CAPITAL FINANCING: FINANCIAL AND OPERATING METRICS ANALYSIS SEPTEMBER 2004

PREPARED FOR

THE ILLINOIS HEALTH FACILITIES PLANNING BOARD SPRINGFIELD IL 62761

PREPARED BY

GOVERNORS STATE UNIVERSITY HEALTH ADMINISTRATION PROGRAM UNIVERSITY PARK IL 60466

TABLE OF CONTENTS

Introduction	04
Scope and Approach	06
Capital Sources	06
Ratings Analysis	09
Metric Analysis	10
Financial Metrics	11.
Hospital Metrics	14
Non-Hospital Metrics	18
Nursing Homes	18
Ambulatory Surgical (Treatment) Centers	20
End Stage Renal Disease (Dialysis) Centers	21
Items to Consider	23
Conclusion	25

APPENDICES DATA TABLES

A. Hospitals

	A-1	HFMA Knowledge Network	
		Key Hospital Financial Statistics and Ratio Medians –	
		November 2003	27
	A-2	Non Profit Hospitals and Health Care Systems	
		Comparison of IHFPB, Fitch and S&P Standards, 2003	30
	A-3(1)	Non Profit Hospitals and Health Care Systems	
		By Rating Category, Fitch Ratings Agency, 2003	32
	A-3(2)	Financial Performance Related to Credit Rating by Rating Agency	34
	A-4	Almanac of Hospital Financial and Operating Indicators	
		Ingenix 2004	
	A-4(1)	Illinois, 2002 Data by Percentile	36
	A-4(2)	Illinois, 2002 Median Values by Performance, System versus Non System,	
		And Teaching versus Non-teaching Facilities	37
	A-4(3)	Illinois, 2002 Median Values by Bed Size and Revenues	38
	A-5	"A" Rated Facilities by Rating Agency	39
В.	Non-H	ospitals	
	B-1	Nursing Homes	42
	B-2	Ambulatory Surgical Centers.	
	B -3	Renal Dialysis Centers	44
ΒI	BLIOG	RAPHY	47

CAPITAL FINANCING

NOTE: The Healthcare Financial Management Association, GE Healthcare Financial Services and PricewaterhouseCoopers are conducting a year-long research project on healthcare facility capital needs over the next five to ten year period. Surveys were conducted with 460 healthcare financial officers, and interviews were undertaken with lenders, bond analysts, rating agencies, banks, and bond funds.

The introduction to this report to the Illinois Healthcare Facilities Planning Board is a summary of information and data published in this research project: "HFMA's Financing the Future, 2004". The final Report (6) was released in September 2004.

INTRODUCTION

The demand for capital is intensifying. A fourteen percent annual growth in capital spending is anticipated compared to the one percent growth between 1997 and 2001.

(HEMA Financing the Future 2004) Encilities survived the implementation of Medicara and

(HFMA Financing the Future, 2004). Facilities survived the implementation of Medicare and Medicaid prospective reimbursement systems and managed care contracting in the 1990's by implementing cost containment programs, increasing productivity, and under investing in plant and equipment. Demand for capital financing is increasing due to three key drivers:

- Need to improve and update facilities
- Acquisition of medical and information technology, and
- Desire to increase capacity.

The average age of healthcare plant facilities has crept up from an average of 9.4 years in 1997 to over ten years in 2002. Report 3 of HFMA's Financing the Future indicates that there exists an inverse relationship between average age of plant and operating margin: the lower the average age of the plant, the higher the operating margin. For example:

Table 1.1

Capital and Profitability Evaluation, 2001							
Operating Margin % <(10) (10) to (5) (5) to 0 0 to 5 5 to 10 >10							
Median Age pf Plant	9.3	11.1	10.3	10.0	9.7	8.4	
Median Debt/Bed*	\$172.8	\$136.9	\$155.6	\$171.7	\$159.8	\$79.2	
Median Capital	\$19.1	\$21.4	\$21.6	\$29.7	\$33.6	\$28.8	
Expenditure Per Bed*							

^{*} Dollars in Thousands

Forrester Research projects a nine percent annual growth in information technology (IT), while McKinsey & Company indicates overall IT spending will increase six to seven percent annually. An example of the increase in spending on medical technology is the average eleven percent annual increases in spending on MRI scanners between 1994 and 2002 (Frost & Sullivan).

The three most frequently cited capital projects hospitals intend to fund in the next five years are all technology acquisitions:

•	Purchase digital radiology systems	72%
•	Purchase computerized physician order entry	64%
•	Purchase major IT	61%
•	Purchase computers for in- patient rooms	25%

While the total number of hospital beds has declined substantially from 1970 through 2003, Solucient estimates that there will be a rebound in bed demand, with a one percent increase annually in hospital beds through 2012, for a total of an additional 72,000 beds in the United States. Over the next 25 years, bed demand is projected to increase by 4.6 percent, resulting in an increase from the current 519,000 beds to more than 756,000 beds in the United States. (Solucient, 2002)

Hospitals are increasing inpatient capacity and responding to design trends, such as "universal rooms", which accommodate a full range of equipment from intensive to acute care in the same room, amenities such as private rooms and homelike surroundings, and infrastructure to support centralized databases and other information technology needs. (Moon, 2002). In addition, individual hospitals will be spending millions to renovate air-handling and ventilation systems in decontamination units to accept victims of bioterrorism. (Thrall & Santamour, 2001)

There has been a steady growth in admissions, from approximately 31 million in 1992 to close to 34 million in 2001. Outpatient visits have soared from 300 million in 1992 to over 550 million in 2001. Part of this growth is due to population growth, and part is due to the aging U.S. population. (AHA Hospital Statistics, 2003)

A current survey indicates that facilities intend to:

	3	
•	Increase emergency room capacity	51%
•	Increase operating room capacity	50%
•	Add a specialty unit	37%
•	Convert semi-private rooms to private	36%
•	Increase bed capacity	35%
•	Increase lab space	35%
•	Build new outpatient centers	35%
•	Expand outpatient facilities	34%
•	Build new hospitals	23%

With the growing demand for healthcare capital, a systematic, yet flexible approach is essential. Organizations must build accountability for results. At the same time, the approach must balance projects aimed at positive returns on investment results, while adhering to mission endeavors. Facilities must prioritize capital expenditures and allocate available capital financing through the process of assessing individual capital projects, debt capacity and spending goals. Competing projects for a finite amount of financing dollars must be compared by contribution margin as well as the fit with the facility's mission and strategy. The facility should access the project's fit with its key strategic goals, the project's support of clinical priorities, and its effect on market position.

To continue to obtain sufficient amounts of capital at affordable prices, not-for-profit hospitals will need strong operating and capital financing plans and an effective management team. The hospitals that succeed in the capital marketplace in the coming years will be those that can improve operations by:

- Assuring continued revenue from core, profitable lines of businesses,
- Protecting inpatient market share from niche (boutique) providers,
- Protecting outpatient market share from growing physician office services,
- Automating standardized patterns of care and best practice protocols for delivering care to patients,
- Automating charge capture and insurance contract monitoring,
- Providing financial counseling and finding third-party resources for indigent patients, and
- Improving fund-raising and philanthropy.

Source: The Future of Not-for-Profit Healthcare Capital Financing, Healthcare Finance Forum, June 2002

Financial and operational projected results should be evaluated as well. Criteria may include revenue potential, achievability of cost savings, ability to increase productivity, and the return on investment, and the amount of financing needed to complete the project. Additionally, stakeholder and community input should be assessed, considering such criteria as improving quality of care and patient satisfaction, achieving medical staff support and employee satisfaction.

SCOPE AND APPROACH

Utilizing the four categories of facilities currently regulated by the Illinois Health Facilities Planning Board (Hospitals, Nursing Homes, Ambulatory Surgical Treatment Centers and End Stage Renal Dialysis Centers), current financial and operating data were collected from a variety of sources for each category. Data were collected from trade associations, rating agencies, SEC mandated reports filed by publicly traded companies, and stock reports prepared by stock market analysts and brokers. This data was then compared to the 2004 Illinois Health Facilities Planning Board (IHFPB) standards. Major variances in actual financial and operating data and the IHFPB standards were reviewed and differences were analyzed.

CAPITAL SOURCES

Increasing demand for healthcare capital also necessitates understanding available capital sources, the use of each source and the impact on the industry and facility. Trends in hospitals' access to capital have deteriorated between 1997 and 2001. Most healthcare facilities use a mix of sources:

• Cash from operations

97%

•	Philanthropy	81%
•	Investment Income	75%
•	Tax-exempt Bonds	65%
•	Capital Leases	63%
•	Bank Loans	38%

Other sources include local taxes (18%), sale of assets (16%) and physician investment (10%). Cash from operations has remained stable with the operating margin being approximately 2%. However, access to cash is divided between the "haves and the have-nots", with best performing facilities generating close to a 9% operating margin while those in the lowest quartile generate less than a one percent operating margin (Ingenix, 2004).

Healthcare facilities have been broadly classified into the "haves" and "have-not" hospitals. The "have" (broad access) facilities should be able to access the capital markets, afford capital projects and handle a certain level of debt. The "have-not" (limited access) facilities may not be able to efficiently access the capital markets, may have "maxed-out" debt capacity, and may not be able to afford to initiate needed capital projects to update and maintain their facilities. However, limited access facilities still may be able to access the capital markets by paying a higher interest rate due to the speculative nature of its debt, or by incurring bond insurance costs related to enhancing their bond issues.

Operational factors associated with access to capital for limited capital access hospitals include a high percentage of Medicaid patients, high asset turnover, low occupancy, a high percentage of nonsalary costs, high percentage of inpatients, high average length of stays, and low productivity. Broad capital access hospitals' factors include a high outstanding debt and a low average length of stay. (Solucient data, HFMA Financing the Future, 2003).

Thresholds for categorizing hospitals by their ability to access capital are as follows:

Table 1.2

	Broad Access	Limited Access
Operating Margin	More than 2%	Less than 0.0%
Debt Service Coverage Ratio	More than 3.5x	Less than 1.25x
Days Cash on Hand (Short-term)	n/a	Less than 5 days
Current Ratio	More than 2.0x	Less than 1.0x
Debt-to-Capitalization Ratio	0 to 35%	Less than 0% or more than 70%

Source: Financing the Future, "How Are Hospitals Financing the Future?" Report 1, HFMA, 2003.

Actual data for broad access and limited access hospitals for 2003 are as follows:

Table 1.3

	Broad Access	Limited Access
Median Operating Margin	4.7%	73%
Median Debt Service Coverage Ratio	8.3x	-0.1x
Short-term Cash on Hand	33.5 days	2.7 days
Debt-to-Capitalization Ratio	26.0%	82.0%

Source: Hospital & Health Networks, June 2004, pages 56-57.

The outlook for tax-exempt bonds is stable. Access will continue to be available to those facilities that have not reached their debt capacity limit and are rated above triple B. However, some facilities do not have access. A quarter of all hospitals surveyed have reached their debt capacity limit, and over 50% of rated hospitals are rated BBB or below.

