35. Marquoya College

Part I		
Tuition Revenue	$15,640,000	(4300 + 300) * ($3,300 + 100)
Less: Scholarships	1,360,000	Less 400 Scholarships
Net Tuition Revenue	$14,280,000	
Fee Revenue	$1,288,000	4,600 * $280
Part II		
Faculty salaries:		
Full time	$9,000,000	250 * $36,000
5% Increase	450,000	
Merit Increase	280,000	Given
Adjunct Faculty	270,000	20 * 18 * $750
Total Faculty Salaries	$10,000,000	
Payroll Taxes	$1,000,000	10% * Total Faculty Salaries

Part III

Budgeted Receipts	
Tuition	$14,280,000
Fees	1,288,000
Endowment	514,000
Auxiliary Services	538,000
Athletics	1,580,000
Total Budgeted Receipts	$18,200,000

Budgeted Expenditures		
Faculty Salaries	$10,000,000	
Operation and Maintenance of Plant	1,260,000	$1,000,000 + 10,000 + 50,000
Mortgage payments	264,000	Given
Administration & General	1,440,000	Given
Library	1,800,000	Given
Health & Recreation	750,000	Given
Athletics	320,000	Given
Insurance & Retirement Benefits	548,000	Given
Capital Improvements	1,300,000	Given
Payroll Taxes	1,276,000	Total Salaries * 10%
Federal Income Taxes	36,000	Given
Bank Loan	204,000	$200,000 + $4,000
Total Budgeted Expenditures	$19,198,000	
Projected Deficit Prior to Fund Raising	($998,000)	

Part IV	SEPTEMBER	OCTOBER	NOVEMBER
Beginning Cash Balance	$3,700	$2,006,600	$3,000
Add: Cash Receipts			
Tuition	2,856,000	0	2,142,000
Fees	644,000	0	0
Endowment	128,500	0	0
Auxiliary Service	53,800	53,800	53,800
Athletics	158,000	0	790,000
Alumni Support	15,000	15,000	90,000
TOTAL CASH AVAILABLE	$3,859,000	$2,075,400	$3,078,800
Less: Cash Disbursements			
Faculty Salaries	$1,000,000	$1,000,000	$1,000,000
Oper. & Maint. of Plant	100,800	100,800	126,000
Mortgage Payments	22,000	22,000	22,000
Admin. & General	120,000	120,000	120,000
Library	150,000	150,000	150,000
Health & Recreation	62,500	62,500	62,500
Athletics	32,000	16,000	32,000
Insurance & Retirement Ben.	54,800	54,800	54,800
Capital Improvements	0	1,040,000	0
Payroll Taxes	106,300	106,300	106,300
Federal Income Taxes	0	0	9,000
TOTAL DISBURSEMENTS	$1,648,400	$2,672,400	$1,682,600
PRE-FINANCING CASH BALANCE	$2,210,600	($597,000)	$1,396,200
Financing Activity:			
Borrow (REPAY)	(204,000)	600,000	(608,000)
Disinvest (INVEST)			
ENDING CASH BALANCE	$2,006,600	$3,000	$788,200

Note: instructions said to round to nearest $100

The Marquoya College problem and solution were written by Ken Milani and Jim Gaertner. Used with permission.

EXTENDED PROBLEM:
DENISON SPECIALTY HOSPITAL

SOLUTION

Part I

Section A

1. Calculation of patient revenue

	Payer Mix (A)	Program Volume (B)	Volume by Payer (C = A × B)	Net Price (D)	Net Revenue (E = C × D)
Oncology					
Private Insurance	30%	120	36	$50,000	$1,800,000
Medicaid/Medicare	50%	120	60	40,000	2,400,000
Self-Pay	10%	120	12	50,000	600,000
Charity	10%	120	12	0	0
Cardiac					
Private Insurance	20%	80	16	40,000	640,000
Medicaid/Medicare	60%	80	48	30,000	1,440,000
Self-Pay	10%	80	8	40,000	320,000
Charity	10%	80	8	0	0
Rhinoplasty					
Private Insurance	10%	40	4	25,000	100,000
Medicaid/Medicare	20%	40	8	10,000	80,000
Self-Pay	60%	40	24	25,000	600,000
Charity	10%	40	4	0	0
			Total Patient Revenue		$7,980,000

2. Endowment revenue

	Investment	Rate	Income
U.S. Bond	$500,000	6%	$30,000
AT&T Div	250,000	8%	20,000
Growth Stock	250,000	0%	0
	$1,000,000		$50,000

3. Gift shop revenue: $120,000 for current year. Will remain the same next year. Assume that gift shop revenue varies with the number of patients in the hospital.

Denison Specialty Hospital Revenue Budget for Next Year	
Net Patient Revenue	$7,980,000
Gift Shop Revenue	120,000
Endowment Income	50,000
Total Budgeted Revenue	$8,150,000

Section B

1. Calculation of expected bad debts

			Bad Debt	
		Revenue	Rate	Bad Debt
Oncology Self-Pay	(from above)	$600,000	25%	$150,000
Cardiac Self-Pay	(from above)	320,000	25%	80,000
Rhinoplasty Self-Pay	(from above)	600,000	25%	150,000
Budgeted Bad Debts				$380,000

2. Consider annual impact of capital budget

$500,000 ÷ 5-year life: Annual Expense = $100,000

Denison Specialty Hospital Expense Budget for Next Year	
Salaries	$6,900,000
Supplies	540,000
Bad Debts	380,000
Rent	300,000
Depreciation Expense	100,000
Total Budgeted Expense	$8,220,000

3.	**Denison Specialty Hospital Operating Budget For Year Ending Last Day of Next Year**		
	Revenues		
	Net Patient Revenue	$7,980,000	
	Gift Shop	120,000	
	Endowment	50,000	
	Total Budgeted Revenue		$8,150,000
	Expenses		
	Salaries	$6,900,000	
	Supplies	540,000	
	Bad Debts	380,000	
	Rent	300,000	
	Depreciation	100,000	
	Total Budgeted Expense		8,220,000
	Budgeted Excess of Revenues over Expenses		$ (70,000)

INSTRUCTOR'S NOTES

Denison Specialty Hospital

You may wish to distribute copies of the previous tables as you discuss the case and retain the notes below for your discussion preparation.

