## **Chapter 5:**

## **Assessing the Financial and Operational Condition of New Jersey Hospitals**

#### - Key Points -

- Many New Jersey hospitals are in poor financial condition relative to hospitals nationwide as measured by common financial indicators used by creditors.
- While not in acute financial distress, a large number of hospitals appear to be heading toward distress in the near future.
- A number of factors are common to hospitals in distress including location in the northeastern region of the state, high volume of publicly insured patients (i.e. Medicaid, Medicare, Charity Care), low volume of surgical cases, and small to medium size.

At the request of the Commission, Navigant Consulting completed an analysis of the financial condition of the 80 general acute care hospitals that were open in New Jersey in 2005. The analysis included individual hospital and hospital system level financial information. The review focused on financial ratios that are indicators of profitability, liquidity and capital structure. In addition, the analysis compares the financial performance of New Jersey hospitals to hospitals nationwide and to benchmarks used by the major bond rating agencies. Based on this analysis, factors that are common to financially distressed hospitals are identified.

The Commission assessed the following seven financial indicators for each of the New Jersey hospitals:

- Operating margin
- Total margin
- Days cash-on-hand
- Current ratio
- Debt service coverage
- Long-term debt to capitalization
- Average age of plant

This chapter discusses the role of these financial indicators have in assessing the financial performance of organizations and provides information on these indicators for New Jersey hospitals. The Commission used three data sources to analyze the financial condition of New Jersey hospitals — Medicare Cost

Reports, Audited Financial Statements and Unaudited Financial Statements (2006 only). Appendix 5 describes in more detail each of the data sources and their relative strengths and weaknesses. In general, the Commission used Medicare Cost Report data to analyze long-term trends and for comparisons of New Jersey results to other states. Audited financial statements were used for hospital-specific assessments, for more detailed analysis of the range of values for each ratio and for comparisons to financial benchmarks available from the major rating agencies. Audited financial statements were used to provide a preliminary assessment of 2006 financial results. For several reasons — notably differences in classification of financial items and the number of hospitals reporting medians —financial indicators calculated from these different data sources will likely differ from one another.

### I. The Financial Condition of New Jersey Hospitals

To assess the financial condition of New Jersey's hospitals, the Commission directed Navigant Consulting, to profile their performance on a series of standard financial indicators. In the following sections, these indicators are defined and explained with respect to their use in our financial assessment of New Jersey's hospitals. Finally, these financial measures are provided for hospitals in the state.

#### A. Operating Margin

A hospital's operating margin is defined as income (or loss) from patient operations divided by net patient revenues (i.e., not patient revenues billed but patient revenues actually received or expected to be received by hospitals). This metric excludes non-operating items such as fundraising or gains or losses on the sale of assets. Thus, this metric measures a hospital's net income strictly from the core business of patient care. In the short-term, hospitals with negative operating margins may be able to bridge the shortfall with loans or by tapping cash reserves. These are, however, short-term solutions and a hospital experiencing sustained negative operating margins will likely be unable to meet its financial obligations over the long-term and faces the prospect of insolvency and bankruptcy.

Despite some differences in the calculation of operating margin in Medicare Cost Reports and audited financial statements (explained in Appendix 5), the operating margin trend obtained from Medicare Cost Reports is both valid and informative. As Figure 5.1 illustrates, the

median<sup>35</sup> operating margin for New Jersey hospitals has ranged from a low of negative 1.4 percent in 1999 to a high of 2.1 in 2002. The trend since 2002 has been negative, with operating margins for New Jersey hospitals declining steadily since 2002. Audited data for 2006 show a median operating margin of positive .02 percent, indicating that approximately half of the State's hospitals lost money from operations.

However, a median, similar to an average, is only a measure of central tendency that obscures the dispersion of values around those central tendencies. Figure 5.2 shows the nature of the dispersion of the operating margin of New Jersey hospitals using 2005 audited financial statements. Each dot represents an individual hospital's operating margin. Operating margins ranged from negative 23 percent to nearly 20 percent, with the large majority of hospitals falling within the negative five percent to positive five percent range. By way of comparison, the average operating margin for acute care hospitals in the entire nation is approximately 3.3 percent.

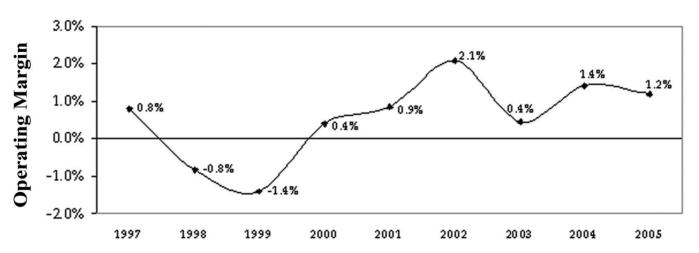
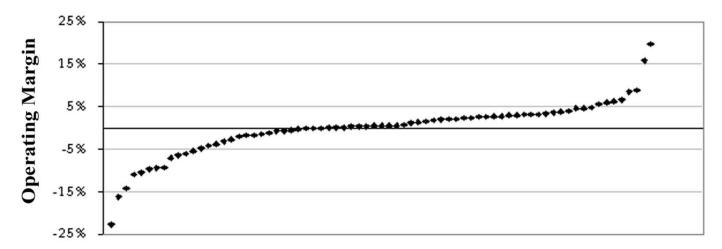


Figure 5.1:
Trend in Median Operating Margins for New Jersey Hospitals (1997 – 2005)

<sup>&</sup>lt;sup>35</sup> The median of a distribution is a metric such that the values of the variable in question for half of the hospitals lie above the median and the metrics for half the hospitals below it. Unlike an average, its value is not distorted by large outlier values. For some purposes, the median describes a set of variables – here operating margins – more accurately.