Hospitals will rely more on philanthropy although recent trends indicate shrinking charitable giving. Healthcare facilities will continue to rely on capital leases, as this means of financing allows the facility to keep up with ever changing technology. However, due to increased Stark II regulation and related anti-kickback issues, physician investment in healthcare facilities is likely to decrease the likelihood of joint ventures. Facilities may increase their dependence on governmental programs, such as FHA 242, FHA 232, and Farmers Home Loan Administration programs.

Capital suppliers are looking for strong or improving profitability, liquidity, and capital structure ratios, a positive return on investment, and solid financial planning. Facilities with limited or no access to the capital markets face aging plant and equipment, an increased inability to attract or retain physicians, and a loss of market share, thereby losing revenues, profits and cash flow. (Byrd Jr. & McCue, 2003)

Fitch Rating Agency has expressed its concern regarding the ongoing healthcare industry pressures and risks including continued labor shortages, rising supply costs, increased competition with physicians/niche competitors, rising bad debt expense and growing capital needs and access to the capital markets. There were nine healthcare issue downgrades and two upgrades in the first quarter of 2004, consistent with the ratio in 2003, during which 37 healthcare issuers were downgraded and 10 were upgraded. "The expectation in both the acute care and long-term care areas for 2004 is for downgrades to continue to exceed upgrades, albeit at a slower pace than in 2003." (Fitch Ratings – Credit Trends in U.S. Public Finance Continues Decline, April 23, 2004).

Standard & Poor's Rating Agency recorded 14 upgrades and 19 downgrades during the first quarter of 2004. "While operating pressures continue, a major reason for some of the ratings being lowered this quarter is increased debt from new borrowings as organizations struggle with growing patient demand, competitive pressures, and rapidly changing technology. All of these

factors have contributed in some way to the need to pursue expansion opportunities and spend more capital dollars." (Standard & Poor's Ratings Direct, April 7, 2004)

RATINGS ANALYSIS

A facility obtaining publicly issued debt may undergo an assessment of its credit worthiness. A bond rating is a credit agency's assessment of the facility's ability to repay a specific debt. The bond rating will influence the cost of the financing (interest rate) and the ability to obtain financing. The three main credit rating agencies for healthcare facilities are Fitch Rating Agency, Moody's Investors Services, and Standard & Poor's (S&P) Rating Group.

Although each of these agencies uses similar evaluation techniques, their grading systems are different. Investment grades for an independent hospital may "grade" out as:

	<u>Fitch</u>	Moody's	S&P
High Dated	A A 1	A a 1	A A 1
High Rated	AA+	Aal	AA+
Low Rated	BBB-	Baa3	BBB-

Bond ratings are reviewed on a periodic basis to assess the reasonableness of the given rating in comparison with the facility's current financial condition. A facility's debt may be "upgraded" or improved when it shows improved financial performance, increased market share or market conditions, and/or a specific event such as merger, acquisition, endowment, or discontinuing non-profitable service lines. The alphabetic character would increase (with AAA being the highest grade). Conversely, a facility's debt may be "downgraded" or decreased when it shows a marked decline in financial condition, increased debt (either short or long-term), decreased market share or deteriorating market conditions, material increases in days of revenue in accounts receivable, and/or unfavorable changes in managed care or other payor reimbursement contracts.

Certain events may trigger an immediate review of a given bond rating by the agencies. These events may include restatement of reported earnings, rapid turnover of senior management, licensure or conditions of participation suspension or official warnings, and investigation or audit by the U.S. Office of the Inspector General or other official agencies.

Although non-profit healthcare facilities are not currently required to comply with the Sarbanes-Oxley Act of 2002 (SOX), it is anticipated that this segment of the industry will eventually be required to adhere to its policies and practices. This Act attempts to strengthen corporate governance and accountability, improve disclosure (transparency of financial operations), and increase auditor independence. Fitch Rating Agency considers the implementation of SOX to be a "best management practice", and will consider its implementation as a positive factor in assigning a bond rating.

METRIC ANALYSIS

A ratio expresses the relationship between two numbers, such as debt to equity. It can be used to make informed judgments about an organization. By itself, a single ratio is difficult to evaluate, unless some industry standards or values are available for comparative purposes.

Recently new terminology has been introduced to the healthcare industry. One may now "benchmark" one's facility (compared to industry or other facilities), and one may use "metrics" (ratios) in assessing its financial and operating characteristics.

Industry standards are available from a variety of sources: the major three rating agencies (Fitch Rating Agency, Moody's Investors Service, and Standard & Poor's Ratings Group), trade associations (American Hospital Association, Illinois Health Care Association, Healthcare Financial Management Association), and healthcare consulting and management companies (Solucient, Premier, Inc. and Ingenix). Each of these entities publishes healthcare financial and operating ratios and financial and operating data on a periodic basis. These data are classified according to numerous categories (bed size, ownership and control, urban/rural, and teaching/non-teaching) for comparative purposes. Additionally, it is useful to compare the same ratio over several periods of time for the facility itself. *However, in all cases, data and ratios should be compared using the same definitions and methods of calculations.*

Data are most readily obtainable from non-profit hospitals. These facilities can afford the annual membership fees charged by trade associations to participate in these benchmarking services. Proprietary facilities (hospitals, nursing homes, ambulatory surgical centers, and dialysis centers) restrict much of its data and consider certain operating and financial data and ratios to be private and confidential. Larger publicly traded for-profit companies are required to file quarterly reports with the Securities Exchange Commission (SEC). Additionally, stockbrokers will generally prepare stock report analyses and tracking updates for publicly traded companies. Data may also be obtained from the Medicare Cost Reports and from federal and state statistical bureaus.

Operating and financial data are difficult to compare among segments of the healthcare industry. An "apple-to-apple" approach is needed to compare "like" institutions. Problems may occur when:

- Comparing for-profit and not-for-profit hospitals, as for-profit facilities must incorporate the payment of income taxes, return on shareholder investment (dividends), and real estate taxes into its rates, cost structure and profit requirement.
- Comparing system and stand-alone facilities, as system facilities can transfer funds to/from each individual institution, thereby subsidizing the weaker institution(s).
- Comparing system-supported ambulatory surgical centers, nursing homes (services), and dialysis centers with stand-alone facilities, as system-supported facilities can be supported by transfer of funds from the corporate organization, thereby subsidizing the weaker institution(s).

Additionally, systems usually have the ability to recruit and retain highly compensated management and specialists who have the ability to operate their facilities in, sometimes, a more

efficient manner. Systems can also spread fixed overhead costs over several institutions resulting in lower per diem operating costs, have the ability to secure more cost efficient debt financing, and have the "name" or reputation to recruit medical and clinical staff on a regional or national basis.

FINANCIAL METRICS

Frequently examined financial ratios include:

Operating Margin (ratio of operating income to total revenue)

Definition: Operating Income/Total Revenue

Operating income is income from normal operations, including patient care and other operating activities minus the expenses associated with such activities. This is a critical ratio that measures how profitable the facility is when looking at the performance of its primary activities. This ratio does not include non-operating income from investments, contributions, gains from the sale of assets and other unrelated business activities. A rough rule-of-thumb would be that the minimum acceptable operating margin should approximate what a facility could earn on money market investments.

For-profit facilities generally achieve a larger operating margin. Their shareholders require it to generate enough "bottom-line" profit to pay shareholder dividends on their investments. This bottom-line may be achieved by running "leaner and meaner" with increased productivity, but it may more likely be due to increased efficiencies by negotiating managed care contracts and company-wide group purchasing discounts, centralized administrative functions, and more sophisticated software monitoring programs and operating controls.

Current Ratio (ratio of current assets to current liabilities)

Definition: Total Current Cash Assets/Total Current Liabilities

This ratio measures the facility's ability to meet its current liabilities with its current assets. A ratio of 1.0 or higher indicates that all current liabilities could be adequately covered by the facility's existing current assets. A healthcare industry standard is a ratio of 2.0 times current assets to current liabilities.

The current ratio may be affected by the amount of cash classified into long-term board-designated investments. Some of these investment accounts may be used to pay current liabilities if they are unrestricted in nature. For example, a facility could liquidate (convert to current use) such accounts as other long-term investments and board-designated building fund deposits. Any board-designated investment may be altered upon approval of the Board of Trustees. Externally-required restricted investments such as a Bond Debt Service Reserve Fund would not be available for other uses.

In addition, system affiliated or for-profit companies with multiple facilities may "sweep" its cash accounts. This procedure transfers cash from the individual facilities to the corporate office where the funds are cumulatively invested in larger investment "jumbo" vehicles. These transfers may be recorded in a non-current account shown as "due to/due from corporate".

Average Days in Accounts Receivable (ratio of net patient accounts receivable to total revenue/365)

Definition: Net Patient Accounts Receivable/(Net Patient Service Revenue/365)

This ratio measures the average number of days in the collection period from date of discharge to date of collection. A larger number of days represent cash that is unavailable for use in its operations.

The median number of days in accounts receivable for Illinois hospitals in 2003 was 63.3 days. However, individual payors' average payment cycles may vary drastically from the overall median. Facilities should prepare an aging of outstanding patient accounts receivable by payor type. Some managed care contracts call for payment within a certain time period. Otherwise, the facility would be entitled to interest income payments on the past due accounts. Medicare has become one of the more prompt paying payors, with one exception. If a facility does not meet electronic billing and transaction standards, its bills will not begin to be processed until at least 14 days after receipt by the Medicare program.

Medicaid payments may be substantially delayed due to state funding deficits or the lack of approved state budgets. This would cause a higher number of days in accounts receivable. However, in long-term care facilities with a high number of private pay patients, the number of days in accounts receivable may be extremely low. Most long-term care facilities prebill for the coming month's services, similar to paying rent on the first of the month for the current month.

Debt Service Coverage Ratio – Total (ratio of total income plus interest expense plus depreciation and amortization to interest expense and current portion of long term debt) Definition: (Total Income + Interest Expense + Depreciation Expense + Amortization Expense)/(Interest Expense + Current Portion of Long-Term Debt)

The annual debt service payment is the total mortgage or bond payment for the year. This payment is composed of both the principal repayment and related interest expense.

Debt service coverage is affected by both profitability and depreciation patterns. Though depreciation is a non-cash transaction, it is often used to set rates for the institution. In the early years after a major construction project has been completed, the depreciation expense may be quite large. In later years, it may decrease or cease to exist.

This ratio measures the ability of the facility to cover current debt obligations with funds derived from both operating and non-operating activities. Higher ratios indicate a facility is better able to

meet its financing commitments. A ratio of 1.0 indicates that average income would just cover current interest and principal payments on long-term debt.

The median debt service coverage ratio for Illinois facilities in 2003 was 3.37 times.

Long-term creditors usually require at least a 1.5x coverage ratio in assessing the facility's financial condition. Government subsidized programs may require a slightly lower coverage ratio (e.g. 1.35x for a Federal Housing Administration (FHA) backed mortgage).

Equity Financing (ratio of net assets to total assets)

Definition: Total Net Assets/Total Assets

This ratio reflects the ability of a facility to take on more debt and is measured by the proportion of total assets financed by equity. Low values indicate a facility has used substantial debt financing to fund asset acquisition and, therefore, may have difficulty taking on more debt to finance further asset acquisition. Conversely, the *debt to net asset* ratio would show the amount of debt that is financing capital acquisitions.