The numerical solution to the case appears above. Try to stress the importance and use of the information as much as possible. The hardest part of the process is gathering the data that was given in the case. Assembling that data into the actual budgets is the easier element. The solution is organized as follows:

Part I

Section A

1. Calculation of patient revenue—the payer mix is provided in the case, as is the volume of patients for each program. The volume by payer is calculated by multiplying those two factors.

   The net price is the same as the charge for the private insurance. The net price is set by the government for Medicare and Medicaid in this example.

   The net price is the same as the charge for the self-pay patient, even though we know there will be some bad debt. The full charge is the revenue, and bad debt will be subtracted later as an expense. This follows current accounting rules for hospitals.

   The net price is 0 for charity care. This follows current accounting rules for hospitals. Multiply volume by net price to get net revenue.

2. Endowment income is based directly on information given in the case.

3. Revenue budget simply sums the different elements. Gift shop revenue is given in the case. We might want to discuss whether they have overlooked other revenue. Is there generally contribution revenue? Do we think we can raise our prices? Do we want to raise our prices? Are we happy with our endowment income? If we expect a deficit, are we willing to take a greater risk? Are we confident that we will get our expected volume and prices?

Section B

1. Calculation of Expected Bad Debts: The case says that 25% of self-pay is never collected. The revenue numbers come from Part I, Section A calculations above.

2. Expense Budget: The total salaries, supplies, and rent are all given in the case. The result is a line-item expense budget. This does not tell us much about the relative cost of different programs or of running different departments.

3. Combine the revenue and expense budgets into one table to yield the operating budget.

Problem 2-17

SOLUTION

First Year	Cash Budget	Operating Budget
Collections/Revenues	$ 45,000	$ 60,000
Disbursements/Expenses	$ 52,000	$ 58,000
Net Cash Flow/ Profit or Loss	$ (7,000)	$ 2,000

Second Year	Cash Budget
Collections	$ 15,000
Disbursements	$ 6,000
Net Cash Flow	$ 9,000
Plus First-Year Cash Balance	$ (7,000)
Cash at End of Year Two	$ 2,000

Cash at the end of year 2 is the same as the accrual basis.
Accrual basis better refelcts long-term stability of organizatio

EXTENDED PROBLEM: DENISON SPECIALTY HOSPITAL

SOLUTION

Part I

Section A.

1 Calculation of patient revenue.

	Payer Mix (A)	Program Volume (B)	Volume by Payer (C = A x B)	Net Price (D)
Oncology				
Private Insurance	30%	120	36	$50,000
Medicaid/Medicare	50%	120	60	40,000
Self-Pay	10%	120	12	50,000
Charity	10%	120	12	0
Cardiac				
Private Insurance	20%	80	16	40,000
Medicaid/Medicare	60%	80	48	30,000
Self-Pay	10%	80	8	40,000
Charity	10%	80	8	0
Rhinoplasty				
Private Insurance	10%	40	4	25,000
Medicaid/Medicare	20%	40	8	10,000
Self-Pay	60%	40	24	25,000
Charity	10%	40	4	0
			Total Patient Revenue	

Net Revenue (E = C x D)
$1,800,000
2,400,000
600,000
0
640,000
1,440,000
320,000
0
100,000
80,000
600,000
0
$7,980,000

Section A.

2 Calculation of endowment revenue.

	Investment	Rate	Income
U.S. Bond	$500,000	6%	$30,000
AT&T Div	250,000	8%	20,000
Growth Stock	250,000	0%	0
	$1,000,000		$50,000

Section A.

3 Revenue Budget.

	Denison Specialty Hospital Revenue Budget for Next Year	
	Net Patient Revenue	$7,980,000
	Gift Shop Revenue	120,000
	Endowment Income	50,000
	Total Budgeted Revenue	$8,150,000

Section B.

1 Bad Debt Expenses

			Bad Debt	
		Revenue	Rate	Bad Debt
	Oncology Self-Pay	$600,000	25%	$150,000
	Cardiac Self-Pay	320,000	25%	80,000
	Rhinoplasty Self-Pay	600,000	25%	150000
	Budgeted Bad Debts			$380,000

Section B.

2 Expense Budget

	Denison Specialty Hospital Expense Budget for Next Year	
	Salaries	$6,900,000
	Supplies	540,000
	Bad Debts	380,000
	Rent	300,000
	Depreciation Expense	100000
	Total Budgeted Expense	$8,220,000

Section B.

3 Operating Budget

	Denison Specialty Hospital **Operating Budget** **For Year Ending Last Day of Next Year**		
	Revenues		
	Net Patient Revenue	$7,980,000	
	Gift Shop	120,000	
	Endowment	50,000	
	Total Budgeted Revenue		$8,150,000
	Expenses		
	Salaries	$6,900,000	
	Supplies	540,000	
	Bad Debts	380,000	
	Rent	300,000	
	Depreciation	100,000	
	Total Budgeted Expense		8,220,000
	Budgeted Excess of Revenues over Expenses		($70,000)