

Income Statement

Exhibit 13.1 contains simplified forms of the 2009 and 2010 income statements (also called statements of operations or statements of revenues and expenses) for Bayside Memorial Hospital, a 450-bed, not-for-profit, acute care hospital. Although a hospital is being used to illustrate financial condition analysis techniques, such techniques can be applied to any health services setting. Bayside had an excess of revenues over expenses, or net income, of \$8,572,000 in 2010. Of course, being not-for-profit, the hospital paid no dividends, so it retained all of its net income. When looking at an income statement, we can get a rough idea of the organization's cash flow, which is approximately equal to its net income plus any noncash expenses. In 2010, Bayside's cash flow was \$8,572,000 in net income plus \$4,130,000 in depreciation expense, for a total estimated net cash flow of \$12,702,000. Depreciation does not really *provide* funds; it is simply a noncash charge added back to net income to obtain an estimate of the business's net cash flow. Later in this section, we will discuss the statement of cash flows, which provides better insight into Bayside's cash flows.

Note that the income statement reports on transactions *over a period*—for example, during fiscal year 2010. (Note that Bayside's fiscal year coincides with the calendar year.) The balance sheet, which we discuss next, may be thought of as a snapshot of the firm's asset, liability, and equity position *at a single point in time*—for example, on December 31, 2010.

	2010	2009
Net patient service revenue	\$108,600	\$ 97,393
Premium revenue	5,232	4,622
Other revenue	3,644	6,014
Total revenues	<u>\$ 117,476</u>	<u>\$108,029</u>
Expenses:		
Nursing services	\$ 58,285	\$ 56,752
Dietary services	5,424	4,718
General services	13,198	11,655
Administrative services	11,427	11,585
Employee health and welfare	10,250	10,705
Provision for uncollectibles	3,328	3,469
Provision for malpractice	1,320	1,204
Depreciation	4,130	4,025
Interest expense	1,542	1,521
Total expenses	<u>\$108,904</u>	<u>\$105,634</u>
Net income	<u>\$ 8,572</u>	<u>\$ 2,395</u>

EXHIBIT 13.1

Bayside
Memorial
Hospital
Statements of
Operations
(Income
Statements)
Years Ended
December 31,
2010 and 2009
(in thousands
of dollars)

Balance Sheet

Exhibit 13.2 contains Bayside's 2009 and 2010 balance sheets. Although the assets are stated in terms of dollars, only the cash account represents actual money. We see that Bayside could, if it liquidated its short-term investment securities, write checks at the end of 2010 for a total of \$6,263,000 (versus total current liabilities of \$13,332,000 due during 2010). The noncash current assets will presumably be converted to cash within a year, but they do not represent cash on hand.

The claims against assets are of two types: (1) liabilities, or money the firm owes, and (2) equity, also called net assets or fund capital.² Equity is a residual, so for 2010:

$$\begin{array}{rclcl} \text{Assets} & - & \text{Liabilities} & = & \text{Equity} \\ \$151,278,000 & - & (\$13,332,000 + \$30,582,000) & = & \$107,364,000. \end{array}$$

Liabilities consist of \$13,332,000 of current liabilities plus \$30,582,000 of long-term liabilities. If assets decline in value—suppose some of Bayside's

EXHIBIT 13.2

Bayside
Memorial
Hospital
Balance Sheets
December 31,
2010 and 2009
(in thousands
of dollars)

