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NOT-FOR-PROFIT HEALTH CARE SECTOR

1999 Outlook and Medians

Not-For-Profit Health Care

Outlook

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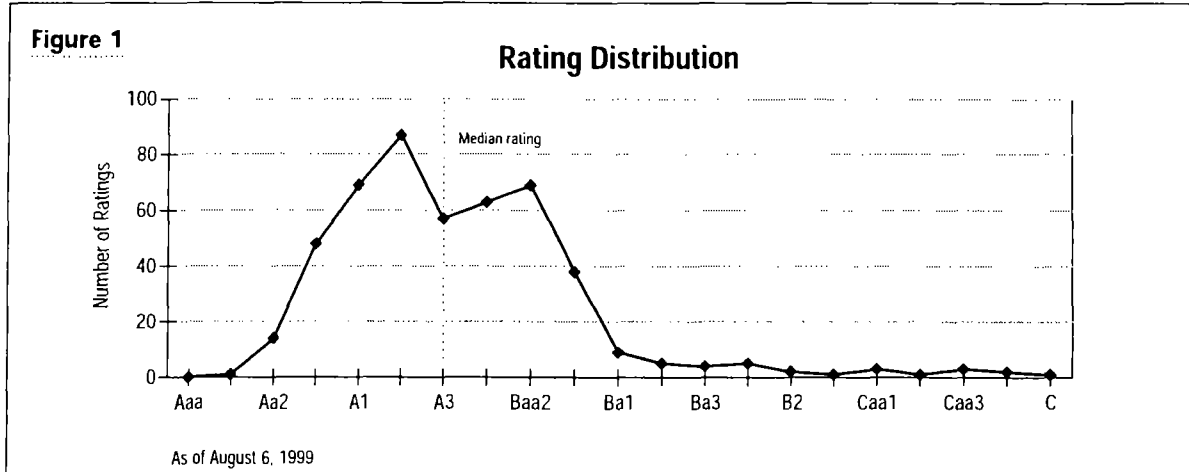
Summary Opinion

Moody's believes that U.S. not-for-profit hospitals overall will continue to experience financial difficulties over the near term (one to two years) because of increased revenue pressures created by the Balanced Budget Act of 1997, integration risk associated with continued merger and acquisition activity, and new efforts to terminate or restructure strategies that are proving more costly than initially estimated.

Over the intermediate term (three to four years), we expect ratings volatility for not-for-profit providers, characterized by continued variable rating activity, both up and down the rating scale. We have already seen a growing number of hospitals struggle with their transition toward larger provider systems, and we expect that their difficulties will continue over the intermediate term as newly integrated hospital cultures are assimilated, physician relationships are changed, and the assumption of financial risk, either through new insurance business lines or through the acceptance of global capitation becomes more common. We believe that even some of the strongest entities in our portfolio will experience weakening credit quality.

Over the long-term (five years and beyond), however, we predict greater credit stability overall for providers as they become larger and more efficient, merger activity settles, distinct business units become better integrated, and the supply and demand for health care services achieves greater stabilization. Furthermore, the refocus on core operations that we are currently witnessing should help stabilize financial performance, whereby healthcare providers reach a level of financial equilibrium.

Moody's rates nearly 500 not-for-profit hospitals and health systems with more than \$60 billion in total debt outstanding. The average median rating for the sector currently stands at A3 (see Figure 1). However, if current trends continue, it is possible that the median rating for the sector could decline to Baa1 within the intermediate term.



Health Care Outlook

BUMPY ROAD TO CONTINUE OVER THE SHORT-TERM

1998 was a watershed year for the healthcare industry, and our healthcare portfolio entered new terrain as providers engaged in strategies to remain competitive and financially solvent. Not-for-profit hospitals experienced weakened credit health in 1998 and we expect that the sector's high ratings volatility and deteriorating credit quality will continue throughout 1999 and 2000. 1998 was the first year that we witnessed material credit difficulties in all rating categories, including Aa-rated credits. In fact, the number of overall downgrades surged and multi-notch downgrades were far more commonplace in 1998 than ever before (*Sidebar 1*). Additionally, the number of outlook changes to negative also surged, indicating a weakened credit profile and the potential for a downgrade sometime in the future, contributing to our negative outlook for the sector.

Sidebar 1

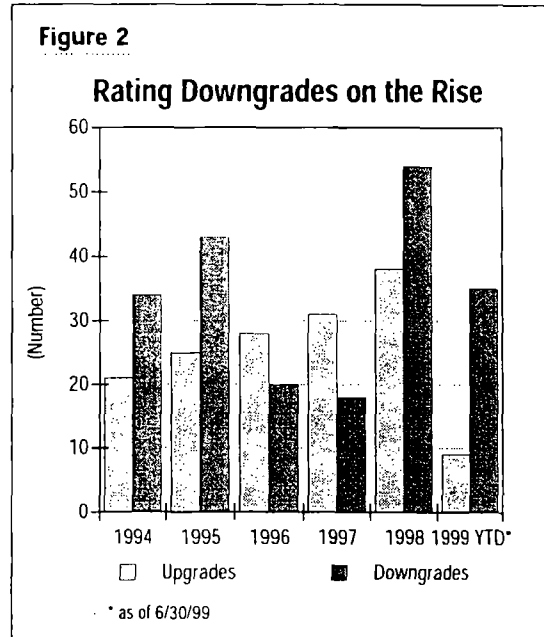
1998 and 1999* Multi-Notch Downgrades

HOSPITAL	ISSUER	RATING
Alexian Brothers Health System	Illinois Health Facilities Authority	Baa1 (downgraded from A2)
Allegheny General Hospital	Pennsylvania Higher Educational Facilities Authority	Caa1 (downgraded from A3)
Baptist Hospital	Metropolitan Government of Nashville & Davidson Counties Health & Education Facility Board, TN	A2 (downgraded from Aa3)
Bethesda Hospital	Hamilton (County of), OH	A3 (downgraded from A1)
Boston Regional Medical Center	Massachusetts Health and Educational Facilities Authority	Ca (downgraded from B2)
CareGroup, Inc.	Massachusetts Health and Educational Facilities Authority	Baa1 (downgraded from A2)
Catholic Healthcare West	Various Issuers	Baa1 (downgraded from A2)
Citrus Valley Health Partners	California Statewide Communities Developmental Authority	Baa1 (downgraded from A2)
Columbus Hospital	New Jersey Health Care Facilities Financing Authority	Ba2 (downgraded from Baa3)
Community Medical Ctr/Kimball Medical Ctr/Kensington Manor Care Ctr	New Jersey Health Care Facilities Financing Authority	Baa2 (downgraded from A2)
Cooper Health System	Camden County Improvement Authority, NJ	B1 (downgraded from Baa2)
Delaware Valley Obligated Group	Pennsylvania Higher Educational Facilities Authority	Caa3 (downgraded from B3)
Detroit Medical Center	Michigan State Hospital Finance Authority	Baa2 (downgraded from A2)
East Boston Neighborhood Health Center	Massachusetts Industrial Finance Agency	Caa1 (downgraded from Ba2)
East Texas Medical Center Regional Healthcare System	Tyler Healthcare Development Corporation, TX	B3 (downgraded from Baa3)
Erlanger Medical Center	Chattanooga-Hamilton County Hospital Authority, TN	Baa1 (downgraded from A2)
Forbes Health System	Pennsylvania Higher Educational Facilities Authority	Caa1 (downgraded from Baa1)
Galion Community Hospital	Galion (City of), OH	Ba1 (downgraded from Baa1)
Graduate Health System	Philadelphia Hospital and Higher Education Facilities Authority, PA	Ca (downgraded from Ba2)
Greater Southeast Healthcare System	Prince George's (County of) MD	Caa3 (downgraded from Baa3)
St. Elizabeth Medical Center	Granite (City of), IL	Ba3 (downgraded from Baa3)
University of Pennsylvania Health System	Philadelphia Hospital and Higher Education Facilities Authority, PA	A2 (downgraded from Aa3)

* Through August 16, 1999

Since the pressures within the sector appear to be systemic to the healthcare industry, we believe that 1998 rating actions will carry through the near term, challenging the premise that the strong are getting stronger and the weak are getting weaker. Overall rating deterioration for US not-for-profit hospitals in 1998 was evidenced by the sheer number of downgrades versus the smaller number of upgrades made during the year (Figure 2). Our prognosis is for further credit deterioration – as evidenced by Moody's rating actions in the first six months of the year – and the overall outlook for the nearly 500 not-for-profit hospitals and systems we rate remains negative. There are a number of developments that are contributing to our pessimism for the near-term outlook. In 1998, healthcare providers faced a multitude of situations that we believe creates a setting for potential credit risks moving forward, including:

- Uncertainty associated with M&A “event” risk and new dis-integration attempts;
- Severe losses from physician integration strategies and the costs of continuing or terminating such strategies;
- Financial pressures created by greater-than-expected revenue declines from the Balanced Budget Act of 1997 and additional managed care reimbursement pressure;
- Insufficient infrastructure to manage insurance risk assumed through the acceptance of global capitation, resulting in large losses; and
- Anticipated declines in investment earnings as equity markets become increasingly volatile and investment returns are insufficient to offset operating losses;



M&A RELATED EVENT RISK RAISES ONGOING UNCERTAINTY

Moody's believes that the merger and acquisition (M&A) related event risk and the corresponding uncertainty that arises when providers grapple with the transition to larger healthcare delivery systems is an increasingly common factor that contributed to numerous downgrades in 1998 and may contribute to more uncertainty in the future. Since the size and complexity of M&A transactions have significantly increased, we expect that the healthcare delivery systems created by these large financial combinations will require significantly greater capital needs and future debt issuances.

We believe that over the long run, most merger and acquisition activity and strategic integration initiatives will yield benefits in the form of greater market share advances, enhanced negotiating leverage, economies of scale, and improved operating efficiency. The expectation of such benefits led to the initial rating assignment of Baa3 for **Doctors OhioHealth** (Columbus, Ohio) following its merger into OhioHealth and rating upgrade to Baa3 from Ba1 for **Palisades Medical Center** (NJ) who became an affiliate of New York Presbyterian Healthcare System.

Many systems, however, falter during the implementation stage of their development towards operating as a larger, integrated healthcare delivery system. **Allegheny Health and Education Research Foundation** (AHERF) is a prime example of a provider who could not integrate its Philadelphia operations, which suffered significant operating losses, and its Pittsburgh operations, which experienced extremely erratic performance, into a cohesive organization. An offset to AHERF has been a higher demand for mortgages, tighter covenants and probably fewer restricted affiliate structures than what we otherwise would have seen.

CareGroup in Boston (MA), is another example of a provider who suffered financially post-merger, when it became evident that not all relevant stakeholders were committed to the underlying rationale of consolidation and cost cutting. CareGroup was downgraded to Baa1 from A2 in January 1999. **Catholic Health System** (Long Island, NY) currently maintains an uncertain outlook on its A2 rating due to the unpredictable impact on financial operations following the implementation stage of developing an inte-

grated system from four previously independent hospitals and additional pending acquisitions.

One of the primary factors behind recent credit deterioration is management's inability to reduce costs shortly after a combination and/or an inability to be objective in assessing the contribution of all business lines that have been added in the pursuit of becoming a vertically integrated system. Furthermore, the lack of integration with management information systems and subsequent shortcomings with receivable collections has contributed to unanticipated integration problems that have proven financially costly post-merger.

Various integration relationships have been creatively structured in the hope that such partnering would alleviate the pitfalls that befell other truly merged entities. However, several of these new types of affiliation arrangements saw their founding rationale questioned during 1998 (see Sidebar 2), when poor performance of one partner deviated substantially from historical performance prior to their affiliation. While Joint Operating Agreement (JOA) arrangements are not technically as strong as mergers, depending on the structure, the parties often operating under such arrangements are essentially one economic entity.

The need for information systems has never been greater, especially given the challenge of coordinating multiple managed care contracts within a newly coordinated system of multiple providers. Furthermore, we believe that the ongoing mergers between hospitals and health systems are delaying further the ability to address Y2K compliance issues expeditiously as these newly formed entities must first identify and correct incompatibilities between different existing computer systems. Consequently, we believe hospitals' are justified in their millennium uneasiness because they do not have significant unrestricted capital available to be used for unknown Y2K issues when at the same time, they are using resources to coordinate the information systems each partner brings to the new organization.

The affects of a single rating revision, on average, continues to affect a much greater amount of debt than it has in the past given industry consolidation efforts and systems' growth (Figure 3). Of the 92 rating actions taken in 1998, the five credits with the largest debt outstanding accounted for 37% of the total debt affected.

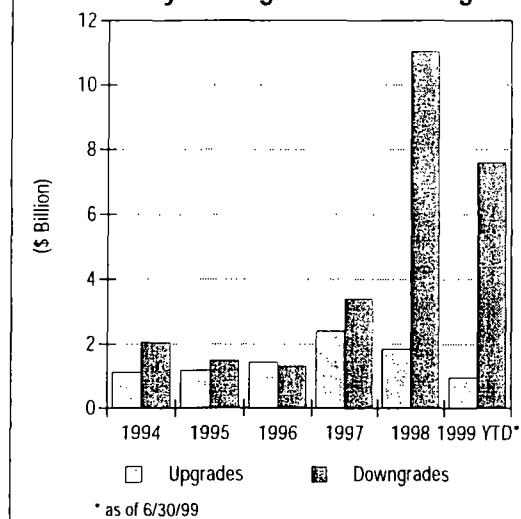
Sidebar 2

In 1998, the effect of poor financial performance at **Exempla, Inc.** in Denver, CO (formerly Lutheran Medical Center) which was offset by satisfactory financial performance by Exempla Healthcare, an integrated delivery system formed by a Joint Operating Agreement between Exempla, Inc. and **Sisters of Charity of Leavenworth Health Services Corporation** (SCL/HSC) on January 1, 1998 resulted in an outlook revision to negative from stable associated with Exempla, Inc.'s A1 rating. The change in outlook rather than a downgrade at this time, considered the benefit of being part of a larger entity in the face of two years of poor financial performance which resulted in significantly reduced cashflow at Exempla, Inc. Also in Denver, Moody's downgraded the rating of **PorterCare Adventist Health Care** to Baa3 from Baa2, where it remains on Watchlist for possible downgrade followed the poor and unexpected financial performance by Centura, which impacted both the operations and liquidity position of PorterCare. PorterCare's financial performance is linked to the operational performance of Catholic Health Initiatives' (CHI) Denver and Colorado Springs hospitals, the other Centura partner. Because of a 70/30 split of income, PorterCare as the smaller entity is disproportionately affected by financial performance at Centura. Moody's revised the outlook for CHI to negative from stable on its Aa2 rating due in part to a material decline in operating performance in several key markets, including Denver.

Another higher risk affiliation structure created was **CareAlliance Health Services** (CAHS) in Charleston, SC. CareAlliance was formed in August 1998 by the merger of the former Roper Hospital and Bon Secours Health System's St. Francis-Xavier Hospital (SFX). It has three-way ownership, with the initial membership interests held by The Medical Society of South Carolina (MSSC, formerly the sole member of Roper (63% ownership in CAHS)), Bon Secours Health System (rated A3), formerly the sole member of SFX (27% ownership) and Charlotte-based Carolinas HealthCare System, rated Aa3 (10% ownership). CareAlliance, which is rated A3 with a positive outlook, is required to distribute 50% of annual cash flow (after debt service) to the three owners, somewhat limiting its own ability to build up liquid resources and fund major capital improvements. Because funding investment opportunities is at the discretion of each owner, we believe there is potential for strategic projects not to be funded.

Several not-for-profit providers purchased hospitals from for-profit Columbia/HCA with tax-exempt debt in 1998 and we are seeing the results of operating under an increased debt burden as a result of purchasing these facilities at prices higher than what historical market values would justify. We revised the outlooks on the Aa3 ratings of **Duke University Health System (NC)** and **Pitt County Memorial Hospital (NC)** to negative, and downgraded the rating on **Baptist Medical Center (Montgomery, AL)** and **Alexian Brothers Health System** as a result of significant purchases of Columbia/HCA hospitals.

Figure 3
Amount of Debt Affected by Downgrades is Soaring



DIS-INTEGRATION AND RETURN TO CORE OPERATIONS BECOMING A COMMON THEME

The overall volatility created by the rapid pace of M&A activity and integration strategies over the last five years has many market participants rethinking what their future organizational structure will be. In 1998, several management teams started to critically analyze their strategic objectives against the realized benefits to date and, as a result, began to terminate strategies that are proving unfruitful and/or detrimental to the fiscal health of the health system taken as a whole. In addition, as the financial performance

of alternative, non-acute care, business lines extended a multi-year drag on system profitability, we saw the decision to “dis-integrate” such non-performing business lines become a more common goal. The theme for 1999 is to refocus on core operations, unique service lines or centers of clinical excellence.

Physician integration strategies and MSO operations are two non-performing business lines that were restructured, privatized, or simply terminated in 1998 as providers struggled to justify the high ongoing costs of maintaining employed physicians within their organizations. Provider-owned HMOs are yet another business line that providers sought to divest in 1998. **Texas Health Resources** in Fort Worth (TX) is an example of a provider attempting to shed its unprofitable Harris Methodist Health Plan HMO. **Kaiser Foundation Hospitals (CA)** is another entity that appears committed to refocusing on its core markets and is taking steps to consider strategic options for several of its problem health plans. This return to basics is most recently highlighted by the company’s decision to reconsider its alignment with Group Health Plan of Puget Sound. Moody’s upgrade of **Touro Infirmary (LA)** to Baa1 from Baa2 incorporated the positive impact of terminating its Advantage Health Plan.

PHYSICIAN INTEGRATION STRATEGIES PROVING TOO COSTLY TO SUPPLEMENT

Only a handful of providers report that the expense of their primary care physician integration strategy is offset by increased net revenues generated by increased admissions or ancillary services. Providers are actively seeking to reduce physician losses either through renegotiating employment contracts, consolidating physician office sites to reduce per-unit costs, or simply “spinning off” the practices into an independent organization. The 1997 loss by **Memorial Hermann Health System (TX)** is largely credited to its physician-integration vehicle, OneCare, (100 employed physicians) which posted a significant loss due to price escalation for physician practices from an aggressive acquisition and start-up strategy. What could be a potential drawback from pursuing such actions, such as the potential alienation of these formerly employed physicians and a possible redirection of patient referrals to competing health systems, has not materialized yet—usually more than one provider in a market is choosing to privatize its physicians, limiting the available alternative options for these previously employed physicians. However, an extended review of the effect of privatizing physicians will be necessary to determine if there is a loss of referral business.

Additionally, asset write-downs associated with physician restructuring have caused significant one-time expenses in the recent past. **Scott and White Memorial Hospital’s (TX)** financial difficulties and recent outlook revision to negative from stable on its Aa3 rating stems largely from billing and collection problems related to accounts receivable at the hospital’s affiliated 490-member multi-specialty medical

group and delays in recognizing the magnitude of the issue. Other integrated systems, such as **Henry Ford Health System** (MI) have had their rating revised, partly due to physician losses.

One of the few providers who has been able to successfully implement a physician integration strategy with a minimal subsidization of physician practices is **Mercy Health System Corporation** (WI). With the exception of a 50-member independent physician group, Mercy owns all of its physician practices. We believe the key elements of Mercy's successful physician strategy are: (1) early implementation of appropriate compensation incentives heavily linked to physicians' productivity; (2) concentration on balancing the importance of maintaining access points by placing physicians in key under-served and/or growing communities with equally critical consolidation of practices to achieve cost efficiencies; (3) redirection of physicians' ambulatory referrals from competitors to Mercy facilities; (4) a model of integrating practices instead of overpaying for physician practices; and (5) communication with and involvement of physicians in management planning. While this final factor is more difficult to measure, we suspect that some of the system's success is driven by the quality of hospital-physician relations.

In the future, more hospitals may try to develop a model that includes specialists. This may be a defensive move, similar to the earlier strategy to acquire primary care physicians, because practice management companies are now targeting specialists with whom to joint venture for freestanding surgery centers or specialty hospitals. **Baptist Hospital**, Nashville (TN) reports that it has successfully created a limited liability corporation with its orthopedists which has translated into additional volumes to their hospitals. It is our hope that providers have learned from the mistakes of their primary care integration strategies and will include unwinding mechanisms into these new models should the results prove undesirable over time.

One tangential outcome from employing physicians is the limited but increasing use of "hospitalists." Hospitalists are hospital-based employed physicians who do not see patients in a private office, but rather spend the day in the hospital overseeing the treatment of patients under the care of an admitting physician. Management teams report that the use of hospitalists makes patient care more efficient because it relieves a primary care physician from the dual obligations of following a patient's inpatient care with seeing other patients in a private office. The hospitalist movement is growing fastest in California and the Southeast, but hospitalists are also practicing in Massachusetts and Texas. We expect the use of hospitalists to increase nationwide, especially as pressures to further decrease lengths of stay continue and the concept of hospitalists gains acceptance from patients and physicians.

REVENUE PRESSURES MOUNTING: BBA97 AND MEDICARE RISK CONTRACTING ARE SIGNIFICANT CREDIT ISSUES

We are finding that for most health care providers, the impact from the Balanced Budget Act of 1997 (BBA97), which included a freeze on hospital Medicare inpatient payment rates for fiscal 1998, was far more material than originally anticipated. We believe that the negative impact of BBA97 and the continuation of the industry's secular credit pressures have significantly contributed to the deteriorating credit quality that is felt across the rating continuum.

The impact of Medicare cuts on individual hospitals will vary depending on geographic classification, the number of staffed beds and the size of a hospital's teaching program. Higher rated health systems tend to be larger, developing health systems with teaching programs, making them more susceptible to merger and integration-related risks and BBA97 payment reductions. As the major recipients of graduate medical education (GME) and disproportionate share (DSH) funding, teaching hospitals dependent on add-on payments from Medicare will experience the greatest Medicare revenue reductions in real terms. These cuts have a material impact. For example, **BJC Health System's** Aa2 bond rating was recently assigned a negative outlook and **University of Pennsylvania Health System's** bond rating was lowered to A1 and subsequently lowered to A2 with a negative outlook from Aa3. These negative rating actions were partially due to increased risk associated with expected BBA97 reimbursement cuts over the next several years. Moody's believes that an inability to adjust to BBA97 revenue reductions over the short-term will contribute to additional rating revisions for higher rated providers in the future. The rating downgrade and outlook change to negative for **Henry Ford Health System** (MI) was due to our expectation that future profitability will continue to come under pressure as the effects of BBA97 on reimbursement for medical education and outpatient care, both significant to the core operations of Henry Ford Health System, are realized.

Furthermore, the BBA97 impact is not limited to hospitals — we are seeing many HMOs terminate Medicare contracts as the government's switch to fixed, flat-rate reimbursements from the traditional fee-

based system has made it less profitable for the HMO to cover treatment and administrative costs for the elderly. In 1998, we also saw the initial pullback by hospital providers from Medicare risk contracts and serious reevaluation of the financial impact of participating in such contracts. **Adventist Health System (FL)** incurred large operating losses under Premier Care, a large Medicare managed care product, due to rapid enrollment growth (nearly 18,000 lives), higher-than-budgeted utilization rates and out-of-network leakage. This resulted in Adventist's decision to notify HCFA of its plan to terminate the program. Management's quick action to discontinue an unprofitable service line is viewed favorably by Moody's, but the impact to the system's 1998 performance nonetheless weakened the financial stature of this large organization.

Many providers realize in hindsight, that reimbursement levels were insufficient to cover the cost of the benefits required by the Medicare beneficiaries. These providers are now recognizing that traditional Medicare provides relatively good reimbursement, especially as providers became more efficient in reducing Medicare lengths of stay. We expect increased credit volatility for the mid-term as providers seek to offset increasing Medicare reductions and find a method to limit the cost of providing services from surpassing the compensation received.

CONTINUED SHIFT TO MANAGED CARE FURTHER IMPACTING THE HEALTHCARE ENVIRONMENT

We believe the development and unrelenting shift toward managed care is driving the competitive changes in the health care sector's landscape. Generally speaking, managed care penetration is increasing steadily with nationwide HMO enrollment still growing annually. This growth is spurred not only by a continuation of the conversion of commercial lives to managed care, but also from governmental payers encouraging the shift of its programs to managed care. Moody's believes the passage of BBA97 has enhanced the shift into managed care.

Fiscal year 1998 was another financially difficult year for many for-profit and not-for-profit insurers, with several posting losses due to multiple reasons: pricing wars resulting in premium freezes and reductions, expansion costs, high medical costs (especially pharmaceutical), and information system difficulties. While there are indications of large premium increases for the current and coming year, it is uncertain as to what extent these premium hikes will be passed along to providers. We believe improvement in reimbursement rates is likely to be related to the balance of power in specific markets. We anticipate that those providers with greater market leverage are in better bargaining positions to extract higher reimbursement rates.

Rapid consolidation of the nation's health plans may reverse a more recent trend of providers gaining some leverage with payers, shifting the balance of power back into the hands of the payers. In addition, following two years of relatively poor profitability stemming from cutthroat premium competition and continued increases in medical utilization, managed care plans are searching for ways to reign in medical costs. Moody's negative outlook associated with **Kaiser Foundation Hospital's A3** rating addresses the unique challenges facing a group model health plan and an atypical capital intensive HMO in the face of high levels of overhead. We believe the HMOs will use their leverage to be more aggressive in future negotiations with hospitals and physicians and it will become increasingly difficult for health systems to generate profits at historic levels.

An additional pressure from managed care organizations (MCOs) has been a slowdown in claims payment or outright denials of claims for what managed care plans determine to be medically unnecessary service. Often this denial occurs after the treatment has been provided. This recent development is in direct contrast to the original promise by MCOs of prompt payment and increased volume to providers in exchange for discounted payments. **Massachusetts** providers have been grappling with this issue for several years, since managed care plans in that state began denying inpatient admissions for less acute treatments and reimbursing the hospitals instead for what they deem to be observation or 23-hour visits. Many hospitals report that they are utilizing additional resources to shore up their billing and claims departments so that clean claims can be submitted with less chance of denial or multiple delays. Although states such as **Louisiana, New York and Pennsylvania** are legislating quicker payment by payers, enforcing such a mandate is proving difficult.

The shift to Medicaid managed care created some new revenue pressures for providers and health plans in 1998. With more states mandating managed care for their Medicaid recipients, we anticipate that a steady shift from commercial plans to managed care plans will mean material reimbursement reductions

to providers. In fact, we are now beginning to witness Medicaid managed care plans exiting markets because of insufficient funding. For instance, Oxford Health Plan terminated its Medicaid managed care coverage in New York, Connecticut and New Jersey, and Prudential HealthCare announced its plans to terminate its Medicaid coverage in several states pending its sale to Aetna. For providers, fewer Medicaid managed care options may shift the balance of power to the Medicaid plans, resulting in even lower reimbursement for this payer class.

CAPITATION CREATING RISK EXPOSURE, RESULTING IN SIGNIFICANT LOSSES

While many health systems believe they are prepared to operate under capitated arrangements, those that have entered into these risk-bearing arrangements are encountering significant difficulties. To date, the amount of capitated hospital business is increasing but remains a relatively modest percentage of total revenues. A number of not-for-profit hospital systems, including those in California, have experienced margin erosion due to the assumption of capitated business, and certain providers, such as **Catholic Healthcare West**, are exiting onerous capitated contracts in certain regions where competitive reciprocity is less likely. The negative outlook assigned to **Holy Cross Health System (IN)** is due in part to higher-than-expected medical utilization at its Fresno hospital under a capitated contract with an affiliated health maintenance organization (Navmed). Other providers not renewing capitated contracts due to large losses include **PorterCare Health System (CO)** and **UMass Memorial Health System (MA)**.

Moody's believes that hospitals entering into capitated contracts expose themselves to greater risk since use rates are difficult to predict and out-of-network utilization is very difficult to control. Furthermore, the providers experiencing the largest losses are those who often, overnight, began covering significant numbers of covered lives without prior experience. Many issuers believe their large 1998 losses from capitated contracts were due to flawed baseline data from which the rates were initially based, and then lacked timely and accurate data surrounding the 1997 and 1998 performance, which hindered an ability to monitor actual costs of all medical expenses. Additionally, pharmaceutical expenses recorded double-digit increases and were difficult to control. While there are a few hospital systems that have demonstrated success in managing significant capitated business, we believe that success within the capitated arena can best be achieved by those systems which are large enough to capture and manage the cost of caring for the plan's enrolled population within their own integrated health network. However, we expect that a current redirection of focus regarding information systems toward year 2000 compliance issues may compromise short-term efforts to build an adequate information system to manage capitated lives.

DISAPPOINTINGLY WEAK FINANCIAL PERFORMANCE IN 1998

Fiscal 1998 was a year that saw a significant downturn in financial performance. The confluence of higher than expected BBA97 impact, increased Y2K expenses, physician losses and managed care pressures created an environment in which generating excess returns was difficult. The size of operating deficits recorded in 1998 was unprecedented. Several providers recorded operating deficits in excess of \$50 million, including **Detroit Medical Center (MI)**, **CareGroup (MA)**, **University of Pennsylvania Health System (PA)**, **Saint Barnabas Health System (NJ)**, **Baptist Hospital (TN)**, **Catholic Healthcare West (CA)**.

Because the operating losses were quite high, a number of providers took the opportunity to "clean up" accounts receivables by writing off bad debt accounts and thus reducing operating margins further. The thought was to clean up the balance sheet so that fiscal 1999 could begin with a clean slate. Unfortunately, such a clean up means that historical analysis of profitability may not have been accurately reflected due to the overstatement of the value of receivables and other assets. The significance of such write-offs was a contributing factor to downgrades for several credits including **Citrus Valley Health Partners (CA)** and **Detroit Medical Center (MI)**.

REGIONAL POCKETS OF RISK REMAIN

Those operating environments with strong local economies and less aggressive managed care development in the Southwest and Midwest remain generally favorable. By contrast, urban markets, such as Cleveland, Denver, Detroit, Los Angeles, New York, Philadelphia, Pittsburgh, and San Francisco, remain particularly volatile to managed care pressures and merger and acquisition activity.

ACADEMIC MEDICAL CENTERS/MAJOR TEACHING HOSPITALS ARE UNDER PRESSURE

Many of the academic medical centers (AMCs) and major teaching hospitals experienced financial pressures in fiscal year 1998. AMCs are being challenged by payers, the government and consumers to prove that they are different from community, non-teaching providers and that their higher costs are therefore justified for their delivery of patient care. The financial pressures are coming from varying sources, but are generally focused on Medicare and/or Medicaid changes in medical education reimbursement programs, financial pressures from the development of integrated health care systems, or increased competitive factors. Fiscal 1998 saw several rating downgrades for AMCs and Moody's assigned several negative outlooks to other premiere organizations, many that are or were rated Aa at one time. The higher ratings for AMCs is largely predicated on our belief that these hospitals' ability to draw from wide geographic regions due to their superior teaching, clinical and research reputations provide them leverage with payers. Furthermore, they tend to possess strong financial foundations (i.e. cash resources) to overcome the challenges associated with rapid integration activities.

We believe that the future of an AMC is largely dependent on what it chooses for the development and refinement of its healthcare delivery systems. The challenge remains to define and then develop the most appropriate integration strategy with physicians and other area providers given the local demographics and competitive landscape.

YEAR 2000 COMPLIANCE PROCEEDING

Hospitals and health care systems are actively pursuing internal and external measures to assure their ability to be operational on January 1, 2000. Five main areas that need to be addressed by industry participants are 1) computer systems; 2) biomedical devices; 3) facilities and plant operations; 4) external suppliers and partners (both upstream and downstream); and 5) internal partners/employees.

Moody's has questioned providers about their efforts to become compliant and contingency plans for their most important processes, but to date has taken no specific rating action as a result of these discussions. Many providers are well underway with their compliance efforts, expecting to have the majority of their changes implemented by calendar mid-year 1999, using the second half of 1999 as a test period. Although hospitals are communicating with their vendors, suppliers and business partners to determine their current level of compliance, there is no guarantee that the systems of these third parties, or others on which the hospital relies, will be compliant and will not have an adverse affect on hospital operations. The basis of our discussions with hospitals now is to be satisfied that they have developed and are executing a plan to replace or modify as necessary all information system hardware and software, and that they are evaluating whether to replace or modify certain biomedical equipment and have determined their exposure to outside vendors and suppliers. Furthermore, we are discussing the assessment of mission-critical applications, which are defined as those applications for which there is no reliable manual alternatives, to determine the potential for failure and that impact on the hospital's ability to fulfill its mission to provide health care services. While costs vary from hospital to hospital, all organizations are devoting significant resources and time to be compliant by year-end. Such resource allocation may prove significant for hospitals with limited financial cushion.

The larger issue facing the health care industry is not how the providers of service (i.e. hospitals) will be prepared for Y2K, but rather how outside vendors, in particular the federal government will be prepared. Any disruption in government payments could cause financial trouble for hospitals, which depend on governmental payers for at least 50% of their total revenue. Therefore hospitals must anticipate and budget for the potential of a temporary halt in cash flow from one of its largest payers. Providers have been exploring the use of lines of credit if cashflow problems require such a revenue influx.

As a result of HCFA concentrating on fixing its internal systems, the agency stated recently that it would halt any new project that could get in the way during Year 2000 activity next year. The agency confirmed reports that it would not make reimbursement updates for hospitals on October 1, 1999 and for doctors on January 1, 2000. Instead it will adjust payments after April 2000 at a rate that will yield a full year's update by the end of the budget year.

UNCERTAIN FUTURE FOR EQUITY INVESTMENT RETURNS

Over the past several years, strengthening hospital financial profiles have been fueled, in part, by exceptional returns from the stock market. However, the stock market's performance is becoming increasingly variable as of late and we believe that it is unlikely that current investment returns will be sustained in the future. With a larger portion of an average hospital's investment portfolio weighted more heavily towards equity investments than in the past, we believe that a possible market decline will have a more pronounced impact on hospital investments, thereby making profitability and liquidity levels more volatile and unpredictable. This in fact was the case experienced in 1998, when we saw the negative effect of the stock market's August 1998 decline on the net income of providers with fiscal years ending on September 30, 1998. We believe health care providers have less "risk tolerance" to market fluctuations than other entities, resulting in a greater impact on credit quality should negative equity market conditions prevail.