Figure 5.2:
Distribution of New Jersey Hospitals' Operating Margins based on Audited Financial Statements (FY 2005)

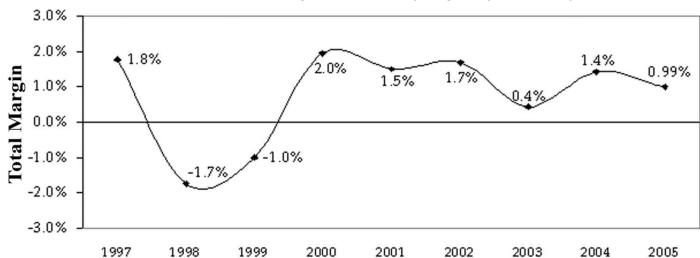


#### **B. Total Margin**

Total margin is defined as income (or losses) from all sources divided by net revenues. A positive total margin can, in the short-term, help offset operating losses or fund equipment and facility replacement. However, hospitals that continually rely on total margins to subsidize operating losses face difficult financial challenges and hospitals that fail to generate consistent positive total margins are unlikely to be able to meet their financial obligations in the long run.

According to Medicare Cost Report data from 1997 through 2005, the median total margin for New Jersey hospitals was at its lowest level in 1998 at negative 1.7 percent and peaked at 2 percent in 2000 (Figure 5.3). Since 2000, the median total margin for New Jersey hospitals has fluctuated between 0.4 percent and 1.7 percent, markedly below the national median. The median total margin for all acute care hospitals in the United States in 2005 was 3.6 percent.

Figure 5.3:
Trend in Median Total Margins for New Jersey Hospitals (1997 – 2005)



Analysis of fiscal year (FY) 2005 audited financial statements showed hospital total margins in New Jersey ranged from negative 26 percent to nearly 20 percent with a median of 2.1 percent. Data for 2006, based on audited financial statements, shows a marked decline in the median total margin as it fell to 0.41 percent. Figure 5.4 illustrates the distribution of hospitals' total margins based on FY 2005 audited financial statements. The large majority of hospitals fall within the negative 1.0 percent to 8.0 percent range. Most importantly, more than two-thirds of New Jersey hospitals had total margins below the national median.

#### C. Days Cash-on-Hand

Days cash-on-hand is defined as cash and highly liquid assets (e.g., marketable securities or money-market funds) divided by the hospital's average daily cash outflow to support operations; it excludes depreciation, which is a non-cash expense. In other words, days cash-on-hand measures a hospital's cash reserves in terms of the number of days the hospital could continue to meet daily operating expenses even if it were to receive no additional cash revenues. The lower the number, the more vulnerable a hospital is to disruptions in revenues (e.g., problems with reimbursement from third-party payers) or expenses (e.g., sharp increases in supply costs). A very low number may signal that the hospital may not be able to meet payroll.

As illustrated in Figure 5.5, median days of cash-on-hand for New Jersey hospitals, as calculated from Medicare Cost Reports, was relatively constant from 1997 to 2000, peaked in 2002 and subsequently declined to levels consistent with the figures recorded from 1997 through 2000.

Figure 5.4:
Distribution of New Jersey Hospitals' Total Margins based on Audited Financial Statements (FY 2005)

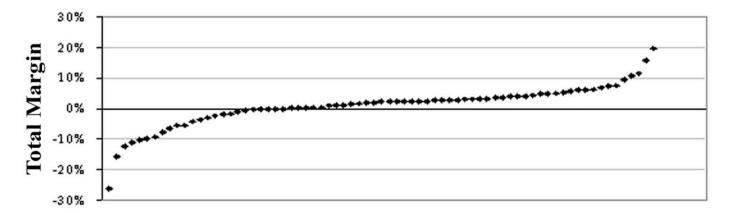
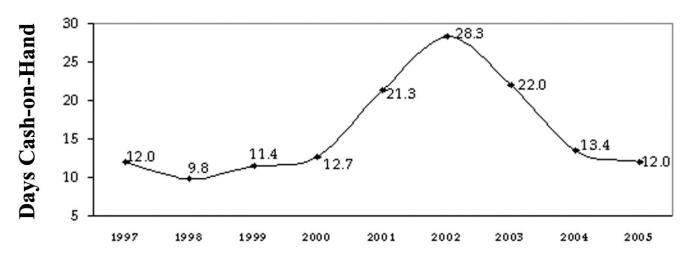