The current 2003 equity financing ratio for Illinois hospitals is 59.3%. A rule-of-thumb should be that the ratio should be 50% or more that reflects that the facility "owns" the facility rather than its creditors. Illinois hospitals are approaching that critical phase of over reliance on credit to fund capital assets acquisitions.

Capital Expense Ratio (capital expenses as a percentage of total operating expenses)

Definition: (Interest Expense + Depreciation and Amortization Expenses)/ Total Operating Expenses

Capital expenses have become extremely important since the Medicare program has fully phased in prospective reimbursement of capital expenses. During the ten-year phase-in period, facilities were reimbursed on a blended rate of actual capital expenses and budgeted capital expenses.

The future situation for facilities wishing to undertake major renovation or new construction will be as follows:

- Facilities that do not undertake major renovation or new construction will have lower actual capital expense costs and will therefore "make money" on Medicare reimbursement since the prospective Medicare rates may be higher than the facility's actual capital expense rate.
- Facilities that undertake major renovation or new construction will have higher actual capital expense costs than the prospective Medicare rate, and would therefore "lose money" on each Medicare patient. These deficits would have to be covered or subsidized by other patient payor sources or through a possible combination of fundraising, reduced operating costs, or sale of assets.

Average Age of Plant (years)

Definition: Accumulated Depreciation/Depreciation Expense

This ratio indicates the average financial age of the capital assets of the facility. The older the average age, the greater the short term need for capital resources to replace its building and equipment.

The 2003 Illinois average age of plant for hospitals was 10.3 years, higher than the average plant age shown in national rating agency and industry association surveys. This indicates that Illinois hospitals will shortly need to make capital investment decisions as to renovating or replacing its buildings and equipment.

Facilities should also calculate each component of its accumulated depreciation and depreciation expense for buildings and equipment separately. Since equipment has a substantially lower useful life, its average age should reflect the replacement of large pieces of expensive medical equipment on a frequent basis. The average age of such major pieces of medical equipment should generally be less than an average of seven years.

By separately calculating the building's average age, one could have a better understanding of the average age of the building itself. Most healthcare facilities "componentize" the costs of its buildings. Attached building equipment such as elevators and escalators may be assigned a useful life of 15-20 years, as would be the roof. Carpeting would be assigned a useful life of 5-7 years while the "bricks and mortar" would have an assigned economic useful life of 40 years. By componentizing a new facility, its average useful economic life (the combination of building and attached building equipment) would average 26-28 years.

HOSPITAL METRICS

There are 228 hospitals in the State of Illinois of which 198 are acute-care community based and the remainder are non-acute (e.g. psychiatric) facilities. These facilities include:

- 81 small hospitals with 150 beds or less
- 71 of them rural (outside of the metropolitan service area), of which 40 are classified as critical access hospitals
- 17 of which are disproportionate share facilities
- 25 of which are classified as public facilities (city, township, district or county)
- 12 of them rural referral centers
- 7 classified as sole community hospitals
- 58 are church operated, and
- 15 (7%) are investor owned

Source: Illinois Hospital Association, February 2004

"There are ten Metropolitan Statistical Areas (MSAs) in Illinois. Two of these, Chicago and St. Louis are known as "Large Urban" areas. One-half of Illinois hospitals are located in these Large Urban areas, with 44.4% in the Chicago MSA. The remaining eight Illinois MSAs are known as "Other Urban" areas, in which 13.6% of Illinois hospitals are located. The portion of the state that is not in an MSA is "Rural". 36.4% of Illinois hospitals are located in rural areas." Source: Focus on Illinois Community Hospitals, Illinois Hospital Association, 2003.

Data tables summarizing current hospital metrics are included in Appendix A.

Table A-1 HFMA Knowledge Network's Key Hospital Financial Statistics and Ratio Medians as of November 2003 were released in June 2004. It summarizes key financial ratios collected by seven different organizations. Sample size ranged from a low of 208 hospitals (Fitch) to a high of 4,301 hospitals (Data Advance Corp.). In most cases, ratios collected by the three rating agencies (Fitch, Moody's and S&P) were stronger than ratios collected by the other four organizations. These results are reasonable, as stronger facilities would obtain their capital financing through the issuance of rated public debt rather than by other sources. This can be demonstrated by the statistic Net patient revenue in thousands of dollars. For the three rating agencies' metric, Net patient revenue ranged from \$161,822,000 to \$286,100,000. The other four organizations' metric ranged from \$45,278,000 to \$124,328,000.

Table A-2 compared the current Illinois Health Facilities Planning Board's (IHFPB) standards with Fitch Rating Agency's Median and "A" rated metrics and Standard & Poor's Rating Group's "A" rated stand-alone hospitals. In four of the five metrics, the IHFPB's standards were less than the actual results reported by the rating agencies.

- IHFPB's standard for days cash on hand was 90 days as compared to rating agencies' metrics ranging from 133.2 to 176 days.
- IHFPB's standard for the cushion ratio was 5 times as compared to rating agencies' metrics ranging from 9.8 to 12.5 times.
- IHFPB's standard for the maximum annual debt service was 1.75 times as compared to rating agencies' metrics ranging from 3.1 to 3.5 times.
- IHFPB's standard for debt to capitalization was 60% as compared to rating agencies' metrics ranging from 36.1% to 41.9%.

Only the IHFPB's metric for operating margin (3.5%) was higher than the actual operating margins achieved by the surveyed rating agency facilities (1.5% to 2.0%).

Table A-3(1) presented Fitch Ratings Agency's 2003 metrics for median, and "AA", "A", "BBB" and below "BB" rated hospitals and health care systems. As expected, the better the rating (with "AA" being the best in this presentation of data), the stronger the reported metric.

Table A-3(2) compared the three rating agencies' 2002 medians for four key metrics for represented rating categories. No significant variances among rating agencies were noted. As expected, the better the rating (with "AA" being the best in this presentation of data), the stronger the reported metric.

Tables A-4(1)-(3) and Table 5 were prepared from data released June 26, 2004 by Ingenix: Almanac of Hospital Financial and Operating Indicators – 2004. Data used to prepare their reports came from three sources:

- Audited hospital financial statements (3500 hospitals)
- Strategic operating indicator data submitted by 1700 hospitals, and
- Medicare cost reports (6000 hospitals)

Specifically, 39 Illinois hospitals submitted financial data.

Table A-4(1) presented State of Illinois 2002 capital financing and operating metrics based on percentile. These data were released June 26, 2004 by Ingenix: Almanac of Hospital Financial and Operating Indicators – 2004. The higher the percentile (90%), the better the facilities performed. Overall, the median values were higher than the IHFPB's standards with the exception of total margin, which was lower than the Board's 3.5% operating margin standard.

Table A-4(2) presented State of Illinois 2002 capital financing and operating metrics based on total Illinois, "A" Rated Illinois facilities, high and low performance facilities, system and non-system facilities and teaching and non-teaching facilities. These data were released June 26, 2004 by Ingenix: Almanac of Hospital Financial and Operating Indicators – 2004. As expected, high performance facilities had stronger reported metrics than low performance, "A" rated, or Illinois median metrics. System facilities had varying results as compared to non-system facilities, as did teaching facilities versus non-teaching facilities.

- System facilities generally had a lower number of days of cash on hand from short-term sources and from all sources. It appears that system facilities are better able to efficiently manage their cash sources.
- As expected, system facilities have a much greater financial flexibility index (1.801) as compared to non-system facilities (1.285).
- Teaching facilities had mixed results. Teaching facilities had lower total margin, current ratio, and financial flexibility index results as compared to non-teaching facilities. It appears that the impact of higher costs, length of stay, payor mix, and intensity of service factors negatively impact the financial results of these facilities.
- Teaching facilities had a higher percentage of occupancy (55.23%) versus the 40.65% average occupancy for non-teaching facilities.

Table A-4(3) presented State of Illinois 2002 capital financing and operating metrics based on bed size and total revenues for urban and rural facilities. These data were released June 26, 2004 by Ingenix: Almanac of Hospital Financial and Operating Indicators – 2004.

• Total margin, the financial flexibility index, and the current ratio were higher for facilities under 100 beds and for rural facilities. Some recent publications have noted that increased critical access hospital reimbursement and rural hospital reimbursement have strengthened these facilities. Illinois has a large number of critical access hospitals (40 of the 71 rural facilities), which may account for this variance.

- Days in patient accounts receivable decreased as the facilities grew larger, as it would be expected that larger facilities would have more personnel with specialized training in billing and collections to manage the business office function.
- Average occupancy and average length of stay statistics were greater as the size of the facility increased.

Table A-5 presented State of Illinois 2002 capital financing and operating metrics for median and "A" rated facilities. These data were released June 26, 2004 by Ingenix: Almanac of Hospital Financial and Operating Indicators – 2004.

- Unusual results included days in patient accounts receivable for small "A+" to "A-" hospitals averaging 73.0 days as compared to other Illinois facilities that ranged from 51.5 to 59.7 days. Again, this may be attributed to larger facilities being able to attract and retain more skilled billing and collections personnel.
- As reflected in Table A-4(3), smaller hospitals had a more positive cushion ratio.

The Board may wish to review the stringency of its net operating margin standard in light of actual average operating results. Additionally, for the purpose of comparability and to aid in its assessment of an institution's economic and financial condition, the Board may wish to further segregate its standards to provide additional criteria for:

- . for-profit versus non-for-profit facilities,
- . rural versus urban facilities,
- . rural hospitals designated as critical access facilities, and
- . disproportionate share facilities.

NON-HOSPITAL METRICS

Non-hospitals as defined by this report are nursing homes, ambulatory surgical (treatment) centers and end stage renal disease (dialysis) centers. Data for these facilities are more difficult to obtain and compare within classifications due to the proprietary nature of many of the facilities, the corporate consolidated reporting of financial and operating results of systems and chains, and types of ownership.

Nursing Homes

Generically, nursing homes, now properly referred to as "nursing facilities" may be a combination of many services. They may cover sheltered care, assisted living, intermediate and/or skilled nursing care. Often, other facilities such as subsidized senior housing, board and care homes and continuing care retirement communities may be misclassified as nursing homes. For data collection purposes, the National Center for Health Statistics defined a nursing home as "a facility with three beds or more that is either licensed as a nursing home by its state, certified as a nursing facility under Medicare, identified as a nursing care unit of a retirement center, or determined to provide nursing or medical care" (NCHS, 2000).

Nationally, there are over 17,000 nursing facility providers in the United States providing over 1.8 million nursing facility beds. 13% of these beds are hospital-based. Additional information includes:

- 52% of facilities are part of a chain (a multi-facility organization)
- 107 average facility bed size
- 83% average occupancy rate
- ownership averages 66% for-profit, 27% not-for-profit and 7% government
- nursing facility reimbursement payor mix averages 8% Medicare, 68% Medicaid and 23% private pay
- Over 105,000 special care beds for Alzheimer, AIDS, hospice, and ventilator patients. Source: AHCA Statistics: Facts and Trends: The Nursing Facility Sourcebook, American Health Care Association, 2001

Fitch Rating Agency's outlook for the nonprofit nursing home sector is negative due to severe financial pressures from inadequate Medicaid reimbursement. "Nonprofit nursing homes' weak financial profiles have limited their ability to access capital, and consequently, many homes have accrued substantial deferred capital expenditures. In addition, increased scrutiny from governmental regulators regarding the quality of care provided has added pressure on expenses."

