

ALPINE VILLAGE CLINIC

CASH BUDGETING

8

ALPINE VILLAGE CLINIC is a small walk-in clinic located next to the primary ski area of Alpine Village, a winter resort close to Aspen, Colorado. The clinic specializes in treating injuries sustained while skiing. It is owned and operated by two physicians: James Peterson, an orthopedist, and Amanda Cook, an internist. The clinic has an outside accountant who takes care of payroll matters, but Dr. Cook does all the other financial work for the clinic. However, to help in that task, the clinic recently hired a part-time MBA student, Doug Washington.

On a Wednesday afternoon in October 2009, Dr. Cook called Doug into her office to tell him that she had just received a phone call from the head of commercial lending at First Bank of Aspen, the clinic's primary lender. Because of a forecasted reduction in bank deposits and hence funds available to make commercial loans, First Bank has asked each of its commercial loan customers for an estimate of its borrowing requirements for the first half of 2010.

Dr. Cook had a previously scheduled meeting at First Bank the following Monday to discuss cash management services, so she asked Doug to come up with an estimate of the clinic's line-of-credit requirements to submit at the meeting. A line of credit is a short-term loan agreement by which a bank agrees to lend a business some specified maximum amount. The business can borrow (draw down) against the credit line at any time it is in force, which typically is no longer than one year. When a line expires, it will have to be renegotiated if it is still needed. The amount borrowed on the line, or some lesser amount,

can be repaid at any time, but any amount outstanding must be repaid at expiration. Interest is charged daily on the amount drawn down, and often a commitment fee is required up front to secure the line. In general, lines of credit are used by businesses to meet temporary (usually seasonal) cash needs, as opposed to being used for permanent long-term financing.

Dr. Cook was going on vacation, a trip that had already been delayed several times, and she would not be back until just before her meeting at the bank. Therefore, she asked Doug to prepare a cash budget while she was away. No one had taken the time to prepare a cash budget recently, although a spreadsheet model that had been constructed a few years ago was available for use. From information previously developed, Doug knew that no seasonal financing would be needed from First Bank before January, so he decided to restrict his budget to the period from January through June 2010. As a first step, he looked through the clinic's financial records to get the data needed to develop the billings forecast, which is contained in Exhibit 8.1.

Patient volume at the clinic is highly seasonal because the vast majority of the business occurs during the ski season, which generally runs from December through March. In fact, at one time Dr. Peterson and Dr. Cook thought about closing the clinic during the slow months. However, (1) the clinic would be very difficult to operate efficiently for only a portion of the year, and (2) the area has started to attract a sizable number of summer visitors, which has made summer operations more financially attractive.

On the basis of the clinic's previous collections experience, Doug was able to convert billings for medical services into actual cash collections. On average, about 20 percent of the clinic's patients pay immediately for services rendered. Third-party payers pay the remaining claims, with 20 percent of the payments made within 30 days and the 60 percent remainder (of total billings) paid within 60 days. For monthly budgeting purposes, 20 percent of billings are assumed to be collected in the month of billing, 20 percent are assumed to be collected one month after the billing month, and 60 percent are assumed to be collected two months after the billing month.

Variable medical costs at the clinic are assumed to consist entirely of medical and administrative supplies. These supplies, which are estimated to cost 15 percent of billings, are purchased two months before expected usage. On average, the clinic pays about half of its suppliers

in the month of purchase (two months before use) and the other half in the following month (one month before use).

Clinical labor costs (for physicians and other clinical employees) are the primary expense of the clinic. During the high season (December through March), these costs run \$150,000 a month, but some of the clinical staff work only seasonally, so clinical labor costs drop to \$120,000 a month in the remaining months.

The clinic pays fixed general and administrative expenses, including clerical labor, of approximately \$30,000 a month, while lease obligations amount to \$12,000 per month. These expenditures are expected to continue at the same level throughout the forecast period. The clinic's miscellaneous expenses are estimated to be \$10,000 monthly.