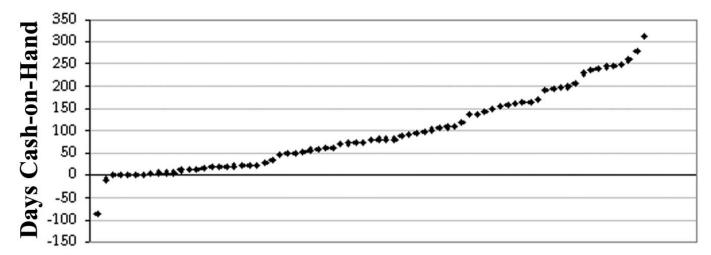
Figure 5.5:
Trend in Median Days Cash-On-Hand for New Jersey Hospitals (1997 – 2005)



However, as is explained further in Appendix 5, there are data limitations in Medicare Cost Reports that result in an understatement of hospitals' days cash-on-hand. Because of this limitation, Medicare Cost Reports were used to examine historical trends in the hospitals' days cash-on-hand indicator, but relied on hospitals' FY 2005 audited financial statement data that include board-designated funds to assess hospitals' more current days cash-on-hand positions. Figure 5.6 illustrates the distribution of hospitals' days cash-on-hand based on FY 2005 audited financial statements, which include board-

designated funds. In FY 2005, days cash on hand ranged from negative 87 (overdraft) to 311, with a median of 80 days. In 2005, the median days cash on hand, including board-designated funds that are available for immediate use if needed, for all hospitals in the nation was 160 days. Therefore, the median for New Jersey hospitals was half of the median for all hospitals in the nation. More importantly, approximately one-third of New Jersey hospitals had less than 50 days cash-on-hand in FY 2005. Audited data for 2006 show a further decline in median days cash-on-hand down to 69 days.

Figure 5.6:
Distribution of New Jersey Hospitals' Days Cash-On-Hand Based on Audited Financial Statements (FY 2005)



#### **D. Current Ratio**

The current ratio is defined as current assets divided by current liabilities, where "current" means assets likely to be converted into cash within a year or liabilities that have to be paid in cash within a year. The ratio indicates the ability of a hospital to meet its short-term obligations with cash or other assets that can quickly be converted to cash (e.g. patient accounts receivable). Lower values suggest potential problems in meeting payroll or making payments to vendors. Most often, a current ratio of two or higher is assumed to indicate that an organization is financially sound.

As illustrated in Figure 5.7, the median current ratio for New Jersey hospitals has declined steadily since 2001. Audited data for 2006 indicate continued decline, with the median current ratio falling to 1.26.

As Figure 5.8 illustrates, approximately three-fourths of New Jersey hospitals had current ratios below 2.0 in FY 2005. Liquidity problems are, therefore, systemic for the hospital industry in New Jersey and are likely affecting most of the State's hospitals.

Figure 5.7:
Trend in Median Current Ratios for New Jersey Hospitals (1997 – 2005)

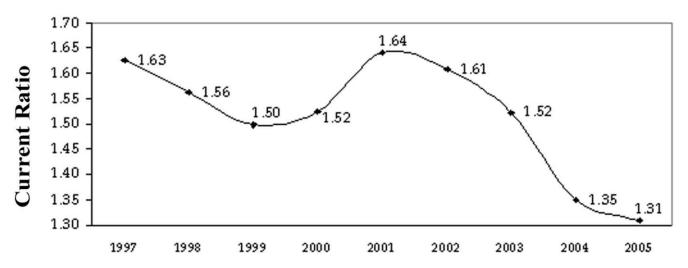
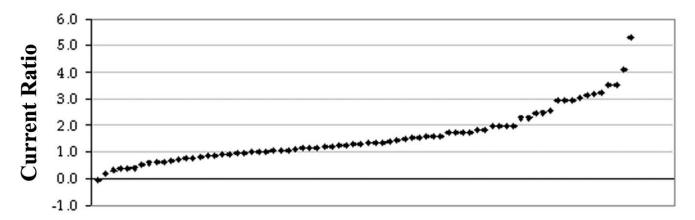


Figure 5.8:

Distribution of New Jersey Hospitals' Current Ratios Based on Audited Financial Statements (FY 2005)



#### E. Debt Service Coverage

Debt service coverage is a widely used indicator that measures an organization's ability to cover its monthly debt payments – that is, interest and principal. The ratio is calculated by dividing the hospital's operating cash flow (net income plus depreciation and interest) by its annual debt service – the total of all interest and principal payments for the year. The higher a hospital's debt service coverage, the better its financial condition and ability to meet its debt requirements.

As Figure 5.9 illustrates, the median debt service coverage ratio for New Jersey hospitals was at its lowest point in 1998, then increased over the next three years and has stabilized since 2003. A stable debt service coverage ratio is normally the result of fairly low variation in operating income and low variation in the amount of debt. As discussed in the next section of this chapter, New Jersey hospitals have an exceptionally

high average age of plant, which suggests hospitals have incurred relatively less new debt in recent years. It is important to highlight that although New Jersey hospitals' debt service coverage has been stable in recent years, the State's debt service coverage ratio of 2.43 is substantially below the average of 3.98 for all hospitals in the United States.