	2010	2009
Cash	\$ 4,263	\$ 5,095
Short-term investments	2,000	0
Accounts receivable	21,840	20,738
Inventories	3,177	2,982
Total current assets	<u>\$ 31,280</u>	<u>\$ 28,815</u>
Gross plant and equipment	\$ 145,158	\$140,865
Accumulated depreciation	25,160	21,030
Net plant and equipment	<u>\$ 119,998</u>	<u>\$ 119,835</u>
Total assets	<u>\$ 151,278</u>	<u>\$148,650</u>
Accounts payable	\$ 4,707	\$ 5,145
Accrued expenses	5,650	5,421
Notes payable	825	4,237
Current portion of long-term debt	2,150	2,000
Total current liabilities	<u>\$ 13,332</u>	<u>\$ 16,803</u>
Long-term debt	\$ 28,750	\$ 30,900
Capital lease obligations	1,832	2,155
Total long-term liabilities	<u>\$ 30,582</u>	<u>\$ 33,055</u>
Net assets (equity)	<u>\$ 107,364</u>	<u>\$ 98,792</u>
Total liabilities and net assets	<u>\$ 151,278</u>	<u>\$148,650</u>

statement, cash coming into the hospital (inflows) is shown as positive numbers, while cash being spent (outflows) is shown as negative numbers (shown in parentheses). The top part lists cash generated by and used in operations. For Bayside, operations provided \$11,196,000 in net cash flow. The income statement reported a rough cash flow estimate of $\text{Net income} + \text{Depreciation} = \$8,572,000 + \$4,130,000 = \$12,702,000$, but as part of its operations, Bayside invested \$1,297,000 in current assets (receivables and inventories) and lost \$209,000 in spontaneous liabilities (payables and accruals). The end result, *net cash flow from operations*, was $\$12,702,000 - \$1,297,000 - \$209,000 = \$11,196,000$.

The next section of the statement of cash flows focuses on investments in fixed assets (plant and equipment) as opposed to investments in financial assets (securities). As noted in the statement, Bayside spent \$4,293,000 on capital expenditures in 2010. Bayside's financing activities, as shown in the third section, highlight the fact that the hospital used cash to pay off previously incurred debt and to invest in marketable securities. The net effect of the hospital's financing activities was a *net cash outflow from financing* of \$7,735,000.

EXHIBIT 13.3

Bayside
Memorial
Hospital
Statement of
Cash Flows
Year Ended
December
31, 2010 (in
thousands of
dollars)

Cash flows from operating activities:

Net income	\$ 8,572
Adjustments:	
Depreciation	4,130
Increase in accounts receivable	(1,102)
Increase in inventories	(195)
Decrease in accounts payable	(438)
Increase in accrued expenses	229
Net cash flow from operations	<u>\$ 11,196</u>

Cash flows from investing activities:

Investment in plant and equipment	<u>(\$ 4,293)</u>
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Cash flows from financing activities:

Investment in short-term securities	(\$ 2,000)
Repayment of long-term debt	(2,150)
Repayment of notes payable	(3,412)
Capital lease principal repayment	(323)
Change in current portion of long-term debt	150
Net cash flow from financing	<u>(\$ 7,735)</u>

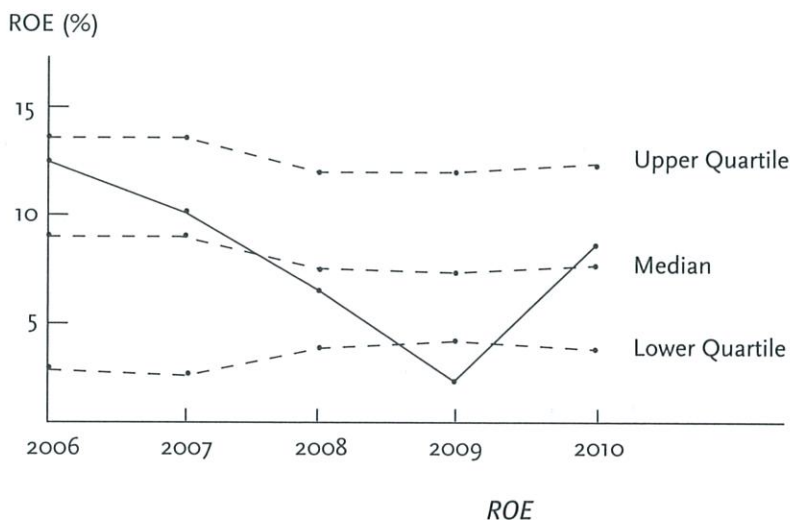
Net increase (decrease) in cash	<u>(\$ 832)</u>
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Beginning cash	<u>\$ 5,095</u>
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Ending cash	<u><u>\$ 4,263</u></u>
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EXHIBIT 13.4