The clinic has a semi-annual, five-year, 10 percent, \$500,000 term loan outstanding with First Bank. Payments of \$64,752 are due on March 15 and September 15. Also, the clinic is planning to replace an old x-ray machine (which has no salvage value) in February with a new one that costs \$125,000. The clinic is a partnership, so, for tax purposes, any profits (or losses) are prorated to the two physician partners, who must pay individual taxes on this income. Thus, no tax payments are built into the clinic's cash budget.

The clinic has to maintain a minimum cash balance of \$50,000 at First Bank because of compensating balance requirements on its term loan. This amount, but no more, is expected to be on hand on January 1, 2010.

If a daily cash budget is required, some additional assumptions about volume and collections are required:

1. The clinic operates seven days a week.
2. Patient volume is more or less constant throughout the month, so the daily billings forecast will be $1/(\text{Number of days in the month})$ multiplied by the billings forecast for that month.
3. Daily billings follow the 20 percent, 20 percent, 60 percent collection breakdown based on monthly billings.
4. Patient payments are assumed to occur on the day of billing, "early" payers are assumed to pay 30 days after billing, and "late" payers are assumed to pay 60 days after billing.

5. The lease payment is made on the 1st of the month.
6. Fifty percent of both clinical labor costs and general and administrative expenses are paid on the 1st of the month, and 50 percent are paid on the 15th of the month.
7. Supplies are delivered on the 1st of the month and paid for on the 5th of the month.
8. Miscellaneous expenses are incurred and paid evenly throughout each month.
9. Term loan payments are made on the 15th of the month in which they are due.
10. The compensating balance of \$50,000 must be in the bank on each day.

In addition to the cash budget itself, Dr. Cook asked Doug to consider several additional issues:

1. Will the clinic need to request a line of credit for the period and, if so, how big should the line be?
2. A monthly budget may not reveal the full extent of the borrowing requirements actually needed. To see if her concern is valid, Dr. Cook suggested that Doug construct a daily cash budget for the month of January as a test case.
3. The existing cash budget model does not provide for interest paid on line-of-credit borrowings or interest earned on cash surpluses. Dr. Cook suggested that the monthly cash budget be modified to include these items. Currently, the interest rate on First Bank line-of-credit draw downs is 8 percent compounded monthly ($8\%/12 = 0.667\%$ per month), and First Bank pays 4 percent compounded monthly ($4\%/12 = 0.333\%$ per month) on temporary investments of excess cash.
4. Although the target cash balance has been based on First Bank's compensating balance requirement, the term loan will be paid off in September 2010. Dr. Cook asked how the clinic might go about setting its target cash balance when no compensating balance is required.

5. Dr. Cook is well aware that the cash budget is a forecast, so most of the cash flows shown are expected values rather than amounts known with certainty. If actual patient billings, and hence collections, were different from forecasted levels, then the forecasted surpluses and deficits would be incorrect. Dr. Cook is interested in knowing how various changes in key assumptions would affect the forecasted surplus or deficit. For example, if billings fell below the forecasted level or if collections were stretched out, what effect would that have?
6. Dr. Cook notes that no bad-debt losses are built into the budget. How would that be accomplished if the clinic had such losses?
7. Finally, Dr. Cook believes that the surge in patient volume over the forecast period is bound to result in some cash surpluses, and she wants to know what the clinic should do with them.

Place yourself in Doug's position. Be prepared to discuss your analysis with Dr. Cook when you meet with her next week.

<i>Year</i>	<i>Month</i>	<i>Amount</i>
2009	November	\$150,000
	December	250,000
2010	January	350,000
	February	450,000
	March	300,000
	April	150,000
	May	100,000
	June	175,000
	July	250,000
	August	200,000

EXHIBIT 8.1
Alpine Village Clinic:
Billings Forecast