Figure 5.10 illustrates the distribution of individual New Jersey hospitals' debt service coverage ratios based on FY 2005 audited financial statements. Values ranged from negative 3.5 to 14.4 with a median of 2.71. Particularly troubling is the number of hospitals with coverage ratios less than 1.0, an indication of potential problems in meeting debt service. Also, the median for 2006 based on audited financial statements shows further decline to 2.35.

Figure 5.9:
Trend in Median Debt Service Coverage for New Jersey Hospitals (1997 – 2005)

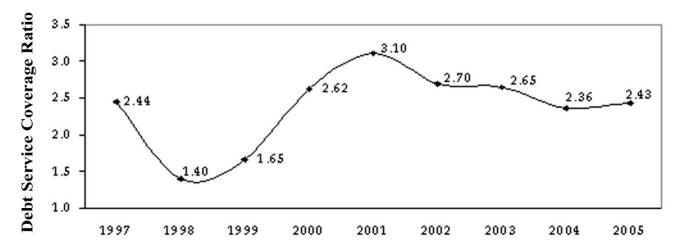
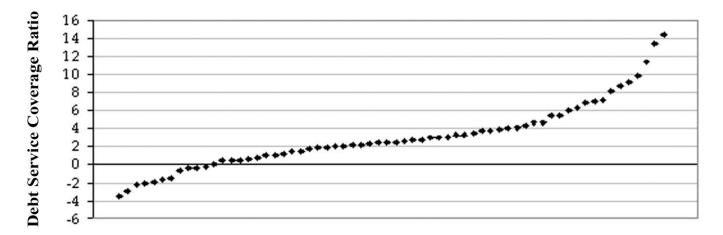


Figure 5.10:

Distribution of New Jersey Hospitals' Debt Service Coverage based on Audited Financial Statements (FY 2005)



#### F. Long-Term Debt to Capitalization

A hospital's ratio of long-term debt to total capitalization measures its degree of financial leverage. One can think of it as the fraction of a hospital's total assets that has been financed with debt, rather than with the hospital's equity funds (endowments plus accumulated retained earnings). Other things being equal, the higher a hospital's debt-to-capitalization ratio, the larger the interest expense in the hospital's income statement and the larger the total debt-service in its cash flow statement. Therefore, this ratio is widely used by financial analysts to assess the degree to which a

hospital is leveraged and thus, may be unable to take on additional debt or the extent to which a hospital may have difficulty meeting its scheduled debt service payments.

Although New Jersey hospitals' median long-term debt to capitalization ratio has decreased since 2002 (as illustrated in Figure 5.11), the median long-term debt to capitalization ratio for New Jersey hospitals is substantially higher than the ratio for all hospitals in the United States (38.6 percent). This indicates that New Jersey hospitals are more highly leveraged and have less equity than other hospitals in the nation.

Figure 5.11:
Trend in Median Ratios of Long-Term Debt to Capitalization for New Jersey Hospitals (1997 – 2005)

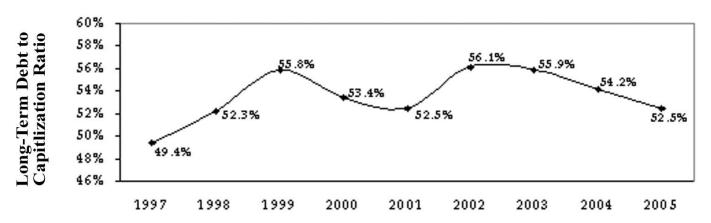


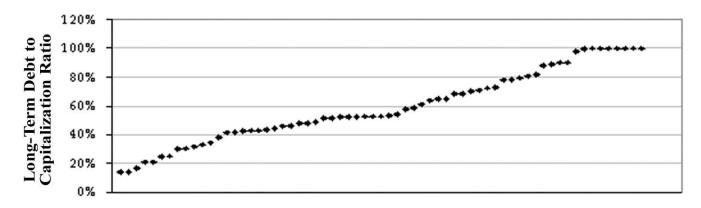
Figure 5.12 illustrates the distribution of individual hospitals' long-term debt to capitalization ratios based on their audited financial statements. These ratios ranged from 14 percent to 100 percent with a median of 46 percent. As shown in the figure, seven New Jersey hospitals have long-term debt to capitalization ratios of 100 percent, which means that their activities are entirely funded by debt. Audited data for 2006 indicate a decline in the median but this appears to be attributable to reclassification of debt at several hospitals rather than an actual improvement in fund balances or debt levels.

#### **G.** Average Age of Plant

In the eyes of economists and financial analysts, the average age of plant of an enterprise is a significant statistic for two reasons. First, higher average age of plant figures indicate that the facilities used by the organization are aging and are likely to require renovation and/or replacement. In addition, effective and efficient use of new technology often requires new capital outlays for structures and equipment.

