State of the Hospital Industry
2008 Edition

by

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Introduction

This book represents the sixth report by Cleverley + Associates (C+A) on the financial position of the US hospital industry. In it, we report selected measures of financial performance as well as display and discuss the critical factors that lie behind the summary measures. For example, our publication includes information on supplies and drug costs by MS-DRG that have a profound effect on overall profitability. We also show selected measures of price for a day of routine care and chest x-rays. In short, we provide the reader with not only financial data but also a clear understanding of the relative importance of key management strategies and their impact on financial performance.

Our primary focus is upon the acute-care sector of the hospital industry, excluding critical access hospitals. In Appendices C & D, we have provided summary measures of performance for other sectors, including critical access hospitals, psychiatric hospitals, and rehabilitation hospitals. While some data are presented for these areas, our primary purpose is to report on and to explain the financial condition of the US acute-care hospital industry.

From a purely financial perspective, we believe that return on equity (ROE) or economic value added (EVA) are the most important measures of financial performance. Many hospital executives and policy makers have continued to focus on margin (the relationship of income to revenue) as the primary financial performance measure for a hospital. We believe that this can be very misleading and often can produce inaccurate assessments of financial health. Margin is not, nor has it ever been, the predominant measure of financial success in any business. Using it as the primary measure of financial performance can lead and has led to inaccurate assessments and decisions.

Most finance textbooks make return on investment (ROI), or some derivative of it, the primary financial performance measure. Usually, the primary ROI measure used is ROE because of the relationship to business unit value enhancement. More recently, a financial measure referred to as economic value added (EVA) has been promoted. EVA, however, is very similar to ROI concepts. In fact, EVA is simply net income less the cost of employing equity capital. Usually, EVA will be greater than zero if and only if ROE is greater than the firm’s cost of equity capital.

Many people will argue that the difference between an ROI measure and a margin measure is academic. However, using margin versus ROI makes a huge difference. To see the difference, assume that two hospitals have identical margins but grossly different levels of...
If we assume that return on equity or business unit value is the primary measure of financial performance success, the schematic in Exhibit 1 provides a road map of the critical drivers of performance. The schematic shows that the three primary determinants of value are profit, investment, and cost of capital. These three primary determinants can then be related to a set of macro drivers and ultimately to a number of micro value drivers that will enable measurement and modeling for analysis. It is this structure that will be used to assess both the opportunities and problems that currently exist in the hospital industry.

To evaluate the financial position of the US hospital industry, we will be using 68 measures of performance that are organized as follows:

**Proprietary Measures**
1. Community Value Index®
2. Financial Strength Index®
3. Hospital Charge Index®
4. Hospital Cost Index®

**Overall Measures**
5. Return on Equity
6. Economic Value Added
7. Total Margin

**Market Factors**
8. Inpatient Revenue Percentage
9. Surgical Cases Percentage
10. Expected Profit on DRGs Percentage
11. Expected Profit on APCs Percentage
12. Market Share Percentage
13. Medicaid Days Percentage
14. Medicare Days Percentage
15. Inpatient Disproportionate Share Percentage
16. Revenue Growth (Last Year) Percentage
17. Admissions from ER Percentage
18. Admissions from SNF Percentage

**Cost Factors**
32. Average Cost per Medicare Discharge (CMI = 1.0; WI = 1.0)
33. Average Cost per Visit (RW = 1.0; WI = 1.0)
34. Direct Cost per Routine Day (WI = 1.0)
35. Direct Cost per ICU/CCU Day (WI = 1.0)
36. Overhead Cost Percentage
37. Capital-Related Costs per Adjusted Patient Day (WI = 1.0)
38. Average Cost per Adjusted Patient Day (WI = 1.0)

**Labor Cost Factors**
39. Net Patient Revenue per FTE (WI = 1.0)
40. Man-hours per Adjusted Discharge
41. FTEs per Adjusted Patient Day
42. Salary per FTE (WI = 1.0)
43. Fringe Benefits Percentage

**Supply Cost Factors**
44. Average Pharmacy Cost per Medicare Discharge (CMI = 1.0)
45. Average Medical Supply Cost per Medicare Discharge (CMI = 1.0)
<table>
<thead>
<tr>
<th>DATA SOURCES</th>
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</thead>
<tbody>
<tr>
<td>The data used in this report are taken from four primary public data sets:</td>
<td></td>
</tr>
<tr>
<td>1. PPS Minimum Data Set (Medicare Cost Reports)</td>
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<tr>
<td>2. MedPAR (Medicare Inpatient Claims)</td>
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<tr>
<td>3. Hospital Outpatient Prospective Payment System (Medicare Outpatient Claims)</td>
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<tr>
<td>4. Standard Analytical Outpatient File (Medicare Outpatient Claims)</td>
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The utilization of these databases assures that virtually every US acute-care hospital is included in this study: approximately 3,800 hospitals. The inclusion of these databases and their integration also permits the presentation and analysis of a much wider array of factors. For example, utilization of the HOPPS file allows us to make assessments regarding actual prices at the CPT® / HCPCS level that can have tremendous implications for pricing adjustments.

The tabular data that are presented later in this report are for 2004 to 2006. Significant trends will be pointed out and discussed. We are, however, especially interested in differences among hospital sectors. To this end we have provided data breakouts for the following groups:

- States
- Top 40 MSAs
- Urban by Revenue Size
- Rural by Revenue Size
- Teaching Status by Intensity
- Ownership and Control
- Performance Groups
- Revenue Size

We have provided three levels of teaching intensity: low, medium, and high. Placement into one of these groups is based upon the hospital's number of interns and residents:

- Low: 1 to 30
- Medium: 31 to 200
- High: greater than 200

**ORGANIZATION**

The 2008 State of the Hospital Industry consists of four primary sections:

1. Present Financial Condition
2. Community Value Index®
3. Performance Measures
   - US Median Values
   - Proprietary Measures
   - Overall Measures
   - Market Factors
   - Pricing Factors
   - Coding Factors
   - Contract Negotiation Factors
   - Cost Factors
   - Labor Cost Factors
   - Supply Cost Factors
   - Non-operating Income Factors
   - Service Intensity Factors
   - Investment Efficiency Factors
   - Plant Obsolescence Factors
   - Capital Position Factors
4. Appendices
   - Definition of Measures
   - Number of Reporting Hospitals
   - Specialty Hospital Data
   - Critical Access Hospital Trends
   - Sample Dashboard Report

For each of the indicators shown, we have ranked the states and the MSAs. For the states, the rankings range from 1 to 52 and for the MSAs, they range from 1 to 40. Please note that the rankings are defined from lowest to highest values. For some indicators, a high value is desirable; therefore, a higher rank would indicate a more favorable position. For other indicators, such as length of stay or cost per discharge, lower values are desirable.

**COMMUNITY VALUE INDEX® HOSPITAL SCORING**

The 2008 State of the Hospital Industry contains a section devoted to assessing the value that a hospital provides to its community. The assessment is made through a measure referred to as the Community Value Index® (CVI), which was developed by Cleverley + Associates in 2004. The CVI is composed of nine measures that evaluate a hospital’s performance in three areas: 1) financial viability and plant reinvestment, 2) hospital cost structure, and 3) hospital charge structure. The CVI suggests that a hospital provides value to the community when it is financially viable and is appropriately reinvesting in the facility, maintains a low-cost structure, and has reasonable charges. Top-performing CVI hospitals are listed in the Community Value Index® Top 100 Hospitals list, as well as the Community Value Index® Five-Star Hospitals list (the top twenty percent of hospitals in the CVI study). The CVI and subsequent rankings are described in depth in Part II of this publication.