The 1999 Medians

We currently maintain unenhanced ratings on 478 issuers, including acute care and specialty hospitals (i.e. children's, rehabilitation and chronic disease hospitals), multi-site health systems, continuing care facilities, health maintenance organizations, and various other health providers. Of the rated hospital/health system universe, 20 are multi-state systems and over 110 are single-state systems with multiple acute care delivery sites. The remainder are freestanding hospitals. In total, those issuers rated by Moody's now sustain approximately \$60 billion outstanding in aggregate debt. The 1999 medians are based on 1998 audited financial reports of 303 freestanding systems and 16 multi-state hospital systems.

Since the generation of last year's medians, health care provider consolidations have removed a number of public unenhanced health care providers with Moody's rated debt from our ratings pool. Offsetting these deletions are 41 new ratings added to our portfolio in 1998. An additional 17 ratings have been added to our portfolio in the first six months of 1999. The credit impact of the ratings removed from last year's pool are now included in our rating of the new health care organization. Moody's expects continued shifts in both the hospital portfolio and multi-state system portfolio as existing entities rated by Moody's consolidate and expand, and as new systems are formed.

Analysis Of Historical Financial Performance: Freestanding Hospitals/Single-State Systems

The overall credit deterioration for US not-for-profit hospitals that occurred in 1998 is evident across almost all medians.

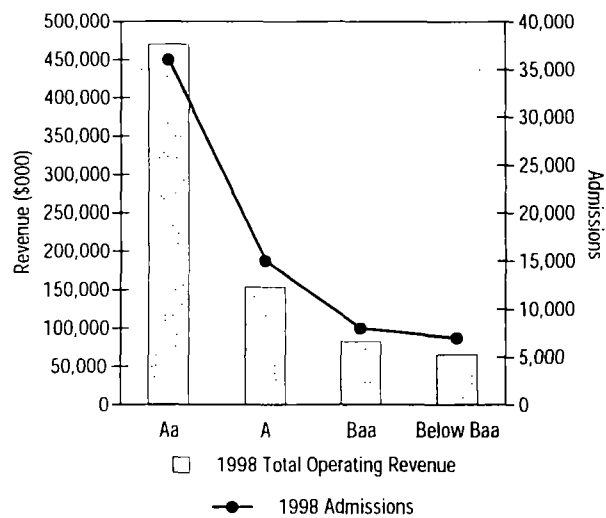
CRITICAL MASS AND CREDIT STRENGTH

Consistent with prior years, larger size and higher ratings are clearly correlated among investment grade-rated entities, as indicated in Figure 4, although the trend no longer applies for hospitals that are rated below-investment grade. Over the past ten years, the profile of the hospitals downgraded to the speculative grade level as well as the factors behind the downgrades have changed. A range of hospital sizes in the below investment grade ratings categories is evidence that increased market pressures affect hospitals of all sizes. Nonetheless, larger entities, especially those that operate multiple sites, tend to possess the resources necessary to better withstand negative market developments.

Non-specialty freestanding hospitals and single-state health systems represent approximately 88% of the current unenhanced ratings within our portfolio. Within our median sample of freestanding hospitals and single-state health systems, merger and acquisition activity has created larger organizations, and in certain cases higher ratings.

Figure 4

1998 Median Total Operating Revenues and Admissions by Rating Category



EXPENSE GROWTH OUTPACING REVENUE GROWTH

Moody's-rated hospitals continue their strategic initiatives to control costs and maintain profits as they battle against both actual and anticipated reimbursement pressures by payers. These initiatives were the starting point for providers to cope with reimbursement declines as a result of the passage of the Balance Budget Act of 1997. Providers with a higher dependence on Medicare and Medicaid face significant challenges to maintain existing profitability levels due to the federal government's reduction of the rate of funding increases, restructured payment methodologies, and greater use of managed care structures.

Despite implementing widespread cost control initiatives, the fact that expense growth outpaced revenue growth does not bode well for industry participants. Several market participants report an increase in Y2K spending, which is being included in 1998's higher expense results. The significant decline by 49.4% in the income from operations median from 1997 to 1998, which reversed a steadily increasing trend since 1994, clearly illustrates the negative effect of expense growth outpacing revenue growth during 1998. Even with revenue pressures, Moody's-rated hospitals reported an increase in the rate of revenue growth for total operating revenues in 1998 although a decline in growth in net patient revenue was also reported (Figure 5). We believe that there were two key factors to this trend reversal, both relating to mergers and consolidations. First, on a same-store basis, total revenues improved as organizations gained increased bargaining power with increased market position. Second, and likely a larger contributor to revenue improvement, is the addition of new hospitals and/or new lines of business, whose revenue is recorded apart from net patient revenue (i.e. premium revenue). We believe this to be true as operating expenses, which includes expenses associated with starting new business lines, also grew at a pace faster than the prior year (8.6% in 1998 compared to 5.3% in 1997).

Moody's continues to believe that once all the "low hanging fruit" has been removed from the cost structure, facilities will have to be closed or scaled back to achieve further cost savings. Some organizations are already moving in this direction, demonstrated, for example, through announcements of facility closures by both **Detroit Medical Center** and **Oakwood Health System**, both located in the metropolitan Detroit market. Conversely, the decision to close **HealthEast's St. Joseph's Hospital** facility was changed following physician involvement and demonstrated volume increases from renewed physician loyalty.

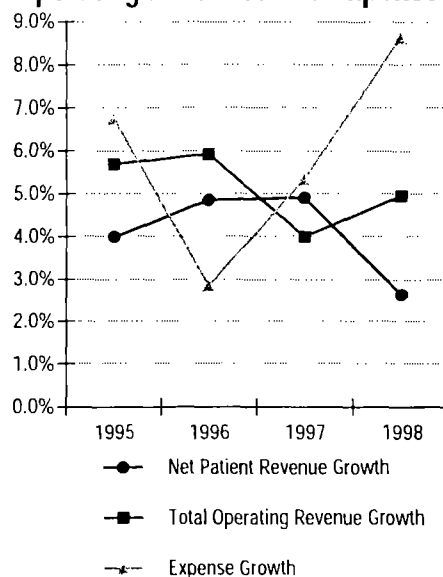
PATIENT UTILIZATION: NOTICEABLE SHIFT TOWARD OUTPATIENT SETTINGS

The provision of care continues to shift away from inpatient settings and toward outpatient settings as hospitals attempt to provide quality care in less expensive environments. In concert with this trend, we have seen a greater share of capital dollars directed toward not only the expansion and renovation of outpatient services located within a hospital's walls, but also the establishment of freestanding clinical and ambulatory care sites. At the same time, although generating lower reimbursement per service provided, hospitals are reporting a greater percentage of revenues derived from these outpatient services. We believe that freestanding surgery sites, coupled with more surgeries being performed in physician offices accounts for the decline in outpatient surgeries reported on the providers' campus in our 1998 sample.

The inpatient admissions median, which increased 9.6% over the previous four year (1994-1997) period, showed a 4.7% decline in 1998 over 1997. (Figure 6). The increased use of observation days and tech-

Figure 5

Median Growth Rate in Operating Revenues and Expenses



nological advances that enable more complex medical cases to be performed on an outpatient basis contribute to the overall inpatient admission decline. We believe this trend will continue in the near-term.

Although 1998 median inpatient admissions declined, in various pockets throughout the country, providers are reporting an overall increase in admissions and occupancy rates considerably higher than recorded in previous years. This may be due to these hospitals reducing maintained beds over the past 5 years in response to declining occupancy rates as lengths of stay declined, and being perhaps “too downsized” to take advantage of new referrals being generated by horizontal integration strategies that are maturing several years after implementation.

Of additional interest when reviewing utilization trends is the increase in the Medicare Case Mix Index in 1998 and slight increase in average length of stay. We believe that those patients now admitted to an inpatient unit are sicker and require treatment for more medically complex illnesses than patients admitted several years ago. The use of observation visits to take less complex medical cases out of a hospital’s inpatient mix is another contributing factor to this increased case mix. Additionally, a renewed focus on proper billing and coding of medical records to capture all applicable revenues are contributing factors to this 1998 median.

PROFITABILITY HAS NOTICEABLY DECLINED

As we projected in last year’s Outlook on Health Care Ratings, 1998 ended a three-year trend (1995-1997) of increasing median operating and excess margins, reflecting the hospitals’ ability to control costs with persisting revenue pressures during those years (Figure 7). The median operating margin declined significantly (by almost 40%) to 2.1% in 1998 from 3.4% in 1994, and marks the first time since 1993 that the operating margin has fallen below 3.0%. At the same time, the median excess margin decreased to 4.9% in 1998 from 6.2% in 1997 and is flat with the 4.9% excess margin recorded in 1994. Additionally, median operating cash flow margin (operating income plus depreciation, amortization and interest expenses, divided by total operating revenues) of 10.3% in 1998 is at a five year low. BBA97 revenue pressures and Y2K compliance costs were two contributing factors to the year’s financial downturn.

Moody’s believes that the recent proliferation of losses reported by major insurers does not bode well for improving hospitals’ future profitability. While insurers are successfully implementing double-digit premium increases, it is uncertain to what degree these premium increases will be passed along to providers, as the insurers attempt to alleviate their own negative operating performance which was equally poor in fiscal 1998.

Median operating and operating cash flow margins for the Aa-rated hospitals were higher than those of A-rated hospitals (Figure 8), reversing a previous two-year trend. We found this surprising given the number of Aa-rated organizations that experienced financial difficulties in 1998 and the fact that the Aa-

Figure 6

Median Inpatient Admissions

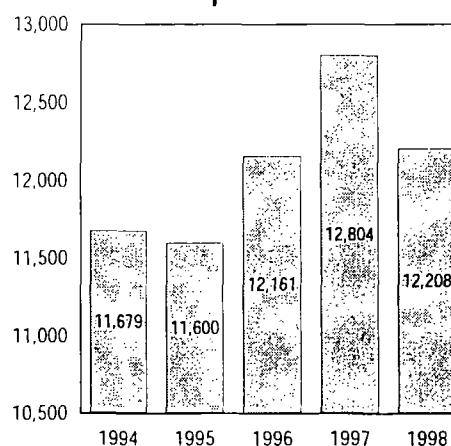
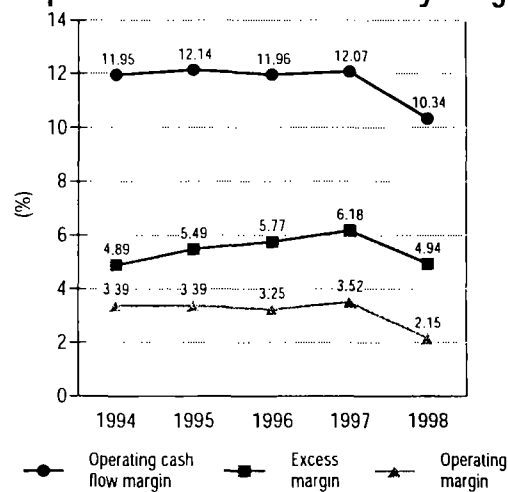


Figure 7

Comparison of Median Profitability Margins



rated organizations are more likely to have integrated with other hospitals and non-hospital affiliates (such as health insurance plans), which generate lower profit margins than the core acute care service itself. We believe that the disproportionate number of Aa-rated organizations in North Carolina and Virginia who continue to generate very favorable margins are skewing these two ratios.

As a result of poor operating results, several of the integrated systems are undertaking major restructuring initiatives. In an attempt to refocus attention on their core business and to stem losses generated by affiliates, these organizations, such as A2-rated Baptist Health System (Nashville, TN), have sold portions of their managed care companies and physician group practices. In light of satisfactory operating performance by key lines of business, we expect such efforts will help some of these organizations return to operating profitability. We expect to witness more divestitures of unprofitable product lines in the future as more hospitals realize that a back-to-basics strategy can return financial performance to more palatable levels.

DEBT SERVICE COVERAGE SHOWED SOME WEAKENING

Estimated Maximum Annual Debt Service (MADS) Coverage measures the ability of a borrower to apply its most recent historical net revenue available for the debt service to the largest future annual principal and interest payment owed, based on the borrower's debt amortization schedule. If the borrower can service the largest future payment, then it should be able to service its most current actual debt service payment (Annual Debt Service Coverage). While this ratio remains an important one, it gives no information regarding the time period over which the provider must maintain its current year's financial performance. From this ratio, we have no indication of whether the hospital is making its first debt service payment in a 30-year amortization or the 30th year's payment.

Reversing a four year trend, the 1998 MADS Coverage ratio showed some weakening to 3.53 times from a median coverage of 3.67 times the year before. This decline derives primarily from slower growth in cash flow generation (numerator) than in required debt service payments (denominator) on higher debt loads. As expected, higher ratings are associated with higher coverage levels (Figure 9). It is interesting to note that the MADS coverage of 1.84 times for non-investment grade credits is a slight improvement over the 1997 coverage of 1.80 times and exceeds the MADS coverage test of 1.10 times considered standard by today's bond documents.

Figure 8

1998 Median Margins by Rating Category

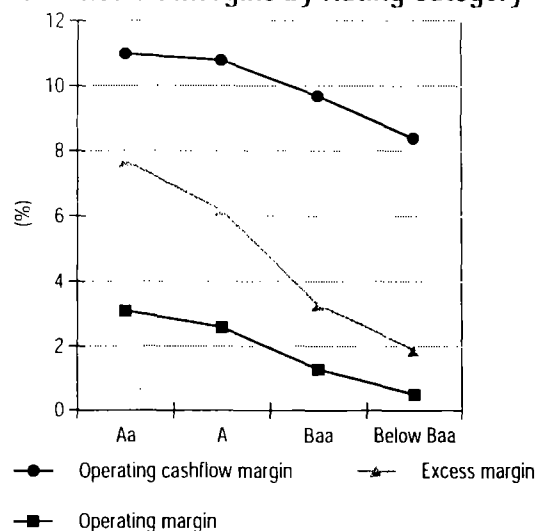
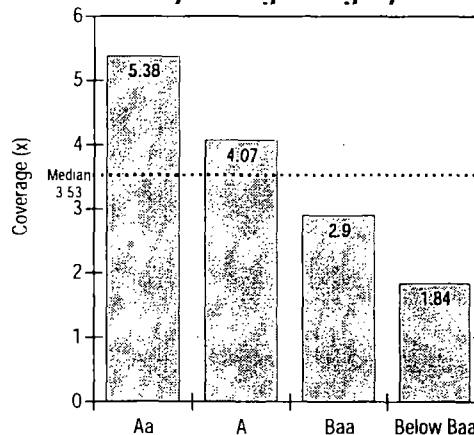


Figure 9

1998 Median MADS Coverage (x) By Rating Category



LIQUIDITY IMPROVES, BUT NOT AT HISTORIC LEVELS

The primary liquidity ratios measure the number of days a hospital could continue paying its cash operating expenses from existing cash balances in the absence of any future cash inflows (Days Cash-on-Hand) and the percentage of existing debt that could be retired immediately with existing cash balances (Cash-to-Debt).

The 1998 Medians (Figure 10) show another year in the trend of increasing unrestricted cash and investment balances over the past five years, with the 1998 median liquidity balance nearly double that of 1994 (to \$53.6 million from \$29.9 million). However, the improvement in liquidity balances for 1998 was not as material as we thought it would be, given the amount of borrowing that occurred during the year for future routine capital and management's projected plans to "bank" the year's excess cash flow into liquidity balances. Furthermore, a decline in days cash-on-hand to 155 from 163 days, indicates that the increase in absolute unrestricted reserves (2.9%) does not compensate for the greater increase in expense structure (8.6% increase) over the previous year. We believe that much of the growth prior to 1998 was driven by the recognition of unrealized gains on investment securities with the adoption of SFAS 124 (including restatement of 1996 balances) and favorable market returns as organizations re-balanced investment portfolios to include greater investments in the equity markets.

As demonstrated in Figure 11, liquidity grew slower than debt in 1998, generating an overall decline in the Cash-to-Debt ratio from the year before, and reversing another four-year trend. In 1998, the median ratio declined to 98.7% from 101.6%, but was up from 74.1% in 1994. Again, we believe the recent weakening is related to cash flow declines that limited the ability to generate excess earnings to reserve into savings at the end of the year. Despite this, as seen in Figure 12, Aa- and A-rated hospitals could still retire their entire debt obligations immediately, while non-investment grade hospitals (Below Baa) continue a trend of minimal cash on hand to repay bondholders.

Current realized growth in liquidity is viewed as a credit strength, and we are looking more closely at how cash balances are invested and the dependence on non-operating income to bolster profit margins.

Figure 10

Comparison of Liquidity Median

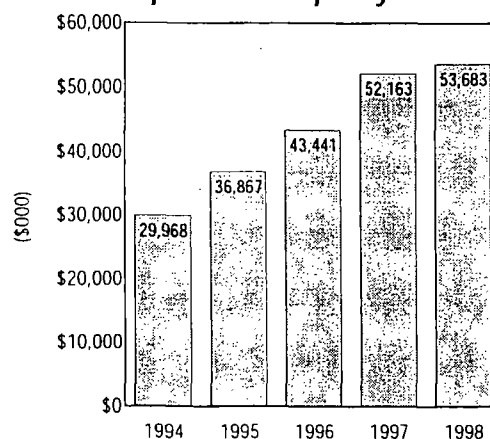


Figure 11

Comparison of Median Cash-to-Debt Ratio (%)

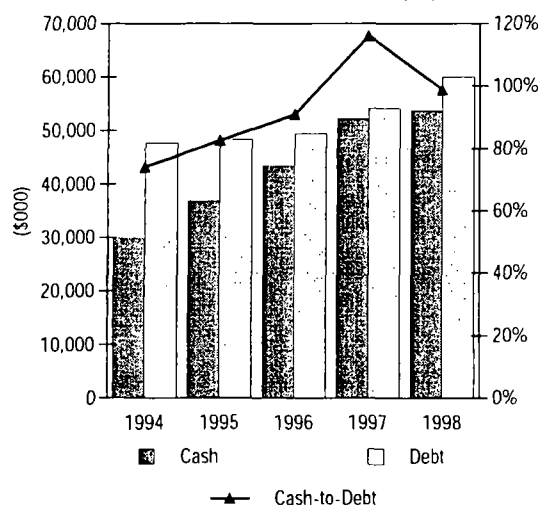
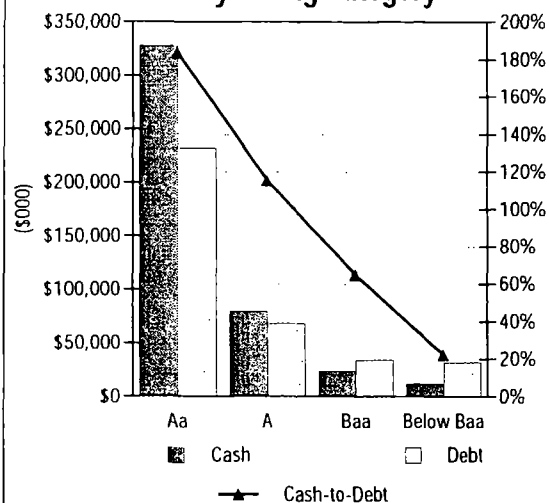


Figure 12

1998 Cash-to-Debt Median By Rating Category



LEVERAGE

Moody's believes that the financial measures of debt, particularly the Debt-to-Cash Flow ratio, go to the heart of the assessment of credit risk. Similar to the Debt Service Coverage ratio, the Debt-to-Cash Flow ratio measures the relationship between the debt obligation and the ability to generate ongoing cash flow to service the debt. It also provides an effective measure of leverage in that it captures the time period during which the hospital will have to maintain its current operating performance in order to pay back all of its debt by relating the balance sheet liability to recurring annual cashflow. The 1998 median ratio of 3.6 times, for example, means that, hypothetically, a hospital could repay the principal on the outstanding debt from its cash flow generated over the next three and a half years (assuming the hospital can maintain this year's cash flow level, and assuming zero capital expenditures). All else equal, the longer the time period over which a hospital must service its debt obligations (i.e. higher ratio), the riskier we perceive the credit to be.

Despite an increase in the median debt load to \$60 million in 1998 from \$47.7 million in 1994, median Debt-to-Cash Flow improved (declined) during the same period to 3.6 times from 3.74 times (Figure 13). We believe this trend is driven by stronger cash flow generation over that four year period as organizations increased operating and non-operating revenues, implemented major cost control initiatives in advance of Medicare and Medicaid reimbursement pressures, and gained financial benefits from consolidation efforts. However, the median did weaken (increase) from 3.29 times in 1997, suggesting that the aforementioned level of improvement in cash flow experienced through 1997 may not be sustainable in the long run.

Obviously, no ratio can guarantee a hospital's future performance. Overlaying any ratio is the need for an analytical assessment of the hospital's ability to duplicate the current year's financial performance. This requires an analysis of multiple factors, including management strategy, shifting market alliances, government regulation and market demographics. Ultimately, the ability to assess the "quality" of the most recent year's cash flow necessitates an assessment of how well positioned the hospital is to handle future contingencies. Notwithstanding the uncertainty of future performance, stronger credits tend to carry lower Debt-to-Cash Flow ratios than weaker credits (Figure 14), although each rating category experienced a higher (weaker) debt-to-cash flow ratio in 1998 than in the previous three years.

Figure 13

Comparison of Median Debt-to-Cash Flow Ratio

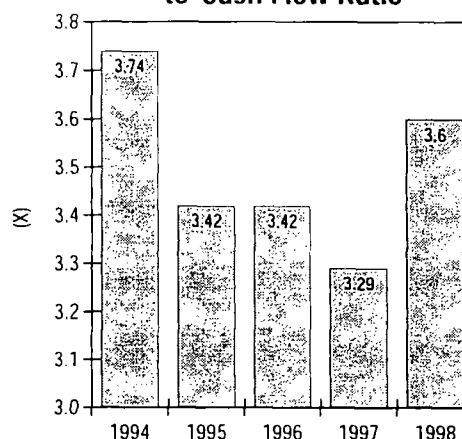
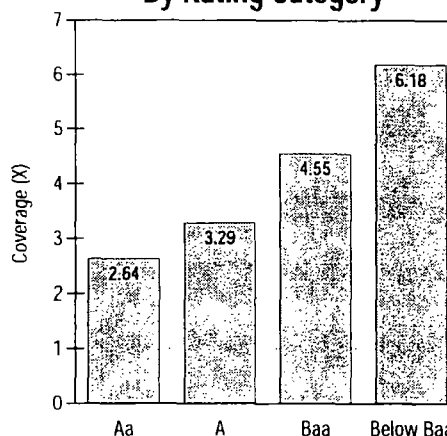


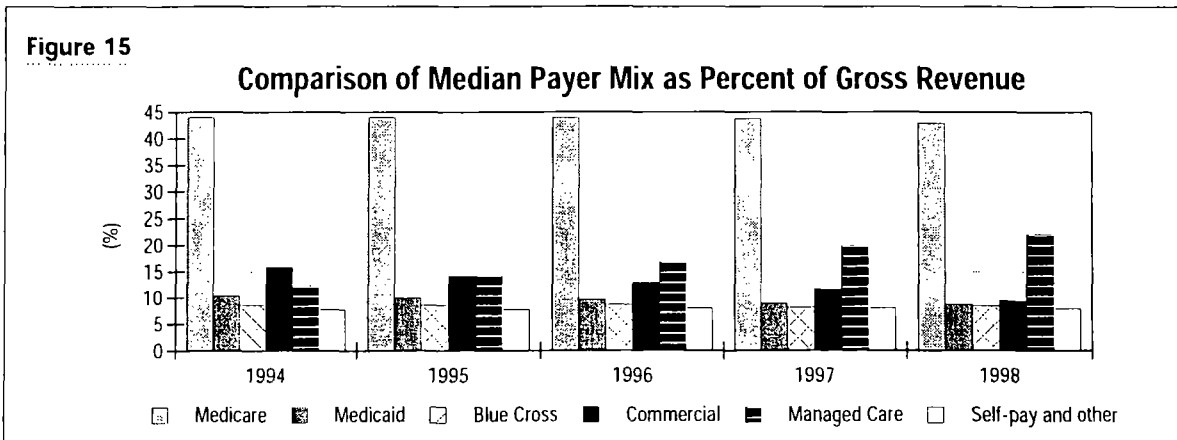
Figure 14

1998 Debt-to-Cash Flow By Rating Category



PAYER MIX REFLECTS CONTINUED MANAGED CARE GROWTH AT EXPENSE OF TRADITIONAL MEDICARE AND MEDICAID

Managed care continues to grow, primarily at the expense of commercial indemnity insurance contracts. But also driving this shift is the increasing emphasis to enroll Medicare and Medicaid eligibles into managed care plans, especially with the passage of BBA97. The 1998 medians show an increase in managed care as a percent of gross revenue, which is offset by declines in both traditional fee-for-service Medicare and Medicaid (Figure 15). More and more states are obtaining Medicaid waivers and slowly converting various segments of the Medicaid population into managed care plans. The result has been a public uproar by providers of unreasonably low reimbursement rates and a wave of HMOs exiting from Medicare-risk markets.



Freestanding Hospital & Single-State Health Care Systems Health Care Medians by Rating Category, 1998[1]

	All Ratings	Aa	A	Baa	Below Baa
Distribution of Health Care Ratings [2]	100%	11%	45%	36%	8%
Median Sample Size	303	35	142	114	12
Utilization					
Maintained beds	256	662	310	171	183
Admissions	12,208	35,559	15,124	7,940	7,062
Patient days	60,533	178,808	73,825	39,566	39,720
Average length of stay	5.0	5.2	4.9	4.9	5.2
Maintained bed occupancy	61.8%	69.6%	63.3%	58.1%	57.7%
Emergency room visits	37,566	73,393	43,853	26,101	30,946
Outpatient visits	118,629	236,091	135,168	94,069	46,388
Outpatient surgeries	5,459	12,362	7,533	4,161	4,187
Medicare case mix index	1.38	1.68	1.41	1.31	1.22
Financial Performance (\$000)					
Net patient revenues	\$121,932	\$431,526	\$147,151	\$ 77,019	\$ 63,657
Total operating revenue	132,601	470,244	154,303	82,987	65,540
Interest expense	2,897	9,372	3,222	2,138	2,425
Depreciation and amortization expense	8,278	29,613	9,815	4,726	3,755
Total operating expenses	131,285	440,574	151,776	81,029	69,961
Income from operations	2,131	12,805	3,260	949	296
Excess of revenue over expenses	6,246	39,327	10,068	2,489	1,663
Net revenue available for debt service	17,871	79,059	23,869	9,788	7,779
Operating cash flow	12,631	58,269	17,996	7,570	7,598
Debt service	4,938	11,371	5,763	3,620	3,117
Additions to property, plant and equipment	12,621	48,359	16,257	5,933	2,258
Balance Sheet (\$000)					
Unrestricted cash and investments	\$53,683	\$328,087	\$ 79,776	\$ 23,937	\$ 11,984
Restricted cash and investments	3,271	19,284	5,083	1,697	211
Net fixed assets	78,165	287,849	97,031	45,555	36,324
Long-term debt	60,010	232,294	68,203	34,081	31,919
Debt service reserve and Debt service funds	4,489	5,967	5,231	3,696	3,258
Net debt	50,000	157,455	58,968	29,039	28,704
Unrestricted fund balance	90,363	477,057	132,868	46,778	24,951
Key Ratios					
Operating margin	2.2%	3.1%	2.6%	1.3%	0.5%
Excess margin	4.9%	7.7%	6.2%	3.3%	1.9%
Operating cash flow margin	10.3%	11.0%	10.8%	9.7%	8.4%
Return on assets	4.2%	5.3%	4.8%	2.9%	1.7%
Annual debt service coverage (x)	3.67	7.23	4.40	2.82	2.02
Maximum annual debt service coverage (x)	3.53	5.38	4.07	2.90	1.84
Current ratio (x)	2.0	1.8	2.1	2.0	1.5
Cash on hand (days)	154.6	255.2	200.5	100.2	39.9
Cushion ratio (x)	11.2	20.6	12.8	6.9	1.8
Cash-to-debt	98.7%	183.6%	115.4%	64.8%	22.4%
Accounts receivable (days)	64.2	66.6	64.0	64.2	59.2
Average payment period (days)	65.1	70.0	63.2	63.9	70.4
Debt-to-capitalization	37.7%	28.7%	35.4%	45.5%	63.1%
Debt-to-cash flow (x)	3.60	2.64	3.29	4.55	6.18
Average age of plant (years)	8.7	8.0	8.5	9.6	9.8
Patient Revenue Sources By Gross Revenue (%) [3]					
Medicare	42.9	37.2	43.0	43.3	50.3
Medicaid	8.8	10.2	9.0	8.0	7.7
Blue Cross	8.5	8.2	10.0	8.1	6.6
Commercial	9.6	14.4	9.0	9.2	4.5
Managed Care	22.1	24.2	24.8	20.6	18.2
Self-pay and other	8.0	11.0	8.3	7.3	9.7

[1] Statistics are based on a sample size of 303 hospitals, excluding multi-state hospital systems.

[2] Distribution encompasses all non-insured ratings as of 8/16/99, rather than the median sample.

[3] Columns do not necessarily sum to 100% because each entry is a separately calculated median.

Comparative Review of Health Care Medians, 1994 - 1998[1]

All Ratings	1994	1995	1996	1997	1998
Utilization					
Maintained beds	283	280	278	293	256
Admissions	11,679	11,600	12,161	12,804	12,208
Patient days	68,012	64,816	65,135	65,702	60,533
Average length of stay	5.64	5.31	5.10	4.98	4.99
Maintained bed occupancy	63.57%	62.33%	61.09%	61.90%	61.75%
Emergency room visits	34,720	35,087	35,603	37,313	37,566
Outpatient visits	77,854	83,167	94,110	107,510	118,629
Outpatient surgeries	5,015	5,331	5,152	5,546	5,459
Medicare case mix index	1.30	1.32	1.33	1.36	1.38
Financial Performance (\$000)					
Net patient revenues	\$103,869	\$108,011	\$113,253	\$118,812	\$121,932
Total operating revenue	108,517	114,694	121,487	126,351	132,601
Interest expense	2,774	2,880	2,972	2,937	2,897
Depreciation and amortization expense	6,082	6,906	7,515	7,979	8,278
Total operating expenses	104,504	111,560	114,735	120,865	131,285
Income from operations	3,216	3,762	3,837	4,211	2,131
Excess of revenue over expenses	5,066	6,710	7,058	8,365	6,246
Net revenue available for debt service	14,816	16,489	17,465	19,172	17,871
Operating cash flow	12,257	13,578	14,025	14,851	12,631
Debt service	4,211	4,288	4,518	4,828	4,938
Additions to property, plant and equipment	8,505	9,689	9,596	10,655	12,621
Balance Sheet (\$000)					
Unrestricted cash and investments	\$29,968	\$36,867	\$43,441	\$52,163	\$53,683
Restricted cash and investments	1,186	1,400	1,809	2,502	3,271
Net fixed assets	62,721	64,794	66,912	72,221	78,165
Long-term debt	47,718	48,299	49,392	54,120	60,010
Debt service reserve and Debt service funds	3,855	4,110	3,940	4,481	4,489
Net debt	43,509	43,192	43,188	44,901	50,000
Unrestricted fund balance	59,733	68,225	76,315	86,411	90,363
Key Ratios					
Operating margin	3.4%	3.4%	3.3%	3.5%	2.2%
Excess margin	4.9%	5.5%	5.8%	6.2%	4.9%
Operating cash flow margin	11.9%	12.1%	12.0%	12.1%	10.3%
Return on assets	4.4%	4.8%	5.2%	5.5%	4.2%
Annual debt service coverage (x)	3.46	3.62	3.83	4.05	3.67
Maximum annual debt service coverage (x)	2.56	3.00	3.31	3.67	3.53
Current ratio (x)	2.0	1.9	1.9	2.0	2.0
Cash on hand (days)	117.49	135.09	145.02	162.96	154.62
Cushion ratio (x)	5.7	7.1	8.5	10.4	11.2
Cash-to-debt	74.1%	82.7%	90.9%	101.6%	98.7%
Accounts receivable (days)	62.6	61.2	59.8	60.6	64.2
Average payment period (days)	61.0	62.9	64.1	65.5	65.1
Debt-to-capitalization	42.7%	40.3%	38.4%	36.6%	37.7%
Debt-to-cash flow (x)	3.74	3.42	3.42	3.29	3.60
Average age of plant (years)	7.7	8.0	8.1	8.3	8.7
Patient Revenue Sources By Gross Revenue (%) [2]					
Medicare	44.0	44.0	44.0	43.8	42.9
Medicaid	10.4	10.0	9.7	9.0	8.8
Blue Cross	8.6	8.5	8.7	8.2	8.5
Commercial	16.0	14.2	13.0	11.8	9.6
Managed Care	12.4	14.4	16.9	20.0	22.1
Self-pay and other	7.7	7.7	8.0	8.0	8.0

[1] Statistics are based on a sample size of 303 hospitals, excluding multi-state hospital systems. Data is compiled from 1998 audited financial statements.

[2] Columns do not necessarily sum to 100% because each entry is a separately calculated median.