Fitch believes investment-grade ratings are now more difficult for nonprofit nursing homes to attain. It expects a decline in credit quality in 2003 and maintains a long-term negative outlook for the sector. (Fitch Ratings: 2003 Outlook for Nonprofit Nursing Homes, February 12, 2003).

Characteristics of an investment-grade rated nursing home as used by the three rating agencies to assess credit-worthiness include an:

• Effective, stable management team

- Diversified payor mix, minimizing Medicaid utilization
- Low staff turnover, especially among nurse aides positions
- Stabilized resident (patient) turnover
- Occupancy at least 90%
- Strong financial condition, including debt service coverage, profit margins and liquidity
- Strong share of market and limited competition, and
- Equitable Medicaid reimbursement

Expected ratios for investment-grade nursing homes (Fitch) include:

- 180-220 days cash on hand
- 5.0 to 8.0 cushion ratio (x)
- 60-75 cash to debt (%)
- 1% to 3% operating margin
- 1.8 to 2.2 times maximum annual debt service coverage.

Source: Fitch Ratings Agency, Rating Guidelines for Nonprofit Nursing Homes, March 29, 2000.

Fitch's 2004 assessment of the financial state of the nation's nursing homes continues to be negative. It points out that besides inadequate Medicaid reimbursement, rising insurance and labor expenses continue to negatively impact financial results. Currently Fitch has six ratings on freestanding nursing homes with the last nursing home rated in 1999. "Fitch does not expect to see many investment-grade nursing homes; however, the facilities that have obtained investment-grade ratings typically have additional support through an endowment or affiliation with a large health system". (Fitch Rating Agency, 2004 Industry Outlook for Nonprofit Continuing Care Retirement Communities and Nursing Homes, March 3, 2004).

Specifically in the State of Illinois, Illinois Medicaid nursing home reimbursement averages \$85.00 per day. This averages less than \$3.55 an hour based on a 24-hour day. Melvin Siegel, a member of the Illinois Nursing Home Administrators Association "estimates that 60 to 70% of Illinois nursing homes are operating in the red or are barely keeping their finances in the black". (Interview with Doug Wilson, July 30, 2004,. Quincy Herald-Whig). (Note that Medicaid nursing home reimbursement can vary widely based on the geographic region of the State).

Perhaps, the best analysis of the state of nursing homes in the United States today may be found in the January 2004 released study by the New York Association of Homes and Services for the Aging: "Fighting for Survival: The Dire State of Nursing Home Finances in New York State". Many of this report's findings are applicable to the state of nursing homes in the State of Illinois. Among their findings were over 52% of nursing homes had a negative operating margin in the years 2000-2002, with 67.5% of rural nursing homes having a negative operating margin. Median debt service coverage averaged 1.5 times in 2002, with a cushion ratio lower than 2.5 times.

Statistics for for-profit nursing home chains reflect a negative outlook as well. Beverly Enterprises' 2003 financial results included a 1.2% operating margin, 1.2 times current ratio, and a 1.7% return on assets. Manor Care's 2003 financial results included a 3.9% operating margin,

1.5 times current ratio and 5.0% return on assets. Perhaps one factor of Beverly's lower results is its payor mix: 53% Medicaid, 26% Medicare and 21% from private sources as compared to Manor Care's payor mix of 33% Medicaid, 32% Medicare and 35% from private sources. (Standard & Poor's Ratings Group Stock Reports, 2004).

Nursing Home occupancy continues to decline. From the over 90% utilization of nursing home beds in the 1990's, current 2003 occupancy averages 83% for intermediate and skilled nursing facilities. Alternative means of care including assisted living facilities, over age 55 developments with attached nursing services, adult day care, and home health services, have negatively impacted nursing home utilization. This trend is expected to continue.

Financial and operating data for nursing homes are more difficult to obtain than for hospital facilities. For-profit chains report their operations on a consolidated basis rather than by individual facility. Hospitals that have distinct long-term care units within their facility report operations on a facility-wide basis rather than by individual department. One source of financial and operating data for nursing homes is the Medicare cost report. It may be obtained through the Federal Freedom of Information Act. However, each facility's cost report must be requested separately.

TABLE B-1 "Nursing Homes" compares the Illinois Health Facilities Planning Board standards and Fitch investment grade guidelines for non-profit nursing homes with BizMiner data collected from 12,094 facilities and with three investor-owned chain systems. 2003 financial and operating metrics indicate:

- IHFPB standards are within the range of the Fitch guidelines
- BizMiner facilities reported an overall .3% net operating loss as compared to the IHFPB standard of a 2.5% net margin and had overall weaker results than either the IHFPB standards or the operating results of the three reported for-profit systems
- Two of the three for-profit chains did not meet the IHFPB net margin standard; only Manor Care (3.9%) exceeded the IHFPB standard of 2.5%
- Earnings per share for the for-profit chains ranged from a low of \$.22 per share (Beverly Enterprises, Inc.) to a high of \$1.41 per share for Kindred Healthcare Inc.

The Board should continue to monitor the impact of alternative delivery system changes on the utilization of nursing facilities.

Ambulatory Surgical (Treatment) Centers

Innovations in medical technology (e.g. minimally invasive surgery) along with economic pressures from government and other third-party payors, have hastened the development of ambulatory surgical centers (ASCs). Ambulatory surgical centers are facilities with an organized medical staff of physicians and are equipped and operated to perform surgical procedures on a same-day basis. These procedures cannot be properly performed in a physician's office and can be more economically and efficiently handled on an outpatient basis rather than on an inpatient basis. Cost efficiencies may be achieved by specializing in one type

of surgery. The top five surgical areas of specialization are ophthalmology, gastroenterology, orthopaedics, OB/GYN, and plastic surgery.

These facilities may be operated as a distinct part of a hospital's campus or at a remote location or as a freestanding surgery center. This type of organization provides an excellent investment opportunity for physicians and investors, as the payor mix is heavily commercial insurance. Approximately 20% of ASCs are owned and operated by corporate chains, 74.0% are independently owned, and 6% are hospital owned centers. Two of the largest corporate chains with ASCs are Columbia/HCA Inc., and HealthSouth. (SMG Marketing Group Inc., Chicago IL, 2003).

As of 2002, there were 92 ambulatory surgical (treatment) centers in Illinois. 90% of them were investor-owned. Payment sources were 69.3% insurance, 22.0% Medicare, 4.2% private pay, 2.0% Medicaid, and 1.9 % from other sources. (State Summary of Ambulatory Surgical Treatment Profiles for Year 2002, Illinois Center for Health Statistics, October 2003)

Due to the proprietary nature of these facilities, it is difficult to obtain financial and operating data. Publicly traded for-profit chains report financial and operating results on a consolidated basis. Privately owned facilities are not required to publish their financial and operating results. Perhaps the Illinois Health Facilities Planning Board has the most current and complete financial and operating data in its recent certificate of need applications.

TABLE B-2 compared Illinois Health Facilities Planning Board standards with actual financial and operating results collected from BizMiner's 537 reporting facilities. This comparison reflects stronger actual operating results than the IHFPB standard in all reportable categories, including current ratio (1.8x as compared to the 1.5x IHFPB standard) and a net (operating) margin of 5.81% as compared to the 2.5% IHFPB standard.

The Board may wish to further investigate the similarities and differences in non-for-profit and for-profit facility results and develop new standards for each category.

End Stage Renal Disease (Dialysis) Centers

During the 1960's, advancing medical technology brought about the ability to cleanse waste from the blood of renal failure patients. Effective July 1, 1972, the Medicare program covered end stage renal dialysis patients who were eligible for social security and for their children if the parent was eligible for social security coverage. This program covers patients after ninety days of care for commercial dialysis and from day one for self-dialysis or kidney transplantation. Most commercial insurance policies, Medicaid programs, and other third-payors cover these procedures.

Hemodialysis allows the use of an artificial kidney machine to receive waste-filled blood from the patient's bloodstream, filter it, and return the dialyzed blood to the patient's body. The procedure is done usually three times a week. This procedure may be done at a commercial dialysis center or at home by the patient with the help of a family member or friend.

Approximately 30% of renal patients are capable of in-home dialysis. Medicare will pay for the initial patient and assistant training, the machine, and supplies for these home dialysis patients. Patients can also perform peritoneal dialysis that allows the patient to perform the procedure within the patient's abdominal cavity. (Chabner, 1996)

Currently there are 299,591 end stage renal disease patients being dialyzed in the United States who are being provided services by 4,443 commercial providers. These providers provide clinic-based hemodialysis care, and may also provide services and supplies for home dialysis patients. Medical experts have forecasted that the need for hemodialysis will increase 3.0% per annum due to the rising rates of obesity and diabetes, two diseases that may lead to renal failure. (www.Medicare.gov).

Advancing medical technology is allowing a greater number of patients to have an alternative to clinic-based hemodialysis. For example, a new machine developed by Aksys Ltd., allows the patient to dialyze on a daily basis, so that waste and fluids can be better controlled. The Medicare program, as a cost-savings measure, is encouraging patients to transfer to self-dialysis programs.

Financial and operating data for these facilities are difficult to obtain. Most of these centers are either operated as a department of a hospital or as freestanding for-profit facilities. However, due to the capital expenditure requirements to equip such a center, most for-profit centers are operated by several publicly traded for-profit companies. Perhaps the Illinois Health Facilities Planning Board has the most current and complete financial and operating data through its recent certificate of need applications. Unfortunately, the Illinois Center for Health Statistics does not collect complete date for these centers. BizMiner collects marketing data for 534 end stage renal dialysis centers, but does not collect financial and operating data.

TABLE B-3 presented a comparison of Illinois Health Facilities Planning Board standards with the actual operating results of three publicly traded for-profit chains. The results showed:

- Actual operating margins to be substantially stronger than the IHFPB standard of 2.5%
- Earnings per share ranging from \$1.13 to \$1.37 per share
- An acceptable debt/capitalization ratio for two of the companies
- A stronger than average current ratio

The Board may wish to further investigate the financial results of non-for-profit and for-profit facilities and develop new standards for each category. Additionally, the Board should continue to monitor the impact of self-dialysis improvements on the utilization of commercial dialysis centers.