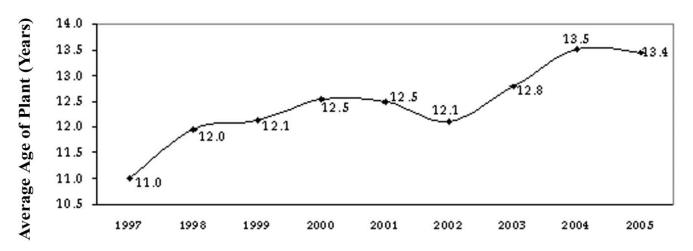
The median value for New Jersey hospitals' average age of plant has increased nearly every year since 1997 as illustrated in Figure 5.13, and in FY 2005 was 13.4 years, which was more than 30 percent higher than the 10.2 median value for all hospitals in the nation in 2005.

Figure 5.12:
Distribution of Long-Term Debt to Capitalization for New Jersey Hospitals Based on Audited Financial Statements (FY 2005)\*



<sup>\*</sup> Note: The actual calculated long-term debt to capitalization ratio for seven hospitals was greater than 100 percent due to negative equity reported on their audited financial statements. Since 100 percent of an entity's capital is the maximum amount that can be financed via debt, these hospitals' long-term debt to capitalization ratio is capped at 100 percent.

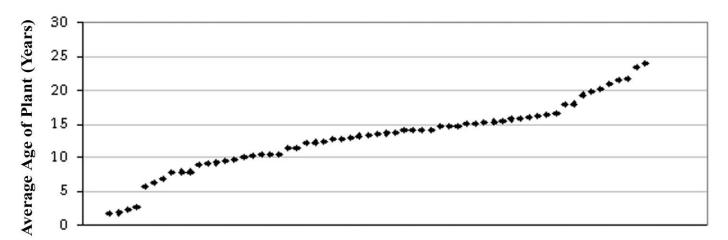
Figure 5.13:
Trend in Median Average Age of Plant for New Jersey Hospitals (1997 – 2005)



Data for individual hospitals calculated from audited financial statements (Figure 5.14) indicate that one-third of the State's hospitals had an average plant age of 15 years or older, and less than one-fourth had a plant age equal to or below the national median. This high average age of plant figures suggests that New Jersey hospitals will likely need to make significant capital investments to update, renovate, and replace old and

obsolete facilities. The ability of New Jersey hospitals to make these investments will be challenging, especially given the low margins (both operating and total), low debt service coverage ratios, and the high debt to capitalization ratios. The median average age of plant for New Jersey hospitals for 2006, calculated using audited financial statements, shows continued aging of the State's hospital infrastructure.

Figure 5.14:
Distribution of Average Age of Plant for New Jersey Hospitals Based on Audited Financial Statements (FY 2005)



### **II. How Hospitals Raise Capital**

The vast majority of hospitals in New Jersey raise most of the funds needed for equipment, renovations, capital improvements and new facilities by borrowing from the proceeds of bonds or notes issued by the New Jersey Health Care Facilities Financing Authority (NJHCFFA). NJHCFFA is an independent State authority, in but not of the Department of Health and Senior Services. Since its creation by the New Jersey Legislature in 1972, 36 NJHCFFA has issued over \$14.3 billion in bonds for health care organizations, as that term is defined under its enabling statute. 37

Currently, the Authority has a total of over \$6.6 billion of bonds outstanding on behalf of nearly a hundred health care organizations. As of June 30, 2007, the total long term debt at New Jersey's 80 acute care hospitals was approximately \$5.2 billion. Seventy of the State's 80 acute care inpatient hospitals currently have debt outstanding through the Authority, which accounts for over \$4.3 billion of the Authority's bonds currently outstanding. Therefore, the Authority finances over 80% of the long term debt for New Jersey hospitals and about 88% of New Jersey hospitals currently have debt outstanding with the Authority. Other long term debt of these hospitals may include commercial loans from banks and capital leases with equipment manufacturers. Some hospitals also have operating leases which are not included in their calculation of long term debt.

The primary benefit of financing through a State or local financing authority is that not-for-profit, 501(c)(3) hospitals are able to receive the benefit of lower interest rates because the interest on the bonds issued on their behalf, in most cases, is exempt from Federal and State income tax. There are a few hospitals that typically do not issue bonds through the Authority. These hospitals fall into three groups: for-profit hospitals,

In very simplified and generalized terms, in most cases, a hospital seeking to finance a health care project through the Authority enters into an agreement to pay an amount equal to the principal and interest on the bonds issued by the Authority plus fees and costs associated with the issuance of the bonds. The payments on the bonds are secured by that agreement. Neither the State of New Jersey nor the Authority is obligated to make any payments on the bonds except to the extent that the borrower makes its payments to the Authority under the agreement. There are some cases in which additional security or credit liquidity or enhancement are also pledged to satisfy payments on the bonds. These include bond insurance, letters of credit, mortgages and guarantees.

## III. Comparison of Median Financial Indicators for New Jersey Hospitals and Other States and Credit Rating Agencies' Values

Similar analyses were completed for hospitals in the neighboring states of Connecticut, Maryland, New York, and Pennsylvania. With the exception of New York, hospitals in each of the comparison states had higher operating margins than New Jersey hospitals. Also, New Jersey hospitals had a more significant debt load, relative to the other states, again with the exception of New York. Lastly, New Jersey hospital facilities have the oldest plants relative to the comparison group of states. Table 5.1 on the following page presents these comparisons. In addition to the comparison states, medians values for the United States are also presented.

governmentally owned hospitals and hospitals in redevelopment zones.<sup>38</sup>

<sup>&</sup>lt;sup>36</sup> See N.J.S.A. 26:2I-1 et seq., the Authority's enabling statute.