Moody's Utilization and Financial Statistics, 1998[1]

All Ratings	Minimum	Median	Maximum	Mean	Standard Deviation
Utilization					
Maintained beds	68	256	4,901	426	528
Admissions	2,886	12,208	187,071	19,440	21,508
Patient days	11,105	60,533	687,882	95,808	97,070
Average length of stay	2.6	4.99	8.51	5.04	0.88
Maintained bed occupancy	26.51%	61.75%	396.18%	66.05%	32.40%
Emergency room visits	6,974	37,566	340,475	51,534	45,056
Outpatient visits	11,649	118,629	1,646,867	205,391	244,377
Outpatient surgeries	537	5,459	56,331	8,185	7,366
Medicare case mix index	1.00	1.38	2.02	1.43	0.22
Financial Performance (\$000)					
Net patient revenues	\$21,761	\$121,932	\$2,674,346	\$ 227,799	\$302,163
Total operating revenue	22,272	132,601	2,830,832	258,521	359,907
Interest expense	52	2,897	54,634	5,487	6,916
Depreciation and amortization expense	515	8,278	160,521	15,167	20,113
Total operating expenses	21,501	131,285	2,832,148	256,614	361,090
Income from operations	(78,136)	2,131	51,208	1,907	12,924
Excess of revenue over expenses	(51,362)	6,246	105,077	11,543	19,359
Net revenue available for debt service	(9,249)	17,871	263,942	32,125	39,762
Operating cash flow	(41,580)	12,631	218,849	22,489	28,697
Debt service	52	4,938	128,498	8,768	12,338
Additions to property, plant and equipment	755	12,621	349,053	24,998	38,567
Balance Sheet (\$000)					
Unrestricted cash and investments	\$385	\$53,683	\$1,316,753	\$ 120,696	\$174,338
Restricted cash and investments	4	3,271	464,433	21,519	58,370
Net fixed assets	4,558	78,165	1,374,770	140,764	185,848
Long-term debt	835	60,010	1,138,093	110,645	141,647
Debt service reserve and Debt service funds	(6,925)	4,489	700,909	16,244	48,805
Net debt	(169,875)	50,000	983,420	94,562	126,836
Unrestricted fund balance	(13,212)	90,363	1,532,300	175,859	227,460
Key Ratios					
Operating margin	-24.6%	2.2%	15.5%	1.7%	4.7%
Excess margin	-11.3%	4.9%	21.6%	5.4%	5.6%
Operating cash flow margin	-9.3%	10.3%	25.2%	10.2%	4.8%
Return on assets	-10.2%	4.2%	17.0%	4.2%	4.2%
Annual debt service coverage (x)	(3.24)	3.67	248.13	5.44	14.72
Maximum annual debt service coverage (x)	(1.36)	3.53	13.81	3.85	2.09
Current ratio (x)	0.2	2.0	8.6	2.2	1.2
Cash on hand (days)	4.1	154.6	927.7	191.4	138.4
Cushion ratio (x)	0.2	11.2	75.5	13.1	9.7
Cash-to-debt	2.8%	98.7%	2950.2%	145.7%	243.1%
Accounts receivable (days)	16.3	64.2	117.4	64.6	16.7
Average payment period (days)	8.1	65.1	217.7	67.7	23.8
Debt-to-capitalization	1.3%	37.7%	136.2%	39.1%	16.9%
Debt-to-cash flow (x)	(81.38)	3.60	182.88	5.20	14.30
Average age of plant (years)	3.7	8.7	27.9	9.1	2.6
Patient Revenue Sources By Gross Revenue (%) [2]					
Medicare	13.7	42.9	68.1	42.2	10.1
Medicaid	0.7	8.8	30.4	9.5	5.5
Blue Cross	0.6	8.5	29.9	10.4	7.4
Commercial	0.7	9.6	35.7	11.5	7.2
Managed Care	13.7	22.1	68.0	24.5	13.8
Self-pay and other	0.7	8.0	55.0	10.9	9.8

[1] Statistics are based on a sample size of 303 hospitals, excluding multi-state hospital systems. Data is compiled from 1998 audited financial statements.

[2] Columns do not necessarily sum to 100% because each entry is a separately calculated median.

Moody's Utilization and Financial Statistics, 1998[1]

Aa	Minimum	Median	Maximum	Mean	Standard Deviation
Utilization					
Maintained beds	181	662	3,142	807	595
Admissions	9,951	35,559	131,070	37,425	22,806
Patient days	36,622	178,808	687,882	203,584	126,803
Average length of stay	3.7	5.2	7.0	5.2	0.7
Maintained bed occupancy	50.6%	69.6%	81.7%	68.0%	8.2%
Emergency room visits	21,214	73,393	340,475	97,779	74,908
Outpatient visits	27,974	236,091	1,149,473	353,353	310,094
Outpatient surgeries	4,791	12,362	36,167	14,968	8,794
Medicare case mix index	1.24	1.68	1.98	1.65	0.20
Financial Performance (\$000)					
Net patient revenues	\$97,249	\$431,526	\$1,909,825	\$541,749	\$393,221
Total operating revenue	99,865	470,244	2,209,605	633,303	503,944
Interest expense	529	9,372	37,662	10,833	7,701
Depreciation and amortization expense	5,337	29,613	110,100	37,453	25,739
Total operating expenses	96,644	440,574	2,254,450	621,552	509,960
Income from operations	(44,845)	12,805	51,208	11,751	17,702
Excess of revenue over expenses	(22,570)	39,327	105,077	42,218	29,867
Net revenue available for debt service	9,631	79,059	221,100	90,195	51,679
Operating cash flow	9,218	58,269	148,508	59,728	33,551
Debt service	700	11,371	128,498	18,018	22,497
Additions to property, plant and equipment	9,553	48,359	349,053	76,169	71,938
Balance Sheet (\$000)					
Unrestricted cash and investments	\$57,168	\$328,087	\$1,010,024	\$383,685	\$242,483
Restricted cash and investments	500	19,284	464,433	51,262	99,234
Net fixed assets	45,482	287,849	1,214,585	351,228	267,451
Long-term debt	8,135	232,294	983,420	241,411	182,594
Debt service reserve and Debt service funds	(3,627)	5,967	208,500	34,350	53,156
Net debt	(9,872)	157,455	983,420	208,042	178,389
Unrestricted fund balance	105,381	477,057	1,532,300	543,318	314,165
Key Ratios					
Operating margin	-5.0%	3.1%	11.5%	2.8%	3.2%
Excess margin	-5.6%	7.7%	19.9%	8.2%	5.7%
Operating cash flow margin	2.9%	11.0%	18.1%	10.8%	3.6%
Return on assets	-4.0%	5.3%	12.3%	5.3%	3.1%
Annual debt service coverage (x)	1.27	7.23	61.55	8.85	9.71
Maximum annual debt service coverage (x)	2.04	5.38	13.18	5.44	2.38
Current ratio (x)	0.9	1.8	8.6	2.3	1.6
Cash on hand (days)	56.4	255.2	927.7	311.9	199.1
Cushion ratio (x)	9.7	20.6	75.5	24.7	13.8
Cash-to-debt	77.1%	183.6%	1508.0%	233.8%	246.7%
Accounts receivable (days)	44.1	66.6	117.3	69.8	15.1
Average payment period (days)	22.5	70.0	217.7	74.8	33.6
Debt-to-capitalization	3.7%	28.7%	52.1%	28.9%	10.7%
Debt-to-cash flow (x)	0.39	2.64	14.33	3.26	2.36
Average age of plant (years)	5.9	8.0	11.6	8.1	1.3
Patient Revenue Sources By Gross Revenue (%) [2]					
Medicare	25.6	37.2	50.2	38.1	6.2
Medicaid	0.7	10.2	23.0	10.3	5.8
Blue Cross	1.0	8.2	24.1	9.9	8.1
Commercial	0.7	14.4	29.5	14.8	7.6
Managed Care	4.0	24.2	51.0	25.9	12.6
Self-pay and other	4.3	11.0	44.2	15.3	11.0

[1] Statistics are based on a sample size of 35 hospitals, excluding multi-state hospital systems.

[2] Columns do not necessarily sum to 100% because each entry is a separately calculated median.

Moody's Utilization and Financial Statistics, 1998[1]

A	Minimum	Median	Maximum	Mean	Standard Deviation
Utilization					
Maintained beds	95	310	4,901	460	583
Admissions	3,611	15,124	187,071	22,129	24,171
Patient days	14,636	73,825	526,394	100,875	86,280
Average length of stay	3.6	4.9	8.5	5.0	0.9
Maintained bed occupancy	34.3%	63.3%	396.2%	71.7%	41.7%
Emergency room visits	7,404	43,853	213,159	56,183	40,521
Outpatient visits	14,035	135,168	1,646,867	232,417	272,397
Outpatient surgeries	537	7,533	56,331	9,081	8,194
Medicare case mix index	1.15	1.41	2.02	1.45	0.21
Financial Performance (\$000)					
Net patient revenues	\$ 36,110	\$ 147,151	\$ 2,674,346	\$ 238,270	\$ 309,651
Total operating revenue	36,797	154,303	2,830,832	271,836	365,318
Interest expense	52	3,222	54,634	5,856	7,739
Depreciation and amortization expense	2,124	9,815	160,521	16,393	21,049
Total operating expenses	35,491	151,776	2,832,148	270,171	366,374
Income from operations	(73,344)	3,260	27,943	1,665	12,327
Excess of revenue over expenses	(41,013)	10,068	87,841	12,167	14,038
Net revenue available for debt service	(9,249)	23,869	263,942	34,292	37,456
Operating cash flow	(41,580)	17,996	218,849	23,791	29,822
Debt service	52	5,763	81,711	9,303	11,613
Additions to property, plant and equipment	1,878	16,257	230,966	25,663	29,777
Balance Sheet (\$000)					
Unrestricted cash and investments	\$ 7,376	\$ 79,776	\$ 1,316,753	\$ 130,324	\$ 155,135
Restricted cash and investments	19	5,083	381,928	23,998	60,454
Net fixed assets	14,428	97,031	1,374,770	150,764	186,529
Long-term debt	835	68,203	1,138,093	119,369	148,807
Debt service reserve and Debt service funds	(6,925)	5,231	700,909	18,162	62,656
Net debt	(169,875)	58,968	960,234	101,335	132,581
Unrestricted fund balance	28,146	132,868	1,498,430	187,402	192,899
Key Ratios					
Operating margin	-24.6%	2.6%	15.5%	2.1%	5.1%
Excess margin	-8.6%	6.2%	21.6%	6.6%	5.4%
Operating cash flow margin	-9.3%	10.8%	25.2%	10.6%	4.9%
Return on assets	-8.5%	4.8%	15.0%	5.0%	4.0%
Annual debt service coverage (x)	(0.71)	4.40	248.13	6.71	20.67
Maximum annual debt service coverage (x)	(0.80)	4.07	13.81	4.25	2.05
Current ratio (x)	0.6	2.1	8.0	2.3	1.2
Cash on hand (days)	41.0	200.5	700.4	224.0	121.9
Cushion ratio (x)	4.5	12.8	60.4	14.9	7.9
Cash-to-debt	35.0%	115.4%	2950.2%	178.6%	315.7%
Accounts receivable (days)	19.4	64.0	117.4	63.3	17.4
Average payment period (days)	23.2	63.2	193.0	67.3	21.2
Debt-to-capitalization	1.3%	35.4%	64.1%	35.1%	12.1%
Debt-to-cash flow (x)	(10.60)	3.29	86.58	4.75	7.92
Average age of plant (years)	5.5	8.5	15.5	8.6	1.7
Patient Revenue Sources By Gross Revenue (%) [2]					
Medicare	13.7	43.0	68.1	41.9	10.8
Medicaid	1.2	9.0	23.6	9.2	5.3
Blue Cross	0.6	10.0	28.7	10.9	7.1
Commercial	1.0	9.0	35.7	10.7	6.7
Managed Care	1.3	24.8	68.0	26.8	13.8
Self-pay and other	0.3	8.3	55.0	11.6	11.0

[1] Statistics are based on a sample size of 142 hospitals, excluding multi-state hospital systems.

[2] Columns do not necessarily sum to 100% because each entry is a separately calculated median.

Moody's Utilization and Financial Statistics, 1998[1]

Baa	Minimum	Median	Maximum	Mean	Standard Deviation
Utilization					
Maintained beds	68	310	4,901	460	583
Admissions	2,886	15,124	187,071	22,129	24,171
Patient days	11,105	73,825	526,394	100,875	86,280
Average length of stay	2.6	4.9	8.5	5.0	0.9
Maintained bed occupancy	26.5%	63.3%	396.2%	71.7%	41.7%
Emergency room visits	6,974	43,853	213,159	56,183	40,521
Outpatient visits	11,649	135,168	1,646,867	232,417	272,397
Outpatient surgeries	1,164	7,533	56,331	9,081	8,194
Medicare case mix index	1.00	1.41	2.02	1.45	0.21
Financial Performance (\$000)					
Net patient revenues	\$ 21,761	\$147,151	\$ 2,674,346	\$238,270	\$309,651
Total operating revenue	22,272	154,303	2,830,832	271,836	365,318
Interest expense	184	3,222	54,634	5,856	7,739
Depreciation and amortization expense	1,490	9,815	160,521	16,393	21,049
Total operating expenses	21,501	151,776	2,832,148	270,171	366,374
Income from operations	(78,136)	3,260	27,943	1,665	12,327
Excess of revenue over expenses	(51,362)	10,068	87,841	12,167	14,038
Net revenue available for debt service	(3,802)	23,869	263,942	34,292	37,456
Operating cash flow	(1,204)	17,996	218,849	23,791	29,822
Debt service	672	5,763	81,711	9,303	11,613
Additions to property, plant and equipment	1,146	16,257	230,966	25,663	29,777
Balance Sheet (\$000)					
Unrestricted cash and investments	\$ 1,201	\$ 79,776	\$ 1,316,753	\$130,324	\$155,135
Restricted cash and investments	33	5,083	381,928	23,998	60,454
Net fixed assets	13,475	97,031	1,374,770	150,764	186,529
Long-term debt	3,988	68,203	1,138,093	119,369	148,807
Debt service reserve and Debt service funds	(505)	5,231	700,909	18,162	62,656
Net debt	3,472	58,968	960,234	101,335	132,581
Unrestricted fund balance	14,506	132,868	1,498,430	187,402	192,899
Key Ratios					
Operating margin	-12.8%	2.6%	15.5%	2.1%	5.1%
Excess margin	-11.3%	6.2%	21.6%	6.6%	5.4%
Operating cash flow margin	-0.7%	10.8%	25.2%	10.6%	4.9%
Return on assets	-10.2%	4.8%	15.0%	5.0%	4.0%
Annual debt service coverage (x)	(3.24)	4.40	248.13	6.71	20.67
Maximum annual debt service coverage (x)	(1.36)	4.07	13.81	4.25	2.05
Current ratio (x)	0.2	2.1	8.0	2.3	1.2
Cash on hand (days)	6.0	200.5	700.4	224.0	121.9
Cushion ratio (x)	0.2	12.8	60.4	14.9	7.9
Cash-to-debt	2.8%	115.4%	2950.2%	178.6%	315.7%
Accounts receivable (days)	16.3	64.0	117.4	63.3	17.4
Average payment period (days)	8.1	63.2	193.0	67.3	21.2
Debt-to-capitalization	8.7%	35.4%	64.1%	35.1%	12.1%
Debt-to-cash flow (x)	(70.10)	3.29	86.58	4.75	7.92
Average age of plant (years)	3.7	8.5	15.5	8.6	1.7
Patient Revenue Sources By Gross Revenue (%) [2]					
Medicare	14.0	43.0	68.1	41.9	10.8
Medicaid	1.4	9.0	23.6	9.2	5.3
Blue Cross	0.8	10.0	28.7	10.9	7.1
Commercial	1.8	9.0	35.7	10.7	6.7
Managed Care	0.0	24.8	68.0	26.8	13.8
Self-pay and other	0.1	8.3	55.0	11.6	11.0

[1] Statistics are based on a sample size of 114 hospitals, excluding multi-state hospital systems.

[2] Columns do not necessarily sum to 100% because each entry is a separately calculated median.

Moody's Utilization and Financial Statistics, 1998 [1]

Below Baa	Minimum	Median	Maximum	Mean	Standard Deviation
Utilization					
Maintained beds	116	183	270	186	44
Admissions	5,145	7,062	10,375	7,324	1,628
Patient days	19,660	39,720	63,736	38,033	12,658
Average length of stay	3.8	5.2	6.1	5.1	0.8
Maintained bed occupancy	46.4%	57.7%	64.7%	55.7%	6.0%
Emergency room visits	19,914	30,946	43,321	31,697	7,252
Outpatient visits	30,653	46,388	222,785	86,554	79,279
Outpatient surgeries	2,582	4,187	7,671	4,542	1,657
Medicare case mix index	1.12	1.22	1.75	1.31	0.23
Financial Performance (\$000)					
Net patient revenues	25,107	63,657	\$456,267	\$147,994	\$156,087
Total operating revenue	33,427	65,540	479,652	155,966	166,422
Interest expense	750	2,425	15,867	5,104	5,563
Depreciation and amortization expense	515	3,755	37,421	8,780	10,659
Total operating expenses	34,424	69,961	513,386	159,956	174,860
Income from operations	(42,252)	296	3,554	(3,990)	12,080
Excess of revenue over expenses	(22,600)	1,663	3,860	(1,239)	7,163
Net revenue available for debt service	612	7,779	35,717	12,644	11,873
Operating cash flow	268	7,598	32,472	9,894	9,711
Debt service	1,304	3,117	21,634	7,177	7,369
Additions to property, plant and equipment	755	2,258	48,299	7,459	13,288
Balance Sheet (\$000)					
Unrestricted cash and investments	\$385	\$11,984	\$41,394	\$15,337	\$12,590
Restricted cash and investments	4	211	66,497	9,738	23,174
Net fixed assets	4,558	36,324	269,928	81,441	92,715
Long-term debt	10,346	31,919	301,331	90,925	110,489
Debt service reserve and Debt service funds	900	3,258	40,902	10,080	13,698
Net debt	7,411	28,704	262,215	80,845	99,855
Unrestricted fund balance	(13,212)	24,951	94,162	28,590	26,281
Key Ratios					
Operating margin	-9.0%	0.5%	6.1%	-0.6%	4.7%
Excess margin	-6.8%	1.9%	6.4%	0.7%	4.5%
Operating cash flow margin	0.8%	8.4%	16.0%	8.0%	5.0%
Return on assets	-6.2%	1.7%	8.9%	0.9%	4.9%
Annual debt service coverage (x)	0.44	2.02	3.90	1.98	1.06
Maximum annual debt service coverage (x)	0.38	1.84	4.36	2.03	1.25
Current ratio (x)	1.1	1.5	3.3	1.7	0.6
Cash on hand (days)	4.1	39.9	146.3	54.1	46.2
Cushion ratio (x)	0.5	1.8	11.4	3.3	3.5
Cash-to-debt	3.4%	22.4%	128.0%	37.4%	39.2%
Accounts receivable (days)	30.8	59.2	104.8	61.6	19.8
Average payment period (days)	37.9	70.4	103.2	70.3	20.7
Debt-to-capitalization	28.8%	63.1%	136.2%	69.7%	31.7%
Debt-to-cash flow (x)	(81.38)	6.18	182.88	10.38	61.87
Average age of plant (years)	3.8	9.8	27.9	11.8	6.4
Patient Revenue Sources By Gross Revenue (%) [2]					
Medicare	41.0	50.3	59.5	50.3	7.2
Medicaid	3.9	7.7	9.6	7.2	2.1
Blue Cross	6.0	6.6	21.2	10.1	6.4
Commercial	4.4	4.5	18.0	9.0	6.4
Managed Care	8.4	18.2	20.9	16.4	5.0
Self-pay and other	1.6	9.7	11.3	7.5	4.3

[1] Statistics are based on a sample size of 12 hospitals, excluding multi-state hospital systems.

[2] Columns do not necessarily sum to 100% because each entry is a separately calculated median.

Analysis of Historical Financial Performance: Multi-State Systems

THE PORTFOLIO

The number of multi-state system ratings declined by one credit rating from the prior year to encompass 20 Moody's-rated systems. While the net change appears to be immaterial, the multi-state system portfolio experienced significant turnover. With the issuance of refunding debt by Catholic Health Initiatives (rated Aa2), four credits were removed from our rating portfolio, including Catholic Health Corporation (formerly rated A1), Franciscan Health System (formerly rated A1), Sisters of Charity Health Care System (formerly rated Aa2), and Sisters of Charity of Nazareth Health Corporation (formerly rated A1). Additions to the portfolio include Catholic Health East (rated A1) and Adventist Health System/Sunbelt (rated Baa1). We expect to see further changes in 1999/2000 as regional systems consolidate and the multi-state systems continue to acquire additional hospitals and health systems.

The multi-state hospital systems remain some of the largest organizations within Moody's portfolio, ranging in size from two-state, two-hospital Alexian Brothers Health System (Alexian) to mega-giant CHI with over 65 acute care hospitals across 20 states. Alexian will be removed from the multi-state portfolio and placed in the freestanding hospital portfolio next year as it now operates in only one state. Fourteen of the twenty systems generate total operating revenues greater than \$1 billion, with only two of the smaller systems reporting less than \$500 million. This differs from five years ago when nine of the currently rated systems reported total operating revenues under \$1 billion. Furthermore, only eight credits included in our Freestanding Hospitals and Single-State Health Care Systems medians generate over \$1 billion in total operating revenues, all constituting multi-site single-state health systems.

This year's multi-state medians include data for 16 of the 20 systems. **Catholic Health Initiatives (CHI)**, **Catholic Health East (CHE)** and **Christus Health** (formerly SCH Health Care and Incarnate Word Health System, TX) are excluded because their corporate existence and financial reporting trend are less than the five years used in the medians for comparison purposes. Alexian Brothers is excluded because of the lack of 1998 data.

RATING CHANGES

Other than the loss of ratings due to merger activity, only two rating changes occurred in 1998 – **Catholic Healthcare West**, was downgraded to A2 (underlying) from A1 (underlying) and **Alexian Brothers Health System** was downgraded from A2 to Baa1. More recent volatility is evidenced by the fact that in the first half of 1999, three systems had their ratings revised and two others had their outlooks revised to negative. **Catholic Healthcare West**, was downgraded to Baa1 (underlying) from A2 (underlying), **Sisters of St. Francis's (IN)** rating was upgraded to Aa3 from A1 and the outlook was revised from stable to positive, and **Franciscan Health Partnership** (formerly Franciscan Sisters of the Poor in NY) was downgraded from Baa1 to Baa2. Additionally, CHI (Aa2) had its outlook revised to negative from stable, **Daughters of Charity National Health System** (Aa2) has its outlook revised from positive to stable, and **Catholic Healthcare Partners (OH)** had its outlook changed to negative from stable for its Aa3 rating.

GENERAL OBSERVATIONS FROM THE 1998 DATA

Due to the limited sample size and varied organization size, care must be taken when drawing conclusions from the medians regarding the multi-state systems. As Figure 16 demonstrates, there is high variability in this set of medians. However, some general conclusions can be made.

Figure 16

Multi-State Health Minimums, Medians, and Maximums for Select Key Measures

1998 Select Key Measures	Minimum	Median	Maximum	Mean	Standard Deviation
Number of hospitals	8	12	25	14	6
Maintained beds	1,790	2,846	5,920	3,222	1,211
Total system admissions	64,838	120,174	201,385	121,709	48,689
Operating margin	-3.4%	1.8%	6.8%	1.3%	3.0%
Operating cash flow margin	5.6%	9.1%	15.2%	9.5%	2.5%
Maximum annual debt service coverage	1.35	2.96	7.97	3.84	1.93
Cash on hand (days)	40.5	172.8	394.8	178.0	87.4
Cash-to-debt	24.7%	104.5%	336.2%	120.7%	77.7%
Debt-to-capitalization	15.3%	36.9%	63.5%	38.2%	13.1%
Debt-to-cash flow (x)	1.16	4.27	11.87	4.95	3.08

- Aggregate debt outstanding for the multi-state systems is \$15.2 billion. The highest concentration of this debt, accounting for 49.8% of debt outstanding is attributable to five of the twenty systems: Catholic Healthcare West (\$1.73 billion), Catholic Health Initiatives (\$1.71 billion), Charity Obligated Group (\$1.43 billion), Adventist Health System/Sunbelt (\$1.38 billion), and Catholic Health East (\$1.38 billion).
- Median unrestricted cash and investments improved for the fourth consecutive year, to \$683 million in 1998 from \$614 million the prior year, although the percentage increase markedly decreased from the prior year. The variance from the minimum of \$107 million to the maximum cash position of \$2.0 billion is significant, as is the standard deviation of \$487 million. Coupled with continued growth in aggregate debt outstanding, median Cash-to-Debt ratio declined to 104.6%, reversing a four-year trend of improvement, which culminated in a median ratio of 113.7% in 1997. Again the variance between the minimum cash-to-debt statistic (24.7%) and maximum cash-to-debt ratio (336.2%) amplifies the variability of systems due to their different stages of development and size.
- Similar to the stand-alone ratios, median revenues and expenses increased in 1998, with expense growth outpacing revenue growth. For the third straight year, median total operating revenue growth rate (5.9%) lagged behind median total operating expense growth rate (8.8%).
- Median estimated maximum annual debt service coverage of 2.96 reverses a three-year trend of improvement and is below 3.0 times for the first time in five years.
- The higher rated credits continue to demonstrate stronger balance sheets and financial operations.

List Of Individual Multi-State Health Care Systems, 1998

Health Care System (Headquarters)	Rating [1]	Outlook[2]	Total Debt Outstanding (\$000) [3]
Health Care Systems Included in 1999 Medians			
Catholic Healthcare West (San Francisco, CA)	Baa1	N	\$ 1,729,096
Charity Obligated Group (St. Louis, MO)	Aa2	S	1,436,903
Adventist Health System/Sunbelt (Orlando, FL)	Baa1	S	1,384,604
Catholic Healthcare Partners (Cincinnati, OH)	Aa3	N	960,178
St. Joseph Health System (Orange, CA)	Aa3	S	749,341
Bon Secours Health System (Marriottsville, MD)	A3	S	694,548
Mercy Health Services (Farmington Hills, MI)	Aa3	N	661,339
Holy Cross Health System (South Bend, IN)	Aa3	N	636,210
Sisters of Charity of Leavenworth Health Services Corporation (Leavenworth, KS)	Aa3	S	570,772
Sisters of Providence (Seattle, WA)	A1	S	480,877
Sisters of Mercy Health System (St. Louis, MO)	Aa1	S	443,880
Franciscan Health Partnership (New York, NY)	Baa2	S	436,140
Carondelet Health System (St. Louis, MO)	Baa1	S	368,138
IHC Hospitals (Salt Lake City, UT)	Aa2	S	333,888
Sisters of St. Francis Health Services (Mishawaka, IN)	Aa3	P	203,173
Ancilla Health Systems (Hobart, IN)	Baa1	S	202,208
Subtotal:			\$ 11,291,295
Health Care Systems Excluded in 1999 Medians			
Catholic Health Initiatives (Denver, CO)	Aa2	N	1,714,584
Catholic Health East (Newtown Square, PA)	A1	S	1,310,957
Christus Health (Houston and San Antonio, TX)	Aa3	N	744,010
Alexian Brothers Health System (Elk Grove Village, IL)	Baa1	S	151,736
Total Debt:			\$ 15,212,582

[1] Ratings as of 8/16/99

[2] Positive(P), Negative (N), Stable(S)

[3] As of fiscal year end 1998

Multi-State Health Care Systems: Median Comparison, 1994-1998

All Ratings	1994	1995	1996	1997	1998
Median Sample Size	16	16	16	16	16
Utilization					
Number of hospitals	13	13	13	13	12
Maintained beds	2,601	2,384	2,381	2,683	2,846
Average hospital bed size	217	206	202	203	206
Total system admissions	106,194	109,824	119,192	122,960	120,174
Financial Performance (\$000)					
Net patient revenues	\$1,046,991	\$ 1,137,166	\$ 1,236,892	\$1,268,244	\$1,204,097
Total operating revenue	1,103,632	1,185,166	1,288,587	1,340,262	1,419,567
Interest expense	23,498	24,446	25,255	27,713	29,234
Depreciation and amortization expense	63,224	68,999	83,112	80,824	89,619
Total operating expenses	1,063,281	1,135,189	1,240,734	1,298,950	1,413,053
Income from operations	42,364	39,788	46,869	39,190	23,468
Excess of revenue over expenses	57,884	60,912	73,736	82,784	71,842
Net revenue available for debt service	157,805	156,789	177,483	187,413	197,864
Operating cash flow	136,687	128,349	145,585	147,999	139,820
Debt service	35,851	39,963	37,068	45,256	49,957
Additions to property, plant and equipment	85,367	105,371	106,230	130,977	119,088
Balance Sheet (\$000)					
Unrestricted cash and investments	\$327,531	\$415,428	\$468,141	\$613,890	\$ 683,439
Restricted cash and investments	11,346	18,549	26,014	33,070	37,183
Net fixed assets	505,649	614,921	660,881	715,205	836,520
Long-term debt	356,262	476,364	479,601	529,768	603,491
Debt service reserve and Debt service funds	71,252	52,491	48,325	77,580	70,090
Net debt	308,262	403,088	433,321	510,567	505,256
Unrestricted fund balance	655,858	733,949	867,479	978,542	1,110,369
Key Ratios					
Operating margin	4.0%	3.9%	3.4%	3.1%	1.8%
Excess margin	5.3%	5.3%	5.3%	5.4%	3.8%
Operating cash flow margin	12.2%	11.5%	11.1%	10.5%	9.1%
Return on assets	4.9%	5.2%	5.7%	5.2%	3.4%
Annual debt service coverage (x)	4.69	4.37	4.75	4.26	3.63
Maximum annual debt service coverage (x)	3.20	3.12	3.54	3.68	2.96
Current ratio (x)	1.5	1.9	1.7	1.9	1.7
Cash on hand (days)	124.1	141.6	158.3	170.7	172.8
Cushion ratio (x)	6.9	7.7	9.2	11.1	11.1
Cash-to-debt	79.6%	103.6%	106.6%	113.7%	104.6%
Accounts receivable (days)	60.2	60.2	62.6	64.3	62.4
Average payment period (days)	68.3	67.7	68.5	69.9	68.2
Debt-to-capitalization	37.5%	38.4%	37.3%	36.9%	36.9%
Debt-to-cash flow (x)	3.35	3.01	3.02	3.32	4.27
Average age of plant (years)	8.2	8.6	8.1	8.0	9.1

Multi-State Health Care Systems: Median Comparison by Rating Category, 1998

	All Ratings	Aa	A	Baa
Median Sample Size	16	9	2	5
Utilization				
Number of hospitals	12	9	17	18
Maintained beds	2,846	2,882	2,809	3,001
Average hospital bed size	206	206	165	214
Total system admissions	120,174	106,034	160,126	111,378
Financial Performance (\$000)				
Net patient revenues	\$1,204,097	\$1,295,259	\$1,324,822	\$889,651
Total operating revenue	1,419,567	1,443,509	1,662,199	1,023,349
Interest expense	29,234	28,634	34,077	24,657
Depreciation and amortization expense	89,619	105,972	87,111	59,063
Total operating expenses	1,413,053	1,415,028	1,630,324	1,030,416
Income from operations	23,468	55,104	31,875	(27,336)
Excess of revenue over expenses	71,842	122,876	56,932	(289)
Net revenue available for debt service	197,864	230,973	178,120	79,952
Operating cash flow	139,820	142,380	153,063	73,570
Debt service	49,957	50,660	55,200	41,414
Additions to property, plant and equipment	119,088	131,252	126,438	90,748
Balance Sheet (\$000)				
Unrestricted cash and investments	\$683,439	\$876,960	\$398,847	\$235,138
Restricted cash and investments	37,183	43,202	119,407	28,078
Net fixed assets	836,520	862,095	845,689	514,631
Long-term debt	603,491	636,210	587,713	436,140
Debt service reserve and Debt service funds	70,602	70,602	78,465	64,379
Net debt	505,256	566,632	509,248	378,639
Unrestricted fund balance	1,110,369	1,270,429	874,429	457,535
Key Ratios				
Operating margin	1.8%	4.0%	1.8%	-2.5%
Excess margin	3.8%	6.0%	3.3%	0.0%
Operating cash flow margin	9.1%	10.0%	9.4%	6.8%
Return on assets	3.4%	5.2%	3.3%	0.0%
Annual debt service coverage (x)	3.63	5.12	3.18	1.93
Maximum annual debt service coverage (x)	2.96	4.37	4.43	2.36
Current ratio (x)	1.7	1.7	1.5	1.8
Cash on hand (days)	172.8	202.5	96.8	137.9
Cushion ratio (x)	11.1	13.3	3.4	6.3
Cash-to-debt	104.6%	133.9%	72.7%	57.6%
Accounts receivable (days)	62.4	66.3	65.1	59.6
Average payment period (days)	68.2	68.1	65.1	68.4
Debt-to-capitalization	36.9%	33.5%	43.0%	44.6%
Debt-to-cash flow (x)	4.27	2.66	4.77	7.60
Average age of plant (years)	9.1	9.2	7.9	9.0

Appendix

Moody's 1999 Health Care Medians are based on fiscal year 1998 audited financial statements. Financial medians for the freestanding/single-state systems were compiled from 303 entities, while the multi-state system medians were extracted from data on 16 systems.

We caution that comparisons with medians contained in previous publications are not necessarily appropriate due to differences in the composition of the two databases – the 303 hospitals whose data was utilized in this year's medians are not necessarily the same hospitals utilized in last year's publication. However, medians contained in this publication for all five historical years 1994-1998 was calculated from the same sample of 303 hospitals.

The reader will note that this year's rating categories include the following categories: Aa, A, Baa, and below Baa. The below Baa category includes only 12 hospitals and is therefore less statistically significant. We also caution that comparisons across different years may be skewed by the hospital auditors' practice of restating prior year financial statements to make applicable comparisons with the current year.