ITEMS TO CONSIDER

During the course of this study, several issues were identified that warrant further investigation. They include:

- For the purpose of comparability and to aid in its assessment of an institution's economic and financial condition, the Board may wish to further segregate it standards to provide additional criteria for:
 - . for-profit versus non-for-profit facilities
 - . rural versus urban facilities
 - . rural hospitals designated as critical access facilities disproportionate share facilities (with high Medicaid and indigent care populations)
- Establish and review its position on the development of specialty hospitals. Currently there is an eighteen month federal moratorium on construction of physician-owned specialty hospitals. These facilities could siphon lucrative business from community hospitals, thereby deteriorating their financial condition. Refer to the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, Section 507.
- Assess the impact of advancing medical technology and delivery of care on future utilization of nursing homes and dialysis centers. Refer to the nursing home and end stage renal (dialysis) centers portions of this report.
- Require audited final construction project reports. Enforce timely filing of the final construction project reports. Enforce penalty provisions for delinquent filings and unjustified cost overruns. Update data bases to reflect final cost construction data.
- Review the Federal Trade Commission's 2004 report on health care competition. It discusses the impact of certificate of need legislation on "free trade" competition.
- Consider modification of the certificate of need application to include analysis of the
 facility's Medicare capital prospective payment versus its projected capital expenses.
 Capital expenses include depreciation, interest, and amortization expenses. New projects
 may cause a facility to not be fully reimbursed for its actual capital expenses. This deficit
 would then have to be subsidized by additional fundraising, additional operating cost
 containment, and/or cost-shifting to other payors.
- Review the provisions of the Sarbanes-Oxley Act (SOX). Consider certificate of need (CON) application information requirements for self-disclosure of potential conflict of interest statements, mandatory disclosure of adverse material events during the application, approval, and construction process, mandatory disclosure of financial statement restatements during the CON and construction process, and mandatory disclosure of sentinel events relating to Office of Inspector General and other governmental and regulatory (JCAHO) investigations during the CON and construction process.

- Update the State bed inventory survey.
- Update determination of need criteria.
- Update new population statistics to include the results of special censuses performed by the U.S. Bureau of the Census.
- Develop an interactive database that would allow users to "mine" data collected from certificate of need applications, staff reports, and final decisions.

CONCLUSION

Our research provides current financial and operating data that may be used to update the Illinois Health Facilities Planning Board's financial and operating standards. In particular, we note that the standard for the net operating margin for all facility types (hospitals, nursing homes, ambulatory surgical treatment centers, and end stage renal disease (dialysis) centers should be reviewed for appropriateness.

The students and faculty of the graduate Health Administration Program at Governors State University appreciate the opportunity to participate in this research study. Proceeds of this grant were used to fund graduate student tuition waivers, graduate research associate stipends, and funding adjunct faculty positions to allow for additional course availability. Faculty members served as pro-bono reviewers and supervisors in the preparation of this report.

Faculty Advisors and Research Investigators

Donna L. Gellatly MBA FHFMA CPA Kyusuk Chung Ph.D., MS

Graduate Student Research Associates

Lisa Aponte-Soto Yang Hei Shilpa Gupta

25

APPENDICES DATA TABLES

A. Hospitals

A-1	HFMA Knowledge Network	
	Key Hospital Financial Statistics and Ratio Medians	
	November 2003	27
A-2	Non Profit Hospitals and Health Care Systems	
	Comparison of IHFPB, Fitch and S&P Standards, 2003	30
A-3(1)	Non Profit Hospitals and Health Care Systems	
	By Rating Category, Fitch Ratings Agency, 2003	32
A-3(2)	Financial Performance Related to Credit Rating by Rating Agency	34
A-4	Almanac of Hospital Financial and Operating Indicators,	
	Ingenix, 2004	
A-4(1)	Illinois, 2002 Data by Percentile	36
A-4(2)	Illinois, 2002 Median Values by Performance, System versus	
	Non-system, and Teaching versus Non-teaching Facilities	37
A-4(3)	Illinois 2002 Median Values by Bed Size and Revenues	38
A-5	"A" Rated Facilities by Rating Agency	39
B. Non-Ho	spitals	
B-1	Nursing Homes	42
B-2	Ambulatory Surgical (Treatment) Centers	43
B-3	End Stage Renal Disease (Dialysis) Centers	44

TABLE A-1 HFMA Knowledge Network Key Hospital Financial Statistics and Ratio Medians – November 2003

	Moody's (1)	S & P (2)	Fitch (3)	Solucient (4)	Ingenix	Premier, In	Data
							Advan
Measure	All ratings	All Ratings	All Ratings	HBSI, HCIA	CHIPS (5)	(6)	Corp (7)
Sample size	343	572	208	751	1,820	381	4,301
Average length of stay (%) (1)	4.80	4.60	N/A	4.80	4.14	4.53	4.81
Maintained bed occupancy (%) (2)	67.90	63.50	N/A	65.56	56.49	66.37	59.41
Net patient revenue (\$000) (3)	223,414	161,822	286,100	124,328	45,278	49,376	82,531
Operating margin (%) (4)	1.70	1.80	1.50	3.80	1.14	1.65	(1.84)
Excess margin (5)	3.80	2.40	2.00	4.41	3.10	2.58	5.15
Debt service coverage (x) (6)	3.72	2.70	2.70	4.07	2.96	N/A	N/A
Current ratio (x) (7)	2.00	1.87	N/A	2.12	2.07	2.25	1.89
Cash on hand (days) (8)	129.90	131.00	133.20	70.03	77.50	N/A	33.80
Cushion ratio (%) (9)	10.50	9.60	9.80	N/A	8.50	N/A	N/A
Accounts receivable (days) (10)	57.80	57.40	57.60	57.95	59.40	54.63	65.28
Average payment period (days)	59.90	61.40	65.50	53.70	54.00	N/A	71.87
(11)							
Average age pf plant (years) (12)	9.30	9.40	9.50	N/A	9.67	N/A	9.38
Debt-to-capitalization (%) (13)	41.60	39.20	39.20	43.20	26.60	31.70	31.74
Capital expense (%) (14)	N/A	7.60	N/A	7.69	6.60	6.70	6.48

Source: Healthcare Financial Management Association (HFMA), 2003

- 1. Moody's Investors Service, 2003 Not-For-Profit Health Care Medians, based on 2002 audits
- 2. Standard & Poor's Ratings Group, 2003 Median Healthcare Ratios
- 3. FITCH, 2003 Median Ratios for Nonprofit Hospitals and Health Care Systems
- 4. Solucient 2003 ACTION O-I Program (January December 2003 median data)
- 5. 2003 Ingenix, Data from 2002 Hospital Financial and Operating Statistics
- 6. Premier, Inc. Operations Outlook for the Year Ended June 30, 2003
- 7. Data Advantage Corporation, For-Profit & Not-For Profit Health Care Medians 2003

Table A-1 Definitions of Ratios:

- 1. Average length of stay (days): The average stay counted by days of all or a class of inpatients discharged over a given period. Used as an indicator of efficiency in containing inpatient service costs. Average length of stay (days) = (Patient days) / (Total discharges)
- 2. Maintained bed occupancy (%): A measure of the volume and utilization of inpatient services Maintained bed occupancy = (Patient days x 100) / (Maintained beds x 365)
- 3. Net patient revenues (\$000): A measure of the relative size of an organization. Net patient revenues = Gross revenue (contractual allowances + provision for charity and uncollectible accounts)
- 4. Operating margin (%): This profitability indicator shows the income derived from patient care operations. Profitability indicators, measure the extent to which the organization is using its financial and physical assets to generate a profit. Operating margin (%) = (Total operating revenue Total operating expenses) / (Total operating revenue)
- 5. Excess margin (%): This measure goes beyond the operating margin to include all sources of income and expenses. Other sources of income besides those from patient care operations have become increasing important to hospitals. Excess margin (%) = (Total operating revenue total operating expenses + non-operating revenue) / (Total operating revenue + non-operating revenue)
- 6. Debt service coverage ratio (x): A ratio that measures the organization's ability to meet its debt repayments. A declining ratio number can indicate that an organization is in danger of becoming insolvent. Debt service coverage ratio (x) = (net revenue available for debt service) / (Principal payment + interest expense)
- 7. Current ratio (x): This liquidity indicator shows the number of times short-term obligations can be met from short-term creditors. Because it provides an indication of the ability to pay liabilities, a high ratio number is one way short-term creditors evaluate their margin of safety. Current ratio (x) = (Total current assets) / (Total current liabilities)
- 8. Cash on hand (days): This solvency indicator measures the number of days an organization can pay its cash operating expenses if none of the accounts receivable were collected. This liquidity indicator shows the minimal survival period of an organization. Cash on hand (days) = ((Cash and cash equivalents + Board designated funds for capital) x 365) / (Total operating expenses depreciation and amortization expenses)
- 9. Cushion ratio (x): A measure of the capital structure of the organization. This ratio is important in evaluating the financial risk position of an organization. Cushion ratio (x) = (Cash and cash equivalents + board designated funds for capital) / (Estimated future peak debt service
- 10. Accounts receivable (days): A measure of the efficiency of the collections function. Accounts receivable (days) = (net patient accounts receivable x 365) / (net patient revenue)

Table A-1 Definitions of Ratios:

- 11. Average payment period (days): A measure of how efficiently an organization pays its bills. Average payment period (days) = (Total current liabilities X 365) / (Total operating expenses depreciation and amortization expenses)
- 12. Average age of plant (years): Indicates the financial age of the fixed assets of the hospital. The older the average age, the greater the short term need for capital resources. Average age of plant = Accumulated Depreciation/Depreciation Expense.
- 13. Debt-to-capitalization (%): A measure of the long-term sources of debt financing. Debt-to-capitalization (%) = (long-term debt) / (long-term debt + unrestricted fund balance)
- 14. Capital expense (%): A measure of the capital structure and the degree of flexibility an organization might have in raising capital. Capital expense (%) = (Interest expense + depreciation & amortization expenses) / (Total operating expenses)

TABLE A-2 Non Profit Hospitals and Health Care Systems COMPARISON OF IHFPB, FITCH, AND S&P STANDARDS

	IHFPB Standards	Fitch Rating Agency 2003 Non-Profit		Standard & Poor's Rating Group 2003 Stand Alone Hospitals		
		Median	A	A		
Days Cash on Hand (1)	90	133.2	155.2	176		
Days in Accounts Receivable (2)		57.6	57.3	57.4		
Cushion Ratio (x) (3)	5	9.8	11.4	12.5		
Days in Current Liabilities (9)		65.5	62.1	57.9		
Cash to Debt (%) (10)		91.6	99.5	105.8		
Operating Margin (%) (4)	3.5	1.5	1.8	2.0		
Excess Margin (%) (5)		2.0	2.9	3.2		
EBITDA Margin (%) (11)		9.1	9.7	11.1		
Cash Flow from Operations Before Interest (CFFOBI) Margin (%) (12)		10.3	10.7	13.9		
Personnel Costs as % of Total Operating Revenue (13)		52.0	50.9	52.5		
Bad Debt Expense as % of Total Operating Revenue (14)		5.1	5.2	4.9		
Maximum Annual Debt Service (x) (6)	1.75	3.4	3.5	3.1		
Debt to EBITDA (x) (18)		4.0	3.5	3.3		
Debt to Capitalization (%) (8)	60	41.9	39.3	36.1		
Average Age of Plant (Years) (7)		9.5	9.2	9.2		

Sources: Illinois Health Facilities Planning Board Standards, 2004 Fitch Rating Agency: 2003 Non-Profit Hospital Ratios

Standard & Poor's Rating Group: 2003 Stand Alone Hospitals

Table A-2 Definition of Ratios:

Financial Ratio Calculation

- 1. Cash on hand (days) = ((Cash and Cash Equivalents + Board Designated Funds for Capital) * 365) / (Total operating expenses depreciation and amortization expenses)
- 2. Accounts receivable (days) = (Net patient accounts receivable x 365) / net patient revenues
- 3. Cushion ratio (%) = (Cash + Short Term Investments + Unrestricted Long Term Inv.) / (Principal + interest payments)
- 4. Operating margin (%) = (Total operating revenues Total operating revenues) $\times 100$
- 5. Excess margin (%) = (Total operating revenues –+Non-operating revenues Total operating expenses) / (Total operating revenues + Non-operating revenues) X 100
- 6. Debt service coverage (x) = (Excess of Revenues over Expenses + Depreciation + Interest Exp.) / (Principal + interest payments)
- 7. Average age of plant (years) = (Accumulated Depreciation) / (Depreciation Expense)
- 8. Debt-to-Capitalization (%) = (Long term debt) / (Long term debt + Net Assets) $\times 100$
- 9. Days in Current Liabilities: Total current liabilities divided by daily cash operating expenses.
- 10. Cash to Debt (%): Unrestricted cash and investment divided by long-term debt less current maturities
- 11. EBITDA margin (%): Earnings before interest, taxes, depreciation, and amortization (EBITDA), divided by total operating revenues plus non-operating revenues.
- 12. CFFOBI Margin (%): Cash flow from operations before interest (CFFOBI), divided by total operating revenues plus non-operating revenues.
- 13. Personnel Costs as % of Total Operating Revenues: Salaries, wages, benefits, and professional fees divided by total operating revenues.
- 14. Bad Debt Expense as a % of Total Operating Revenues: Bad debt expense divided by total operating revenues.

Capital Structure and Cash Flow

- 15. EBITDA Debt Service Coverage (x): EBITDA divided by MADS.
- 16. CFFOBI Debt Service Coverage (x): CFFOBI divided by MADS.
- 17. CFFOBI Debt Service Coverage, Less Capital Expenditures (x): CFFOBI minus capital expenditures, divide by MADS.
- 18. Debt to EBITDA (x): Long-term debt divided by EBITDA.
- 19. Debt to Net PP&E: Long-term plus capital lease minus current maturities, divided by net property, plant, and equipment (PP&E).
- 20. Debt to Assets (%): Long-term debt plus capital leases minus current maturities, divided by depreciation expense.

NOTE: MADS = Maximum Annual Debt Service

TABLE A-3(1) Nonprofit Hospitals and Health Care Systems BY RATINGS CATEGORY FITCH RATINGS AGENCY, 2003

	Median	AA	A	BBB	Below BB
Days Cash on Hand (1)	133.2	194.6	155.2	112.1	39.8
Days in Accounts Receivable (2)	57.6	58.3	57.3	56.2	59.4
Cushion Ratio (x) (3)	9.8	16.6	11.4	6.0	2.8
Days in Current Liabilities (9)	65.5	67.1	62.1	63.7	82.4
Cash to Debt % (10)	91.6	120.0	99.5	65.9	27.8
Operating Margin (%) (4)	1.5	2.8	1.8	0.7	(3.0)
Excess Margin (%) (5)	2.0	3.0	2.9	1.4	(1.6)
EBITDA Margin (%) (11)	9.1	10.0	9.7	8.6	6.3
Cash Flow from Operations Before Interest (CFFOBI) Margin (%)	10.3	10.8	10.7	8.6	7.2
(12)					
Personnel Costs as % of Total Operating Revenue (13)	52.0	51.7	50.9	53.7	54.7
Bad Debt Expense as % of Total Operating Revenue (14)	5.1	4.4	5.2	5.2	5.5
EBITDA Debt Service Coverage (x) (15)	2.7	3.5	2.9	2.2	1.3
CFFOBI Debt Service Coverage (x) (16)	2.9	4.0	3.1	2.2	1.4
CFFOBI Debt Service Coverage Less Capital Expenditures (x) (17)	0.7	1.2	0.5	0.7	0.9
Maximum Annual Debt Service (x) (6)	3.4	3.1	3.5	3.5	4.7
Debt to EBITDA (x) (18)	4.0	3.7	3.5	4.5	6.6
Debt to Capitalization (%) (8)	41.9	36.2	39.3	48.8	78.6
Debt to Net Property, Plant, and Equipment (%) (19)	82.2	77.1	78.4	86.7	99.7
Debt to Assets (%) (20)	31.8	29.3	31.4	35.6	45.5
Average Age of Plant (Years) (7)	9.5	9.4	9.2	9.1	12.1
Capital Expenditures as % of Depreciation Expense (21)	133.4	143.6	151.5	125.1	64.0

Source: Fitch Ratings Agency: 2003 Median Ratios for Nonprofit Hospitals and Health Care Systems

Table A-3(1)

Definition of Ratios:

Financial Ratio Calculation

- 01. Cash on hand (days) = ((Cash and Cash Equivalents + Board Designated Funds for Capital) * 365) / (Total operating expenses depreciation and amortization expenses)
- 02. Accounts receivable (days) = (Net patient accounts receivable \times 365) / net patient revenues
- 03. Cushion ratio (%) = (Cash + Short Term Investments + Unrestricted Long Term Inv.) / (Principal + interest payments)
- 04. Operating margin (%) = (Total operating revenues Total operating revenues) x 100
- 05. Excess margin (%) = (Total operating revenues + Non-operating revenues Total operating expenses) / (Total operating revenue + Non-operating revenues) x 100
- 06. Debt service coverage (x) = (Excess of Revenues over Expenses + Depreciation + Interest Exp.) / (Principal + interest payments)
- 07. Average age of plant (years) = (Accumulated Depreciation) / (Depreciation Expense)
- 08. Debt-to-Capitalization (%) = (Long term debt) / (Long term debt + Net Assets) x 100
- 09. Days in Current Liabilities: Total current liabilities divided by daily cash operating expenses.
- 10. Cash to Debt (%): Unrestricted cash and investment divided by long-term debt less current maturities
- 11. EBITDA margin (%): Earnings before interest, taxes, depreciation, and amortization (EBITDA), divided by total operating revenues plus non-operating revenues
- 12. CFFOBI Margin (%): Cash flow from operations before interest (CFFOBI), divided by total operating revenues plus non-operating revenues
- 13. Personnel Costs as % of Total Operating Revenues: Salaries, wages, benefits, and professional fees divided by total operating revenues
- 14. Bad Debt Expense as a % of Total Operating Revenues: Bad debt expense divided by total operating revenues.
- 15. EBITDA Debt Service Coverage (x): EBITDA divided by MADS
- 16. CFFOBI Debt Service Coverage (x): CFFOBI divided by MADS.
- 17. CFFOBI Debt Service Coverage, Less Capital Expenditures (x): CFFOBI minus capital expenditures, divide by MADS.
- 18. Debt to EBITDA (x): Long-term debt divided by EBITDA.
- 19. Debt to Net PP&E: Long-term plus capital leases minus current maturities, divided by net property, plant, and equipment
- 20. Debt to Assets (%): Long-term debt plus capital lease minus current maturities, divided by depreciation expense.
- 21. Capital Expenditures as % of Depreciation Expense

Note: MADS = Maximum Annual Debt Service

TABLE A-3(2) FINANCIAL PERFORMANCE RELATED TO CREDIT RATING

	Rating Category					
2002 Medians	AA, Aa	A	Baa, BBB	Below Investment Grade		
Operating margins: (1)						
Moody's	2.5%	1.9%	0.5%	-2.9%		
Fitch	2.8%	1.8%	0.7%	-3.0%		
S & P	2.3%	1.7%	0.8%	-2.9%		
Days cash on hand: (2)						
Moody's	226	160	97	32		
Fitch	195	155	112	40		
S & P	221	152	108	N/A		
Debt service coverage:						
(3)						
Moody's	6.6	4.1	2.9	1.3		
Fitch	3.5	2.9	2.2	1.3		
S & P	3.8	3.2	2.7	N/A		
Debt to capitalization: (4)						
Moody's	29.9%	38.2%	45.6%	68.9%		
Fitch	36.2%	39.3%	48.8%	78.6%		
S & P	31.5%	34.8%	41.7%	N/A		

Source: Moody's, Fitch, Standard & Poor's Source: HFMA Financing the Future, Report 5, 2004

TABLE A-3(2) Definitions:

- 1. Operating Margin (%): This Profitability indicator shows the income derived from patient care operations. Profitability indicators measure the extent to which the organization is using its financial and physical assets to generate a profit. = [(Total operating revenue total operating expense) / (total operating revenue)] x 100
- 2. Days Cash on Hand (Days): This solvency indicator measures the number of days an organization can pay its cash operating expenses if none of the accounts receivable were collected. This liquidity indicator shows the minimal survival period of an organization.
 - = [(Cash and cash equivalents + unrestricted long-term board designated investment) x 365] / (total operating expenses depreciation and amortization expenses)
- 3. Debt Service Coverage Ratio (x): A ratio that measures the organization's ability to meet its debt repayments. A declining ratio number can indicate that an organization is in danger of becoming insolvent.
 - = (Excess of revenues over expenses + depreciation & interest expense) / (Principal Payments + interest expense)
- 4. Debt to Capitalization (%): A measure of the long-term sources of debt financing.
 - = [(long-term debt) / (long-term debt + unrestricted net assets) x 100

)

TABLE A-4(1)
ILLINOIS 2002 DATA BY PERCENTILE

Ratio	Median Value	10 th	25 th	75 th	90 th
Total margin (1)	2.2	-3.8	8	5.6	6.7
Current ratio (2)	1.97	1.35	1.58	2.42	2.71
Days in patient accounts receivable (3)	63.3	49.9	57.4	69.9	78.3
Days cash on hand-short term sources (days) (4)	17.9	6.6	11.2	33.7	46.9
Days cash on hand-all sources (5)	69.6	10.2	22.2	114.3	145.8
Equity financing (6)	59.3	31.0	41.6	72.3	83.7
Long-term Debt to capitalization (7)	20.4	0	0	39.7	53.3
Fixed asset financing (8)	34.7	0	0.1	72.8	117.7
Capital Expense ratio (9)	6.6	5.9	5.7	7.9	8.8
Debt service coverage (10)	3.37	0	1.97	5.51	19.9
Cushion ratio (x) (11)	7.43	1.06	2.60	13.95	27.72
Average age of plant (years) (12)	10.3	7.96	9.05	10.98	13.22
Financial flexibility index (13)	510	-2.708	-1.300	1.580	7.221
Occupancy Percentage (14)	41.57	22.82	32.53	53.24	57.61
Occupancy-staffed beds (15)	49.24	25.52	39.58	63.27	75.10
Average length of stay (16)	4.2	3.35	3.69	4.70	5.14

Source: Almanac of Hospital Financial and Operating Indicators 2004, Ingenix Illinois 2002 Data

TABLE A-4(2)
ILLINOIS 2002 MEDIAN VALUES BY PERFORMANCE, SYSTEM VERSUS NON-SYSTEM AND TEACHING VERSUS NON-TEACHING FACILITIES