<sup>37 &</sup>quot;Health care organization' means an organization located in this State which is authorized or permitted by law . . . to provide health care-related services, including, but not limited to, hospital, outpatient, public health, home health care, residential care, assisted living, hospice, health maintenance organization, blood bank, alcohol or drug abuse, half-way house, diagnostic, treatment, rehabilitation, extended care, skilled nursing care, nursing care, intermediate care, tuberculosis care, chronic disease care, maternity, mental health, boarding or sheltered care or day care, services provided by a physician in his office, or any other service offered in connection with health care services or by an entity affiliated with a health care

organization or an integrated delivery system." N.J.S.A. 26:2I-3.

<sup>&</sup>lt;sup>38</sup> For-profit hospitals typically issue corporate bonds, use cash-on-hand or borrow through traditional commercial sources for their capital projects. As a separate State entity, the University of Medicine and Dentistry of New Jersey ("UMDNJ") typically issues bonds on its own behalf for capital projects at University Hospital. Bergen Regional Medical Center and Hoboken University Medical Center are owned by Bergen County and the City of Hoboken, respectively, and receive financing through local financing entities. Cooper Hospital University Medical Center in Camden is in a redevelopment zone and as such is typically financed through the Camden County Improvement Authority.

Table 5.1:

Comparison of Key Financial Indicators' Median Values –
Hospitals in New Jersey, Neighboring States and the United States (2005)

[	Key Financial Indicators						
	Operating Margin	Total Margin	Days Cash on Hand	Debt Service Coverage	Long-Term Debt to Capitalization	Average Age of Plant	
United States							
General Acute Care Hospitals	3.3%	3.6%	N/A	3.98	38.6%	10.2	
New Jersey							
General Acute Care Hospitals	1.2%	1.0%	12.0	2.43	52.5%	13.4	
Comparison States							
Connecticut	2.1%	1.6%	23.4	3.78	41.0%	10.8	
Maryland	2.5%	3.1%	20.2	3.67	49.8%	6.2	
New York	0.3%	1.2%	13.0	2.52	61.1%	11.3	
Pennsylvania	2.6%	3.4%	10.6	3.23	44.8%	12.2	

It is also useful to compare the profitability, liquidity and financial structure indicators for New Jersey hospitals to the expectations that credit rating agencies have when they evaluate a hospital's credit worthiness. Median values for several financial indicators for different bond ratings calculated by Standard & Poor's, one of the major bond rating agencies, are compared to New Jersey hospitals' indicators in Table 5.2. The table clearly indicates that, for most of the ratios, New Jersey medians fall between the medians for BBB- hospitals (the lowest rating category above speculative grade) and

the medians for speculative grade ratings. To highlight one example, the median cash-on-hand for BBB-hospitals was 103 days compared to 80 days for New Jersey hospitals. Based on this indicator, the financial performance of a large majority of New Jersey hospitals does not meet the expectations for a typical BBB-hospital. A lower bond rating, especially a speculative grade rating, means that it will be more difficult for a hospital to obtain bond financing, and the financing that is obtained will be accompanied by higher interest rates.

**Table 5.2:**Comparison of Key Financial Indicators – New Jersey Hospitals to Various Rating Levels (2005)

Financial Indicator		Stand-Alone Hospital Median Ratios by Rating Level®								Name
	AA	AA-	A+	A	Α-	BBB+	ввв	ввв-	Speculative Grade	New Jersey <sup>(2)</sup>
Operating Margin (%)	4.5	4.6	4.2	3.7	3.3	3.1	1.6	2.0	(0.4)	0.5
Total Margin (%)	9.5	8.8	6.8	6.1	5.4	4.6	3.4	3.3	0.8	2.1
Days Cash on Hand	401.0	262.0	202.0	204.0	180.0	154.0	110.0	103.0	46.0	80.0
Debt Service Coverage	5.6	5.8	4.8	4.1	3.8	3.4	2.7	2.4	1.9	2.7
Long-Term Debt to Capitalization	n (%) 24.7	32.3	31.5	36.4	34.4	37.5	44.1	41.8	55.1	46.1
Average Age of Plant (years)	8.4	8.7	8.7	9.2	9.6	9.5	9.2	10.0	13.1	11.9
Sources:										
(1) Standard & Poor's Rating Services				spital Med	lians; July	2006				

<sup>(2)</sup> Data for New Jersey are based on audited financial statements

To provide an additional perspective on New Jersey hospitals, the State's medians were compared to three specific bond rating levels: "A-", "BBB+", and "BBB-". Table 5.3 through 5.5 present these comparisons. As the

data in the tables show, New Jersey hospital medians are lower than the medians for all hospitals in the United States, even for BBB- rated bonds.

