Corrections Sheet

Introduction to the Financial Management of Healthcare Organizations
Seventh Edition

by Michael Nowicki

After the book's first printing, the financial statements in chapter 3 were modified to improve the articulation between years and between statements. (Thanks to Dana Forgione, PhD, CPA, CMA, CFE, professor of accounting at the University of Texas at San Antonio, for his assistance in improving these financial statements). The revised statements also affect a few practice problems and solutions. The author apologizes for any inconvenience.

To determine whether you have the first printing of the book or a later one that includes the revised financial statements, look at the copyright page (preceding the dedication page near the front of the book). Just above the middle of the page you will see a row of numbers. If the rightmost number is a 1, you have the first printing; if not, you have a later (corrected) printing.

Here is a list of the revised pages, which are also appended to this correction sheet as PDFs:

Page 52  In exhibit 3.1, many numbers were changed; the “Permanently restricted net assets” row was deleted; and some descriptive entries in the left column were slightly reworded and/or indented differently.

Page 55  In exhibit 3.2, some numbers were changed; several rows in the “REVENUES” and “CHANGES IN NET ASSETS” sections were deleted; a new row (“Estimated bad debt expense”) was added to the “EXPENSES” section; and some descriptive entries in the left column were reworded and/or indented differently.

Page 56  The first italicized sentence of the first full paragraph was deleted.

Page 59  Exhibit 3.3 was almost entirely replaced, though its basic organization was retained (“Cash flow from operating activities,” etc.).

Page 60  In exhibit 3.4, sections 2, 3, and 4 were slightly reworded, including some new numbers, and the “Bad Debt” section was moved to the end.

Pages 71–73  In the Ratio Analysis Practice Problem Solution, many numbers were changed.

Page 389  In the Ratio Analysis Self-Quiz Solution, several numbers were changed.
### Exhibit 3.1
Bobcat Hospital
Balance Sheet as of December 31, 2016 and 2017 (in thousands)

<table>
<thead>
<tr>
<th>ASSETS</th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>$124</td>
<td>$280</td>
</tr>
<tr>
<td>Temporary investments</td>
<td>45</td>
<td>30</td>
</tr>
<tr>
<td>Receivables, net</td>
<td>3,536</td>
<td>2,860</td>
</tr>
<tr>
<td>Inventory</td>
<td>175</td>
<td>140</td>
</tr>
<tr>
<td>Prepaid expenses</td>
<td>32</td>
<td>40</td>
</tr>
<tr>
<td>Total current assets</td>
<td>$3,912</td>
<td>$3,350</td>
</tr>
<tr>
<td>Noncurrent assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land, plant, and equipment</td>
<td>6,980</td>
<td>6,580</td>
</tr>
<tr>
<td>Less accumulated depreciation</td>
<td>1,730</td>
<td>1,259</td>
</tr>
<tr>
<td>Plant and equipment, net</td>
<td>5,250</td>
<td>5,321</td>
</tr>
<tr>
<td>Long-term investments</td>
<td>609</td>
<td>790</td>
</tr>
<tr>
<td>Other noncurrent assets</td>
<td>113</td>
<td>109</td>
</tr>
<tr>
<td>Total noncurrent assets</td>
<td>5,972</td>
<td>6,220</td>
</tr>
<tr>
<td>Total assets</td>
<td>$9,884</td>
<td>$9,570</td>
</tr>
<tr>
<td>LIABILITIES AND NET ASSETS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current liabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts payable</td>
<td>$302</td>
<td>$370</td>
</tr>
<tr>
<td>Notes payable</td>
<td>345</td>
<td>335</td>
</tr>
<tr>
<td>Accrued expenses payable</td>
<td>871</td>
<td>606</td>
</tr>
<tr>
<td>Deferred revenues</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Estimated third-party adjustments</td>
<td>137</td>
<td>224</td>
</tr>
<tr>
<td>Current portion of long-term debt</td>
<td>184</td>
<td>178</td>
</tr>
<tr>
<td>Total current liabilities</td>
<td>$1,849</td>
<td>$1,728</td>
</tr>
<tr>
<td>Noncurrent liabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-term debt, net of current portion</td>
<td>3,600</td>
<td>3,500</td>
</tr>
<tr>
<td>Total liabilities</td>
<td>$5,449</td>
<td>$5,228</td>
</tr>
<tr>
<td>NET ASSETS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unrestricted net assets</td>
<td>3,283</td>
<td>3,190</td>
</tr>
<tr>
<td>Restricted net assets</td>
<td>1,152</td>
<td>1,152</td>
</tr>
<tr>
<td>Total net assets</td>
<td>$4,435</td>
<td>$4,342</td>
</tr>
<tr>
<td>Total liabilities and net assets</td>
<td>$9,884</td>
<td>$9,570</td>
</tr>
</tbody>
</table>
Net patient services revenue include amounts deducted from total charges to account for contractual allowances and charity care.