	Illinois	'A'	Performance		System	Non-System	Teaching	Non-
		Rated				·		Teaching
			High	Low				
Total margin (1)	2.2	2.1	8.1	-2.6	3.4	2.2	2.2	2.8
Current ratio (2)	1.97	1.9	2.28	1.76	2.06	2.00	1.87	2.07
Days in patient accounts receivable (3)	63.3	59.7	59.3	64.2	59.3	59.2	58.3	59.9
Days cash on hand-short term sources	17.9	29.7	23.9	19.8	18.5	28.3	25.2	24.5
(days) (4)								
Days cash on hand-all sources (5)	69.6	108.6	58.0	64.8	65.7	82.7	89.5	69.6
Equity financing (6)	59.3	53.5	64.0	54.6	53.7	56.4	50.0	57.8
Long-term Debt to capitalization (7)	20.4	33.8	15.2	23.4	24.9	28.1	32.4	24.7
Fixed asset financing (8)	34.7	66.7	27.8	44.1	44.1	51.3	60.5	44.2
Capital Expense ratio (9)	6.6	7.6	6.1	5.9	6.7	6.5	6.9	6.5
Debt service coverage (10)	3.37	2.91	4.48	1.10	3.07	2.80	2.88	2.86
Cushion ratio (x) (11)	7.43	11.73	5.68	8.54	7.06	8.15	8.77	7.59
Average age of plant (years) (12)	10.3	9.08	9.06	10.84	9.66	9.92	9.95	9.68
Financial flexibility index (13)	.510	1.447	5.280	-2.657	1.801	1.285	1.050	1.562
Occupancy Percentage (14)	41.57	52.95	40.54	40.43	45.10	46.56	55.23	40.65
Occupancy-staffed beds (15)	49.24	61.82	50.75	57.73	57.35	57.65	67.74	51.77
Average length of stay (16)	4.2	4.66	3.72	4.47	4.26	4.18	4.72	3.94

Definitions:

High Performance: 2002 Return on Investment (Price Level Adjusted) Value of ≥ 11.8% Low Performance: 2002 Return on Investment (Price Level Adjusted) Value of ≤ 6.1%

Source: Almanac of Hospital Financial and Operating Indicators 2004, Ingenix

Illinois 2002 Data

TABLE A-4(3)
ILLINOIS, 2002 MEDIAN VALUES BY BED SIZE AND REVENUES

	Illinois	Bed Size			Revenues (Million)			n)	
				Urban		Ru	ıral		
		<100	100-199	200-299	>499	60-100	>150	10-25	>60 mil
						mil	mil	mil	
Total margin (1)	2.2	3.1	2.5	2.2	1.8	2.0	2.7	3.6	3.4
Current ratio (2)	1.97	2.19	1.91	1.97	1.84	1.73	1.90	2.44	2.06
Days in patient accounts receivable (3)	63.3	61.4	57.3	57.5	55.5	56.5	57.5	62.8	57.9
Days cash on hand-short term sources (days)	17.9	25.0	26.0	25.5	25.2	23.0	25.3	27.6	29.0
(4)									
Days cash on hand-all sources (5)	69.6	68.3	85.2	78.2	103.0	66.6	94.2	70.4	124.8
Equity financing (6)	59.3	59.8	53.0	49.4	45.3	46.9	48.2	62.8	58.5
Long-term Debt to capitalization (7)	20.4	23.5	30.5	32.0	37.6	33.8	36.6	21.9	29.9
Fixed asset financing (8)	34.7	41.2	55.2	65.9	65.5	58.9	67.3	42.6	60.7
Capital Expense ratio (9)	6.6	6.2	7.1	6.9	7.1	6.9	6.9	6.3	7.7
Debt service coverage (10)	3.37	2.84	2.98	3.16	2.78	2.71	3.18	3.16	3.8
Cushion ratio (x) (11)	7.43	6.85	7.72	9.65	9.09	5.53	9.33	6.75	12.39
Average age of plant (years) (12)	10.3	9.95	9.46	9.68	9.82	9.47	9.67	9.9	8.07
Financial flexibility index (13)	.510	1.321	1.780	1.564	.757	1.658	1.381	1.943	2.201
Occupancy Percentage (14)	41.57	33.59	45.74	54.78	62.51	50.34	59.08	28.59	46.94
Occupancy-staffed beds (15)	49.24	41.60	59.13	66.08	75.87	59.19	70.55	37.00	56.30
Average length of stay (16)	4.2	3.53	4.22	4.72	5.38	4.37	4.81	3.34	4.23
C Al			2004	·					

Source: Almanac of Hospital Financial and Operating Indicators, 2004 Illinois 2002 Data

TABLE A-5
"A" RATED FACILITIES BY RATING AGENCY

	Illinois (1)	Ingenix (2)	S & P System	S & P System	S & P Small	S & P All
			(3)	(4)	(5)	(6)
	Med. Value	A-Rated	A Rated	A Rated	A+ to A-	A+ to A-
Total margin (1)	2.2	2.1	2.15	2.77	2.28	3.2
Current ratio (2)	1.97	1.9				
Days in patient accounts receivable (3)	63.3	59.7	56.1	51.5	73.0	53.8
Days cash on hand-short term sources	17.9	29.7				
(days) (4)		100 5	1.00			
Days cash on hand-all sources (5)	69.6	108.6	129.8	119.5	256.6	159
Equity financing (6)	59.3	53.5				
Long-term Debt to capitalization (7)	20.4	33.8	47.2	48.8	18.2	37.3
Fixed asset financing (8)	34.7	66.7				
Capital Expense ratio (9)	6.6	7.6				
Debt service coverage (10)	3.37	2.91	2.96	2.68	2.46	3.5
Cushion ratio (x) (11)	7.43	11.73	11.80	9.29	21.19	12.7
Average age of plant (years) (12)	10.3	9.08	9.6	9.8	11.9	9.1
Financial flexibility index (13)	.510	1.447				
Occupancy Percentage (14)	41.57	52.95				
Occupancy-staffed beds (15)	49.27	61.82				
Average length of stay (16)	4.2	4.66				
Period	2002	2002	7/01/02 — 8/11/03	As of 6/2/04	2002 Audit	2003

- 1. Illinois Total: Ingenix Almanac of Hospital Financial & Operating Indicators, 2002
- 2."A" Rated: Ingenix Almanac of Hospital Financial & Operating Indicators, 2002
- 3. Standard & Poor's Rating Group: US Non-Profit 2003 Healthcare System Medians 9/03/03
- 4. Standard & Poor's Rating Group: Us Non-Profit 2004 Healthcare System Medians 6/10/04
- 5. Standard & Poor's Rating Group: Small Hospital Ratios show signs of Stability 12/03/03
- 6. Standard & Poor's Rating Group: Small Hospital 2004 Median Ratios 6/10/04

TABLES A-4 AND A-5 Definition of Indicators:

	Desired Position
Profitability Ratios	
1. Total Margin = (Excess Revenues over Expenses) / (Total Revenues) x 100	Up
Liquidity Ratios	
2. Current Ratio = (Current Assets) / (Current Liabilities)	Up
3. Days in Patient Accounts Receivable = (Net Patient A/R) / (Net Patient	Down
Revenues/365	
4. Days Cash on Hand Short-term Sources (days) = (Cash + Short-term Investments)	Up
/ ((Total Expenses-Depreciation)/365)	
5. Days Cash on Hand All sources = (Cash + Short-term Investments plus	Up
Unrestricted Long-term Investments) / (Total Expenses-Depreciation)/365	
Capital Structure Ratios	
6. Equity Financing = (Net Assets) / (Total Assets x 100)	Up
7. Long-term Debt to Capitalization = (Long-term Debt) / (Long-term Debt + Net	Down
Assets x 100)	
8. Fixed Asset Financing = (Long-term Debt) / (Net Fixed Assets x 100)	Down
9. Capital Expense = (Interest + Depreciation Expenses) / (Total Expenses x 100)	Down
10. Debt Service Coverage = (Excess of Revenues over Expenses + Depreciation &	Up
Interest Expense) / (Principal Payments + Interest Expense)	**
11. Cushion Ratio = (Cash + Short-term Investments + Unrestricted Long-term	Up
Investments) / (Principal Payments + Interest Expense)	
Other Financial Ratios	D
12. Average Age of Plant = (Accumulated Depreciation) / (Depreciation Expense)	Down
13. Financial Flexibility Index (See Following)	Up
Volume Indicators	T T
14. Occupancy Percentage = (Patient Days) / (365 x Licensed Beds x 100)	Up
15. Occupancy % for Staffed Beds = (Patient Days) / (365 x Staffed Beds x 100)	Up
16. Length of Stay = (Patient Days) / (Total Discharges)	Down

TABLE A-5
Definition of Indicator:

Financial Flexibility Index Worksheet - Calculated Sample

			Rela	l Position tive to
Indicator	Definition		Trend	Median *
Total Margin	(Excess of Revenues over Expenses) Total Revenues	(TM –4.7) / 4.7	1.4	(0.70)
Return on Investment (Price-level Adjusted) (ROIPLA)	(Excess of Revenues over Expenses + <u>Depreciation Exp + Interest</u>) Price-level Adjusted Total Assets	+ (ROIPLA – 10) 10 +	25.3	1.53
Replacement Viability (RV)	(Unrestricted Long-term Investments) Price-level Adjusted Accumulated Depreciation	(RV – 15.5) 15.5 +	6.0	(0.61)
Equity Financing (EF)	Net Assets Total Assets	(EF – 52) 52	60	0.15
		+		
Days Cash on Hand, Short- term Sources	(Cash + Short-term Investments) (Total Expenses – Depreciation) / 365	(DCOH – 18) 18	22	0.22
(DCOH)	303	+		
Cash Flow to Total Debt	(Excess of Revenues over Expenses + Depreciation)	(CFTD –17) 17	36	1.12
(CFTD)	(Current Liabilities + Long-term Debt)	+		
Average Age of Plant (AAP)	Accumulated Depreciation Depreciation Expense	$\frac{(7.5 - AAP)}{7.5}$	9.8	(0.31)
		= Financial		
		Flexibility Index		<u>1.64</u>