Health Care Financial Ratios

Ratio	Computation
Accounts receivable (days)	(Net patient accounts receivable x 365) / net patient revenue
Annual debt-service coverage (x)	Net revenue available for debt service / (principal payments + interest expense)
Average age of plant (years)	Accumulated depreciation / depreciation expense
Average payment period (days)	(Total current liabilities x 365) / (total operating expenses - depreciation and amortization expense)
Cash on hand (days)	(Unrestricted cash and investments x 365) / (total operating expenses - depreciation and amortization expenses)
Cash-to-debt (%)	Unrestricted cash and investments / (long term debt + short term debt)
Current ratio (x)	Total current assets / total current liabilities
Cushion ratio (x)	Unrestricted cash and investments / estimated future peak debt service
Debt-to-capitalization (%)	(Long-term debt + short term debt) / (long-term debt + short term debt + unrestricted fund balance)
Debt-to-cash flow (x)	(Long-term debt + short term debt) / (excess of revenues over expenses + depreciation and amortization expenses)
Excess margin (%)	(Total operating revenue - total operating expenses + nonoperating income) / (total operating revenue + non-operating income)
Maximum annual debt service coverage (x)	Net revenue available for debt service / estimated future peak principal payments and interest expense
Medicare case-mix index	Measurements comparing acuity of Medicare patients among hospitals
Net debt (\$000)	Total debt outstanding - trustee-held bond funds
Operating cash flow margin (%)	(Total operating revenue - total operating expenses + interest expense + depreciation and amortization expenses) / total operating revenue
Operating margin (%)	(Total operating revenue - total operating expenses) / total operating revenue
Return on assets (%)	Excess of revenues over expenses / total assets
Unrestricted cash and investments (\$000)	Unrestricted cash + short-term investments + board-designated cash and investments

Portfolio of Health Care Ratings (as of August 13, 1999)

State	Issuer	Issuing Authority	Rating	Outlook ¹
ALABAMA				
	Baptist Health System (Birmingham) (Underlying rating)	Birmingham Special Care Facilities Financing Authority	A2	S
	Baptist Medical Center (Montgomery) (Underlying rating)	Montgomery BMC Special Care Facilities Financing Authority	A2	S
	Charity Obligated Group, Series 1997 D and Series 1998 B	Birmingham Special Care Facilities Financing Authority	Aa2/VMIG1	S
	Cullman Regional Medical Center	Cullman Medical Clinic Board - Cullman Medical Park South	Baa2	S
	Daughters of Charity National Health System (Providence Hospital)	Birmingham Special Care Facilities Financing Authority	Aa2	S
	Daughters of Charity National Health System (St. Margaret's Hospital)	Montgomery Special Care Facilities Financing Authority	Aa2	S
	Daughters of Charity National Health System (St. Vincent's Hospital)	Birmingham Special Care Facilities Financing Authority	Aa2	S
	DCH Health Care Authority (Formerly DCH Regional Medical Center)	DCH Healthcare Authority	A1	S
	Jackson Hospital and Clinic	Montgomery Medical Clinic Board	A3	S
	Marshall Medical Center North Formerly Guntersville-Arab Medical Center)	Marshall County Health Care Authority	Baa2	P
	Marshall Medical Center South (Formerly Boaz-Albertville Medical Center)	Marshall County Health Care Authority	Baa3	P
	Medical Center East	Birmingham Special Care Facilities Financing Authority	A2	S
	Northeast Alabama Regional Medical Center (Underlying Rating)	Regional Medical Center Board	A2	S
	Thomas Hospital	Baldwin County Eastern Shore Healthcare Authority	Baa3	S
	University of Alabama Hospital at Birmingham	University of Alabama Board of Trustees	Aa3	S
	University of Alabama Hospital at Birmingham, Series 1997 (SBPA: Bank of America N.T.R.S.A.)	University of Alabama Board of Trustees	Aa3/VMIG1	S
	Walker Regional Medical Center	Jasper Medical Clinic Board	A3	S
ALASKA				
	Sisters of Providence (Providence Hospital)	Anchorage	A1	S
ARIZONA				
	Baptist Hospital System (Underlying rating)	Mohave County Industrial Development Authority	Baa1	N
	Carondelet Health System (Underlying Rating)	Pima County Industrial Development Authority	Baa1	P
	Catholic Healthcare West (Underlying rating)	Maricopa County Industrial Development Authority	Baa1	N
	Discovery Health System	Mesa Industrial Development Authority	Aa3	S
	Evangelical Lutheran Good Samaritan Society	Benson Industrial Development Authority	A3	S
	Samaritan Health Services ²	Maricopa County Industrial Development Authority	Baa1	P
	Sun Health Corporation	Maricopa County	Baa1	S
	University Medical Center (Underlying rating)	University Medical Center Corporation	A3	S
ARKANSAS				
	Baxter County Regional Hospital	Baxter County	Baa2	S
	Catholic Health Initiatives	Pulaski County Health Facilities Board	Aa2	N

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).
2. Upcoming Discovery Health System bond Issuance will provide funds to defease Samaritan Health Services outstanding bonds.

Portfolio of Health Care Ratings (as of August 13, 1999) *(continued)*

State	Issuer	Issuing Authority	Rating	Outlook ¹
Arkansas, continued				
	Northwest Health System (Formerly Springdale Memorial Hospital)	Springdale Residential Housing & Health Care Facilities Board	Baa3	S
	Sisters of Mercy Health (St. Louis) (St. Edward & St. Edward Mercy)	Arkansas Development Finance Authority	Aa1	S
	Sisters of Mercy Health System (St. Louis), Series 1989 B (SBPA: ABN-AMRO)	Arkansas Development Finance Authority	Aa1/VMIG1	S
	Sparks Regional Medical Center	Sebastian County Health Facilities Board	Aa3	S
CALIFORNIA				
	Antelope Valley Medical Center	Antelope Valley Hospital District	A3	S
	Catholic Healthcare West (Underlying rating)	California Statewide Communities Development Authority	Baa1	N
	Catholic Healthcare West (Formerly Catholic Health Corporation Mater Misericordiae Hospital-Mercy Hospital & Health Services) (Underlying rating)	California Health Facilities Financing Authority	Baa1	N
	Catholic Healthcare West (St. Francis Medical Center) (Underlying rating)	California Health Facilities Financing Authority	Baa1	N
	Catholic Healthcare West (St. Rose Dominican Hospital) (Underlying rating)	California Health Facilities Financing Authority	Baa1	N
	Catholic Healthcare West (Underlying rating)	California Health Facilities Financing Authority	Baa1	N
	Cedars Sinai Medical Center	California Health Facilities Financing Authority	A2	S
	Cedars-Sinai Medical Center	California Statewide Communities Development Authority	A2	S
	Citrus Valley Health Partners (Formerly Inter-Community Medical Center and Queen of the Valley Hospital)	California Statewide Communities Development Authority	Baa1	N
	City of Hope National Medical Center	Duarte	Baa2	N
	Community Hospitals of Central California	Central California Joint Powers Health Financing Authority	Baa1	S
	Eisenhower Memorial Hospital (Underlying rating)	Rancho Mirage Joint Powers Financing Authority	A2	S
	Fremont-Rideout Health Group (Underlying rating)	Marysville	A1	S
	Hoag Memorial Presbyterian Hospital, Series 1992 (SBPA: Bank of America National Trust & Savings)	Newport Beach	Aa3/VMIG1	S
	Hoag Memorial Presbyterian Hospital, Series 1996 A, B & C (SBPA: Bank of America National Trust & Savings)	Newport Beach	Aa3/VMIG1	S
	Holy Cross Health System (St. Agnes Hospital)	Fresno	Aa3	N
	Hospital of the Good Samaritan Hospital	California Health Facilities Financing Authority	Baa2	W/D
	John Muir/Mt. Diablo Health System (Underlying rating)	California Statewide Communities Development Authority	A1	S
	Kaiser Foundation Hospitals	California Health Facilities Financing Authority	A3	N
	Kaiser Foundation Hospitals	Riverside	A3	N
	Kaiser Foundation Hospitals	Santa Rosa	A3	N
	Kaiser Foundation Hospitals	California Statewide Communities Development Authority	A3	N
	Kaiser Foundation Hospitals (Taxable)	Kaiser Foundation Hospitals	A3/P-2	N

1. Positive (P). Negative (N). Stable (S). Uncertain (U). Watchlist for Downgrade (W/D). Watchlist for Upgrade (W/U). Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) (continued)

State	Issuer	Issuing Authority	Rating	Outlook ¹
California, continued				
	Lucille Salter Packard Children's Hospital (Guaranteed by Stanford Health System)	ABAG Finance Authority for Nonprofit Corporations	A1	N
	Memorial Health Services, Series 1991	Long Beach	A1/VMIG1	N
	Memorial Health Services, Series 1994	California Health Facilities Financing Authority	A1/VMIG1	N
	Sharp Healthcare (Underlying rating)	California Health Facilities Financing Authority	Baa1	S
	Sisters of Charity of Leavenworth Health Services Corporation (St. John's Hospital)	California Statewide Communities Development Authority	Aa3	S
	Sisters of Providence (Providence Hospital)	California Health Facilities Financing Authority	A1	S
	St. Joseph Health System	California Health Facilities Financing Authority	Aa3	S
	St. Joseph Health System (Mission Hospital Regional Medical Center), Series 1994	California Statewide Communities Development Authority	Aa3/VMIG1	S
	St. Joseph Health System, Series 1985 A, B	California Health Facilities Financing Authority	Aa3/VMIG1	S
	St. Joseph Health System, Series 1991 B	California Health Facilities Financing Authority	Aa3/VMIG1	S
	St. Joseph Health System, Series 1994	California Statewide Communities Development Authority	Aa3/VMIG1	S
	St. Joseph Health System, Series 1996A (Taxable)	St. Joseph Health System	Aa3/VMIG1	S
	Summit Medical Center	California Health Facilities Financing Authority	Baa3	U
	Sutter Health (Formerly Mann General Hospital) (Underlying rating)	Modesto	A2	S
	Sutter Health (Underlying rating)	California Statewide Communities Development Authority	A2	S
	Sutter Health (Underlying rating)	California Health Facilities Financing Authority	A2	S
	Torrance Memorial Medical Center	Torrance	A1	P
	UCSF - Stanford Health Care	California Health Facilities Financing Authority	A1	N
	Washington Hospital Health Care System	Washington Township Hospital District	A2	P
COLORADO				
	Catholic Health Initiatives	Colorado Health Facilities Authority	Aa2	N
	Catholic Health Initiatives (Formerly Catholic Health Corporation)	Colorado Health Facilities Authority	Aa2	N
	Catholic Health Initiatives (Formerly Sisters of Charity Health Care System (Cincinnati) - Mercy Highlands Ranch Medical Building)	Douglas County	Aa2	N
	Catholic Health Initiatives (Formerly Sisters of Charity Health Care System (Cincinnati))	Colorado Health Facilities Authority	Aa2	N
	Catholic Health Initiatives (Formerly Sisters of Charity Health Care System (Cincinnati), Series 1992 A, B, C (SBPA: Toronto Dominion Bank; Deutsche Bank)	Colorado Health Facilities Authority	Aa2/VMIG1	N
	Catholic Health Initiatives (Formerly Sisters of Charity Health Care System (Cincinnati), Series 1995 (SBPA: Toronto Dominion Bank)	Colorado Health Facilities Authority	Aa2/VMIG1	N
	Catholic Health Initiatives, Series 1997 B			

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) *(continued)*

State	Issuer	Issuing Authority	Rating	Outlook ¹
Colorado, continued				
	(SBPA: Toronto Dominion Bank)	Colorado Health Facilities Authority	Aa2/VMIG1	N
	Catholic Health Initiatives, Series 1997 C (SBPA: Morgan Guaranty Trust Company of New York) (Taxable)	Catholic Health Initiatives	Aa2/VMIG1	N
	Craig Hospital	Colorado Health Facilities Authority	A2	S
	Denver Health and Hospitals	Denver Health and Hospital Authority	Baa2	S
	Exempla, Inc. (Formerly Lutheran Medical Center)	Colorado Health Facilities Authority	A1	N
	Kaiser Foundation Hospitals	Colorado Health Facilities Authority	A3	N
	Longmont United Hospital	Boulder County	Baa1	S
	Lutheran Health System	Larimer County	Aa3	S
	Lutheran Health System	Logan County	Aa3	S
	Memorial Hospital (Colorado Springs) (Underlying rating)	Colorado Springs	A2	S
	National Benevolent Association	Colorado Health Facilities Authority	Baa2	S
	National Benevolent Association (Village at Skyline Project) Series 1995 A	Colorado Health Facilities Authority	Baa2/VMIG1	S
	Parkview Episcopal Medical Center	Colorado Health Facilities Authority	Baa1	S
	PorterCare Adventist Health System (Formerly Rocky Mountain Adventist Healthcare)	Colorado Health Facilities Authority	Baa3	W/D
	Sisters of Charity of Leavenworth Health Services Corporation (Saint Joseph Hospital)	Colorado Health Facilities Authority	Aa3	S
	Sisters of Charity of Leavenworth Health Services Corporation (Underlying rating)	Colorado Health Facilities Authority	Aa3	S
CONNECTICUT				
	Griffin Hospital	Connecticut Health & Educational Facilities Authority	Baa2	N
	Hill Health Corporation	New Haven	B1	S
	Hospital for Special Care	Connecticut Health & Educational Facilities Authority	Baa2	P
	Middlesex Memorial Hospital (Underlying rating)	Connecticut Health & Educational Facilities Authority	A3	S
	St. Mary's Hospital	Connecticut Health & Educational Facilities Authority	Baa1	S
	Windham Community Memorial Hospital	Connecticut Health & Educational Facilities Authority	Baa3	S
DELAWARE				
	Beebe Medical Center Hospital	Delaware Health Facilities Authority	Baa1	S
	Catholic Health Initiatives, Series 1997 B (SBPA: Toronto Dominion Bank)	Delaware Health Facilities Authority	Aa2/VMIG1	N
DISTRICT OF COLUMBIA				
	MedStar Health (Formerly Medlantic Healthcare and Helix Health) (Underlying rating)	Maryland Health & Higher Educational Facilities Authority	A3	N
FLORIDA				
	Adventist Health System Capital Trust I Capital Security, Series A (Guaranteed by Adventist Health System Obligated Group)	Orange County Health Facilities Authority	Baa2	S
	Adventist Health System/Sunbelt (East Pasco Medical Center) (Underlying rating)	Pasco County Health Facilities Authority	Baa1	S
	Adventist Health System/Sunbelt (Florida Hospital) (Underlying rating)	Altamonte Springs Health Facilities Authority	Baa1	S

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) (continued)

State	Issuer	Issuing Authority	Rating	Outlook ¹
Florida, continued				
	Adventist Health System/Sunbelt (Medical Center Hospital) (Underlying rating)	Punta Gorda Health Facilities Authority	Baa1	S
	Adventist Health System/Sunbelt (Walker Memorial Hospital) (Underlying rating)	Highlands County Health Facilities Authority	Baa1	S
	Adventist Health System/Sunbelt	Highlands County Health Facilities Authority	Baa1	S
	Adventist Health System/Sunbelt Obligated Group (Underlying rating)	Orange County Health Facilities Authority	Baa1	S
	Baptist Hospital, Inc. & The Baptist Manor, Inc.	Escambia County Health Facilities Authority	A3	S
	Bay Medical Center (Underlying rating)	Board of Trustees for Bay Medical Center	Baa2	S
	Bon Secours Health System (Underlying rating)	Venice	A3	S
	Bon Secours Health System, Series 1992 A, B (Underlying rating)	Charlotte County	A3/VMIG1	S
	Catholic Health East (Underlying rating)	Tampa	A1	S
	Charity Obligated Group	Escambia County Health Facilities Authority	Aa2/VMIG1	S
	Charity Obligated Group - Baptist/St. Vincent's Health System, Inc.	Jacksonville Health Facilities Authority	Aa2	S
	Cleveland Clinic Florida (Guaranteed by the Cleveland Clinic Health System Obligated Group), Series 1999	Collier County Health Facilities Authority	Aa3/VMIG1	N
	Daughters of Charity National Health System (Sacred Heart Hospital of Pensacola)	Pensacola Health Facilities Authority	Aa2	S
	Daughters of Charity National Health System (St. Vincent's Medical Center)	Jacksonville Health Facilities Authority	Aa2	S
	Evangelical Lutheran Good Samaritan Society	Osceola County Health Facilities Authority	A3	S
	Flagler Hospital (Underlying rating)	St. John's County Industrial Development Authority	A2	S
	H. Lee Moffitt Cancer Center	Tampa	A3	S
	Holmes Regional Medical Center	Brevard County Health Facilities Authority	A1	S
	Jackson Memorial Hospital	Miami-Dade County	A2	S
	Lee Memorial Hospital (Underlying rating)	Lee County Hospital Board	A1	S
	Lee Memorial Hospital, Series 1985 C, D (SBPA: Sun Bank, N.A.)	Lee County Hospital Board	A1/VMIG1	S
	Lee Memorial Hospital, Series 1992 B (SBPA: Sun Bank, N.A.)	Lee County Hospital Board	A1/VMIG1	S
	Lee Memorial Hospital, Series 1995 A (SBPA: Sun Bank, N.A.)	Lee County Hospital Board	A1/VMIG1	S
	Lee Memorial Hospital, Series 1997 B (SBPA: Sun Bank, N.A.)	Lee County Hospital Board	A1/VMIG1	S
	Leesburg Regional Medical Center Hospital	City of Leesburg	A3	S
	Memorial Health System (Formerly South Broward Hospital)	South Broward Hospital District	A2	S
	Mercy Hospital (Underlying rating)	Miami Health Facilities Authority	Baa1	S
	Munroe Regional Health System	Marion County Hospital District	A2	S
	National Benevolent Association (Cypress Village)	Jackson Health Facilities Authority	Baa2	S
	North Broward Hospital District (Underlying rating)	North Broward Hospital District	A2	S
	Orlando Regional Healthcare System (Underlying rating)	Orange County Health Facilities Authority	A2	N
	Sarasota Memorial Hospital (Underlying rating)	Sarasota County Public Hospital District	A1	N

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) *(continued)*

State	Issuer	Issuing Authority	Rating	Outlook ¹
Florida, continued				
	Sarasota Memorial Hospital, Series 1991 and 1993A	Sarasota County Public Hospital District	A1/VMIG1	N
	Sarasota Memorial Hospital, Series 1996 A (SBPA: Sun Trust Bank)	Sarasota County Public Hospital District	A1/VMIG1	N
	Shands Teaching Hospital and Clinics (Underlying rating)	Alachua County Health Facilities Authority	A1	S
	South Lake Hospital (Guaranteed by Orlando Regional Healthcare System)	South Lake County Hospital District	A2	N
	Tallahassee Memorial Regional Medical Center (Underlying rating)	Tallahassee	A2	S
	University Community Hospital	Hillsborough County Industrial Development Authority	Baa1	S
GEORGIA				
	Adventist Health System/Sunbelt Obligated Group (Underlying rating)	Gordon County Hospital Authority	Baa1	S
	Carondelet Health System (St. Joseph Hospital) (Underlying rating)	Augusta Hospital Authority	Baa1	P
	Catholic Health East (Underlying rating)	Fulco Hospital Authority	A1	S
	Medical Center of Central Georgia (Underlying rating)	Macon-Bibb County Hospital Authority	Aa3	S
	Piedmont Hospital	Fulco Hospital Authority	A1	S
	Southeast Georgia Regional Medical Center (Underlying rating)	Glynn-Brunswick Memorial Hospital Authority	A2	S
	Southern Regional Medical Center (Underlying rating)	Clayton County Hospital Authority	A2	S
	St. Joseph's/Candler Health System (Underlying rating)	Savannah Hospital Authority	A3	P
	Wellstar Health System (Formerly Northwest Georgia Health System)	Cobb County Kennestone Hospital Authority	Aa3	S
	Wellstar Health System (Formerly Northwest Georgia Health System)	Cobb County Hospital Authority	Aa3	S
	Wellstar Health System (Formerly Northwest Georgia Health System) Series 1999 (SBPA: SunTrustBank, Atlanta)	Cobb County Kennestone Hospital Authority	Aa3/VMIG1	S
HAWAII				
	Kaiser Foundation Hospitals	Hawaii Department of Budget & Finance	A3	N
	Kapi'olani Health	Hawaii Department of Budget & Finance	A2	S
	Queen's Health System	Hawaii Department of Budget & Finance	A1	S
	Queen's Health System, Series 1998 A (SBPA: Morgan Guaranty Trust Company)	Hawaii Department of Budget & Finance	A1/VMIG1	S
IDAHO				
	Bannock Regional Medical Center	Idaho Health Facilities Authority	Baa1	S
	Carondelet Health System (St. Joseph Hospital) (Underlying rating)	Idaho Health Facilities Authority	Baa1	P
	Holy Cross Health System (St. Alphonsus Regional Medical Center)	Idaho Health Facilities Authority	Aa3	N
	Holy Cross Health System (St. Alphonsus Regional Medical Center), Series 1995 (SBPA: Morgan Guaranty Trust Company)	Idaho Health Facilities Authority	Aa3/VMIG1	N
	Magic Valley Regional Medical Center	Idaho Health Facilities Authority	Baa1	P

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

	Health Corporation) (Underlying rating)	Iowa Finance Authority			S
	Mercy Hospital	Hills City			S
	National Benevolent Association (Ramsey Home Project)	Iowa Finance Authority	Moody's Outlook	43	S
	Northwest Iowa Health Center (Guaranteed by Sioux Valley Hospital & Health System)	Sheldon			S
	University of Iowa Hospital and Clinics	Iowa State Board of Regents			S
KANSAS					
	Catholic Health Initiatives	Kansas Development Finance Au			S
	Catholic Health Initiatives (Formerly Catholic Health Corporation (Central Kansas Medical Center)) (Underlying rating)	Larned			S
	Catholic Health Initiatives (Formerly Catholic Health Corporation) (Underlying rating)	Garden City	Rating	Outlook ¹	S
	Evangelical Lutheran Good Samaritan Society	Winfield	Aa3	N	S
	Hays Medical Center (Underlying rating)	Kansas Development Finance Au	Aa3	N	S
	Lawrence Memorial Hospital	Lawrence	Baa1	P	S
	Med-Map L.L.C. (Guaranteed by Sisters of Charity of Leavenworth Health Services Corporation)	Med-Map L.L.C.	Baa2	S	S
			A2	S	N
			Baa2	S	
			A1	S	(W/UD).
			Baa1	P	
			Aa3	P	
			Aa3	P	
			Aa2	N	

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U)

Portfolio of Health Care Ratings (as of August 13, 1999) *(continued)*

State	Issuer	Issuing Authority			
Indiana, continued					
	Holy Cross Health System (St. Joseph Hospital Medical Center)	St. Joseph County Hospital Auth.	Aa2/VMIG1	N	look ¹
	Holy Cross Health System (Underlying rating)	Indiana Health Facilities Financi	A1	P	
	La Porte Hospital	La Porte County Hospital Author	Baa3	S	N
	Memorial Hospital (Jasper)	Indiana Health Facilities Financi			S
	Methodist Hospital (Merrillville)	Indiana Health Facilities Financi	Aa3	S	N
	National Benevolent Association (Robin Run Village)	Indianapolis	Aa3	S	—
	Parkview Health System	Fort Wayne Hospital Authority	Aa3	S	U
	Riverview Hospital	Indiana Health Facilities Financi			S
	Sisters of St. Francis Health Services, Inc.	Marion County Hospital Authori	Aa3	S	S
	Sisters of St. Francis Health Services, Inc.	Indiana Health Facilities Financi	A2	S	S
IOWA					
	Catholic Health Initiatives	Polk County	Baa2	S	S
	Catholic Health Initiatives (Formerly Catholic Health Corporation (Mercy Health Center of Central Iowa)) (Underlying rating)	Iowa Finance Authority	Aa3	S	P
	Catholic Health Initiatives (Formerly Mercy Hospital Medical Center)	Polk County	Aa2	S	N
	Catholic Health Initiatives, Series 1997 B (SBPA: Toronto Dominion Bank)	Polk County	Aa2	N	N
	Genesis Medical Center (Underlying rating)	Iowa Finance Authority	Aa2	N	S
	Keokuk Area Hospital	Keokuk			S
	Mercy Health Services (Formerly Sisters of Mercy Health Corporation St. Joseph Mercy Hospital) (Underlying rating)	Mason City	Aa2	N	S
	Mercy Health Services (Formerly Sisters of Mercy Health Corporation)	Dubuque County	A3	S	S
	Mercy Health Services (Formerly Sisters of Mercy Health Corporation)	Sioux City	A2	S	N
			A3	S	S
	Mercy Health Services (Formerly Sisters of Mercy		Aa3	S	S

Portfolio of Health Care Ratings (as of August 13, 1999) (continued)

State	Issuer	Issuing Authority	Rating	Outlook ¹
Indiana, continued				
	Holy Cross Health System (St. Joseph Hospital Medical Center)	St. Joseph County Hospital Authority	Aa3	N
	Holy Cross Health System (Underlying rating)	Indiana Health Facilities Financing Authority	Aa3	N
	La Porte Hospital	La Porte County Hospital Authority	Baa1	P
	Memorial Hospital (Jasper)	Indiana Health Facilities Financing Authority	Baa2	S
	Methodist Hospital (Merrillville)	Indiana Health Facilities Financing Authority	A2	S
	National Benevolent Association (Robin Run Village)	Indianapolis	Baa2	S
	Parkview Health System	Fort Wayne Hospital Authority	A1	S
	Riverview Hospital	Indiana Health Facilities Financing Authority	Baa1	P
	Sisters of St. Francis Health Services, Inc.	Marion County Hospital Authority	Aa3	P
	Sisters of St. Francis Health Services, Inc.	Indiana Health Facilities Financing Authority	Aa3	P
IOWA				
	Catholic Health Initiatives	Polk County	Aa2	N
	Catholic Health Initiatives (Formerly Catholic Health Corporation (Mercy Health Center of Central Iowa)) (Underlying rating)	Iowa Finance Authority	Aa2	N
	Catholic Health Initiatives (Formerly Mercy Hospital Medical Center)	Polk County	Aa3	N
	Catholic Health Initiatives, Series 1997 B (SBPA: Toronto Dominion Bank)	Polk County	Aa2/VMIG1	N
	Genesis Medical Center (Underlying rating)	Iowa Finance Authority	A1	P
	Keokuk Area Hospital	Keokuk	Baa3	S
	Mercy Health Services (Formerly Sisters of Mercy Health Corporation St. Joseph Mercy Hospital) (Underlying rating)	Mason City	Aa3	S
	Mercy Health Services (Formerly Sisters of Mercy Health Corporation)	Dubuque County	Aa3	S
	Mercy Health Services (Formerly Sisters of Mercy Health Corporation)	Sioux City	Aa3	S
	Mercy Health Services (Formerly Sisters of Mercy Health Corporation) (Underlying rating)	Iowa Finance Authority	Aa3	S
	Mercy Hospital	Hills City	A2	S
	National Benevolent Association (Ramsey Home Project)	Iowa Finance Authority	Baa2	S
	Northwest Iowa Health Center (Guaranteed by Sioux Valley Hospital & Health System)	Sheldon	Aa3	S
	University of Iowa Hospital and Clinics	Iowa State Board of Regents	Aa2	S
KANSAS				
	Catholic Health Initiatives	Kansas Development Finance Authority	Aa2	N
	Catholic Health Initiatives (Formerly Catholic Health Corporation (Central Kansas Medical Center)) (Underlying rating)	Larned	Aa2	N
	Catholic Health Initiatives (Formerly Catholic Health Corporation) (Underlying rating)	Garden City	Aa2	N
	Evangelical Lutheran Good Samaritan Society	Winfield	A3	S
	Hays Medical Center (Underlying rating)	Kansas Development Finance Authority	A2	S
	Lawrence Memorial Hospital	Lawrence	A3	S
	Med-Map L.L.C. (Guaranteed by Sisters of Charity of Leavenworth Health Services Corporation)	Med-Map L.L.C.	Aa3	S

¹ Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) *(continued)*

State	Issuer	Issuing Authority	Rating	Outlook ¹
Kansas, continued				
	Rural Health Resources of Jackson Co., Inc. (Guaranteed by Sisters of Charity of Leavenworth Health Services Corporation)	Kansas City	Aa3	S
	Sisters of Charity of Leavenworth Health Services Corporation	Kansas City	Aa3	S
	Sisters of Charity of Leavenworth Health Services Corporation	Kansas Development Finance Authority	Aa3	S
	Sisters of Charity of Leavenworth Health Services Corporation (St. Francis)	Shawnee	Aa3	S
	Sisters of Charity of Leavenworth Health Services Corporation (Underlying rating)	Kansas Development Finance Authority	Aa3	S
	Stormont-Vail Healthcare (Underlying rating)	Kansas Development Finance Authority	A2	S
KENTUCKY				
	Catholic Health Initiatives (Formerly Catholic Health Corporation)	Kentucky Economic Development Finance Authority	Aa2	N
	Catholic Healthcare Partners (Lourdes Hospital)	McCracken County	Aa3	N
	Catholic Healthcare Partners (Formerly Mercy Health System (Cincinnati))	Davies County	Aa3	N
	Catholic Healthcare Partners, Series 1998A	Kentucky Economic Development Finance Authority	Aa3/VMIG1	N
	Franciscan Health Partnership (Formerly Franciscan Sisters of the Poor Health System)	Russell	Baa2	S
	Jewish Hospital Health Care Services (Formerly JH Systems)	Jefferson County	A1	S
	King's Daughters' Medical Center	Kentucky Economic Development Finance Authority	A1	S
	Murray-Calloway County Hospital	Murray-Calloway County Hospital Corporation	Baa1	S
	T.J. Samson Community Hospital	Glasgow	A2	S
	University of Kentucky Hospital	University of Kentucky	Aa2	S
LOUISIANA				
	Christus Health (Underlying rating)	Louisiana Public Facilities Authority	Aa3	N
	Franciscan Missionaries of Our Lady Health System, Inc.	Louisiana Public Facilities Authority	A1	P
	Franciscan Missionaries of Our Lady Health System, Inc., Series 1998 B (Taxable/Tax-exempt Convertible SAVRS)	Franciscan Missionaries of Our Lady Health System, Inc.	A1	P
	Franciscan Missionaries of Our Lady Health System, Inc., Series 1998 D (Taxable)	Franciscan Missionaries of Our Lady Health System, Inc.	A1	P
	Lincoln Health System	Louisiana Public Facilities Authority	Baa2	S
	Pendleton Memorial Methodist Hospital	Louisiana Public Facilities Authority	Baa3	S
	Sisters of Mercy Health System (Mercy Hospital (St. Louis))	Louisiana Public Facilities Authority	Aa1	S
	Thibodeaux Regional Medical Center (Formerly Thibodeaux Hospital)	LaFourche Parish hospital Service District No. 3	A3	S
	Touro Infirmary	Louisiana Public Facilities Authority	Baa1	S
	West Jefferson Medical Center (Underlying rating)	Jefferson Parish Hospital Service District No. 1	A2	S
	Woman's Hospital Foundation	Louisiana Public Facilities Authority	A3	P

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD)

Portfolio of Health Care Ratings (as of August 13, 1999) (continued)

State	Issuer	Issuing Authority	Rating	Outlook ¹
MARYLAND				
	Adventist Healthcare Mid-Atlantic (Formerly Shady Grove Adventist Hospital)	Gaithersburg	Baa1	S
	Adventist Healthcare Mid-Atlantic (Formerly Washington Adventist Hospital)	Takoma Park	Baa1	S
	Bon Secours Health System (SAVRS) (Underlying rating)	Bon Secours Health System	A3	S
	Bon Secours Health System (Underlying rating)	Maryland Industrial Development Financing Authority	A3	S
	Calvert Memorial Hospital	Maryland Health & Higher Educational Facilities Authority	A2	S
	Catholic Health Initiatives, Series 1997 B (SBPA: Toronto Dominion Bank)	Maryland Industrial Development Financing Authority	Aa2/VMIG1	N
	Charity Obligated Group, Series 1997 D, E, F	Maryland Health & Higher Educational Facilities Authority	Aa2/VMIG1	S
	Dimensions Health Corporation	Prince George's County	Baa1	N
	Doctors' Community Hospital	Maryland Health & Higher Educational Facilities Authority	Baa1	S
	Doctors' Community Hospital (Taxable)	Doctors' Community Hospital	Baa1	S
	Francis Scott Key Medical Center (Guaranteed by Johns Hopkins Hospital)	Maryland Health & Higher Educational Facilities Authority	Aa3	N
	GBMC Medical Arts Limited Partnership (Guaranteed by Greater Baltimore Medical Center) (Taxable)	GBMC Medical Arts Limited Partnership	A1	S
	Greater Baltimore Medical Center	Maryland Health & Higher Educational Facilities Authority	A1	S
	Greater Baltimore Medical Center, Series 1995 (SBPA: First National Bank of Maryland)	Maryland Health & Higher Educational Facilities Authority	A1/VMIG1	S
	Greater Southeast Healthcare System	Prince George's County	Caa3	S
	Holy Cross Health System (Holy Cross Hospital of Silver Spring)	Maryland Health & Higher Educational Facilities Authority	Aa3	N
	Holy Cross Health System (Holy Cross Hospital of Silver Spring)	Maryland Industrial Development Financing Authority	Aa3	N
	Howard County General Hospital (Underlying rating)	Maryland Health & Higher Educational Facilities Authority	Baa2	S
	Johns Hopkins Hospital	Maryland Health & Higher Educational Facilities Authority	Aa3	N
	Kaiser Foundation Hospitals	Maryland Health & Higher Educational Facilities Authority	A3	N
	Kennedy Krieger Institute	Maryland Health & Higher Educational Facilities	Baa1	N
	Mercy Medical Center (Underlying rating)	Maryland Health & Higher Educational Facilities Authority	A3	S
	Montgomery General Hospital (Underlying rating)	Maryland Health & Higher Educational Facilities Authority	A3	S
	Peninsula Regional Medical Center	Maryland Health & Higher Educational Facilities Authority	A2	S
	Suburban Hospital	Maryland Health & Higher Educational Facilities Authority	A1	S
	Union Hospital of Cecil County	Maryland Health & Higher Educational Facilities Authority	A3	S
	Upper Chesapeake Health System (Formerly Harford Memorial Hospital & Fallston General Hospital)	Maryland Health & Higher Educational Facilities Authority	Baa1	N