Table 5.3:

Comparison of Key Financial Indicators – New Jersey Hospitals to Median Values for BBB- Credit Ratings (2005)

	Key Financial Indicators for BBB- Credit Rating					
	Operating Margin	Total Margin	Days Cash on Hand	Debt Service Coverage	Long-Term Debt to Capitalization	Average Age of Plant
United States						
Standard & Poor's (Gen. Acute Hospitals) (1) Fitch Ratings (Not-for-Profit Hospitals) (2)	2.0%	3.3%	103.0	2.40	41.8%	10.0
	1.9%	2.8%	112.0	2.20	48.2%	9.9
Moody's (Not-for-Profit Hospitals) (3)	1.5%	2.5%	79.0	2.50	46.4%	10.3
New Jersey (4) General Acute Care Hospitals	0.5%	2.1%	80.0	2.71	46.1%	11.9
Sources	0.070	2.17.0	00.0		1012 /0	2217
(1) Data for the United States comes from Standard	& Poor's and	are based on l	FY 2005 audited f	inancials. Valu	es are medians.	
(2) Data for the United States comes from Fitch Ratio	ings and are b	ased on FY 20	05 audited financ	ials. Values are	medians.	
(3) Data for the United States comes from Moody's	and are based	on FY 2005 au	dited financials.	Values are med	lians.	
(4) Data for New Jersey are based on analysis of audit	ted financial st	atements. Med	lians are used.			

<sup>\*</sup> Note: All data are 2005 medians

**Table 5.4:**Comparison of Key Financial Indicators – New Jersey Hospitals to Median Values for BBB+ Credit Ratings (2005)

	Key Financial Indicators for BBB+ Credit Rating					
-	Operating Margin	Total Margin	Days Cash on Hand	Debt Service Coverage	Long-Term Debt to Capitalization	Average Age of Plant
United States		< 4				
Standard & Poor's (Gen. Acute Hospitals) (1)	3.1%	4.6%	154.0	3.40	37.5%	9.5
Fitch Ratings (Not-for-Profit Hospitals) (2)	1.4%	4.0%	130.5	3.40	48.0%	10.0
Moody's (Not-for-Profit Hospitals) (3)	2.3%	4.6%	116.1	3.70	45.9%	9.8
New Jersey (4)						
General Acute Care Hospitals	0.5%	2.1%	80.0	2.71	46.1%	11.9

#### Sources:

- (1) Data for the United States comes from Standard & Poor's and are based on FY 2005 audited financials. Values are medians.
- (2) Data for the United States comes from Fitch Ratings and are based on FY 2005 audited financials. Values are medians.
- (3) Data for the United States comes from Moody's and are based on FY 2005 audited financials. Values are medians.
- (4) Data for New Jersey are based on analysis of audited financial statements. Medians are used

 Table 5.5:

 Comparison of Key Financial Indicators – New Jersey Hospitals to Median Values for A- Credit Ratings (2005)

	Key Financial Indicators for A- Credit Rating						
	Operating Margin	Total Margin	Days Cash on Hand	Debt Service Coverage	Long-Term Debt to Capitalization	Average Age of Plant	
United States							
Standard & Poor's (Gen. Acute Hospitals)(1)	3.3%	5.4%	180.0	3.80	34.4%	9.6	
Fitch Ratings (Not-for-Profit Hospitals)(2)	3.0%	4.9%	162.0	3.70	43.0%	10.1	
Moody's (Not-for-Profit Hospitals) (3)	3.1%	5.3%	152.4	4.10	40.0%	9.7	
New Jersey <sup>(4)</sup>							
General Acute Care Hospitals	0.5%	2.1%	80.0	2.71	46.1%	11.9	
Sources:							
(1) Data for the United States comes from Standard	& Poor's and a	re based on F	Y 2005 audited fin	ancials. Values	s are medians.		
(2) Data for the United States comes from Fitch Rate	ings and are ba	sed on FY 200	5 audited financia	ls. Values are r	nedians.		
(3) Data for the United States comes from ${\it Moody's}$	and are based o	on FY 2005 auc	lited financials. V	alues are media	ans.		
(4) Data for New Jersey are based on analysis of audit	ed financial stat	ements. Media	ins are used.				

In the next section of this chapter, characteristics common to financially distressed New Jersey hospitals are discussed.

# IV. Factors Common to Financially Distressed Hospitals

New Jersey hospitals, as a group, have had a poor financial performance in recent years, and a subset of hospitals has experienced significant financial distress. This section identifies factors common to financially distressed hospitals in New Jersey.

## A. Factors that Can Affect Financial Performance

The Commission benefited from the expertise of consultants that have worked with hospitals across the United States. This collective experience has helped identify a number of factors that can affect financial performance. Among these factors are payer mix, indigent care load, staffing ratios, costs, and case mix. In some areas of the country, the location of a hospital can affect financial performance (although there is usually a correlation between location and payer mix—the less affluent an area is the more likely it is to have high levels of Medicaid and self-pay). Size can sometimes be a factor affecting financial performance, although this is not a consistent factor.

Although financially successful and financially unsuccessful hospitals often have a similar mix of

payers, the lower levels of payment by Medicaid and Medicare compared with private patients invariably affect hospitals with larger portions of government-funded patients. In addition, hospitals with poor financial performance are also likely to have larger numbers of uninsured patients.