TABLE B-1 NURSING HOMES COMPARISON OF IHFPB AND FITCH STANDARDS AND ACTUAL 2003 OPERATING RESULTS

IHFPB STANDARDS 2004 (1)	FITCH INVESTMT GRADE –NP STDS (2)	BIZMINER (3)	MANOR CARE INC (HCR) (4)	BEVERLY ENTERPRISES INC. (BEV) (4)	KINDRED HLTHCARE INC (KIND) (4)
		37			
3.0	5.0 - 8.0				
	60% - 75%				
2.5%	1% - 3%	3%	3.9%	1.2%	1.5%
	3% - 6%				
1.5x	1.8 to 2.2				
	6% to 10 %				
			\$1.31	\$.22	\$1.41
80%		109.0%	37.2%	69.9%	18.9%
		.40%	5.0%	1.7%	3.1%
		2.4%	12.0%	12.0%	8%
1.5x		1.6x	1.5x	1.2x	1.5x
			21.5x	9.1x	NM
	2002	2002	2002	2002	2003
	75 3.0 2.5% 1.5x	STANDARDS INVESTMT 2004 (1) GRADE -NP STDS (2) 75 180-220 3.0 5.0 - 8.0 60% - 75% 2.5% 1% - 3% 3% - 6% 1.5x 1.8 to 2.2 6% to 10 % 80%	STANDARDS 2004 (1) INVESTMT GRADE –NP STDS (2) (3) 75 180-220 37 3.0 5.0 - 8.0 60% - 75% 3% 2.5% 1% - 3% 3% 3% - 6% 3% 1.5x 1.8 to 2.2 6% to 10 % 40% 2.4% 40% 1.5x 1.6x	STANDARDS 2004 (1) INVESTMT GRADE -NP STDS (2) (3) CARE INC (HCR) (4) 75 180-220 37 3.0 5.0 - 8.0 -3% 60% - 75% -3% 3.9% 2.5% 1% - 3% 3% 3.9% 1.5x 1.8 to 2.2 3% 3.9% 6% to 10 % \$1.31 3% 37.2% 80% 109.0% 37.2% 1.5x 1.6x 1.5x 1.5x 1.6x 1.5x 2.4% 12.0% 1.5x 1.5x 21.5x	STANDARDS INVESTMT GRADE -NP STDS (2) (3) CARE INC (HCR) (4) ENTERPRISES INC. (BEV) (4) 75 180-220 37 3.0 5.0 - 8.0 60% - 75% 1.2% 2.5% 1% - 3% 3% 3.9% 1.2% 3% - 6% 1.8 to 2.2 51.31 \$.22 80% 109.0% 37.2% 69.9% 1.5x 1.6x 1.5x 1.2x 1.5x 1.6x 1.5x 1.2x 1.5x 1.5x 1.5x 1.2x 1.5x 1.5x 1.5x 1.2x 1.5x 1.5x 1.5x 1.2x 1.5x 1.5x 1.5x 1.2x

- Illinois Health Facilities Planning Board Standards, 2004
 Fitch Rating Group: Rating Guidelines for Nonprofit Nursing Home, March 29, 2000
- 3. BizMiner Financial Analyses Profile July 2003, SIC 8051 Skilled Nursing Facilities
- 4. Standard & Poor's Ratings Group Stock Report, July 27, 2004

TABLE B-2 AMBULATORY SURGICAL TREATMENT CENTERS COMPARISON OF IHFPB STANDARDS AND ACTUAL OPERATING RESULTS

RATIOS	IHFPB STANDARDS (1)	BIZMINER (2)
Cushion Ratios (x) (1)	3.0x	
Current Ratio (x) (2)	1.5x	1.8x
Net Margin (%) (3)	2.5%	5.81%
Debt/Capitalization (%) (4)	80%	81%
Debt Service Coverage (x) (5)	1.5x	
Days Cash on Hand (6)	45	
% Return on Assets (10)		4.60%
SAMPLE SIZE		537
PERIOD	2004	2003

- 1. Illinois Health Facilities Planning Board Standards, 2004
- 2. BizMiner Financial Analysis Profile, July 2003, SIC 8011.0201 Ambulatory Surgical Centers

TABLE B-3 END STAGE RENAL DISEASE CENTERS COMPARISON OF IHFPB STANDARDS AND ACTUAL OPERATING RESULTS

RATIOS	IHFPB STANDARDS (1)	FRESENIUS MED. CARE (2)	DaVITA INC. (2)	RENAL CARE GROUP INC. (2)
Ticker Symbol		FMS	DVA	RCI
Cushion Ratio (x) (1) Current Ratio (x) (2) Net Margin % (3) Debt/Capitalization %	3.0x 1.5x 2.5% 80%	1.6x 6.0% 40.2%	1.7x 8.7% 71.4%	1.7x 10.2% 40%
(4) Debt Service Coverage	1.5x	40.270	71.470	4070
(x) (5) Days Cash on Hand (6) Earnings/Share (8)	45	\$1.13	\$1.66	\$1.37
Price/Earnings ratio (x) (9)		22.5x	15.8x	20.4x
% Return on Assets (10)		4.6%	9.4%	13.1%
% Returns on Equity (7)		11.2%	93.2%	18.3%
PERIOD	2004	2003	2003	2003

- Illinois Health Facilities Planning Board Standards, 2004
 Standard & Poor's Ratings Group Stock Report, 2004

TABLES B-1 through B-3 Definition of Indicators

- 1. Cushion Ratio (x) = (Cash + Short-Term Investments + Unrestricted Long-Term Inv.(Principal + Interest Payments)
- 2. Current Ratio (x) = Current Assets
 Current Liabilities
- 3. Net Margin % = <u>Total Operating Revenues Total Operating Expenses</u>
 (Total Operating Revenues) x 100
- 4. Debt/Capitalization % = Long-Term Debt (Long-Term Debt + Net Assets) x100
- 5. Debt Service Coverage (x) = (Excess Revenues over Expenses + Depreciation + Amortization + Interest Expense (Principal + Interest Payments)
- 6. Days Cash on Hand = (Cash and Cash Equivalents + Board Designated Funds

 For Capital) x 365

 (Total Operating Expenses (Depreciation & Amortization Expenses)
- 7. % Return on Equity = $\frac{\text{Net After Tax Profit}}{\text{Equity x } 100}$
- 8. Earnings per Share = Net Profit (Loss)
 Number of Shares Outstanding
- 9. Price/Earnings Ratio (x) = Stock Price per Share Earnings per Share
- 10. % Return on Assets = $\frac{\text{Net After Tax Profit}}{\text{Total Assets x } 100}$
- 11. Cash to Debt % = Unrestricted Cash and Investments
 (Long-Term Debt less Current Portion of Long-Term Debt) x 100
- 12. Excess Margin % = Net Profit (Loss)
 Total Revenues x 100
- 13. MADS as a % of Revenue = _ Earnings before Interest + Taxes + Depreciation + Amortization Total Revenues x 100

BIBLIOGRAPHY

BIBLIOGRAPHY

AHA Hospital Statistics 2003, American Hospital Association, Chicago IL, 2003

Almanac of Hospital Financial and Operating Indicators 2004, Ingenix Inc., Third Edition, 2003

Best Practice Financing: Capital Allocation, True Integration of Strategic & Financial Planning: Kaufman Hall White Paper, 2003

BizMiner, Industry Financial Analysis Profile SIC 805.0000 Skilled Nursing Care Facilities September 17, 2004 SIC 8011.0201 Ambulatory Surgical Centers, September 17, 2004

Byrd Jr., Charles W. & McCue, Michael J., "Can Your Hospital Remain Independent?" Healthcare Financial Management, September 2003

Capital Allocation: The Right Way: Consistent, Concurrent, Connected and Communicated Jason H. Sussman, Kaufman Hall & Associates, 2004

Capital Growth versus Capital Preservation, Cain Brothers, Volume 42, Winter 2004

Chabner, Davi-Ellen, (1996), <u>The Language of Medicine</u>, 5th edition, Philadelphia PA: W.B. Saunders Co.

Facts & Trends: The Nursing Facility Sourcebook, American Health Care Association, 2001

Fighting for Survival: The Dire State of Nursing Home Financing in New York State, New York Association of Homes & Services for the Aging, January 2004

Finance in Brief: Six Key Concepts for Healthcare Leaders, 2nd Edition, Kenneth Kaufman, Health Administration Press, Chicago IL, 2003

Fitch Rating Agency

- 2002 Median Ratios for Nonprofit Hospitals and Health Care Systems, August 7, 2002
- 2004 Industry Outlook for Nonprofit Continuing Care Retirement Communities and Nursing Homes, March 3, 2004
- 2004 Nonprofit Hospitals and Health Care Systems Forecast, January 15, 2004
- Credit Trends in U.S. Public Finance Continue Decline, April 23, 2004
- Healthcare Ratings Actions for the 12 Months Ended December 31, 2003, February 25, 2004
- Healthcare Ratings Actions for the Three Months Ended March 31, 2004, April 5, 2004
- Long-Term Care and Rising Liability Insurance Premiums, June 8, 2000

Focus on Illinois Community Hospitals, Illinois Hospital Association, 2003

The Future of Not-for Profit Healthcare Capital Financing, Healthcare Finance Forum, June 2002

HealthCare Tactics: A Blueprint for the Future, PriceWaterhouseCoopers, May 2002

Healthcare Financial Management Association,

HFMA's Financing the Future: How are Hospitals Financing the Future?

- Access to Capital in Health Today, Report 1, 2003
- Capital Spending in Health Care Today, Report 2, 2004
- The Future of Capital Spending, Report 3, 2004
- The Future of Capital Access, Report 4, 2004
- Where the Industry Will Go From Here, Report 6, 2004

Key Hospital Financial Statistics and Ratio Medians, November 2003

Healthcare Financial Management Association, Annual National Institute (ANI) Presentations

- Educating the New Board Member on Healthcare Finance, Rick Annis, Catholic Healthcare Partners, June 2002
- Financing the Future, June 2004
- Managing the Modern Medical Center with Metrics, Steven Berger, June 2004
- Presenting Financial Analysis to Key Decision Makers, J. Bruce Ryan and Thomas R. Miller, June 2002

Hospitals & Health Networks, June 2004, pages 56-57.

Illinois Health Facilities Planning Board Standards 2004, Illinois Department of Public Health

Illinois Hospital Association website information, www.ihatoday.org

Ingenix, Almanac of Hospital Financial and Operating Indicators 2004, Third Edition, 2003

Modern Healthcare's By the Numbers, Modern Healthcare, December 22, 2003

Moody's Investors Services

 Moodys.Com Report: NFP Healthcare: Negative Trend Moderating but Downgrades Still Higher, August 2, 2004

Moon, S., "Building the Brand: Construction & Design Survey Shows Healthcare Focus on Expanding Specialized Services", Modern Healthcare, March 11, 2002

National and Local Impact of Long-Term Demographic Change on Inpatient Acute Care, Solucient, November 2002

Nursing Homes, National Center for Health Statistics, 2000

Standard & Poor's (S&P) Ratings Group

• CreditStats: Nursing Home Chains, September 28, 2001

- CreditStats: Adjusted Key U.S. Industrial Financial Ratios, September 8, 2003
- Growing Sector Stability, April 7, 2004
- Industry Report Card: U.S. Corporate Health Care, June 11, 2004
- Not-for-Profit Health Care Ratings Actions April 2004, May 6, 2004
- U.S. Not-for-Profit Health Care Sector 2004 Mid-Year Outlook: Performance Peaking Now, June 10, 2004
- Quantitative Stock Reports
 Kindred Healthcare Stock Report, July 27, 2004
 Manor Care Stock Report, July 24, 2004
 Select Medical Corporation, July 24, 2004

State Summary of Ambulatory Surgical Treatment Profiles for Year 2002, Illinois Center for Health Statistics, October 2003

Solucient, "National and Local Impact of Long-Term Demographic Change on Inpatient Acute Care", November 2002.

Thrall, TH, Haugh R, and Santamour B, "Are you ready?", Hospitals & Health Networks, November 2001