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) *(continued)*

State	Issuer	Issuing Authority	Rating	Outlook ¹
MASSACHUSETTS				
	Addison Gilbert Hospital (now dba Beverly Hospital)	Massachusetts Health & Educational Facilities Authority	A3	N
	Anna Jaques Hospital	Massachusetts Health & Educational Facilities Authority	Baa1	S
	Bay Cove Human Services	Massachusetts Industrial Finance Agency	Ba2	S
	Baystate Medical Center	Massachusetts Health & Educational Facilities Authority	A1	S
	Boston Regional Medical Center (Formerly New England Memorial Hospital)	Massachusetts Health & Educational Facilities Authority	Ca	S
	Brigham & Women's Hospital	Massachusetts Health & Educational Facilities Authority	A1	S
	Brockton Hospital	Massachusetts Health & Educational Facilities Authority	A2	S
	CareGroup, Inc. (Underlying rating)	Massachusetts Health & Educational Facilities Authority	Baa1	S
	Caritas Christi	Massachusetts Health & Educational Facilities Authority	Baa2	S
	Catholic Health East (Underlying rating)	Massachusetts Health & Educational Facilities Authority	A1	S
	Children's Hospital (Boston)	Massachusetts Health & Educational Facilities Authority	Aa3	S
	Concord Assabet Family & Adolescent Services	Massachusetts Industrial Finance Agency	Ba2	P
	Dana-Farber Cancer Institute	Massachusetts Health & Educational Facilities Authority	A1	S
	East Boston Neighborhood Health Center	Massachusetts Health & Educational Facilities Authority	Caa1	S
	Good Samaritan Medical Center (Formerly Cardinal Cushing and Goddard Memorial Hospital)	Massachusetts Health & Educational Facilities Authority	Baa3	S
	Health Alliance (Formerly Central New England Health Alliance)	Massachusetts Health & Educational Facilities Authority	Baa3	S
	Holyoke Hospital	Massachusetts Health & Educational Facilities Authority	Baa3	N
	Home for Little Wanderers (Underlying rating)	Massachusetts Health & Educational Facilities Authority	A2	S
	Lawrence General Hospital	Massachusetts Health & Educational Facilities Authority	Baa2	S
	Lowell General Hospital (Underlying rating)	Massachusetts Health & Educational Facilities Authority	A3	S
	Massachusetts Biomedical Research Corporation (Guaranteed by Massachusetts General Hospital)	Massachusetts Health & Educational Facilities Authority	A1	S
	Massachusetts Eye and Ear Infirmary	Massachusetts Health & Educational Facilities Authority	Baa3	S
	Milford-Whitinsville Regional Hospital	Massachusetts Health & Educational Facilities Authority	Baa2	S
	New England Center for Children	Massachusetts Health & Educational Facilities Authority	Ba2	S
	Newton-Wellesley Hospital (Underlying rating)	Massachusetts Health & Educational Facilities Authority	A3	U
	Partners Healthcare System	Massachusetts Health & Educational Facilities Authority	A1	S
	Saints Memorial Medical Center	Massachusetts Health & Educational Facilities Authority	Ba2	S

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) (continued)

State	Issuer	Issuing Authority	Rating	Outlook ¹
Massachusetts, continued				
	Southcoast Health System (Formerly St. Luke's Hospital of New Bedford and Charlton Memorial Hospital)	Massachusetts Health & Educational Facilities Authority	A1	S
	Spaulding Rehabilitation Hospital, Series A (Guaranteed by Massachusetts General Hospital)	Massachusetts Health & Educational Facilities Authority	A1	S
	The Learning Center for Deaf Children	Massachusetts Health & Educational Facilities Authority	Ba2	S
	UMass Memorial Healthcare (Formerly Memorial Hospital- Medical Center of Central Massachusetts)	Massachusetts Health & Educational Facilities Authority	Baa1	N
	Vinfin Corporation	Massachusetts Health and Educational Facilities Authority	Ba1	P
MICHIGAN				
	Bay Medical Center (Underlying rating)	Michigan State Hospital Finance Authority	A3	S
	Beaumont Properties (Guaranteed by William Beaumont Hospital)	Royal Oak Hospital Finance Authority	Aa3	S
	Bon Secours Health System (Underlying rating)	St. Clair Shores Economic Development Corporation	A3	S
	Bon Secours Health System (Underlying rating)	Michigan State Hospital Finance Authority	A3	S
	Bronson Methodist Hospital	Kalamazoo Hospital Finance Authority	A1	S
	Charity Obligated Group, Series 1997 D, E, F	Michigan State Hospital Finance Authority	Aa2/VMIG1	S
	Crittenton Hospital	Michigan State Hospital Finance Authority	A1	S
	Daughters of Charity National Health System (Providence Hospital)	Michigan State Hospital Finance Authority	Aa2	S
	Daughters of Charity National Health System (Providence Hospital), Series 1984	Michigan State Hospital Finance Authority	Aa2/VMIG1	S
	Daughters of Charity National Health System (St. Mary's Hospital)	Michigan State Hospital Finance Authority	Aa2	S
	Daughters of Charity National Health System (St. Mary's Hospital), Series 1984	Michigan State Hospital Finance Authority	Aa2/VMIG1	S
	Detroit Medical Center	Michigan State Hospital Finance Authority	Baa2	N
	Detroit Medical Center (Formerly Harper, Grace & Huron Valley Hospitals)	Michigan State Hospital Finance Authority	Baa2	N
	Dickinson County Healthcare System	Dickinson County Healthcare System	Ba1	P
	Edward Sparrow Hospital (Underlying rating)	Michigan State Hospital Finance Authority	A1	S
	Garden City Hospital	Michigan State Hospital Finance Authority	Ba3	S
	Genesys Health System	Michigan State Hospital Finance Authority	Baa2	N
	Hackley Hospital	Michigan State Hospital Finance Authority	A3	N
	Henry Ford Continuing Care Corporation (Guaranteed by Henry Ford Health System)	Michigan State Hospital Finance Authority	Aa3	N
	Henry Ford Health System	Michigan State Hospital Finance Authority	Aa3	N
	Holland Community Hospital	Michigan State Hospital Finance Authority	A2	S
	Hurley Medical Center	Flint Hospital Building Authority	Baa1	S
	Marquette General Hospital	Marquette Hospital Finance Authority	A2	S
	Mary Free Bed Hospital & Rehabilitation Center	Kent Hospital Finance Authority	A2	S
	McLaren Healthcare Corporation	Michigan State Hospital Finance Authority	A1	S
	Memorial Healthcare Center (Formerly Memorial Hospital (Owosso))	Michigan State Hospital Finance Authority	Baa1	S
	Mercy Health Services Obligated Group	Michigan State Hospital Finance Authority	Aa3	S

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) (continued)

State	Issuer	Issuing Authority	Rating	Outlook ¹
Michigan, continued				
	Mercy Mt. Clemens Corporation (Guaranteed by Henry Ford Health System)	Michigan State Hospital Finance Authority	Aa3	N
	MidMichigan Regional Health System (Underlying rating)	Michigan State Hospital Finance Authority	A1	S
	North Oakland Medical Center	Pontiac Hospital Finance Authority	Baa3	W/D
	Oakwood Hospital (Underlying rating)	Michigan State Hospital Finance Authority	A2	S
	OSF Healthcare System (Formerly Sisters of the Third Order), Series 1989 B (SBPA: Northern Trust Company)	Michigan State Hospital Finance Authority	A2/VMIG1	N
	Pontiac Osteopathic Hospital	Michigan State Hospital Finance Authority	Baa2	S
	Sinai Hospital of Greater Detroit (Now part of Detroit Medical Center)	Michigan State Hospital Finance Authority	Baa2	N
	Spectrum Health	Kent Hospital Finance Authority	Aa3	N
	Spectrum Health, Series 1998 B, C (SBPA: NBD Bank) (Underlying rating)	Kent Hospital Finance Authority	Aa3/VMIG1	N
	St. John Health System	Michigan State Hospital Finance Authority	A1	N
	St. John-Bon Secours Continuing Care Center (Guaranteed by St. John Hospital & Bon Secours Health System)	Michigan Strategic Fund	A1	N
	University of Michigan Hospitals	Regents of the University of Michigan	Aa2	S
	University of Michigan Hospitals, Series 1992 A, 1995 A and Series 1998	Regents of the University of Michigan	Aa2/VMIG1	S
	William Beaumont Hospital	Royal Oak Hospital Finance Authority	Aa3	S
	William Beaumont Hospital, Series 1996 J (SBPA: NBD Bank)	Royal Oak Hospital Finance Authority	Aa3/VMIG1	S
	William Beaumont Hospital, Series 1997 L (SBPA: Bank of America)	Royal Oak Hospital Finance Authority	Aa3/VMIG1	S
MINNESOTA				
	Catholic Health Initiatives (Formerly Catholic Health Corporation (St. Francis Medical Center))	Breckenridge	Aa2	N
	Evangelical Lutheran Good Samaritan Society	Minneapolis	A3	S
	Evangelical Lutheran Good Samaritan Society	Pine River	A3	S
	Fairview Hospital & Health Care Services	Edina	A2	N
	Fairview Hospital & Health Care Services (Underlying rating)	Princeton	A2	N
	Fairview Hospital & Health Care Services (Underlying rating)	Minneapolis	A2	N
	Fairview Hospital & Health Care Services (Underlying rating)	Minnesota Agricultural and Economic Development Board	A2	N
	Fairview Hospital & Health Care Services Series 1993B (Taxable notes) (Underlying rating)	Fairview	A2/VMIG1	N
	HealthEast	Maplewood	Ba1	N
	HealthEast	St. Paul Housing & Redevelopment Authority	Ba1	N
	HealthEast	Washington County Housing & Redevelopment Authority	Ba1	N
	HealthPartners (Formerly Group Health, Inc.)	St. Paul Housing & Redevelopment Authority and the City of Minneapolis	Baa1	N
MISSISSIPPI				
	Baptist Memorial Hospital Golden Triangle	Lowndes County	Baa2	S
	Greenwood Leflore Hospital	Leflore County	Baa2	S

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD)

Portfolio of Health Care Ratings (as of August 13, 1999) (continued)

State	Issuer	Issuing Authority	Rating	Outlook ¹
Mississippi, continued				
	Magnolia Hospital	Mississippi Hospital Equipment & Facilities Authority	Baa3	S
	Medical Foundation, Inc (Guaranteed by Rush Foundation Hospital)	Mississippi Hospital Equipment & Facilities Authority	Baa3	S
	North Mississippi Health Services (Underlying rating)	Mississippi Hospital Equipment & Facilities Authority	Aa3	S
	Rush Foundation Hospital	Mississippi Hospital Equipment & Facilities Authority	Baa3	S
MISSOURI				
	BJC Health System (Formerly Barnes-Jewish Christian Health Services, Inc.)	Missouri Health & Educational Facilities Authority	Aa2	N
	Boone Hospital Center	Boone County	A3	S
	Capital Region Medical Center (Formerly Charles Still Regional Medical Center)	Missouri Health & Educational Facilities Authority	Baa2	P
	Carondelet Health System (St. Joseph Hospital) (Underlying rating)	Jackson County Industrial Development Authority	Baa1	P
	Carondelet Health System (St. Mary's Hospital of Blue Springs) (Underlying rating)	Jackson County Industrial Development Authority	Baa1	P
	Catholic Health Initiatives	Joplin Industrial Development Authority	Aa2	N
	Daughters of Charity National Health System (DePaul Community Health Center)	St. Louis County Industrial Development Authority	Aa2	S
	Jefferson Memorial Hospital	Missouri Health & Educational Facilities Authority	Baa2	S
	National Benevolent Association (Foxwood Springs Living Center)	Cass County Industrial Development Authority	Baa2	S
	National Benevolent Association (Lenoir Retirement Community Project)	Missouri Health & Educational Facilities Authority	Baa2	S
	National Benevolent Association (Woodhaven Learning Center) health	Missouri Health & Educational Facilities Authority	Baa2	S
	Sisters of Mercy Health System (St. Anthony's Medical Center), Series 1989 A-C (SBPA: ABN AMRO; Rabobank)	Missouri Health & Educational Facilities Authority	Aa1/VMIG1	S
	Sisters of Mercy Health System (St. John's Medical Center (St. Louis))	Missouri Health & Educational Facilities Authority	Aa1	S
	Sisters of Mercy Health System (St. Louis), Series 1989 A-D (SBPA: ABN - AMRO)	Missouri Health & Educational Facilities Authority	Aa1/VMIG1	S
	Sisters of Mercy Health System (St. Louis), Series 1995 B (SBPA: ABN-AMRO ; Rabobank)	Missouri Health & Educational Facilities Authority	Aa1/VMIG1	S
	Sisters of Mercy Health System, Series 1992 B (SBPA: ABN-AMRO)	Missouri Health & Educational Facilities Authority	Aa1/VMIG1	S
	Skaggs Community Hospital	Missouri Health & Educational Facilities Authority	Baa3	S
	University of Missouri Health System (Underlying rating)	Curators of the University of Missouri	A2	S
MONTANA				
	Northern Montana Hospital	Montana Health Facilities Authority	Baa3	S
	Sisters of Charity of Leavenworth Health Services Corporation (St. James and St. Vincent Hospital)	Montana Health Facilities Authority	Aa3	S
	St. Peter's Community Hospital	Lewis and Clark Counties	A3	S

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) *(continued)*

State	Issuer	Issuing Authority	Rating	Outlook ¹
NEBRASKA				
	Catholic Health Initiatives	Nebraska Investment Finance Authority	Aa2	N
	Catholic Health Initiatives (Formerly Catholic Health Corporation (Archbishop Bergan Mercy Hospital))	Douglas County Hospital Authority No. 2	Aa2	N
	Catholic Health Initiatives (Formerly Catholic Health Corporation (New Cassel, Inc.))	Douglas County Hospital Authority No. 3	Aa2	N
	Catholic Health Initiatives (Formerly Sisters of Charity Health Care System (Cincinnati))	Buffalo County Hospital District No. 1	Aa2	N
	Catholic Health Initiatives (Formerly Sisters of Charity Health Care Systems (Cincinnati))	Lancaster County Hospital Authority No. 1	Aa2	N
	Regional West Medical Center	Scotts Bluff County Hospital Authority No. 1	A3	S
NEVADA				
	Catholic Healthcare West (St. Rose Dominican Hospital)	Henderson	Baa1	N
	Lutheran Health System	Churchill County	Aa3	S
	Washoe County Medical Center	Washoe County	A1	S
NEW HAMPSHIRE				
	Crotched Mountain Rehabilitation Center	New Hampshire Higher Educational & Health Facilities Authority	A3	S
	Elliot Hospital	New Hampshire Higher Educational & Health Facilities Authority	A2	N
	Exeter Hospital	New Hampshire Higher Educational & Health Facilities Authority	A2	S
	Frisbie Memorial Hospital	New Hampshire Higher Educational & Health Facilities Authority	Baa1	S
	St. Joseph Hospital	New Hampshire Higher Educational & Health Facilities Authority	Baa2	S
NEW JERSEY				
	Atlantic City Medical Center	New Jersey Health Care Facilities Financing Authority	A3	S
	Atlantic Health System (Underlying rating)	New Jersey Health Care Facilities Financing Authority	A1	P
	Beth Israel Hospital (Passaic)	New Jersey Health Care Facilities Financing Authority	Baa1	S
	Burdette Tomlin Memorial Hospital	New Jersey Health Care Facilities Financing Authority	A2	S
	Capital Health System (Formerly known as Mercer Medical Center)	New Jersey Health Care Facilities Financing Authority	Baa2	N
	Catholic Health East (Underlying rating)	Camden County Improvement Authority	A1	S
	CentraState Medical Center	New Jersey Health Care Facilities Financing Authority	A3	S
	Chilton Memorial Hospital	New Jersey Health Care Facilities Financing Authority	A2	S
	Clara Maass Medical Center (Underlying rating)	New Jersey Economic Development Authority	Baa2	P
	Columbus Hospital	New Jersey Health Care Facilities Financing Authority	B2	N
	Community Medical Center, Kimball Medical Center and Kensington Manor Care Center (Underlying rating)	New Jersey Health Care Facilities Financing Authority	Baa2	P

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) *(continued)*

State	Issuer	Issuing Authority	Rating	Outlook ¹
New Jersey, continued				
	Cooper Health System	Camden County Improvement Authority	B1	W/D
	Deborah Heart & Lung Center	New Jersey Health Care Facilities Financing Authority	Baa2	S
	Elizabeth General Hospital	New Jersey Health Care Facilities Financing Authority	Baa2	S
	Englewood Hospital and Medical Center	New Jersey Health Care Facilities Financing Authority	Baa2	WD
	Franciscan Health Partnership, Inc. (Formerly Franciscan Sisters of the Poor Health System) (St. Mary Hospital (Hoboken))	New Jersey Health Care Facilities Financing Authority	Baa2	S
	JFK Health System	New Jersey Health Care Facilities Financing Authority	A3	N
	Kennedy Memorial Hospital - University Medical Center (Underlying rating)	New Jersey Health Care Facilities Financing Authority	A2	S
	Mecer Medical Center	New Jersey Health Care Facilities Financing Authority	Baa2	N
	Newcomb Medical Center	New Jersey Health Care Facilities Financing Authority	Ba3	N
	Newton Memorial Hospital (Underlying rating)	New Jersey Health Care Facilities Financing Authority	Baa1	P
	Palisades Medical Center of the New York Presbyterian Health System	New Jersey Health Care Facilities Financing Authority	Baa3	S
	Princeton Medical Center (Underlying rating)	New Jersey Health Care Facilities Financing Authority	A2	S
	Rahway Hospital	New Jersey Health Care Facilities Financing Authority	Baa2	W/D
	Robert Wood Johnson University Hospital (Underlying rating)	New Jersey Health Care Facilities Financing Authority	A1	S
	Saint Barnabas Health Care System (Underlying rating)	New Jersey Health Care Facilities Financing Authority	Baa2	P
	Shoreline Behavioral Health Center (Guaranteed by Community Medical Center) (Underlying rating)	New Jersey Health Care Facilities Financing Authority	Baa2	P
	Southern Ocean County Hospital	New Jersey Health Care Facilities Financing Authority	Baa1	S
	St. Elizabeth Hospital/Elizabeth General Hospital (Trinitas Health System)	New Jersey Health Care Facilities Financing Authority	Baa2	S
	Union Hospital/Mega Care (Underlying rating)	New Jersey Health Care Facilities Financing Authority	Baa2	P
	West Hudson Hospital (Underlying rating)	New Jersey Health Care Facilities Financing Authority	Baa2	P
NEW MEXICO				
	Catholic Health Initiatives	New Mexico Hospital Equipment Loan Council	Aa2	N
	Catholic Health Initiatives, Series 1997 B (SBPA; Toronto Dominion Bank)	New Mexico Hospital Equipment Loan Council	Aa2/VMIG1	N
	Lutheran Health System	Los Alamos County	Aa3	S
	Memorial Medical Center	New Mexico Hospital Equipment Loan Council	Baa1	S
	San Juan Regional Medical Center (Underlying rating)	Farmington	A3	P

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) *(continued)*

State	Issuer	Issuing Authority	Rating	Outlook ¹
NEW YORK				
	Beth Israel Medical Center	New York State Medical Care Facilities Finance Agency	Baa2	S
	Beth Israel Medical Center (Underlying rating)	Dormitory Authority of the State of New York	Baa2	S
	Catholic Health East (Underlying rating)	Allegheny County Hospital Development Authority	A1	S
	Catholic Health Services of Long Island	Dormitory Authority of the State of New York	A2	U
	Children's Village	Westchester County Hospital Authority	Baa2	S
	Community-General Hospital of Greater Syracuse	Onodaga County Industrial Development Agency	Baa3	S
	Community-General Hospital of Greater Syracuse (Taxable)	Community-General Hospital of Greater Syracuse	Baa3	S
	Cornwall Hospital	Dormitory Authority of the State of New York	B1	S
	Cortland Memorial Hospital	Cortland County Industrial Development Agency	Baa2	S
	Cortland Memorial Hospital (Taxable)	Cortland Memorial Hospital	Baa2	S
	Franciscan Health Partnership, Inc. (Formerly Franciscan Sisters of the Poor Health System) (Frances Schevier Home & Hospital)	Dormitory Authority of the State of New York	Baa2	S
	Genesee Hospital	Monroe County Industrial Development Agency	B2	W/D
	Good Samaritan Hospital Medical Center, Master Notes Series 1 (SAVRs) (Taxable) (Underlying rating)	New York State Medical Care Facilities Finance Agency	A2	S
	Good Samaritan Hospital Medical Center, Master Notes Series 2 (SAVRs) (Taxable) (Underlying rating)	New York State Medical Care Facilities Finance Agency	A2	S
	Good Samaritan Hospital of Suffern (Guaranteed by Franciscan Health Partnership)	Dormitory Authority of the State of New York	Baa2	S
	Health Insurance Plan of Greater New York	Health Insurance Plan of Greater New York	Ba3	N
	Huntington Hospital	New York State Medical Care Facilities Finance Agency	Baa1	S
	Mercy Community Hospital (Guaranteed by Franciscan Health Partnership Obligated Group)	Port Jervis Industrial Development	Baa2	S
	New York City Health & Hospitals Corporation	New York City	Baa3	S
	Nyack Hospital	Dormitory Authority of the State of New York	Baa2	P
	St. Mary's Hospital at Amsterdam (Guaranteed by Carondelet Health System Obligated Group) (Underlying rating)	Dormitory Authority of the State of New York	Baa1	P
	Vassar Brothers Hospital (Underlying rating)	Dormitory Authority of the State of New York	Baa1	S
NORTH CAROLINA				
	Annie Penn Memorial Hospital	North Carolina Medical Care Commission	Baa3	P
	Cabarrus Memorial Hospital (dba NorthEast Medical Center)	North Carolina Medical Care Commission	A2	S
	Catholic Health East (Underlying rating)	North Carolina Medical Care Commission	A1	S
	Charlotte-Mecklenburg Hospital Authority (dba Carolinas Healthcare System)	Charlotte-Mecklenburg Hospital Authority	Aa3	S
	Charlotte-Mecklenburg Hospital Authority (dba Carolinas Healthcare System, Series 1996 B, C, D (SBPA: NationsBank, N.A.))	Charlotte-Mecklenburg Hospital Authority	Aa3/VMIG1	S

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) (continued)

State	Issuer	Issuing Authority	Rating	Outlook ¹
North Carolina, continued				
	Cumberland County Health System (dba Cape Fear Valley Health System)	Cumberland County	A3	S
	Duke University Hospital	North Carolina Medical Care Commission	Aa3	N
	Duke University Hospital (taxable)	Duke University	Aa3	N
	Duke University Hospital, Series 1985 B, C, D (SBPA: First National Bank of Chicago)	North Carolina Medical Care Commission	Aa3/VMIG1	N
	Duke University Hospital, Series 1993 A (SBPA: First National Bank of Chicago)	North Carolina Medical Care Commission	Aa3/VMIG1	N
	First Health of the Carolinas (Formerly Moore Regional Hospital)	North Carolina Medical Care Commission	Aa3	S
	Gaston Health Care	North Carolina Medical Care Commission	A1	S
	Grace Hospital, Inc.	North Carolina Medical Care Commission	A2	S
	Halifax Regional Medical Center (Formerly Halifax Memorial Hospital)	North Carolina Medical Care Commission	Baa1	S
	Lexington Memorial Hospital	North Carolina Medical Care Commission	Baa1	S
	Mission St. Joseph's Health System	North Carolina Medical Care Commission	Aa3	S
	Mission St. Joseph's Health System (Formerly Memorial Mission Hospital) (Underlying rating)	North Carolina Medical Care Commission	Aa3	S
	Morehead Memorial Hospital	North Carolina Medical Care Commission	Baa3	S
	New Hanover Regional Medical Center (Underlying rating)	New Hanover County	A1	S
	North Carolina Baptist Hospital	North Carolina Medical Care Commission	Aa3	S
	North Carolina Baptist Hospital, Series 1992 B (SBPA: Wachovia Bank, N.A.)	North Carolina Medical Care Commission	Aa3/VMIG1	S
	North Carolina Baptist Hospital, Series 1996 A (SBPA: Wachovia Bank, N.A.)	North Carolina Medical Care Commission	Aa3/VMIG1	S
	Northern Hospital District of Surry County	Northern Hospital District of Surry County	Ba1	S
	Novant Health (Formerly Carolina Medicorp and Presbyterian Hospital) (Underlying rating)	North Carolina Medical Care Commission	Aa3	N
	Pitt County Memorial Hospital	Pitt County	Aa3	N
	Rex Healthcare	North Carolina Medical Care Commission	A1	S
	University of North Carolina Hospitals	Board of Governors of the University of North Carolina	Aa3	S
	Valdese General Hospital, Inc. (Guaranteed by The Charlotte-Mecklenburg Hospital Authority)	North Carolina Medical Care Commission	Aa3/VMIG1	S
	Wayne Memorial Hospital (Underlying rating)	North Carolina Medical Care Commission	A2	S
NORTH DAKOTA				
	Catholic Health Initiatives	Dickinson	Aa2	N
	Catholic Health Initiatives (Formerly Catholic Health Corporation (Carrington Health Center))	Carrington	Aa2	N
	Catholic Health Initiatives (Formerly Catholic Health Corporation (Mercy Hospital))	Williston	Aa2	N
	Catholic Health Initiatives (Formerly Catholic Health Corporation (Mercy Hospital))	Devils Lake	Aa2	N
	Catholic Health Initiatives (Formerly Catholic Health Corporation (Riverview Place))	Cass County	Aa2	N
	Lutheran Health Systems	Valley City	Aa3	S

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) *(continued)*

State	Issuer	Issuing Authority	Rating	Outlook ¹
OHIO	Adena Health System (Formerly Medical Center Hospital) (Underlying rating)	Ross County	A2	S
	Amherst Hospital	Amherst	Caa	S
	Bethesda Hospital & Deaconess Association	Hamilton County	A3	N
	Catholic Health Initiatives	Montgomery County	Aa2	N
	Catholic Health Initiatives (Formerly Sisters of Charity Health Care System (Cincinnati)) (Good Samaritan Hospital)	Hamilton County	Aa2	N
	Catholic Health Initiatives (Formerly Sisters of Charity Health Care System (Cincinnati)) (Good Samaritan Hospital)	Montgomery County	Aa2	N
	Catholic Health Initiatives, Series 1997 B (SBPA: Morgan Guaranty Trust Company of New York)	Montgomery County	Aa2/VMIG1	N
	Catholic Healthcare Partners	Lorain County	Aa3	N
	Catholic Healthcare Partners (Formerly Mercy Health System (Cincinnati))	Lorain County	Aa3	N
	Catholic Healthcare Partners (Formerly Mercy Health System (Cincinnati)), Series 1994 B	Clermont County	Aa3/VMIG1	N
	Catholic Healthcare Partners (Formerly Mercy Health System (Cincinnati)), Series 1996 A	Clermont County	Aa3/VMIG1	N
	Catholic Healthcare Partners (Formerly Mercy Health System (Cincinnati)), Series 1997 A (SBPA: NBD Bank)	Lorain County	Aa3/VMIG1	N
	Catholic Healthcare Partners (Formerly Mercy Health System) (Underlying rating)	Clermont County	Aa3	N
	Catholic Healthcare Partners (St. Vincent Hospital and Medical Center) (Underlying rating)	Lucas County	Aa3	N
	Children's Hospital (Columbus)	Franklin County	Aa3	S
	Children's Hospital (Columbus), Series 1992 B (SBPA: Banc One)	Franklin County	Aa3/VMIG1	S
	Cleveland Clinic Health System	Cuyahoga County	Aa3	N
	Cleveland Clinic Health System, Series 1996 B	Cuyahoga County	Aa3/VMIG1	N
	Cleveland Clinic Health System, Series 1997 C. D	Cuyahoga County	Aa3/VMIG1	N
	Cleveland Clinic Health System, Series 1999	Cuyahoga County	Aa3/VMIG1	N
	Deaconess Hospital of Cincinnati	Hamilton County	A3	S
	DoctorsOhioHealth (Formerly Doctor's Hospital Columbus)	Franklin County	Baa3	S
	East Liverpool City Hospital	East Liverpool	Baa1	S
	Fairview Health System (Member of Cleveland Clinic Health System)	Cuyahoga County	Aa3	N
	Firelands Community Hospital	Erie County	A2	S
	Fort Hamilton Hospital	Butler County	Baa1	S
	Forum Health (Underlying rating)	Mahoning County	A1	S
	Franciscan Health Partnership, Inc.	Montgomery County	Baa2	S
	Franciscan Health Partnership, Inc. (Providence Hospital)	Hamilton County	Baa2	S
	Franciscan Health Partnership, Inc. (Schroder Manor) (Formerly Franciscan Sisters of the Poor, Inc.)	Butler County	Baa2	S

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) *(continued)*

State	Issuer	Issuing Authority	Rating	Outlook ¹
Ohio, continued				
	Franciscan Health Partnership, Inc. (St. Francis-St. George Hospital) (Formerly Franciscan Sisters of the Poor, Inc.)	Hamilton County	Baa2	S
	Galion Community Hospital	Galion	Ba1	N
	Grant Riverside Methodist Hospital (dba OhioHealth)	Franklin County	Aa3	N
	Greene Memorial Hospital	Greene County	A2	S
	Holy Cross Health System (Mount Carmel Health System)	Franklin County	Aa3	N
	Holy Cross Health System (Mount Carmel Health System), Series 1995 (SBPA: Morgan Guaranty Trust Company)	Franklin County	Aa3/VMIG1	N
	Marietta Area Health Care	Washington County	Baa1	P
	Miami Valley Hospital (Underlying rating)	Montgomery County	Aa3	S
	Middletown Regional Hospital (Underlying rating)	Butler County	A2	S
	Samaritan Hospital	Ashland	Baa2	S
	Southwest General Hospital (Underlying rating)	Middleburg Heights	A2	S
	St. Luke's Hospital	Maumee	A1	S
	Summa Health System (Formerly Akron City Hospital)	Akron-Bath-Copley Joint Township Hospital District	Baa1	N
	Trinity Medical Center (Formerly St. John Medical Center Hospital)	Jefferson County	Baa1	P
	Union Hospital	Tuscarawas County	Baa2	S
	University Hospitals Health System	Cuyahoga County	A1	S
	Upper Valley Medical Center Hospital	Miami County	Baa2	S
OKLAHOMA				
	Deaconess Health Care Corporation	Oklahoma Industries Authority	Baa2	S
	Hillcrest Healthcare System	Oklahoma Development Finance Authority	Baa2	P
	Integrus Obligated Group (Underlying rating)	Oklahoma Industries Authority	A1	S
	Integrus Obligated Group, Series 1990 B (SBPA: Morgan Guaranty Trust Company of New York)	Oklahoma Industries Authority	A1/VMIG1	S
	Integrus Obligated Group, Series 1995 A (SBPA: Morgan Guaranty Trust Company of New York)	Oklahoma Industries Authority	A1/VMIG1	S
	National Benevolent Association (Oklahoma Christian Home Project)	Oklahoma County Industrial Development Authority	Baa2	S
	Sisters of Mercy Health System (St. Louis) (Mercy Health Center)	Oklahoma Industries Authority	Aa1	S
	St. John Medical Center	Tulsa Industrial Development Authority	Aa3	S
	Stillwater Medical Center (Underlying rating)	Tulsa Industrial Development Authority	Baa3	P
	St. John Medical Center Physicians Building (LOC: Sanwa Bank), Series 1984	Tulsa Industrial Development Authority	Aa3/VMIG1	S
	Stillwater Medical Center	Stillwater Medical Center Authority	Baa3	P
	Valley View Regional Medical Center	Valley View Hospital Authority	Baa2	S

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) *(continued)*

State	Issuer	Issuing Authority	Rating	Outlook ¹
OREGON				
	Catholic Health Initiatives (Formerly Catholic Health Corporation (Evergreen Court for Retirement Living))	Bay Area Health District Hospital Facilities Authority	Aa2	N
	Catholic Health Initiatives (Formerly Catholic Health Corporation (Holy Rosary Hospital))	Ontario Hospital Facilities Authority	Aa2	N
	Catholic Health Initiatives (Formerly Catholic Health Corporation (Mercy Medical Center))	Douglas County Hospital Facilities Authority	Aa2	N
	Catholic Health Initiatives, Series 1997 B (SBPA: Toronto Dominion Bank)	Umatilla County Hospital Facilities Authority	Aa2/VMIG1	N
	Good Shepherd Community Hospital	Umatilla County Hospital Facilities Authority	Baa3	S
	Kaiser Foundation Hospitals (Formerly Sisters of Providence Health System)	Clackamas County Health Facilities Authority	A3	N
	McKenzie-Willamette Memorial Hospital	Springfield Hospital Facilities Authority	Baa3	S
	Providence Health System (Formerly Sisters of Providence Health System)	Clackamas County Health Facilities Authority	A1	S
	St. Charles Medical Center Hospital	Deschutes County Hospital Facility Authority	Aa3	S
	Willamette Falls Hospital	Clackamas County Health Facilities Authority	Baa1	S
PENNSYLVANIA				
	Allegheny General Hospital	Allegheny County Hospital Development Authority	Caa1	W/UD
	Allegheny General Hospital	Pennsylvania Higher Educational Facilities Authority	Caa1	W/UD
	Allegheny Valley School	Allegheny County Hospital Development Authority	Ba1	S
	Armstrong County Memorial Hospital	Armstrong County Hospital Authority	Ba1	P
	Bon Secours Health System (Underlying rating)	Blair County Hospital	A3	S
	Carlisle Hospital and Health Services	Cumberland County Municipal Authority	Baa3	N
	Catholic Health East (Underlying rating)	Delaware County Authority	A1	S
	Catholic Health Initiatives	St. Mary Hospital Authority	Aa2	N
	Catholic Health Initiatives (Formerly Franciscan Health System) (Underlying rating)	St. Mary Hospital Authority	Aa2	N
	Catholic Health Initiatives (Formerly Franciscan Health System (St. Agnes Medical Center))	Philadelphia Hospital & Higher Educational Facilities Authority	Aa2	N
	Catholic Health Initiatives (Formerly Franciscan Health System (St. Joseph Hospital of Lancaster)) (Underlying rating)	St. Mary Hospital Authority	Aa2	N
	Catholic Health Initiatives (Formerly Franciscan Health System (St. Joseph Hospital of Reading)) (Underlying rating)	St. Mary Hospital Authority	Aa2	N
	Catholic Health Initiatives (Formerly Franciscan Health System (St. Mary Hospital of Langhorne)) (Underlying rating)	St. Mary Hospital Authority	Aa2	N
	Catholic Health Initiatives, Series 1997B (SBPA: Morgan Guaranty Trust Company of New York)	St. Mary Hospital Authority	Aa2/VMIG1	N
	Catholic Healthcare Partners (Formerly Mercy Health System) (Underlying rating)	Scranton-Lackawanna Health & Welfare Authority	Aa3	N
	Catholic Healthcare Partners (Formerly Mercy Health System), Series 1996 A	Scranton-Lackawanna Health & Welfare Authority	Aa3/VMIG1	N
	Centre Community Hospital	Centre County Hospital Authority	A2	S
	Charity Obligated Group, Series 1997 F	Pottsville City Hospital Authority	Aa2/VMIG1	S
	Charity Obligated Group	Schuylkill County Industrial Development Authority	Aa2	S