**Net patient services revenue** is money generated by providing patient care minus the amount the organization will not collect as a result of discounting charges per contractual agreement and providing charity care. For financial reporting purposes, patient services revenue does not include provisions for charity care because charity care was never intended to result in cash flow. GAAP in 2010 required that organizations report the amount of charity care recorded at cost along with the method of determining cost and the organization's

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**Exhibit 3.2**
Bobcat Hospital
Statement of Operations
(in thousands)
through December 31, 2016 and 2017

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REVENUES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net patient services revenue</td>
<td>8,402</td>
<td>8,119</td>
</tr>
<tr>
<td>Premium revenue on sponsored health plans</td>
<td>400</td>
<td>0</td>
</tr>
<tr>
<td>Other operating revenue</td>
<td>440</td>
<td>447</td>
</tr>
<tr>
<td><strong>Total operating revenue</strong></td>
<td><strong>$ 9,242</strong></td>
<td><strong>$ 8,566</strong></td>
</tr>
<tr>
<td><strong>EXPENSES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaries, wages, and benefits</td>
<td>4,980</td>
<td>4,278</td>
</tr>
<tr>
<td>Supplies, drugs, and purchased services</td>
<td>3,080</td>
<td>2,956</td>
</tr>
<tr>
<td>Estimated bad debt expense</td>
<td>600</td>
<td>500</td>
</tr>
<tr>
<td>Depreciation expense</td>
<td>471</td>
<td>443</td>
</tr>
<tr>
<td>Interest</td>
<td>113</td>
<td>109</td>
</tr>
<tr>
<td><strong>Total operating expenses</strong></td>
<td><strong>9,244</strong></td>
<td><strong>8,286</strong></td>
</tr>
<tr>
<td><strong>OPERATING INCOME</strong></td>
<td><strong>(2)</strong></td>
<td><strong>280</strong></td>
</tr>
<tr>
<td><strong>NONOPERATING INCOME</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment income</td>
<td>$ 95</td>
<td>$ 85</td>
</tr>
<tr>
<td><strong>EXCESS OF REVENUE OVER EXPENSES</strong></td>
<td><strong>93</strong></td>
<td><strong>365</strong></td>
</tr>
<tr>
<td><strong>CHANGES IN NET ASSETS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Add: Unrestricted net assets January 1</td>
<td>3,190</td>
<td>2,825</td>
</tr>
<tr>
<td>Unrestricted net assets December 31</td>
<td>3,283</td>
<td>3,190</td>
</tr>
</tbody>
</table>
charity care policy in notes to the financial statements. (Bad debt is the accounting recognition of how much money the organization has billed but will not collect; the amount reported must be based on charges. Bad debt should not be confused with charity care. Bad debt expense reflects the amount for which the organization provided services with the expectation of payment. Charity care reflects services the organization provided with no expectation of payment.)

In 2012 GAAP moved bad debt from an operating expense to a deduction of revenue to account for the patient’s inability to pay deductibles for high-deductible health policies (which the organization knows at time of service). In 2016 the AICPA Revenue Recognition Task Force for Healthcare proposed, but did not require, new guidance for presenting bad debt. After recording revenue at the amount the organization expects to be paid, bad debt would then be recognized in two categories: classic bad debt (the organization believes the patient is able to pay, but the patient does not pay) would be recorded as a bad debt expense under operating expenses; and an implicit price concession (the organization believes the patient is unable to pay, but the patient is not eligible for charity care, and the organization recognizes a write-off based on internal policy). The proposed new guidance for presenting bad debt would allow organizations to group patients with similar characteristics, such as true self-pay or high deductible (Connor and Mosrie 2016).