Hospitals with less efficient operations, as demonstrated by higher full time equivalent (FTE) staff to bed ratios and higher costs per adjusted admission are also likely to be financially distressed. Hospitals that have a higher percentage of medical cases compared to surgical cases tend to be more financially challenged than those that have higher proportions of surgical cases.

## B. Characteristics of New Jersey Hospitals Identified as Financially Distressed

To determine the factors that affect financial performance in New Jersey, this analysis focuses on a subset of 12 New Jersey hospitals that appear to be in the worst financial condition. These hospitals were identified based on financial performance indicators of profitability, liquidity and soundness of their capital financial structure (as measured by their operating margin, days cash on hand and long-term debt to capitalization ratios). All 12 of these hospitals have had negative operating margins for two or more consecutive years, have less than 20 days of cash on hand and long-term debt to capitalization ratios greater than 50 percent.

As Table 5.6 shows, most of the 12 hospitals in serious financial distress are located in the Newark/Jersey City market area.

Table 5.6:
Location of Hospitals in Serious Financial Distress

Hospital Market Area	Number of Hospitals in Serious Financial Distress
Newark/Jersey City	7
Hackensack, Ridgewood and Paterson	4
Atlantic City	1

As Table 5.7 shows, although there are both small and large hospitals in serious financial distress, compared with all hospitals in the State, a higher proportion of hospitals in serious financial distress are small.

Surgical volume is important to consider because margins on surgical cases are generally higher for all payers. As Table 5.8 shows, New Jersey hospitals in serious financial distress have lower proportions of surgical discharges compared with all hospitals in the State.

**Table 5.7:**Bed Size Distribution: Hospitals in Serious Financial Distress versus All Hospitals

Number of Maintained Beds in 2006	Portion of Hospitals in Serious Financial Distress	Portion of All Hospitals
< 100	17%	9%
100 – 200	42%	26%
201 – 300	33%	31%
> 300	8%	34%

 Table 5.8:

 Inpatient Surgical Activity: Hospitals in Serious Financial Distress versus All Hospitals

2006 Surgical Discharges as a Percent of Total Discharges	Portion of Hospitals in Serious Financial Distress	Portion of All Hospitals
< 11%	-	1%
11 – 20%	67%	35%
21 – 30%	25%	45%
> 30%	8%	19%

Table 5.9:
Proportion of Government Programs and Uninsured Discharges: Hospitals in Serious
Financial Distress versus All Hospitals

2006 Medicare, Medicaid and Uninsured Discharges as a Percent of Total Discharges	Portion of Hospitals in Serious Financial Distress	Portion of All Hospitals
< 50%	-	25%
51 – 60%	25%	26%
61 – 70%	42%	34%
71 – 80%	17%	11%
> 80%	16%	4%

As Table 5.9 shows, hospitals in serious financial distress have higher proportions of Medicare, Medicaid and uninsured discharges compared with all hospitals in the State.

While nationally, financially distressed hospitals typically exhibit higher costs and staffing ratios than well-performing hospitals, financially distressed hospitals in New Jersey appear to have responded to negative financial results by reducing staff and costs. As a result, some of the hospitals that are financially distressed do not have higher costs and staffing ratios. In addition, some of the more financially successful hospitals have higher costs and staffing ratios than hospitals that are financially distressed.

The characteristic that the vast majority of hospitals in serious financial distress share is location in the northeast portion of New Jersey. In terms of bed size, not all these hospitals are small, but it is noteworthy that all the small hospitals in the northeast portion of the State are in serious financial distress. It is clear that small hospitals with low rates of surgical discharges have significant challenges to their financial viability. When these characteristics are combined with a high proportion of Medicare, Medicaid and uninsured patients, the likelihood of experiencing serious financial distress is very high.

#### **V. Conclusion**

Based on the financial indicators analyzed in the first section of this chapter, it is evident that the financial condition of New Jersey hospitals is poor and has been deteriorating for the last several years. Currently, New Jersey hospitals are showing, on average, poor profitability, limited cash reserves and high levels of debt. Low margins and low levels of cash on hand threaten a hospital's ability to meet both short- and longterm debt obligations. Furthermore, New Jersey hospitals' capital structure is highly leveraged with a median long-term debt to capitalization ratio of 52.5 percent. When considered in their entirety, these factors significantly inhibit the ability of the State's hospitals to invest in their infrastructure, which has resulted in an exceptionally high average age of plant.

Additionally, the financial performance of New Jersey hospitals is worse than the average performance of its counterparts nationally, and it is not favorable when compared to financial benchmarks commonly used in the industry and by financial rating agencies that assess a hospital's credit worthiness. It is important to note, however, that there is a wide dispersion of values for these financial metrics across New Jersey hospitals. While some hospitals are considerably more distressed

than the averages or medians indicate, others are in very good financial condition, even by national standards.

Several characteristics appear to be common to financially distressed hospitals. Hospitals with a high

volume of publicly insured patients, low volume of surgical cases, or small to medium bed size are the most vulnerable based on current indicators. Geographic presence in the northeastern section of the state also is a key predictor of financial distress currently.