¹ Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) *(continued)*

State	Issuer	Issuing Authority	Rating	Outlook ¹
Pennsylvania, continued				
	Chestnut Hill Hospital	Philadelphia Hospital and Higher Educational Facilities Authority	Baa2	N
	Children's Hospital of Philadelphia	Philadelphia Hospital and Higher Educational Facilities Authority	Aa3	S
	Children's Hospital of Philadelphia, Series 1992 (SBPA: Morgan Guaranty Trust Company)	Philadelphia Hospital and Higher Educational Facilities Authority	Aa3/VMIG1	S
	Children's Hospital of Philadelphia, Series 1996A (SBPA: Morgan Guaranty Trust Company)	Philadelphia Hospital and Higher Educational Facilities Authority	Aa3/VMIG1	S
	Citizen's General Hospital	Westmoreland County Industrial Development Authority	Baa3	S
	Conemaugh Valley Memorial Hospital (Underlying rating)	Cambria County Hospital Development Authority	A3	N
	Conemaugh Valley Memorial Hospital (Underlying rating)	South Fork Municipal Authority	A3	N
	Crozer-Chester Medical Center	Delaware County Authority	Baa2	S
	Daughters of Charity National Health System (Good Samaritan Hospital of Pottsville)	Pottsville City Hospital Authority	Aa2	S
	Delaware Valley Obligated Group	Pennsylvania Higher Educational Facilities Authority	Caa3	W/UD
	Doylestown Hospital	Doylestown Hospital Authority	A2	S
	Elwyn, Inc.	Delaware County Authority	Baa3	P
	Forbes Health System	Monroe Hospital Authority	Caa1	W/UD
	Friends Hospital	Philadelphia Hospital and Higher Educational Facilities Authority	Baa3	N
	Good Samaritan Medical Center of Johnstown (Guaranteed by Conemaugh Valley Memorial Hospital) (Underlying rating)	South Fork Municipal Authority	A3	N
	Graduate Health System (Allegheny Hospitals, Centennial)	Philadelphia Hospital and Higher Educational Facilities Authority	Ca	N
	Hamot Health Foundation	Erie County Hospital Authority	A2	S
	Hazleton General Hospital	Hazleton Health Services Authority	Baa2	S
	Hazleton-St. Joseph Medical Center	Hazleton Health Services Authority	Baa3	S
	Highlands at Wyomissing (Guaranteed by The Reading Hospital)	Berks County Municipal Authority	Aa3	S
	Holy Redeemer Hospital (Underlying rating)	Montgomery County Higher Education and Health Authority	Baa2	N
	Indiana County Hospital	Indiana County Hospital Authority	A3	S
	Jeanes Health System	Philadelphia Hospital and Higher Educational Facilities Authority	Baa2	S
	Jefferson Health System	Chester County Health and Education Facilities Authority	A1	N
	Jefferson Health System	Philadelphia Hospital and Higher Educational Facilities Authority	A1	N
	Lehigh Valley Health Network (Formerly Lehigh Valley Hospital) (Underlying rating)	Lehigh County General Purpose Authority	A1	N
	Lewistown Hospital	Mifflin County Hospital Authority	A3	S
	Lower Bucks Hospital	Langhorne Manor Borough Higher Educational and Health Authority	B1	N
	Main Line Health System (Member of the Jefferson Health System)	Chester County Health and Education Facilities Authority	Aa3	N
	Masonic Homes	Lancaster County Hospital Authority	A1	S

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) (continued)

State	Issuer	Issuing Authority	Rating	Outlook ¹
Pennsylvania, continued				
	Masonic Homes, Series 1996 (SBPA: First Union National Bank)	Lancaster County Hospital Authority	A1VMIG1	S
	Messiah Village	Dauphin County General Authority	Baa2	S
	Metro Health Center	Erie County Hospital Authority	B1	N
	Metropolitan Hospital	Philadelphia Hospitals Authority	C	-
	Monongahela Valley Hospital	Washington County Hospital Authority	A2	S
	Montgomery Hospital	Montgomery County Higher Education and Health Authority	Baa2	S
	Ohio Valley General Hospital	Allegheny County Hospital Development Authority	Baa1	N
	Penn State Geisinger Health System (Formerly Geisinger Health System)	Geisinger Authority	Aa2	S
	Penn State Geisinger Health System (Formerly Geisinger Health System), Series 1998 B	Geisinger Authority	Aa2/VMIG1	S
	Pine Run Retirement Community	Doylestown Hospital Authority	Baa1	S
	Reading Hospital & Medical Center	Berks County Municipal Authority	Aa3	S
	Sacred Heart Health System	Allentown Area Hospital Authority	Baa2	S
	Somerset Community Hospital	Somerset County Hospital Authority	Baa2	S
	South Hills Health System	Allegheny County Hospital Development Authority	A2	S
	St. Francis Health Care Services (Guaranteed by St. Francis Medical Center (Pittsburgh))	Butler County Hospital Authority	Baa1	N
	St. Francis Hospital of New Castle Hospital (Guaranteed by St. Francis Medical Center (Pittsburgh))	New Castle Area Hospital Authority	Baa1	N
	St. Francis Medical Center	Allegheny County Hospital Development Authority	Baa1	N
	Temple University Children's Hospital (Guaranteed by Temple University Hospital)	Philadelphia Hospital and Higher Educational Facilities Authority	Baa1	N
	Temple University Hospital	Philadelphia Hospital and Higher Educational Facilities Authority	Baa1	N
	University of Pennsylvania Health Services	Philadelphia Hospital and Higher Educational Facilities Authority	A2	N
	University of Pennsylvania Health Services Series 1998B (SBPA: First Union National Bank, State Street Bank, Bayerische Landesbank Girozentrale, and Morgan Guaranty Trust Company)	Philadelphia Hospital and Higher Educational Facilities Authority	A2/VMIG1	N
	University of Pennsylvania Health Services, Series 1994 B	Philadelphia Hospital and Higher Educational Facilities Authority	A2/VMIG1	N
	University of Pennsylvania Health Services, Series 1996 C (SBPA: First Union National Bank, State Street Bank, Bayerische Landesbank Girozentrale, and Morgan Guaranty Trust Company)	Pennsylvania Hospital and Higher Educational Facilities Authority	A2/VMIG1	N
	Valley Health System (Underlying rating)	Beaver County Hospital Authority	A1	S
	Wills Eye Hospital	Philadelphia Hospital and Higher Educational Facilities Authority	A2	S
	Windber Medical Center of Johnstown (Guaranteed by Conemaugh Valley Memorial Hospital) (Underlying rating)	South Fork Municipal Authority	A3	N

¹. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) (continued)

State	Issuer	Issuing Authority	Rating	Outlook ¹
RHODE ISLAND				
	South County Hospital	Rhode Island Health & Educational Building Corporation	A3	S
	St. Joseph Health Services of Rhode Island	Rhode Island Health & Educational Building Corporation	Baa3	S
	Westerly Hospital	Rhode Island Health & Educational Building Corporation	Baa3	S
SOUTH CAROLINA				
	Bon Secours Health System Obligated Group (Underlying rating)	Charleston County	A3	S
	CareAlliance Health Services	Charleston County	A3	P
	Conway Hospital	Horry County	A3	S
	Franciscan Health Partnership (Formerly Franciscan Sisters of the Poor (St. Francis Hospital))	South Carolina Jobs-Economic Development Authority	Baa2	S
	Greenville Hospital	Greenville Hospital System Board of Trustees	Aa3	S
	Kershaw County Memorial Hospital	Kershaw County	Baa2	S
	Medical University Hospital	Medical University of South Carolina	A3	S
	Self Memorial Hospital (Underlying rating)	Greenwood County	A2	S
SOUTH DAKOTA				
	Evangelical Lutheran Good Samaritan Society (Taxable medium term notes)	Evangelical Lutheran Good Samaritan Society	A3	S
	Lutheran Health System	Spearfish	Aa3	S
	Prairie Lakes Health Care System	South Dakota Health & Educational Facilities Authority	Baa2	S
	Rapid City Regional Hospital (Underlying rating)	South Dakota Health & Educational Facilities Authority	A1	P
	Sioux Valley Hospital & Health System	South Dakota Health & Educational Facilities Authority	Aa3	S
	Sioux Valley Hospital & Health System, Series 1992 A	South Dakota Health & Educational Facilities Authority	Aa3/VMIG1	S
	Sioux Valley Hospital & Health System, Series 1993	South Dakota Health & Educational Facilities Authority	Aa3/VMIG1	S
	Sioux Valley Hospital & Health System, Series 1997 (SBPA: First Bank N.A.)	South Dakota Health & Educational Facilities Authority	Aa3/VMIG1	S
TENNESSEE				
	Adventist Health System/Sunbelt Hospital	Metropolitan Government of Nashville & Davidson Counties Health & Educational Facilities Board	Baa1	S
	Adventist Health System/Sunbelt (Highland Hospital) (Underlying rating)	Portland Health & Educational Facilities Board	Baa1	S
	Adventist Health System/Sunbelt (Takoma Adventist Hospital) (Underlying rating)	Greenville Health & Educational Facilities Board	Baa1	S
	Adventist Health System/Sunbelt Hospital (Underlying rating)	Metropolitan Government of Nashville & Davidson Counties Health & Educational Facilities Board	Baa1	S
	Alexian Brothers Health System (Alexian Village of Tennessee)	Signal Mountain Health, Educational & Housing Facilities Board	Baa1	S
	Baptist Health System of East Tennessee	Knox County Health, Educational & Housing Facilities Board	Baa1	N
	Baptist Hospital (Nashville) (Underlying rating)	Metropolitan Government of Nashville & Davidson Counties Health & Educational Facilities Board	A2	S
	Blount Memorial Hospital	Blount County	Baa1	S

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD)

Portfolio of Health Care Ratings (as of August 13, 1999) (continued)

State	Issuer	Issuing Authority	Rating	Outlook ¹
Tennessee, continued				
	Catholic Health Initiatives	Chattanooga Health, Educational & Housing Facilities Board	Aa2	N
	Catholic Healthcare Partners (Formerly Mercy Health System)	Knox County Health, Education & Housing Facilities Board	Aa3/VMIG1	N
	Catholic Healthcare Partners (Formerly Mercy Health System) (Underlying rating)	Knox County Health, Education & Housing Facilities Board	Aa3	N
	Charity Obligated Group	Metropolitan Government of Nashville & Davidson Counties Health & Educational Facilities Board	Aa2	S
	Clarksville Regional Health System	Montgomery County Higher Education & Health Authority	Baa2	S
	Cumberland Medical Center	Crossville Health & Educational Facilities Board	Baa1	S
	East Tennessee Children's Hospital	Knox County Health, Education & Housing Facilities Board	Baa1	S
	Erlanger Medical Center	Chattanooga - Hamilton County Hospital Authority	Baa1	S
	Jackson-Madison County General Hospital	Jackson City	A1	S
	Jackson-Madison County General Hospital	Madison County	A1	S
	Northcrest Medical Center	Springfield Health and Educational Facilities Board	Baa3	S
	Oak Ridge Methodist Medical Center	Anderson County Health & Educational Facilities Board	A1	S
	University Health System (Knoxville)	Knox County Health, Education & Housing Facilities Board	Baa1	S
TEXAS				
	Adventist Health System/Sunbelt (Huguley Memorial Medical Center)	Tarrant County Health Facilities Development Corporation	Baa1	S
	Adventist Health System/Sunbelt (Huguley Memorial Medical Center) (Underlying rating)	Tarrant County Health Facilities Development Corporation	Baa1	S
	Adventist Health System/Sunbelt Obligated Group (Underlying rating)	Tarrant County Health Facilities Development Corporation	Baa1	S
	Adventist Health System/Sunbelt Obligated Group (Underlying rating)	Copperas Cove Health Facilities Development Corporation	Baa1	S
	Baptist Health Care System	Jefferson County Health Facilities Development Corporation	Ba1	P
	Baylor Health Care System	North Central Texas Health Facilities Development Corporation	Aa3	S
	Baylor/Richardson Medical Center	Richardson Hospital Authority	Baa2	P
	Charity Obligated Group, Series 1997 D	Waco Health Facilities Development Corp	Baa1	S
	Christus Health	Harris County Health Facilities Development Corporation	Aa3	N
	Christus Health (Formerly Incarnate Word Health System)	Coastal Bend Health Facilities Development Corporation	Aa3	N
	Cook Children's Medical Center (Underlying rating)	Bell County Health Facilities Development Corporation	A1	S
	Daughters of Charity National Health System (Daughters of Charity Health Services of Austin) (Underlying rating)	Travis County Health Facilities Development Corporation	Aa2	S
	Daughters of Charity National Health System (Daughters of Charity Health Services of Waco)	Waco Health Facilities Development Corporation	Aa2	S
	Daughters of Charity National Health System (Hotel Dieu & Providence Hospital)	Waco Health Facilities Development Corporation	Aa2	S

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) *(continued)*

State	Issuer	Issuing Authority	Rating	Outlook ¹
Texas, continued				
	Daughters of Charity National Health System (Seton Medical Center)	Travis County Health Facilities Development Corporation	Aa2	S
	East Texas Medical Center Regional Healthcare System	Tyler Health Facilities Development Corporation	B3	N
	Ector County Hospital	Ector County Hospital District	A2	S
	Evangelical Lutheran Good Samaritan Society	Odessa Health Facilities Development Corporation	A3	S
	Fort Worth Osteopathic Hospital	Tarrant County Health Facilities Development Corporation	Baa2	S
	Memorial Hermann Hospital System (Formerly Memorial Healthcare System) (Underlying rating)	Harris County Health Facilities Development Corporation	A3	S
	Mother Frances Health System	Tyler Health Facilities Development Corporation	Baa2	S
	National Benevolent Association (Patriot Heights)	Bexar County Health Facilities Development Corporation	Baa2	S
	Northeast Medical Center Hospital	Northeast Hospital Authority	Baa1	U
	Parkland Memorial Hospital	Dallas County Hospital District	A1	S
	Scott & White Memorial Hospital & Scott Sherwood & Brindley Foundation	Bell County Health Facilities Development Corporation	Aa3	N
	Sisters of Mercy Health System (St. Louis) (Mercy Regional Medical Center)	McAllen Health Facilities Development Corporation	Aa1	S
	St. Joseph Health System	Lubbock Health Facilities Development Corporation	Aa3	S
	St. Joseph Health System, Series 1985A	Lubbock Health Facilities Development Corporation	Aa3/VMIG1	S
	Texas Children's Hospital	Harris County Health Facilities Development Corporation	Aa2	S
	Texas Health Resources System (Underlying rating)	Tarrant County Health Facilities Development Corporation	A1	N
	Texas Health Resources System (Underlying rating)	North Central Texas Health Facilities Development Corporation	A1	N
	Texas Health Resources System (Underlying rating)	Plano Health Facilities Development Corporation	A1	N
	Titus County Memorial Hospital	Titus County Hospital District	Baa3	S
	Tomball Regional Hospital	Tomball Hospital Authority	Baa2	S
	United Regional Health Care System (Underlying rating)	North Texas Health Facilities Development Corporation	A2	P
	Zale Lipshy University Hospital (Underlying rating)	North Central Texas Health Facilities Development Corporation	A2	S
UTAH				
	IHC Health Services	Utah County	Aa2/VMIG1	S
	IHC Health Services	Weber County	Aa2	S
	IHC Health Services (Underlying rating)	Salt Lake City	Aa2	S
	IHC Health Services, Series 1990 Class A (Pooled Hospital Finance Program) (SBPA: Westdeutsche Landesbank Girozentrale)	Salt Lake City	Aa2/VMIG1	S
	IHC Health Services, Series 1990 Class B (Pooled Hospital Finance Program) (SBPA: Westdeutsche Landesbank Girozentrale)	Salt Lake City	Aa2/VMIG1	S
	IHC Hospitals, Inc. (Cottonwood Hospital) (Underlying rating)	Murray City	Aa2	S
	IHC Hospitals, Inc. (L.D.S. Hospital)	Salt Lake City	Aa2	S

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) (continued)

State	Issuer	Issuing Authority	Rating	Outlook ¹
<i>Utah, continued</i>				
	University of Utah Hospital (Moral Obligation of the State of Utah), Series 1998	State Board of Regents of the State of Utah	Aa3	S
	University of Utah Hospital (Underlying rating)	State Board of Regents of the State of Utah	A2	S
VIRGINIA				
	Alexandria Medical Properties (Taxable) (Guaranteed by Alexandria Hospital)	Alexandria Medical Properties	A2	S
	Bon Secours Health System (St. Mary's Hospital) (Underlying rating)	Henrico County Industrial Development Authority	A3	S
	Bon Secours Health System (Underlying rating)	Peninsula Ports Authority of Virginia	A3	S
	Bon Secours Health System (Underlying rating)	Norfolk Industrial Development Authority	A3	S
	Bon Secours Health System (Underlying rating)	Henrico County Industrial Development Authority	A3	S
	Bon Secours Health System (Underlying rating)	Hanover County Industrial Development Authority	A3	S
	Carilion Health System	Roanoke Industrial Development Authority	Aa3	S
	Carilion Health System, Series 1995 A-D	Roanoke Industrial Development Authority	Aa3/VMIG1	S
	Carilion Health System, Series 1997 A, B	Roanoke Industrial Development Authority	Aa3/VMIG1	S
	Centra Health	Lynchburg Industrial Development Authority	A1	P
	Chesapeake General Hospital	Chesapeake Hospital Authority	A2	S
	Children's Hospital of The King's Daughters	Norfolk Industrial Development Authority	A1	S
	Danville Regional Medical Center (Underlying rating)	Danville	A2	S
	Inova Health System	Fairfax County Industrial Development Authority	Aa2	S
	Inova Health System, Series 1988 A-D	Fairfax County Industrial Development Authority	Aa2/VMIG1	S
	Inova Health System, Series 1989 A	Fairfax County Industrial Development Authority	Aa2/VMIG1	S
	Johnston Memorial Hospital	Washington County Industrial Development Authority	A2	S
	Johnston Memorial Hospital	Abingdon Industrial Development Authority	A2	S
	Martha Jefferson Hospital & MJH Foundation	Charlottesville Industrial Development Authority	A2	P
	Martha Jefferson Hospital & MJH Foundation	Albemarle County Industrial Development Authority	A2	P
	Medical College of Virginia	Virginia Commonwealth University	A1	S
	MWH Medicorp Health System (Formerly Mary Washington Hospital) (Underlying rating)	Fredericksburg Industrial Development Authority	A2	S
	Memorial Hospital of Martinsville & Henry County	Martinsville Industrial Development Authority	A2	S
	Memorial Hospital of Martinsville & Henry County	Henry County Industrial Development Authority	A2	S
	Memorial Regional Medical Center (Project at Hanover Medical Park) (Guaranteed by Bon Secours Health System Obligated Group)	Hanover County Industrial Development Authority	A3	S
	Potomac Hospital	Prince William County Industrial Development Authority	A2	P
	Prince William Hospital	Prince William County Industrial Development Authority	A2	P
	Prince William Hospital	Manassas Industrial Development Authority	A2	P
	Richmond Eye & Ear Hospital	Richmond Eye & Ear Hospital Authority	Ba1	S
	Riverside Health System	Peninsula Ports Authority of Virginia	Aa2	N

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) (continued)

State	Issuer	Issuing Authority	Rating	Outlook ¹
Virginia, continued				
	Riverside Health System, Series 1997	James City County Industrial Development Authority	Aa2/VMIG1	N
	Sentara Health System	Hampton Industrial Development Authority	Aa2	S
	Sentara Health System (Formerly Medical Center Hospital)	Norfolk Industrial Development Authority	Aa2	S
	Sentara Health System (Formerly Medical Center Hospital)	Virginia Beach Development Authority	Aa2	S
	Sentara Health System, Series 1997 B	Hampton Industrial Development Authority	Aa2/VMIG1	S
	Sentara Life Care Corporation (Sentara Health System, Subordinate guarantee)	Norfolk Industrial Development Authority	Aa2	S
	Sentara Life Care Corporation (Sentara Health System, Subordinate guarantee)	Chesapeake Industrial Development Authority	Aa2	S
	Southside Regional Medical Center	Petersburg Hospital Authority	A3	S
	Winchester Medical Center (Underlying rating)	Winchester Industrial Development Authority	A1	S
	Winchester Medical Center (Underlying rating)	Clarke County Industrial Development Authority	A1	S
WASHINGTON				
	Catholic Health Initiatives (Underlying rating)	Washington Health Care Facilities Authority	Aa2	N
	Children's Hospital (Seattle)	Washington Health Care Facilities Authority	Aa3	S
	Evergreen Community Health Care	King County Public Hospital District No. 2	A1	S
	Kadlec Medical Center (Underlying rating)	Washington Health Care Facilities Authority	A3	S
	Providence Health System (Formerly Sisters of Providence)	Washington Health Care Facilities Authority	A1	S
	Providence Health System (Formerly Sisters of Providence)	Sisters of Providence Health System	A1	S
	Providence Health System (Formerly Sisters of Providence)	Washington Health Care Facilities Authority	A1/VMIG1	S
	Skagit Valley Hospital & Health Center	Skagit County Public Hospital District	Baa2	P
	Southwest Washington Medical Center	Washington Health Care Facilities Authority	A1	S
	Stevens Memorial Hospital	Snohomish County Public Hospital District No. 2	Baa3	S
WEST VIRGINIA				
	Charleston Area Medical Center	West Virginia Hospital Finance Authority	A2	N
	Davis Health System	Philippi City	Baa1	S
	Davis Health System (Underlying rating)	Randolph County Commission	Baa1	S
	Fairmont General Hospital	West Virginia Hospital Finance Authority	Baa3	S
	General Division Medical Office Building (Guaranteed by Charleston Area Medical Center)	West Virginia Hospital Finance Authority	A2	N
	Princeton Community Hospital	Princeton City	Baa2	S
WISCONSIN				
	Catholic Health Initiatives (Formerly Catholic Health Corporation (St. Catherine's Hospital and Trinity Memorial Hospital))	Wisconsin Health and Educational Facilities Authority	Aa2	N
	Charity Obligated Group, Series 1997D	Wisconsin Health and Educational Facilities Authority	Aa2/VMIG1	S
	Charity Obligated Group, Series 1997F	Wisconsin Health and Educational Facilities Authority	Aa2/VMIG1	S
	Columbia Hospital	Wisconsin Health Facilities Authority	A3	S
	Community Memorial Hospital of Menomonee Falls	Wisconsin Health and Educational Facilities Authority	A2	S

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) *(continued)*

State	Issuer	Issuing Authority	Rating	Outlook ¹
Wisconsin, continued				
	Mequon Care Center, Inc. (Guaranteed by Columbia Hospital)	Wisconsin Health and Educational Facilities Authority	A3	S
	Mercy Hospital of Janesville	Wisconsin Health and Educational Facilities Authority	A2	S
	Meriter Hospital	Wisconsin Health and Educational Facilities Authority	A2	S
	Monroe Clinic, Inc	Wisconsin Health and Educational Facilities Authority	A3	S
	ProHealth Care, Inc. (Formerly Waukesha Memorial Hospital)	Wisconsin Health and Educational Facilities Authority	A1	S
	Wausau Hospital (Underlying rating)	Wisconsin Health and Educational Facilities Authority	A2	S
WYOMING				
	IHC Hospitals (Underlying rating)	Unita County	Aa2	S
	Wyoming Medical Center	Natrona County	A3	S

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

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Municipal Credit Research

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NOT-FOR-PROFIT HEALTH CARE SECTOR
1999 Outlook and Medians

Not-For-Profit Health Care

Outlook

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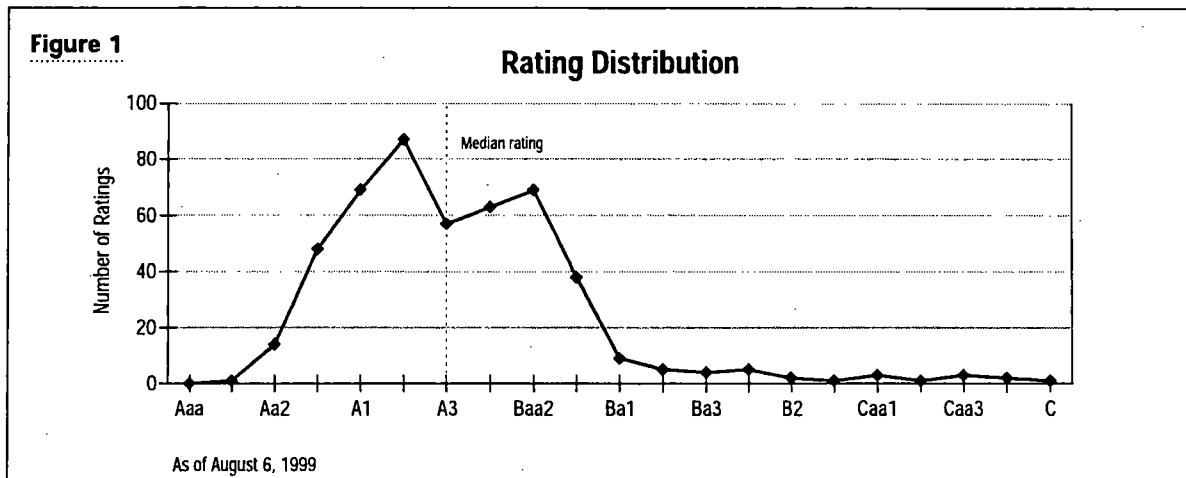
Summary Opinion

Moody's believes that U.S. not-for-profit hospitals overall will continue to experience financial difficulties over the near term (one to two years) because of increased revenue pressures created by the Balanced Budget Act of 1997, integration risk associated with continued merger and acquisition activity, and new efforts to terminate or restructure strategies that are proving more costly than initially estimated.

Over the intermediate term (three to four years), we expect ratings volatility for not-for-profit providers, characterized by continued variable rating activity, both up and down the rating scale. We have already seen a growing number of hospitals struggle with their transition toward larger provider systems, and we expect that their difficulties will continue over the intermediate term as newly integrated hospital cultures are assimilated, physician relationships are changed, and the assumption of financial risk, either through new insurance business lines or through the acceptance of global capitation becomes more common. We believe that even some of the strongest entities in our portfolio will experience weakening credit quality.

Over the long-term (five years and beyond), however, we predict greater credit stability overall for providers as they become larger and more efficient, merger activity settles, distinct business units become better integrated, and the supply and demand for health care services achieves greater stabilization. Furthermore, the refocus on core operations that we are currently witnessing should help stabilize financial performance, whereby healthcare providers reach a level of financial equilibrium.

Moody's rates nearly 500 not-for-profit hospitals and health systems with more than \$60 billion in total debt outstanding. The average median rating for the sector currently stands at A3 (see Figure 1). However, if current trends continue, it is possible that the median rating for the sector could decline to Baa1 within the intermediate term.



Health Care Outlook

BUMPY ROAD TO CONTINUE OVER THE SHORT-TERM

1998 was a watershed year for the healthcare industry, and our healthcare portfolio entered new terrain as providers engaged in strategies to remain competitive and financially solvent. Not-for-profit hospitals experienced weakened credit health in 1998 and we expect that the sector's high ratings volatility and deteriorating credit quality will continue throughout 1999 and 2000. 1998 was the first year that we witnessed material credit difficulties in all rating categories, including Aa-rated credits. In fact, the number of overall downgrades surged and multi-notch downgrades were far more commonplace in 1998 than ever before (*Sidebar 1*). Additionally, the number of outlook changes to negative also surged, indicating a weakened credit profile and the potential for a downgrade sometime in the future, contributing to our negative outlook for the sector.

Sidebar 1

1998 and 1999* Multi-Notch Downgrades

HOSPITAL	ISSUER	RATING
Alexian Brothers Health System	Illinois Health Facilities Authority	Baa1 (downgraded from A2)
Allegheny General Hospital	Pennsylvania Higher Educational Facilities Authority	Caa1 (downgraded from A3)
Baptist Hospital	Metropolitan Government of Nashville & Davidson Counties Health & Education Facility Board, TN	A2 (downgraded from Aa3)
Bethesda Hospital	Hamilton (City of), OH	A3 (downgraded from A1)
Boston Regional Medical Center	Massachusetts Health and Educational Facilities Authority	Ca (downgraded from B2)
CareGroup, Inc.	Massachusetts Health and Educational Facilities Authority	Baa1 (downgraded from A2)
Catholic Healthcare West	Various Issuers	Baa1 (downgraded from A2)
Citrus Valley Health Partners	California Statewide Communities Developmental Authority	Baa1 (downgraded from A2)
Columbus Hospital	New Jersey Health Care Facilities Financing Authority	Ba2 (downgraded from Baa3)
Community Medical Ctr/Kimball Medical Ctr/Kensington Manor Care Ctr	New Jersey Health Care Facilities Financing Authority	Baa2 (downgraded from A2)
Cooper Health System	Camden County Improvement Authority, NJ	B1 (downgraded from Baa2)
Delaware Valley Obligated Group	Pennsylvania Higher Educational Facilities Authority	Caa3 (downgraded from B3)
Detroit Medical Center	Michigan State Hospital Finance Authority	Baa2 (downgraded from A2)
East Boston Neighborhood Health Center	Massachusetts Industrial Finance Agency	Caa1 (downgraded from Ba2)
East Texas Medical Center Regional Healthcare System	Tyler Healthcare Development Corporation, TX	B3 (downgraded from Baa3)
Erlanger Medical Center	Chattanooga-Hamilton County Hospital Authority, TN	Baa1 (downgraded from A2)
Forbes Health System	Pennsylvania Higher Educational Facilities Authority	Caa1 (downgraded from Baa1)
Galion Community Hospital	Galion (City of), OH	Ba1 (downgraded from Baa1)
Graduate Health System	Philadelphia Hospital and Higher Education Facilities Authority, PA	Ca (downgraded from Ba2)
Greater Southeast Healthcare System	Prince George's (County of) MD	Caa3 (downgraded from Baa3)
St. Elizabeth Medical Center	Granite (City of), IL	Ba3 (downgraded from Baa3)
University of Pennsylvania Health System	Philadelphia Hospital and Higher Education Facilities Authority, PA	A2 (downgraded from Aa3)

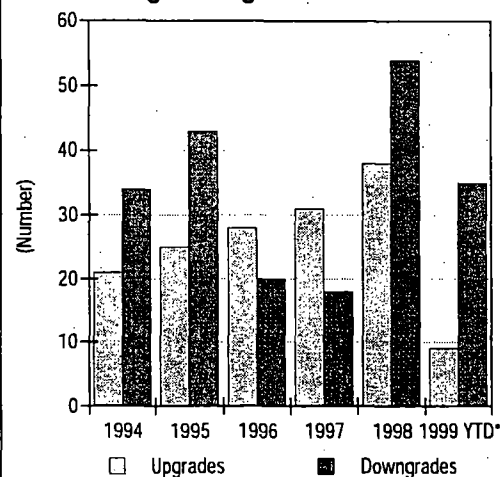
* Through August 16, 1999

Since the pressures within the sector appear to be systemic to the healthcare industry, we believe that 1998 rating actions will carry through the near term, challenging the premise that the strong are getting stronger and the weak are getting weaker. Overall rating deterioration for US not-for-profit hospitals in 1998 was evidenced by the sheer number of downgrades versus the smaller number of upgrades made during the year (Figure 2). Our prognosis is for further credit deterioration – as evidenced by Moody's rating actions in the first six months of the year – and the overall outlook for the nearly 500 not-for-profit hospitals and systems we rate remains negative. There are a number of developments that are contributing to our pessimism for the near-term outlook. In 1998, healthcare providers faced a multitude of situations that we believe creates a setting for potential credit risks moving forward, including:

- Uncertainty associated with M&A “event” risk and new dis-integration attempts;
- Severe losses from physician integration strategies and the costs of continuing or terminating such strategies;
- Financial pressures created by greater-than-expected revenue declines from the Balanced Budget Act of 1997 and additional managed care reimbursement pressure;
- Insufficient infrastructure to manage insurance risk assumed through the acceptance of global capitation, resulting in large losses; and
- Anticipated declines in investment earnings as equity markets become increasingly volatile and investment returns are insufficient to offset operating losses;

Figure 2

Rating Downgrades on the Rise



* as of 6/30/99

M&A RELATED EVENT RISK RAISES ONGOING UNCERTAINTY

Moody's believes that the merger and acquisition (M&A) related event risk and the corresponding uncertainty that arises when providers grapple with the transition to larger healthcare delivery systems is an increasingly common factor that contributed to numerous downgrades in 1998 and may contribute to more uncertainty in the future. Since the size and complexity of M&A transactions have significantly increased, we expect that the healthcare delivery systems created by these large financial combinations will require significantly greater capital needs and future debt issuances.

We believe that over the long run, most merger and acquisition activity and strategic integration initiatives will yield benefits in the form of greater market share advances, enhanced negotiating leverage, economies of scale, and improved operating efficiency. The expectation of such benefits led to the initial rating assignment of Baa3 for **Doctors OhioHealth** (Columbus, Ohio) following its merger into OhioHealth and rating upgrade to Baa3 from Ba1 for **Palisades Medical Center** (NJ) who became an affiliate of New York Presbyterian Healthcare System.

Many systems, however, falter during the implementation stage of their development towards operating as a larger, integrated healthcare delivery system. **Allegheny Health and Education Research Foundation (AHERF)** is a prime example of a provider who could not integrate its Philadelphia operations, which suffered significant operating losses, and its Pittsburgh operations, which experienced extremely erratic performance, into a cohesive organization. An offset to AHERF has been a higher demand for mortgages, tighter covenants and probably fewer restricted affiliate structures than what we otherwise would have seen.

CareGroup in Boston (MA), is another example of a provider who suffered financially post-merger, when it became evident that not all relevant stakeholders were committed to the underlying rationale of consolidation and cost cutting. CareGroup was downgraded to Ba1 from A2 in January 1999. **Catholic Health System** (Long Island, NY) currently maintains an uncertain outlook on its A2 rating due to the unpredictable impact on financial operations following the implementation stage of developing an inte-

grated system from four previously independent hospitals and additional pending acquisitions.

One of the primary factors behind recent credit deterioration is management's inability to reduce costs shortly after a combination and/or an inability to be objective in assessing the contribution of all business lines that have been added in the pursuit of becoming a vertically integrated system. Furthermore, the lack of integration with management information systems and subsequent shortcomings with receivable collections has contributed to unanticipated integration problems that have proven financially costly post-merger.