Premium revenue is money generated from capitation arrangements that must be reported separately from patient services revenue because premium revenue is earned by agreeing to provide care, regardless of whether care is ever delivered. Other operating revenue is money generated from services other than health services to patients and enrollees. It may include revenue from rental equipment and office space, sales of supplies and pharmaceuticals, cafeteria and gift shop sales, and so on. Often the test for whether revenue is considered other operating revenue or nonoperating revenue is whether the revenue was generated in support of the organization’s mission statement. Why is it important to distinguish between operating and nonoperating revenue? Because for a not-for-profit hospital, income derived from operations is not taxed, but income from unrelated businesses, such as the gift shop, may be taxed as unrelated business income. Net assets released from restrictions used for operations, while not reflected in Bobcat Hospital’s statement of operations, consist of money previously restricted by donors that has become available for operations.

Expenses are the amounts of resources used by the organization. The category of operating expenses represents resources used on operations to generate revenue in support of the organization’s mission statement. These expenses can be listed by functional classification (organizational division), such as nursing department and support department, which is useful for internal purposes, or by natural classification, under such categories as salaries, wages, and benefits or supplies, drugs, and purchased services, as is the case with Bobcat Hospital’s statement of operations, which is useful for external purposes.
Chapter 3: Financial Analysis and Management Reporting

**Cash flow from operating activities**

Excess of revenues over expenses for the year $ 93

Adjustments to reconcile change in net assets to net cash

Add:
- Depreciation expense 471
- Decrease in prepaid expense 8
- Increase in notes payable 10
- Increase in accrued expenses payable 265
- Increase in current portion of long-term debt 6

Less:
- Increase in temporary investments 15
- Increase in patient accounts receivable (net of allowance for doubtful accounts) 676
- Increase in inventory 35
- Decrease in accounts payable 68
- Decrease in deferred revenues 5
- Decrease in estimated third-party adjustments 87

Net cash flow from operating activities 33

**Cash flow from investing activities**

- Purchasing of property, plant, and equipment 400
- Proceeds from sale of long-term investments 181
- Purchase of other noncurrent assets 4

Net cash flow from investing activities 223

**Cash flow from financing activities**

- Proceeds from issuance of long-term debt 100

Net cash flow from financing activities 100

Net increase (decrease) in cash for the year 156

Add: Cash balance at January 1 280

Cash balance at December 31 $ 124

Exhibit 3.3
Bobcat Hospital
Statement of Cash Flows, 2017
Ratio Analysis

A ratio is a comparison between two or more financial facts, such as income to assets or assets to liabilities. Ratios are useful because they help an organization compare a period's results to previous periods or to the results of other, similar organizations.

Ratios emerge from facts located on the financial statements, which report an organization's financial position at a point in time and its financial operations over a period of time. Investors and creditors analyze financial statements, primarily through ratio analysis, to predict future earnings and the ability to service debt. Managers use ratio analysis to predict the future and to plan strategies that will influence the future. Financial statement analysis concentrates on four classifications of ratios: liquidity, profitability, asset efficiency, and capital structure (see exhibit 3.5 for Optum medians for all hospitals reporting in 2017 for 2015 fiscal years).
**Ratio Analysis Practice Problem Solution**

**Current ratio**

\[
\frac{\text{Total current assets}}{\text{Total current liabilities}} = \frac{\$3,350}{\$1,728} = 1.939
\]

**Collection period ratio**

\[
\frac{\text{Net receivables}}{\text{Net patient service revenue} / 365} = \frac{\$2,860}{\$8,119 / 365} = 128.597
\]

**Days cash on hand, all sources, ratio**

\[
\frac{\text{Cash} + \text{Temporary investments} + \text{Unrestricted long-term investments}}{\text{(Total expenses} - \text{Depreciation expenses}) / 365} = \frac{\$280 + \$30 + \$790}{\$8,286 - \$443 / 365} = 51.191
\]

**Days cash on hand, short-term sources, ratio**

\[
\frac{\text{Cash} + \text{Temporary investments}}{\text{(Total expenses} - \text{Depreciation expenses}) / 365} = \frac{\$280 + \$30}{\$8,286 - \$443 / 365} = 21.488
\]