Bayside
Memorial
Hospital:
ROE Analysis,
2006–2010

*Industry*

<i>Year</i>	<i>Bayside</i>	<i>Lower Quartile</i>	<i>Median</i>	<i>Upper Quartile</i>
2006	12.5%	2.6%	8.6%	13.3%
2007	10.0	2.5	8.6	13.3
2008	6.7	2.8	7.2	12.1
2009	2.4	4.1	7.2	12.1
2010	8.0	3.8	7.4	12.3

It is easy to combine comparative and trend analyses in a single graph, such as the one shown in Exhibit 13.4. Here, Bayside's ROE (the solid line) and industry average ROE data (the dashed lines) are plotted for the past five years. The graph shows that the hospital's ROE has been declining faster than the industry average from 2006 through 2009 but exceeded the industry average in 2010. Other ratios can be analyzed in a similar manner.

**SELF-TEST
QUESTIONS**

1. What is the purpose of ratio analysis?
2. What are two ratios that measure profitability?
3. What are two ratios that measure liquidity?
4. What are two ratios that measure debt management?
5. What are two ratios that measure asset management?
6. What are two ratios that measure market value?
7. How can comparative and trend analyses be used to interpret ratio results?

EXHIBIT 13.5

Bayside
Memorial
Hospital:
Common
Size Income
Statement for
2010

	<i>Bayside</i>	<i>Industry Average</i>
Net patient service revenue	92.4%	90.4%
Premium revenue	4.5	7.2
Other revenue	3.1	2.4
Total revenues	<u>100.0 %</u>	<u>100.0%</u>
Expenses:		
Nursing services	49.6%	50.7%
Dietary services	4.6	4.7
General services	11.2	11.5
Administrative services	9.7	10.2
Employee health and welfare	8.7	9.2
Provision for uncollectibles	2.8	2.8
Provision for malpractice	1.1	1.0
Depreciation	3.5	3.0
Interest expense	1.3	1.9
Total expenses	<u>92.7%</u>	<u>95.0%</u>
Net income	<u>7.3%</u>	<u>5.0%</u>

Note: This table contains inconsistencies because values are rounded to the nearest tenth of a percent.

EXHIBIT 13.6

Bayside
Memorial
Hospital:
Common Size
Balance Sheet
for 2010

	<i>Bayside</i>	<i>Industry Average</i>
Cash and equivalents	2.8%	3.7%
Short-term investments	1.3	2.0
Accounts receivable	14.4	17.2
Inventories	2.1	2.5
Total current assets	<u>20.7%</u>	<u>25.4%</u>
Gross plant and equipment	96.0%	90.1%
Accumulated depreciation	16.6	15.5
Net plant and equipment	<u>79.3%</u>	<u>74.6%</u>
Total assets	<u>100.0%</u>	<u>100.0%</u>
Accounts payable	3.1%	3.9%
Accrued expenses	3.7	4.1
Notes payable	0.5	3.2
Current portion of long-term debt	1.4	2.1
Total current liabilities	<u>8.8%</u>	<u>13.3%</u>
Long-term debt	19.0%	36.5%
Capital lease obligations	1.2	0.9
Total long-term liabilities	<u>20.2%</u>	<u>37.4%</u>
Net assets (equity)	<u>71.0%</u>	<u>49.3%</u>
Total liabilities and net assets	<u>100.0%</u>	<u>100.0%</u>

Note: This table contains inconsistencies because values are rounded to the nearest tenth of a percent.