Various integration relationships have been creatively structured in the hope that such partnering would alleviate the pitfalls that befell other truly merged entities. However, several of these new types of affiliation arrangements saw their founding rationale questioned during 1998 (see Sidebar 2), when poor performance of one partner deviated substantially from historical performance prior to their affiliation. While Joint Operating Agreement (JOA) arrangements are not technically as strong as mergers, depending on the structure, the parties often operating under such arrangements are essentially one economic entity.

The need for information systems has never been greater, especially given the challenge of coordinating multiple managed care contracts within a newly coordinated system of multiple providers. Furthermore, we believe that the ongoing mergers between hospitals and health systems are delaying further the ability to address Y2K compliance issues expeditiously as these newly formed entities must first identify and correct incompatibilities between different existing computer systems. Consequently, we believe hospitals' are justified in their millennium uneasiness because they do not have significant unrestricted capital available to be used for unknown Y2K issues when at the same time, they are using resources to coordinate the information systems each partner brings to the new organization.

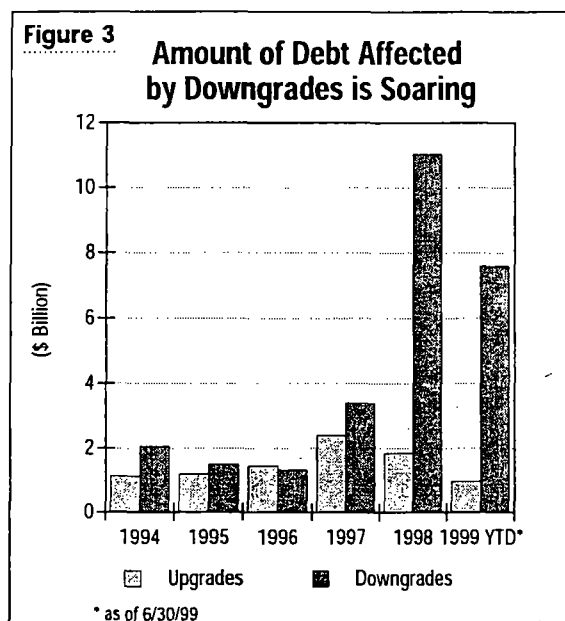
The affects of a single rating revision, on average, continues to affect a much greater amount of debt than it has in the past given industry consolidation efforts and systems' growth (Figure 3). Of the 92 rating actions taken in 1998, the five credits with the largest debt outstanding accounted for 37% of the total debt affected.

Sidebar 2

In 1998, the effect of poor financial performance at **Exempla, Inc.** in Denver, CO (formerly Lutheran Medical Center) which was offset by satisfactory financial performance by Exempla Healthcare, an integrated delivery system formed by a Joint Operating Agreement between Exempla, Inc. and **Sisters of Charity of Leavenworth Health Services Corporation** (SCL/HSC) on January 1, 1998 resulted in an outlook revision to negative from stable associated with Exempla, Inc.'s A1 rating. The change in outlook rather than a downgrade at this time, considered the benefit of being part of a larger entity in the face of two years of poor financial performance which resulted in significantly reduced cashflow at Exempla, Inc. Also in Denver, Moody's downgraded the rating of **PorterCare Adventist Health Care** to Baa3 from Baa2, where it remains on Watchlist for possible downgrade followed the poor and unexpected financial performance by Centura, which impacted both the operations and liquidity position of PorterCare. PorterCare's financial performance is linked to the operational performance of Catholic Health Initiatives' (CHI) Denver and Colorado Springs hospitals, the other Centura partner. Because of a 70/30 split of income, PorterCare as the smaller entity is disproportionately affected by financial performance at Centura. Moody's revised the outlook for CHI to negative from stable on its Aa2 rating due in part to a material decline in operating performance in several key markets, including Denver.

Another higher risk affiliation structure created was **CareAlliance Health Services** (CAHS) in Charleston, SC. CareAlliance was formed in August 1998 by the merger of the former Roper Hospital and Bon Secours Health System's St. Francis-Xavier Hospital (SFX). It has three-way ownership, with the initial membership interests held by The Medical Society of South Carolina (MSSC, formerly the sole member of Roper (63% ownership in CAHS)), Bon Secours Health System (rated A3), formerly the sole member of SFX (27% ownership) and Charlotte-based Carolinas HealthCare System, rated Aa3 (10% ownership). CareAlliance, which is rated A3 with a positive outlook, is required to distribute 50% of annual cash flow (after debt service) to the three owners, somewhat limiting its own ability to build up liquid resources and fund major capital improvements. Because funding investment opportunities is at the discretion of each owner, we believe there is potential for strategic projects not to be funded.

Several not-for-profit providers purchased hospitals from for-profit Columbia/HCA with tax-exempt debt in 1998 and we are seeing the results of operating under an increased debt burden as a result of purchasing these facilities at prices higher than what historical market values would justify. We revised the outlooks on the Aa3 ratings of **Duke University Health System (NC)** and **Pitt County Memorial Hospital (NC)** to negative, and downgraded the rating on **Baptist Medical Center (Montgomery, AL)** and **Alexian Brothers Health System** as a result of significant purchases of Columbia/HCA hospitals.



DIS-INTEGRATION AND RETURN TO CORE OPERATIONS BECOMING A COMMON THEME

The overall volatility created by the rapid pace of M&A activity and integration strategies over the last five years has many market participants rethinking what their future organizational structure will be. In 1998, several management teams started to critically analyze their strategic objectives against the realized benefits to date and, as a result, began to terminate strategies that are proving unfruitful and/or detrimental to the fiscal health of the health system taken as a whole. In addition, as the financial performance

of alternative, non-acute care, business lines extended a multi-year drag on system profitability, we saw the decision to "dis-integrate" such non-performing business lines become a more common goal. The theme for 1999 is to refocus on core operations, unique service lines or centers of clinical excellence.

Physician integration strategies and MSO operations are two non-performing business lines that were restructured, privatized, or simply terminated in 1998 as providers struggled to justify the high ongoing costs of maintaining employed physicians within their organizations. Provider-owned HMOs are yet another business line that providers sought to divest in 1998. **Texas Health Resources** in Fort Worth (TX) is an example of a provider attempting to shed its unprofitable Harris Methodist Health Plan HMO. **Kaiser Foundation Hospitals (CA)** is another entity that appears committed to refocusing on its core markets and is taking steps to consider strategic options for several of its problem health plans. This return to basics is most recently highlighted by the company's decision to reconsider its alignment with Group Health Plan of Puget Sound. Moody's upgrade of **Touro Infirmary (LA)** to Baa1 from Baa2 incorporated the positive impact of terminating its Advantage Health Plan.

PHYSICIAN INTEGRATION STRATEGIES PROVING TOO COSTLY TO SUPPLEMENT

Only a handful of providers report that the expense of their primary care physician integration strategy is offset by increased net revenues generated by increased admissions or ancillary services. Providers are actively seeking to reduce physician losses either through renegotiating employment contracts, consolidating physician office sites to reduce per-unit costs, or simply "spinning off" the practices into an independent organization. The 1997 loss by **Memorial Hermann Health System (TX)** is largely credited to its physician-integration vehicle, OneCare, (100 employed physicians) which posted a significant loss due to price escalation for physician practices from an aggressive acquisition and start-up strategy. What could be a potential drawback from pursuing such actions, such as the potential alienation of these formerly employed physicians and a possible redirection of patient referrals to competing health systems, has not materialized yet—usually more than one provider in a market is choosing to privatize its physicians, limiting the available alternative options for these previously employed physicians. However, an extended review of the effect of privatizing physicians will be necessary to determine if there is a loss of referral business.

Additionally, asset write-downs associated with physician restructuring have caused significant one-time expenses in the recent past. **Scott and White Memorial Hospital's (TX)** financial difficulties and recent outlook revision to negative from stable on its Aa3 rating stems largely from billing and collection problems related to accounts receivable at the hospital's affiliated 490-member multi-specialty medical

group and delays in recognizing the magnitude of the issue. Other integrated systems, such as **Henry Ford Health System (MI)** have had their rating revised, partly due to physician losses.

One of the few providers who has been able to successfully implement a physician integration strategy with a minimal subsidization of physician practices is **Mercy Health System Corporation (WI)**. With the exception of a 50-member independent physician group, Mercy owns all of its physician practices. We believe the key elements of Mercy's successful physician strategy are: (1) early implementation of appropriate compensation incentives heavily linked to physicians' productivity; (2) concentration on balancing the importance of maintaining access points by placing physicians in key under-served and/or growing communities with equally critical consolidation of practices to achieve cost efficiencies; (3) redirection of physicians' ambulatory referrals from competitors to Mercy facilities; (4) a model of integrating practices instead of overpaying for physician practices; and (5) communication with and involvement of physicians in management planning. While this final factor is more difficult to measure, we suspect that some of the system's success is driven by the quality of hospital-physician relations.

In the future, more hospitals may try to develop a model that includes specialists. This may be a defensive move, similar to the earlier strategy to acquire primary care physicians, because practice management companies are now targeting specialists with whom to joint venture for freestanding surgery centers or specialty hospitals. **Baptist Hospital, Nashville (TN)** reports that it has successfully created a limited liability corporation with its orthopedists which has translated into additional volumes to their hospitals. It is our hope that providers have learned from the mistakes of their primary care integration strategies and will include unwinding mechanisms into these new models should the results prove undesirable over time.

One tangential outcome from employing physicians is the limited but increasing use of "hospitalists." Hospitalists are hospital-based employed physicians who do not see patients in a private office, but rather spend the day in the hospital overseeing the treatment of patients under the care of an admitting physician. Management teams report that the use of hospitalists makes patient care more efficient because it relieves a primary care physician from the dual obligations of following a patient's inpatient care with seeing other patients in a private office. The hospitalist movement is growing fastest in California and the Southeast, but hospitalists are also practicing in Massachusetts and Texas. We expect the use of hospitalists to increase nationwide, especially as pressures to further decrease lengths of stay continue and the concept of hospitalists gains acceptance from patients and physicians.

REVENUE PRESSURES MOUNTING: BBA97 AND MEDICARE RISK CONTRACTING ARE SIGNIFICANT CREDIT ISSUES

We are finding that for most health care providers, the impact from the Balanced Budget Act of 1997 (BBA97), which included a freeze on hospital Medicare inpatient payment rates for fiscal 1998, was far more material than originally anticipated. We believe that the negative impact of BBA97 and the continuation of the industry's secular credit pressures have significantly contributed to the deteriorating credit quality that is felt across the rating continuum.

The impact of Medicare cuts on individual hospitals will vary depending on geographic classification, the number of staffed beds and the size of a hospital's teaching program. Higher rated health systems tend to be larger, developing health systems with teaching programs, making them more susceptible to merger and integration-related risks and BBA97 payment reductions. As the major recipients of graduate medical education (GME) and disproportionate share (DSH) funding, teaching hospitals dependent on add-on payments from Medicare will experience the greatest Medicare revenue reductions in real terms. These cuts have a material impact. For example, **BJC Health System's Aa2** bond rating was recently assigned a negative outlook and **University of Pennsylvania Health System's** bond rating was lowered to A1 and subsequently lowered to A2 with a negative outlook from Aa3. These negative rating actions were partially due to increased risk associated with expected BBA97 reimbursement cuts over the next several years. Moody's believes that an inability to adjust to BBA97 revenue reductions over the short-term will contribute to additional rating revisions for higher rated providers in the future. The rating downgrade and outlook change to negative for **Henry Ford Health System (MI)** was due to our expectation that future profitability will continue to come under pressure as the effects of BBA97 on reimbursement for medical education and outpatient care, both significant to the core operations of Henry Ford Health System, are realized.

Furthermore, the BBA97 impact is not limited to hospitals — we are seeing many HMOs terminate Medicare contracts as the government's switch to fixed, flat-rate reimbursements from the traditional fee-

based system has made it less profitable for the HMO to cover treatment and administrative costs for the elderly. In 1998, we also saw the initial pullback by hospital providers from Medicare risk contracts and serious reevaluation of the financial impact of participating in such contracts. **Adventist Health System (FL)** incurred large operating losses under Premier Care, a large Medicare managed care product, due to rapid enrollment growth (nearly 18,000 lives), higher-than-budgeted utilization rates and out-of-network leakage. This resulted in Adventist's decision to notify HCFA of its plan to terminate the program. Management's quick action to discontinue an unprofitable service line is viewed favorably by Moody's, but the impact to the system's 1998 performance nonetheless weakened the financial stature of this large organization.

Many providers realize in hindsight, that reimbursement levels were insufficient to cover the cost of the benefits required by the Medicare beneficiaries. These providers are now recognizing that traditional Medicare provides relatively good reimbursement, especially as providers became more efficient in reducing Medicare lengths of stay. We expect increased credit volatility for the mid-term as providers seek to offset increasing Medicare reductions and find a method to limit the cost of providing services from surpassing the compensation received.

CONTINUED SHIFT TO MANAGED CARE FURTHER IMPACTING THE HEALTHCARE ENVIRONMENT

We believe the development and unrelenting shift toward managed care is driving the competitive changes in the health care sector's landscape. Generally speaking, managed care penetration is increasing steadily with nationwide HMO enrollment still growing annually. This growth is spurred not only by a continuation of the conversion of commercial lives to managed care, but also from governmental payers encouraging the shift of its programs to managed care. Moody's believes the passage of BBA97 has enhanced the shift into managed care.

Fiscal year 1998 was another financially difficult year for many for-profit and not-for-profit insurers, with several posting losses due to multiple reasons: pricing wars resulting in premium freezes and reductions, expansion costs, high medical costs (especially pharmaceutical), and information system difficulties. While there are indications of large premium increases for the current and coming year, it is uncertain as to what extent these premium hikes will be passed along to providers. We believe improvement in reimbursement rates is likely to be related to the balance of power in specific markets. We anticipate that those providers with greater market leverage are in better bargaining positions to extract higher reimbursement rates.

Rapid consolidation of the nation's health plans may reverse a more recent trend of providers gaining some leverage with payers, shifting the balance of power back into the hands of the payers. In addition, following two years of relatively poor profitability stemming from cutthroat premium competition and continued increases in medical utilization, managed care plans are searching for ways to reign in medical costs. Moody's negative outlook associated with **Kaiser Foundation Hospital's A3** rating addresses the unique challenges facing a group model health plan and an atypical capital intensive HMO in the face of high levels of overhead. We believe the HMOs will use their leverage to be more aggressive in future negotiations with hospitals and physicians and it will become increasingly difficult for health systems to generate profits at historic levels.

An additional pressure from managed care organizations (MCOs) has been a slowdown in claims payment or outright denials of claims for what managed care plans determine to be medically unnecessary service. Often this denial occurs after the treatment has been provided. This recent development is in direct contrast to the original promise by MCOs of prompt payment and increased volume to providers in exchange for discounted payments. **Massachusetts** providers have been grappling with this issue for several years, since managed care plans in that state began denying inpatient admissions for less acute treatments and reimbursing the hospitals instead for what they deem to be observation or 23-hour visits. Many hospitals report that they are utilizing additional resources to shore up their billing and claims departments so that clean claims can be submitted with less chance of denial or multiple delays. Although states such as **Louisiana, New York and Pennsylvania** are legislating quicker payment by payers, enforcing such a mandate is proving difficult.

The shift to Medicaid managed care created some new revenue pressures for providers and health plans in 1998. With more states mandating managed care for their Medicaid recipients, we anticipate that a steady shift from commercial plans to managed care plans will mean material reimbursement reductions

to providers. In fact, we are now beginning to witness Medicaid managed care plans exiting markets because of insufficient funding. For instance, Oxford Health Plan terminated its Medicaid managed care coverage in New York, Connecticut and New Jersey, and Prudential HealthCare announced its plans to terminate its Medicaid coverage in several states pending its sale to Aetna. For providers, fewer Medicaid managed care options may shift the balance of power to the Medicaid plans, resulting in even lower reimbursement for this payer class.

CAPITATION CREATING RISK EXPOSURE, RESULTING IN SIGNIFICANT LOSSES

While many health systems believe they are prepared to operate under capitated arrangements, those that have entered into these risk-bearing arrangements are encountering significant difficulties. To date, the amount of capitated hospital business is increasing but remains a relatively modest percentage of total revenues. A number of not-for-profit hospital systems, including those in California, have experienced margin erosion due to the assumption of capitated business, and certain providers, such as **Catholic Healthcare West**, are exiting onerous capitated contracts in certain regions where competitive reciprocity is less likely. The negative outlook assigned to **Holy Cross Health System (IN)** is due in part to higher-than-expected medical utilization at its Fresno hospital under a capitated contract with an affiliated health maintenance organization (Navmed). Other providers not renewing capitated contracts due to large losses include **PorterCare Health System (CO)** and **UMass Memorial Health System (MA)**.

Moody's believes that hospitals entering into capitated contracts expose themselves to greater risk since use rates are difficult to predict and out-of-network utilization is very difficult to control. Furthermore, the providers experiencing the largest losses are those who often, overnight, began covering significant numbers of covered lives without prior experience. Many issuers believe their large 1998 losses from capitated contracts were due to flawed baseline data from which the rates were initially based, and then lacked timely and accurate data surrounding the 1997 and 1998 performance, which hindered an ability to monitor actual costs of all medical expenses. Additionally, pharmaceutical expenses recorded double-digit increases and were difficult to control. While there are a few hospital systems that have demonstrated success in managing significant capitated business, we believe that success within the capitated arena can best be achieved by those systems which are large enough to capture and manage the cost of caring for the plan's enrolled population within their own integrated health network. However, we expect that a current redirection of focus regarding information systems toward year 2000 compliance issues may compromise short-term efforts to build an adequate information system to manage capitated lives.

DISAPPOINTINGLY WEAK FINANCIAL PERFORMANCE IN 1998

Fiscal 1998 was a year that saw a significant downturn in financial performance. The confluence of higher than expected BBA97 impact, increased Y2K expenses, physician losses and managed care pressures created an environment in which generating excess returns was difficult. The size of operating deficits recorded in 1998 was unprecedented. Several providers recorded operating deficits in excess of \$50 million, including **Detroit Medical Center (MI)**, **CareGroup (MA)**, **University of Pennsylvania Health System (PA)**, **Saint Barnabas Health System (NJ)**, **Baptist Hospital (TN)**, **Catholic Healthcare West (CA)**.

Because the operating losses were quite high, a number of providers took the opportunity to "clean up" accounts receivables by writing off bad debt accounts and thus reducing operating margins further. The thought was to clean up the balance sheet so that fiscal 1999 could begin with a clean slate. Unfortunately, such a clean up means that historical analysis of profitability may not have been accurately reflected due to the overstatement of the value of receivables and other assets. The significance of such write-offs was a contributing factor to downgrades for several credits including **Citrus Valley Health Partners (CA)** and **Detroit Medical Center (MI)**.

REGIONAL POCKETS OF RISK REMAIN

Those operating environments with strong local economies and less aggressive managed care development in the Southwest and Midwest remain generally favorable. By contrast, urban markets, such as Cleveland, Denver, Detroit, Los Angeles, New York, Philadelphia, Pittsburgh, and San Francisco, remain particularly volatile to managed care pressures and merger and acquisition activity.

ACADEMIC MEDICAL CENTERS/MAJOR TEACHING HOSPITALS ARE UNDER PRESSURE

Many of the academic medical centers (AMCs) and major teaching hospitals experienced financial pressures in fiscal year 1998. AMCs are being challenged by payers, the government and consumers to prove that they are different from community, non-teaching providers and that their higher costs are therefore justified for their delivery of patient care. The financial pressures are coming from varying sources, but are generally focused on Medicare and/or Medicaid changes in medical education reimbursement programs, financial pressures from the development of integrated health care systems, or increased competitive factors. Fiscal 1998 saw several rating downgrades for AMCs and Moody's assigned several negative outlooks to other premiere organizations, many that are or were rated Aa at one time. The higher ratings for AMCs is largely predicated on our belief that these hospitals' ability to draw from wide geographic regions due to their superior teaching, clinical and research reputations provide them leverage with payers. Furthermore, they tend to possess strong financial foundations (i.e. cash resources) to overcome the challenges associated with rapid integration activities.

We believe that the future of an AMC is largely dependent on what it chooses for the development and refinement of its healthcare delivery systems. The challenge remains to define and then develop the most appropriate integration strategy with physicians and other area providers given the local demographics and competitive landscape.

YEAR 2000 COMPLIANCE PROCEEDING

Hospitals and health care systems are actively pursuing internal and external measures to assure their ability to be operational on January 1, 2000. Five main areas that need to be addressed by industry participants are 1) computer systems; 2) biomedical devices; 3) facilities and plant operations; 4) external suppliers and partners (both upstream and downstream); and 5) internal partners/employees.

Moody's has questioned providers about their efforts to become compliant and contingency plans for their most important processes, but to date has taken no specific rating action as a result of these discussions. Many providers are well underway with their compliance efforts, expecting to have the majority of their changes implemented by calendar mid-year 1999, using the second half of 1999 as a test period. Although hospitals are communicating with their vendors, suppliers and business partners to determine their current level of compliance, there is no guarantee that the systems of these third parties, or others on which the hospital relies, will be compliant and will not have an adverse affect on hospital operations. The basis of our discussions with hospitals now is to be satisfied that they have developed and are executing a plan to replace or modify as necessary all information system hardware and software, and that they are evaluating whether to replace or modify certain biomedical equipment and have determined their exposure to outside vendors and suppliers. Furthermore, we are discussing the assessment of mission-critical applications, which are defined as those applications for which there is no reliable manual alternatives, to determine the potential for failure and that impact on the hospital's ability to fulfill its mission to provide health care services. While costs vary from hospital to hospital, all organizations are devoting significant resources and time to be compliant by year-end. Such resource allocation may prove significant for hospitals with limited financial cushion.

The larger issue facing the health care industry is not how the providers of service (i.e. hospitals) will be prepared for Y2K, but rather how outside vendors, in particular the federal government will be prepared. Any disruption in government payments could cause financial trouble for hospitals, which depend on governmental payers for at least 50% of their total revenue. Therefore hospitals must anticipate and budget for the potential of a temporary halt in cash flow from one of its largest payers. Providers have been exploring the use of lines of credit if cashflow problems require such a revenue influx.

As a result of HCFA concentrating on fixing its internal systems, the agency stated recently that it would halt any new project that could get in the way during Year 2000 activity next year. The agency confirmed reports that it would not make reimbursement updates for hospitals on October 1, 1999 and for doctors on January 1, 2000. Instead it will adjust payments after April 2000 at a rate that will yield a full year's update by the end of the budget year.

UNCERTAIN FUTURE FOR EQUITY INVESTMENT RETURNS

Over the past several years, strengthening hospital financial profiles have been fueled, in part, by exceptional returns from the stock market. However, the stock market's performance is becoming increasingly variable as of late and we believe that it is unlikely that current investment returns will be sustained in the future. With a larger portion of an average hospital's investment portfolio weighted more heavily towards equity investments than in the past, we believe that a possible market decline will have a more pronounced impact on hospital investments, thereby making profitability and liquidity levels more volatile and unpredictable. This in fact was the case experienced in 1998, when we saw the negative effect of the stock market's August 1998 decline on the net income of providers with fiscal years ending on September 30, 1998. We believe health care providers have less "risk tolerance" to market fluctuations than other entities, resulting in a greater impact on credit quality should negative equity market conditions prevail.

The 1999 Medians

We currently maintain unenhanced ratings on 478 issuers, including acute care and specialty hospitals (i.e. children's, rehabilitation and chronic disease hospitals), multi-site health systems, continuing care facilities, health maintenance organizations, and various other health providers. Of the rated hospital/health system universe, 20 are multi-state systems and over 110 are single-state systems with multiple acute care delivery sites. The remainder are freestanding hospitals. In total, those issuers rated by Moody's now sustain approximately \$60 billion outstanding in aggregate debt. The 1999 medians are based on 1998 audited financial reports of 303 freestanding systems and 16 multi-state hospital systems.

Since the generation of last year's medians, health care provider consolidations have removed a number of public unenhanced health care providers with Moody's rated debt from our ratings pool. Offsetting these deletions are 41 new ratings added to our portfolio in 1998. An additional 17 ratings have been added to our portfolio in the first six months of 1999. The credit impact of the ratings removed from last year's pool are now included in our rating of the new health care organization. Moody's expects continued shifts in both the hospital portfolio and multi-state system portfolio as existing entities rated by Moody's consolidate and expand, and as new systems are formed.

Analysis Of Historical Financial Performance: Freestanding Hospitals/Single-State Systems

The overall credit deterioration for US not-for-profit hospitals that occurred in 1998 is evident across almost all medians.

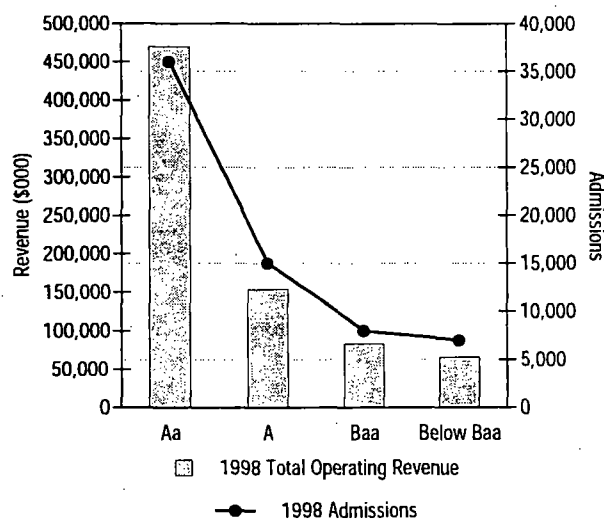
CRITICAL MASS AND CREDIT STRENGTH

Consistent with prior years, larger size and higher ratings are clearly correlated among investment grade-rated entities, as indicated in Figure 4, although the trend no longer applies for hospitals that are rated below-investment grade. Over the past ten years, the profile of the hospitals downgraded to the speculative grade level as well as the factors behind the downgrades have changed. A range of hospital sizes in the below investment grade ratings categories is evidence that increased market pressures affect hospitals of all sizes. Nonetheless, larger entities, especially those that operate multiple sites, tend to possess the resources necessary to better withstand negative market developments.

Non-specialty freestanding hospitals and single-state health systems represent approximately 88% of the current unenhanced ratings within our portfolio. Within our median sample of freestanding hospitals and single-state health systems, merger and acquisition activity has created larger organizations, and in certain cases higher ratings.

Figure 4

1998 Median Total Operating Revenues and Admissions by Rating Category



EXPENSE GROWTH OUTPACING REVENUE GROWTH

Moody's-rated hospitals continue their strategic initiatives to control costs and maintain profits as they battle against both actual and anticipated reimbursement pressures by payers. These initiatives were the starting point for providers to cope with reimbursement declines as a result of the passage of the Balance Budget Act of 1997. Providers with a higher dependence on Medicare and Medicaid face significant challenges to maintain existing profitability levels due to the federal government's reduction of the rate of funding increases, restructured payment methodologies, and greater use of managed care structures.

Despite implementing widespread cost control initiatives, the fact that expense growth outpaced revenue growth does not bode well for industry participants. Several market participants report an increase in Y2K spending, which is being included in 1998's higher expense results. The significant decline by 49.4% in the income from operations median from 1997 to 1998, which reversed a steadily increasing trend since 1994, clearly illustrates the negative effect of expense growth outpacing revenue growth during 1998. Even with revenue pressures, Moody's-rated hospitals reported an increase in the rate of revenue growth for total operating revenues in 1998 although a decline in growth in net patient revenue was also reported (Figure 5). We believe that there were two key factors to this trend reversal, both relating to mergers and consolidations. First, on a same-store basis, total revenues improved as organizations gained increased bargaining power with increased market position. Second, and likely a larger contributor to revenue improvement, is the addition of new hospitals and/or new lines of business, whose revenue is recorded apart from net patient revenue (i.e. premium revenue). We believe this to be true as operating expenses, which includes expenses associated with starting new business lines, also grew at a pace faster than the prior year (8.6% in 1998 compared to 5.3% in 1997).

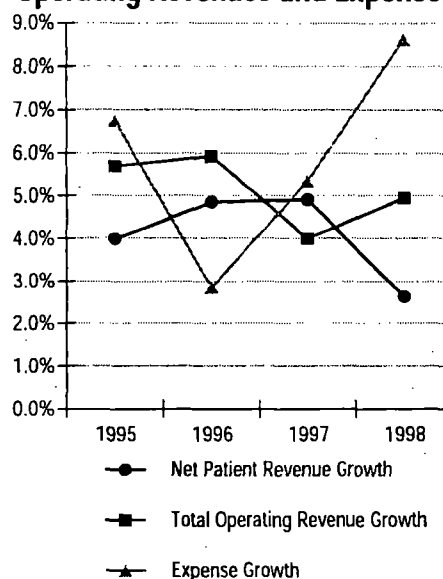
Moody's continues to believe that once all the "low hanging fruit" has been removed from the cost structure, facilities will have to be closed or scaled back to achieve further cost savings. Some organizations are already moving in this direction, demonstrated, for example, through announcements of facility closures by both Detroit Medical Center and Oakwood Health System, both located in the metropolitan Detroit market. Conversely, the decision to close HealthEast's St. Joseph's Hospital facility was changed following physician involvement and demonstrated volume increases from renewed physician loyalty.

PATIENT UTILIZATION: NOTICEABLE SHIFT TOWARD OUTPATIENT SETTINGS

The provision of care continues to shift away from inpatient settings and toward outpatient settings as hospitals attempt to provide quality care in less expensive environments. In concert with this trend, we have seen a greater share of capital dollars directed toward not only the expansion and renovation of outpatient services located within a hospital's walls, but also the establishment of freestanding clinical and ambulatory care sites. At the same time, although generating lower reimbursement per service provided, hospitals are reporting a greater percentage of revenues derived from these outpatient services. We believe that freestanding surgery sites, coupled with more surgeries being performed in physician offices accounts for the decline in outpatient surgeries reported on the providers' campus in our 1998 sample.

The inpatient admissions median, which increased 9.6% over the previous four year (1994-1997) period, showed a 4.7% decline in 1998 over 1997. (Figure 6). The increased use of observation days and tech-

Figure 5
Median Growth Rate in Operating Revenues and Expenses



nological advances that enable more complex medical cases to be performed on an outpatient basis contribute to the overall inpatient admission decline. We believe this trend will continue in the near-term.

Although 1998 median inpatient admissions declined, in various pockets throughout the country, providers are reporting an overall increase in admissions and occupancy rates considerably higher than recorded in previous years. This may be due to these hospitals reducing maintained beds over the past 5 years in response to declining occupancy rates as lengths of stay declined, and being perhaps "too downsized" to take advantage of new referrals being generated by horizontal integration strategies that are maturing several years after implementation.

Of additional interest when reviewing utilization trends is the increase in the Medicare Case Mix Index in 1998 and slight increase in average length of stay. We believe that those patients now admitted to an inpatient unit are sicker and require treatment for more medically complex illnesses than patients admitted several years ago. The use of observation visits to take less complex medical cases out of a hospital's inpatient mix is another contributing factor to this increased case mix. Additionally, a renewed focus on proper billing and coding of medical records to capture all applicable revenues are contributing factors to this 1998 median.

PROFITABILITY HAS NOTICEABLY DECLINED

As we projected in last year's Outlook on Health Care Ratings, 1998 ended a three-year trend (1995-1997) of increasing median operating and excess margins, reflecting the hospitals' ability to control costs with persisting revenue pressures during those years (Figure 7). The median operating margin declined significantly (by almost 40%) to 2.1% in 1998 from 3.4% in 1994, and marks the first time since 1993 that the operating margin has fallen below 3.0%. At the same time, the median excess margin decreased to 4.9% in 1998 from 6.2% in 1997 and is flat with the 4.9% excess margin recorded in 1994. Additionally, median operating cash flow margin (operating income plus depreciation, amortization and interest expenses, divided by total operating revenues) of 10.3% in 1998 is at a five year low. BBA97 revenue pressures and Y2K compliance costs were two contributing factors to the year's financial downturn.

Moody's believes that the recent proliferation of losses reported by major insurers does not bode well for improving hospitals' future profitability. While insurers are successfully implementing double-digit premium increases, it is uncertain to what degree these premium increases will be passed along to providers, as the insurers attempt to alleviate their own negative operating performance which was equally poor in fiscal 1998.

Median operating and operating cash flow margins for the Aa-rated hospitals were higher than those of A-rated hospitals (Figure 8), reversing a previous two-year trend. We found this surprising given the number of Aa-rated organizations that experienced financial difficulties in 1998 and the fact that the Aa-

Figure 6

Median Inpatient Admissions

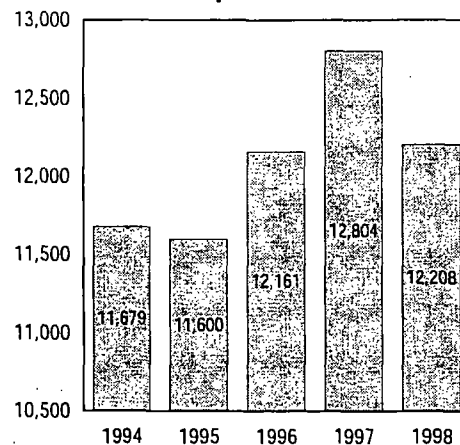
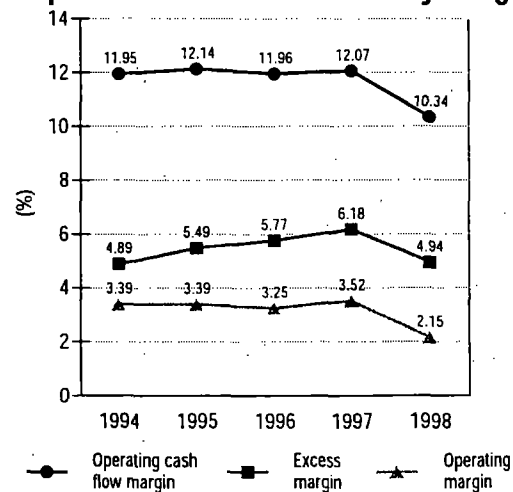


Figure 7

Comparison of Median Profitability Margins



rated organizations are more likely to have integrated with other hospitals and non-hospital affiliates (such as health insurance plans), which generate lower profit margins than the core acute care service itself. We believe that the disproportionate number of Aa-rated organizations in North Carolina and Virginia who continue to generate very favorable margins are skewing these two ratios.