**Average payment period ratio**

\[
\frac{\text{Total current liabilities}}{\text{(Total expenses} - \text{Depreciation expenses}) / 365} = \frac{\$1,728}{\$8,286 - \$443 / 365} = 80.417
\]

**Operating margin ratio**

\[
\frac{\text{Operating income} \times 100}{\text{Total operating revenue}} = \frac{\$280}{\$8,566} \times 100 = 3.269\%
\]
**Total margin ratio**

\[
\text{Excess of revenues over expenses} \times 100 = \frac{365}{8,566} \times 100 = 4.261\%
\]

**Return on net assets ratio**

\[
\text{Excess of revenue over expenses} \times 100 = \frac{365}{4,342} \times 100 = 8.406\%
\]

**Total asset turnover ratio**

\[
\frac{\text{Total operating revenue} + \text{Other income}}{\text{Total assets}} = \frac{8,566 + 85}{9,570} = 0.904
\]

**Age of plant ratio**

\[
\frac{\text{Accumulated depreciation}}{\text{Depreciation expense}} = \frac{1,259}{443} = 2.842
\]

**Fixed asset turnover ratio**

\[
\frac{\text{Total operating revenue} + \text{Other income}}{\text{Net fixed assets}} = \frac{8,566 + 85}{6,220} = 1.391
\]

**Current asset turnover ratio**

\[
\frac{\text{Total operating revenue} + \text{Other income}}{\text{Total current assets}} = \frac{8,566 + 85}{3,350} = 2.582
\]

**Inventory turnover ratio**

\[
\frac{\text{Total operating revenue} + \text{Other income}}{\text{Inventory}} = \frac{8,566 + 85}{140} = 61.793
\]
**Net assets financing ratio**

\[
\text{Net assets financing ratio} = \frac{\text{Total net assets}}{\text{Total assets}} \times 100 = \frac{4,342}{9,570} \times 100 = 45.371\%
\]

**Long-term debt to capitalization**

\[
\text{Long-term debt to capitalization} = \frac{\text{Long-term debt}}{\text{Long-term debt + Net assets}} \times 100 = \frac{3,500}{3,500 + 4,342} \times 100 = 44.631\%
\]

**Debt service coverage ratio**

\[
\text{Debt service coverage ratio} = \frac{\text{Excess of revenues over expenses} + \text{Interest expense} + \text{Depreciation}}{\text{Interest} + \text{Principal payments}}
\]

\[
= \frac{365 + 109 + 443}{109 + 69} = 5.152
\]

Note: $178 – $109 = $69

**Cash flow to debt ratio**

\[
\text{Cash flow to debt ratio} = \frac{\text{Excess of revenues over expenses} + \text{Depreciation}}{\text{Current liabilities} + \text{Long-term debt}} \times 100
\]

\[
= \frac{365 + 443}{1,728 + 3,500} \times 100 = 15.455\%
\]
Chapter 3

Ratio Analysis

Current ratio = 2.116—better, good to benchmark
Collection period ratio = 153.611—better, poor to benchmark
Days cash on hand, all sources, ratio = 32.369—worse, poor to benchmark
Days cash on hand, short-term sources, ratio = 7.031—worse, poor to benchmark
Average payment period ratio = 76.928—better, good to benchmark as long as credit is not affected
Operating margin ratio = (0.022%)—better, poor to benchmark
Total margin ratio = 1.006%—better, poor to benchmark
Return on net assets ratio = 2.097—better, poor to benchmark
Total asset turnover ratio = 0.945—better, poor to benchmark
Age of plant ratio = 3.673—worse, good to benchmark
Fixed asset turnover ratio = 1.563—better, poor to benchmark
Current asset turnover ratio = 2.387—better, poor to benchmark
Inventory ratio = 53.354—worse, poor to benchmark
Net asset financing ratio = 44.870—worse, poor to benchmark, though nondirectional
Long-term debt to capitalization ratio = 44.804—worse, poor to benchmark
Debt service coverage ratio = 3.679—better, poor to benchmark
Cash flow to debt ratio = 10.351—better, poor to benchmark