As a result of poor operating results, several of the integrated systems are undertaking major restructuring initiatives. In an attempt to refocus attention on their core business and to stem losses generated by affiliates, these organizations, such as A2-rated Baptist Health System (Nashville, TN), have sold portions of their managed care companies and physician group practices. In light of satisfactory operating performance by key lines of business, we expect such efforts will help some of these organizations return to operating profitability. We expect to witness more divestitures of unprofitable product lines in the future as more hospitals realize that a back-to-basics strategy can return financial performance to more palatable levels.

DEBT SERVICE COVERAGE SHOWED SOME WEAKENING

Estimated Maximum Annual Debt Service (MADS) Coverage measures the ability of a borrower to apply its most recent historical net revenue available for the debt service to the largest future annual principal and interest payment owed, based on the borrower's debt amortization schedule. If the borrower can service the largest future payment, then it should be able to service its most current actual debt service payment (Annual Debt Service Coverage). While this ratio remains an important one, it gives no information regarding the time period over which the provider must maintain its current year's financial performance. From this ratio, we have no indication of whether the hospital is making its first debt service payment in a 30-year amortization or the 30th year's payment.

Reversing a four year trend, the 1998 MADS Coverage ratio showed some weakening to 3.53 times from a median coverage of 3.67 times the year before. This decline derives primarily from slower growth in cash flow generation (numerator) than in required debt service payments (denominator) on higher debt loads. As expected, higher ratings are associated with higher coverage levels (Figure 9). It is interesting to note that the MADS coverage of 1.84 times for non-investment grade credits is a slight improvement over the 1997 coverage of 1.80 times and exceeds the MADS coverage test of 1.10 times considered standard by today's bond documents.

Figure 8

1998 Median Margins by Rating Category

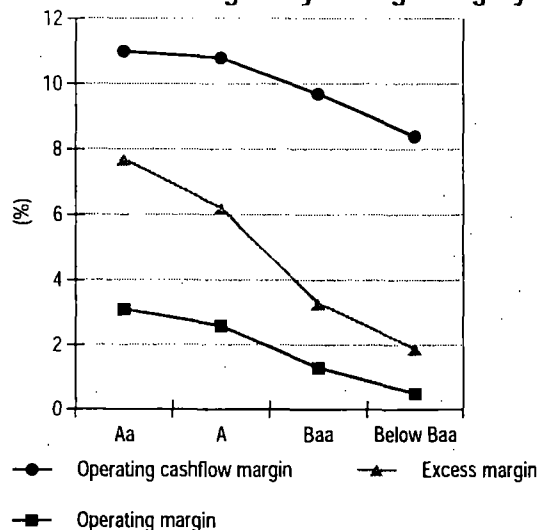
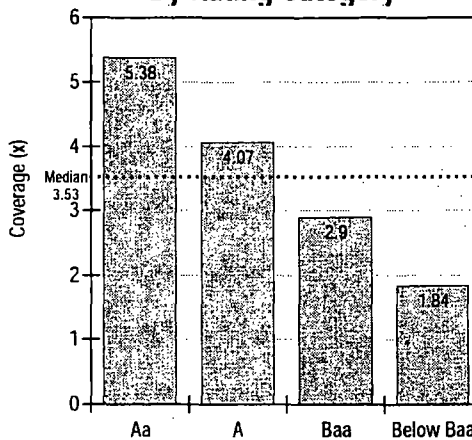


Figure 9

1998 Median MADS Coverage (x) By Rating Category



LIQUIDITY IMPROVES, BUT NOT AT HISTORIC LEVELS

The primary liquidity ratios measure the number of days a hospital could continue paying its cash operating expenses from existing cash balances in the absence of any future cash inflows (Days Cash-on-Hand) and the percentage of existing debt that could be retired immediately with existing cash balances (Cash-to-Debt).

The 1998 Medians (Figure 10) show another year in the trend of increasing unrestricted cash and investment balances over the past five years, with the 1998 median liquidity balance nearly double that of 1994 (to \$53.6 million from \$29.9 million). However, the improvement in liquidity balances for 1998 was not as material as we thought it would be, given the amount of borrowing that occurred during the year for future routine capital and management's projected plans to "bank" the year's excess cash flow into liquidity balances. Furthermore, a decline in days cash-on-hand to 155 from 163 days, indicates that the increase in absolute unrestricted reserves (2.9%) does not compensate for the greater increase in expense structure (8.6% increase) over the previous year. We believe that much of the growth prior to 1998 was driven by the recognition of unrealized gains on investment securities with the adoption of SFAS 124 (including restatement of 1996 balances) and favorable market returns as organizations re-balanced investment portfolios to include greater investments in the equity markets.

As demonstrated in Figure 11, liquidity grew slower than debt in 1998, generating an overall decline in the Cash-to-Debt ratio from the year before, and reversing another four-year trend. In 1998, the median ratio declined to 98.7% from 101.6%, but was up from 74.1% in 1994. Again, we believe the recent weakening is related to cash flow declines that limited the ability to generate excess earnings to reserve into savings at the end of the year. Despite this, as seen in Figure 12, Aa- and A-rated hospitals could still retire their entire debt obligations immediately, while non-investment grade hospitals (Below Baa) continue a trend of minimal cash on hand to repay bondholders.

Current realized growth in liquidity is viewed as a credit strength, and we are looking more closely at how cash balances are invested and the dependence on non-operating income to bolster profit margins.

Figure 10

Comparison of Liquidity Median

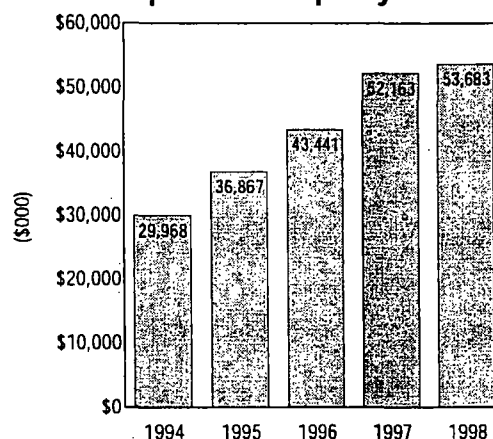


Figure 11

Comparison of Median Cash-to-Debt Ratio (%)

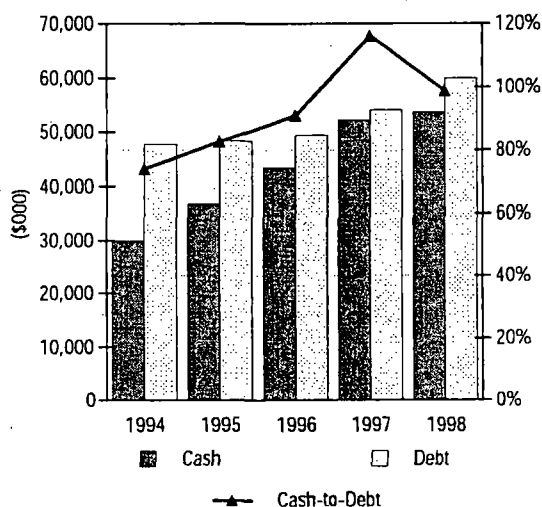
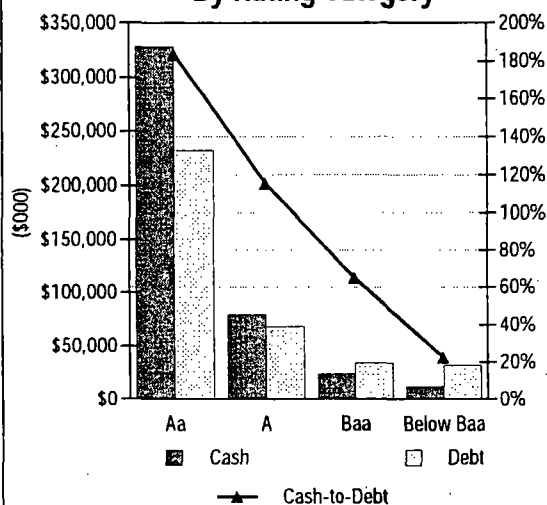


Figure 12

1998 Cash-to-Debt Median By Rating Category



LEVERAGE

Moody's believes that the financial measures of debt, particularly the Debt-to-Cash Flow ratio, go to the heart of the assessment of credit risk. Similar to the Debt Service Coverage ratio, the Debt-to-Cash Flow ratio measures the relationship between the debt obligation and the ability to generate ongoing cash flow to service the debt. It also provides an effective measure of leverage in that it captures the time period during which the hospital will have to maintain its current operating performance in order to pay back all of its debt by relating the balance sheet liability to recurring annual cashflow. The 1998 median ratio of 3.6 times, for example, means that, hypothetically, a hospital could repay the principal on the outstanding debt from its cash flow generated over the next three and a half years (assuming the hospital can maintain this year's cash flow level, and assuming zero capital expenditures). All else equal, the longer the time period over which a hospital must service its debt obligations (i.e. higher ratio), the riskier we perceive the credit to be.

Despite an increase in the median debt load to \$60 million in 1998 from \$47.7 million in 1994, median Debt-to-Cash Flow improved (declined) during the same period to 3.6 times from 3.74 times (Figure 13). We believe this trend is driven by stronger cash flow generation over that four year period as organizations increased operating and non-operating revenues, implemented major cost control initiatives in advance of Medicare and Medicaid reimbursement pressures, and gained financial benefits from consolidation efforts. However, the median did weaken (increase) from 3.29 times in 1997, suggesting that the aforementioned level of improvement in cash flow experienced through 1997 may not be sustainable in the long run.

Obviously, no ratio can guarantee a hospital's future performance. Overlaying any ratio is the need for an analytical assessment of the hospital's ability to duplicate the current year's financial performance. This requires an analysis of multiple factors, including management strategy, shifting market alliances, government regulation and market demographics. Ultimately, the ability to assess the "quality" of the most recent year's cash flow necessitates an assessment of how well positioned the hospital is to handle future contingencies. Notwithstanding the uncertainty of future performance, stronger credits tend to carry lower Debt-to-Cash Flow ratios than weaker credits (Figure 14), although each rating category experienced a higher (weaker) debt-to-cash flow ratio in 1998 than in the previous three years.

Figure 13

Comparison of Median Debt-to-Cash Flow Ratio

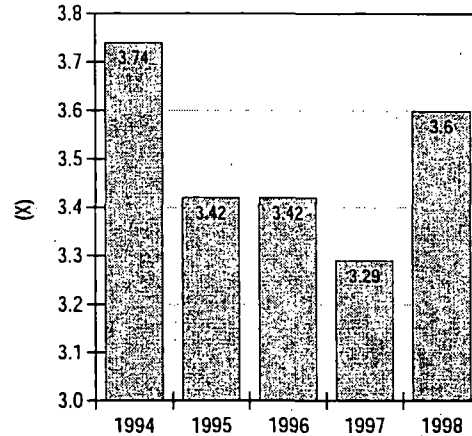
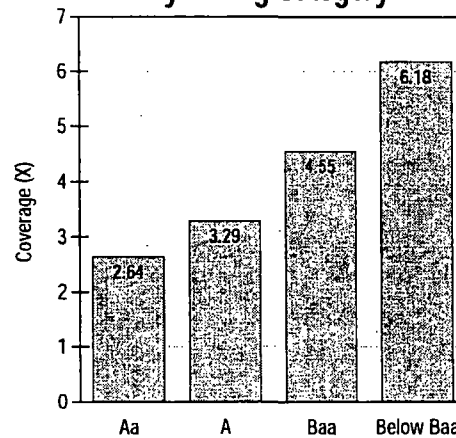


Figure 14

1998 Debt-to-Cash Flow By Rating Category

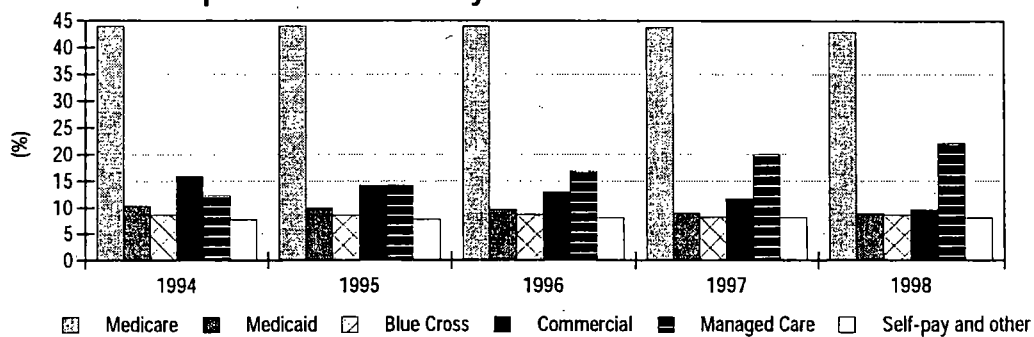


PAYER MIX REFLECTS CONTINUED MANAGED CARE GROWTH AT EXPENSE OF TRADITIONAL MEDICARE AND MEDICAID

Managed care continues to grow, primarily at the expense of commercial indemnity insurance contracts. But also driving this shift is the increasing emphasis to enroll Medicare and Medicaid eligibles into managed care plans, especially with the passage of BBA97. The 1998 medians show an increase in managed care as a percent of gross revenue, which is offset by declines in both traditional fee-for-service Medicare and Medicaid (Figure 15). More and more states are obtaining Medicaid waivers and slowly converting various segments of the Medicaid population into managed care plans. The result has been a public uproar by providers of unreasonably low reimbursement rates and a wave of HMOs exiting from Medicare-risk markets.

Figure 15

Comparison of Median Payer Mix as Percent of Gross Revenue



Freestanding Hospital & Single-State Health Care Systems Health Care Medians by Rating Category, 1998[1]

	All Ratings	Aa	A	Baa	Below Baa
Distribution of Health Care Ratings [2]	100%	11%	45%	36%	8%
Median Sample Size	303	35	142	114	12
Utilization					
Maintained beds	256	662	310	171	183
Admissions	12,208	35,559	15,124	7,940	7,062
Patient days	60,533	178,808	73,825	39,566	39,720
Average length of stay	5.0	5.2	4.9	4.9	5.2
Maintained bed occupancy	61.8%	69.6%	63.3%	58.1%	57.7%
Emergency room visits	37,566	73,393	43,853	26,101	30,946
Outpatient visits	118,629	236,091	135,168	94,069	46,388
Outpatient surgeries	5,459	12,362	7,533	4,161	4,187
Medicare case mix index	1.38	1.68	1.41	1.31	1.22
Financial Performance (\$000)					
Net patient revenues	\$121,932	\$431,526	\$147,151	\$77,019	\$63,657
Total operating revenue	132,601	470,244	154,303	82,987	65,540
Interest expense	2,897	9,372	3,222	2,138	2,425
Depreciation and amortization expense	8,278	29,613	9,815	4,726	3,755
Total operating expenses	131,285	440,574	151,776	81,029	69,961
Income from operations	2,131	12,805	3,260	949	296
Excess of revenue over expenses	6,246	39,327	10,068	2,489	1,663
Net revenue available for debt service	17,871	79,059	23,869	9,788	7,779
Operating cash flow	12,631	58,269	17,996	7,570	7,598
Debt service	4,938	11,371	5,763	3,620	3,117
Additions to property, plant and equipment	12,621	48,359	16,257	5,933	2,258
Balance Sheet (\$000)					
Unrestricted cash and investments	\$53,683	\$328,087	\$79,776	\$23,937	\$11,984
Restricted cash and investments	3,271	19,284	5,083	1,697	211
Net fixed assets	78,165	287,849	97,031	45,555	36,324
Long-term debt	60,010	232,294	68,203	34,081	31,919
Debt service reserve and Debt service funds	4,489	5,967	5,231	3,696	3,258
Net debt	50,000	157,455	58,968	29,039	28,704
Unrestricted fund balance	90,363	477,057	132,868	46,778	24,951
Key Ratios					
Operating margin	2.2%	3.1%	2.6%	1.3%	0.5%
Excess margin	4.9%	7.7%	6.2%	3.3%	1.9%
Operating cash flow margin	10.3%	11.0%	10.8%	9.7%	8.4%
Return on assets	4.2%	5.3%	4.8%	2.9%	1.7%
Annual debt service coverage (x)	3.67	7.23	4.40	2.82	2.02
Maximum annual debt service coverage (x)	3.53	5.38	4.07	2.90	1.84
Current ratio (x)	2.0	1.8	2.1	2.0	1.5
Cash on hand (days)	154.6	255.2	200.5	100.2	39.9
Cushion ratio (x)	11.2	20.6	12.8	6.9	1.8
Cash-to-debt	98.7%	183.6%	115.4%	64.8%	22.4%
Accounts receivable (days)	64.2	66.6	64.0	64.2	59.2
Average payment period (days)	65.1	70.0	63.2	63.9	70.4
Debt-to-capitalization	37.7%	28.7%	35.4%	45.5%	63.1%
Debt-to-cash flow (x)	3.60	2.64	3.29	4.55	6.18
Average age of plant (years)	8.7	8.0	8.5	9.6	9.8
Patient Revenue Sources By Gross Revenue (%) [3]					
Medicare	42.9	37.2	43.0	43.3	50.3
Medicaid	8.8	10.2	9.0	8.0	7.7
Blue Cross	8.5	8.2	10.0	8.1	6.6
Commercial	9.6	14.4	9.0	9.2	4.5
Managed Care	22.1	24.2	24.8	20.6	18.2
Self-pay and other	8.0	11.0	8.3	7.3	9.7

[1] Statistics are based on a sample size of 303 hospitals, excluding multi-state hospital systems.

[2] Distribution encompasses all non-insured ratings as of 8/16/99, rather than the median sample.

[3] Columns do not necessarily sum to 100% because each entry is a separately calculated median.

Comparative Review of Health Care Medians, 1994 - 1998[1]

All Ratings	1994	1995	1996	1997	1998
Utilization					
Maintained beds	283	280	278	293	256
Admissions	11,679	11,600	12,161	12,804	12,208
Patient days	68,012	64,816	65,135	65,702	60,533
Average length of stay	5.64	5.31	5.10	4.98	4.99
Maintained bed occupancy	63.57%	62.33%	61.09%	61.90%	61.75%
Emergency room visits	34,720	35,087	35,603	37,313	37,566
Outpatient visits	77,854	83,167	94,110	107,510	118,629
Outpatient surgeries	5,015	5,331	5,152	5,546	5,459
Medicare case mix index	1.30	1.32	1.33	1.36	1.38
Financial Performance (\$000)					
Net patient revenues	\$103,869	\$108,011	\$113,253	\$118,812	\$121,932
Total operating revenue	108,517	114,694	121,487	126,351	132,601
Interest expense	2,774	2,880	2,972	2,937	2,897
Depreciation and amortization expense	6,082	6,906	7,515	7,979	8,278
Total operating expenses	104,504	111,560	114,735	120,865	131,285
Income from operations	3,216	3,762	3,837	4,211	2,131
Excess of revenue over expenses	5,066	6,710	7,058	8,365	6,246
Net revenue available for debt service	14,816	16,489	17,465	19,172	17,871
Operating cash flow	12,257	13,578	14,025	14,851	12,631
Debt service	4,211	4,288	4,518	4,828	4,938
Additions to property, plant and equipment	8,505	9,689	9,596	10,655	12,621
Balance Sheet (\$000)					
Unrestricted cash and investments	\$29,968	\$36,867	\$ 43,441	\$52,163	\$53,683
Restricted cash and investments	1,186	1,400	1,809	2,502	3,271
Net fixed assets	62,721	64,794	66,912	72,221	78,165
Long-term debt	47,718	48,299	49,392	54,120	60,010
Debt service reserve and Debt service funds	3,855	4,110	3,940	4,481	4,489
Net debt	43,509	43,192	43,188	44,901	50,000
Unrestricted fund balance	59,733	68,225	76,315	86,411	90,363
Key Ratios					
Operating margin	3.4%	3.4%	3.3%	3.5%	2.2%
Excess margin	4.9%	5.5%	5.8%	6.2%	4.9%
Operating cash flow margin	11.9%	12.1%	12.0%	12.1%	10.3%
Return on assets	4.4%	4.8%	5.2%	5.5%	4.2%
Annual debt service coverage (x)	3.46	3.62	3.83	4.05	3.67
Maximum annual debt service coverage (x)	2.56	3.00	3.31	3.67	3.53
Current ratio (x)	2.0	1.9	1.9	2.0	2.0
Cash on hand (days)	117.49	135.09	145.02	162.96	154.62
Cushion ratio (x)	5.7	7.1	8.5	10.4	11.2
Cash-to-debt	74.1%	82.7%	90.9%	101.6%	98.7%
Accounts receivable (days)	62.6	61.2	59.8	60.6	64.2
Average payment period (days)	61.0	62.9	64.1	65.5	65.1
Debt-to-capitalization	42.7%	40.3%	38.4%	36.6%	37.7%
Debt-to-cash flow (x)	3.74	3.42	3.42	3.29	3.60
Average age of plant (years)	7.7	8.0	8.1	8.3	8.7
Patient Revenue Sources By Gross Revenue (%) [2]					
Medicare	44.0	44.0	44.0	43.8	42.9
Medicaid	10.4	10.0	9.7	9.0	8.8
Blue Cross	8.6	8.5	8.7	8.2	8.5
Commercial	16.0	14.2	13.0	11.8	9.6
Managed Care	12.4	14.4	16.9	20.0	22.1
Self-pay and other	7.7	7.7	8.0	8.0	8.0

[1] Statistics are based on a sample size of 303 hospitals, excluding multi-state hospital systems. Data is compiled from 1998 audited financial statements.

[2] Columns do not necessarily sum to 100% because each entry is a separately calculated median.

Moody's Utilization and Financial Statistics, 1998[1]

All Ratings	Minimum	Median	Maximum	Mean	Standard Deviation
Utilization					
Maintained beds	68	256	4,901	426	528
Admissions	2,886	12,208	187,071	19,440	21,508
Patient days	11,105	60,533	687,882	95,808	97,070
Average length of stay	2.6	4.99	8.51	5.04	0.88
Maintained bed occupancy	26.51%	61.75%	396.18%	66.05%	32.40%
Emergency room visits	6,974	37,566	340,475	51,534	45,056
Outpatient visits	11,649	118,629	1,646,867	205,391	244,377
Outpatient surgeries	537	5,459	56,331	8,185	7,366
Medicare case mix index	1.00	1.38	2.02	1.43	0.22
Financial Performance (\$000)					
Net patient revenues	\$21,761	\$121,932	\$2,674,346	\$ 227,799	\$302,163
Total operating revenue	22,272	132,601	2,830,832	258,521	359,907
Interest expense	52	2,897	54,634	5,487	6,916
Depreciation and amortization expense	515	8,278	160,521	15,167	20,113
Total operating expenses	21,501	131,285	2,832,148	256,614	361,090
Income from operations	(78,136)	2,131	51,208	1,907	12,924
Excess of revenue over expenses	(51,362)	6,246	105,077	11,543	19,359
Net revenue available for debt service	(9,249)	17,871	263,942	32,125	39,762
Operating cash flow	(41,580)	12,631	218,849	22,489	28,697
Debt service	52	4,938	128,498	8,768	12,338
Additions to property, plant and equipment	755	12,621	349,053	24,998	38,567
Balance Sheet (\$000)					
Unrestricted cash and investments	\$385	\$53,683	\$1,316,753	\$ 120,696	\$174,338
Restricted cash and investments	4	3,271	464,433	21,519	58,370
Net fixed assets	4,558	78,165	1,374,770	140,764	185,848
Long-term debt	835	60,010	1,138,093	110,645	141,647
Debt service reserve and Debt service funds	(6,925)	4,489	700,909	16,244	48,805
Net debt	(169,875)	50,000	983,420	94,562	126,836
Unrestricted fund balance	(13,212)	90,363	1,532,300	175,859	227,460
Key Ratios					
Operating margin	-24.6%	2.2%	15.5%	1.7%	4.7%
Excess margin	-11.3%	4.9%	21.6%	5.4%	5.6%
Operating cash flow margin	-9.3%	10.3%	25.2%	10.2%	4.8%
Return on assets	-10.2%	4.2%	17.0%	4.2%	4.2%
Annual debt service coverage (x)	(3.24)	3.67	248.13	5.44	14.72
Maximum annual debt service coverage (x)	(1.36)	3.53	13.81	3.85	2.09
Current ratio (x)	0.2	2.0	8.6	2.2	1.2
Cash on hand (days)	4.1	154.6	927.7	191.4	138.4
Cushion ratio (x)	0.2	11.2	75.5	13.1	9.7
Cash-to-debt	2.8%	98.7%	2950.2%	145.7%	243.1%
Accounts receivable (days)	16.3	64.2	117.4	64.6	16.7
Average payment period (days)	8.1	65.1	217.7	67.7	23.8
Debt-to-capitalization	1.3%	37.7%	136.2%	39.1%	16.9%
Debt-to-cash flow (x)	(81.38)	3.60	182.88	5.20	14.30
Average age of plant (years)	3.7	8.7	27.9	9.1	2.6
Patient Revenue Sources By Gross Revenue (%) [2]					
Medicare	13.7	42.9	68.1	42.2	10.1
Medicaid	0.7	8.8	30.4	9.5	5.5
Blue Cross	0.6	8.5	29.9	10.4	7.4
Commercial	0.7	9.6	35.7	11.5	7.2
Managed Care	13.7	22.1	68.0	24.5	13.8
Self-pay and other	0.7	8.0	55.0	10.9	9.8

[1] Statistics are based on a sample size of 303 hospitals, excluding multi-state hospital systems. Data is compiled from 1998 audited financial statements.

[2] Columns do not necessarily sum to 100% because each entry is a separately calculated median.

Moody's Utilization and Financial Statistics, 1998[1]

Aa	Minimum	Median	Maximum	Mean	Standard Deviation
Utilization					
Maintained beds	181	662	3,142	807	595
Admissions	9,951	35,559	131,070	37,425	22,806
Patient days	36,622	178,808	687,882	203,584	126,803
Average length of stay	3.7	5.2	7.0	5.2	0.7
Maintained bed occupancy	50.6%	69.6%	81.7%	68.0%	8.2%
Emergency room visits	21,214	73,393	340,475	97,779	74,908
Outpatient visits	27,974	236,091	1,149,473	353,353	310,094
Outpatient surgeries	4,791	12,362	36,167	14,968	8,794
Medicare case mix index	1.24	1.68	1.98	1.65	0.20
Financial Performance (\$000)					
Net patient revenues	\$97,249	\$431,526	\$1,909,825	\$541,749	\$393,221
Total operating revenue	99,865	470,244	2,209,605	633,303	503,944
Interest expense	529	9,372	37,662	10,833	7,701
Depreciation and amortization expense	5,337	29,613	110,100	37,453	25,739
Total operating expenses	96,644	440,574	2,254,450	621,552	509,960
Income from operations	(44,845)	12,805	51,208	11,751	17,702
Excess of revenue over expenses	(22,570)	39,327	105,077	42,218	29,867
Net revenue available for debt service	9,631	79,059	221,100	90,195	51,679
Operating cash flow	9,218	58,269	148,508	59,728	33,551
Debt service	700	11,371	128,498	18,018	22,497
Additions to property, plant and equipment	9,553	48,359	349,053	76,169	71,938
Balance Sheet (\$000)					
Unrestricted cash and investments	\$57,168	\$328,087	\$1,010,024	\$383,685	\$242,483
Restricted cash and investments	500	19,284	464,433	51,262	99,234
Net fixed assets	45,482	287,849	1,214,585	351,228	267,451
Long-term debt	8,135	232,294	983,420	241,411	182,594
Debt service reserve and Debt service funds	(3,627)	5,967	208,500	34,350	53,156
Net debt	(9,872)	157,455	983,420	208,042	178,389
Unrestricted fund balance	105,381	477,057	1,532,300	543,318	314,165
Key Ratios					
Operating margin	-5.0%	3.1%	11.5%	2.8%	3.2%
Excess margin	-5.6%	7.7%	19.9%	8.2%	5.7%
Operating cash flow margin	2.9%	11.0%	18.1%	10.8%	3.6%
Return on assets	-4.0%	5.3%	12.3%	5.3%	3.1%
Annual debt service coverage (x)	1.27	7.23	61.55	8.85	9.71
Maximum annual debt service coverage (x)	2.04	5.38	13.18	5.44	2.38
Current ratio (x)	0.9	1.8	8.6	2.3	1.6
Cash on hand (days)	56.4	255.2	927.7	311.9	199.1
Cushion ratio (x)	9.7	20.6	75.5	24.7	13.8
Cash-to-debt	77.1%	183.6%	1508.0%	233.8%	246.7%
Accounts receivable (days)	44.1	66.6	117.3	69.8	15.1
Average payment period (days)	22.5	70.0	217.7	74.8	33.6
Debt-to-capitalization	3.7%	28.7%	52.1%	28.9%	10.7%
Debt-to-cash flow (x)	0.39	2.64	14.33	3.26	2.36
Average age of plant (years)	5.9	8.0	11.6	8.1	1.3
Patient Revenue Sources By Gross Revenue (%) [2]					
Medicare	25.6	37.2	50.2	38.1	6.2
Medicaid	0.7	10.2	23.0	10.3	5.8
Blue Cross	1.0	8.2	24.1	9.9	8.1
Commercial	0.7	14.4	29.5	14.8	7.6
Managed Care	4.0	24.2	51.0	25.9	12.6
Self-pay and other	4.3	11.0	44.2	15.3	11.0

[1] Statistics are based on a sample size of 35 hospitals, excluding multi-state hospital systems.

[2] Columns do not necessarily sum to 100% because each entry is a separately calculated median.

Moody's Utilization and Financial Statistics, 1998[1]

A	Minimum	Median	Maximum	Mean	Standard Deviation
Utilization					
Maintained beds	95	310	4,901	460	583
Admissions	3,611	15,124	187,071	22,129	24,171
Patient days	14,636	73,825	526,394	100,875	86,280
Average length of stay	3.6	4.9	8.5	5.0	0.9
Maintained bed occupancy	34.3%	63.3%	396.2%	71.7%	41.7%
Emergency room visits	7,404	43,853	213,159	56,183	40,521
Outpatient visits	14,035	135,168	1,646,867	232,417	272,397
Outpatient surgeries	537	7,533	56,331	9,081	8,194
Medicare case mix index	1.15	1.41	2.02	1.45	0.21
Financial Performance (\$000)					
Net patient revenues	\$ 36,110	\$147,151	\$ 2,674,346	\$238,270	\$309,651
Total operating revenue	36,797	154,303	2,830,832	271,836	365,318
Interest expense	52	3,222	54,634	5,856	7,739
Depreciation and amortization expense	2,124	9,815	160,521	16,393	21,049
Total operating expenses	35,491	151,776	2,832,148	270,171	366,374
Income from operations	(73,344)	3,260	27,943	1,665	12,327
Excess of revenue over expenses	(41,013)	10,068	87,841	12,167	14,038
Net revenue available for debt service	(9,249)	23,869	263,942	34,292	37,456
Operating cash flow	(41,580)	17,996	218,849	23,791	29,822
Debt service	52	5,763	81,711	9,303	11,613
Additions to property, plant and equipment	1,878	16,257	230,966	25,663	29,777
Balance Sheet (\$000)					
Unrestricted cash and investments	\$ 7,376	\$ 79,776	\$ 1,316,753	\$130,324	\$155,135
Restricted cash and investments	19	5,083	381,928	23,998	60,454
Net fixed assets	14,428	97,031	1,374,770	150,764	186,529
Long-term debt	835	68,203	1,138,093	119,369	148,807
Debt service reserve and Debt service funds	(6,925)	5,231	700,909	18,162	62,656
Net debt	(169,875)	58,968	960,234	101,335	132,581
Unrestricted fund balance	28,146	132,868	1,498,430	187,402	192,899
Key Ratios					
Operating margin	-24.6%	2.6%	15.5%	2.1%	5.1%
Excess margin	-8.6%	6.2%	21.6%	6.6%	5.4%
Operating cash flow margin	-9.3%	10.8%	25.2%	10.6%	4.9%
Return on assets	-8.5%	4.8%	15.0%	5.0%	4.0%
Annual debt service coverage (x)	(0.71)	4.40	248.13	6.71	20.67
Maximum annual debt service coverage (x)	(0.80)	4.07	13.81	4.25	2.05
Current ratio (x)	0.6	2.1	8.0	2.3	1.2
Cash on hand (days)	41.0	200.5	700.4	224.0	121.9
Cushion ratio (x)	4.5	12.8	60.4	14.9	7.9
Cash-to-debt	35.0%	115.4%	2950.2%	178.6%	315.7%
Accounts receivable (days)	19.4	64.0	117.4	63.3	17.4
Average payment period (days)	23.2	63.2	193.0	67.3	21.2
Debt-to-capitalization	1.3%	35.4%	64.1%	35.1%	12.1%
Debt-to-cash flow (x)	(10.60)	3.29	86.58	4.75	7.92
Average age of plant (years)	5.5	8.5	15.5	8.6	1.7
Patient Revenue Sources By Gross Revenue (%) [2]					
Medicare	13.7	43.0	68.1	41.9	10.8
Medicaid	1.2	9.0	23.6	9.2	5.3
Blue Cross	0.6	10.0	28.7	10.9	7.1
Commercial	1.0	9.0	35.7	10.7	6.7
Managed Care	1.3	24.8	68.0	26.8	13.8
Self-pay and other	0.3	8.3	55.0	11.6	11.0

[1] Statistics are based on a sample size of 142 hospitals, excluding multi-state hospital systems.

[2] Columns do not necessarily sum to 100% because each entry is a separately calculated median.

Moody's Utilization and Financial Statistics, 1998[1]

Baa	Minimum	Median	Maximum	Mean	Standard Deviation
Utilization					
Maintained beds	68	310	4,901	460	583
Admissions	2,886	15,124	187,071	22,129	24,171
Patient days	11,105	73,825	526,394	100,875	86,280
Average length of stay	2.6	4.9	8.5	5.0	0.9
Maintained bed occupancy	26.5%	63.3%	396.2%	71.7%	41.7%
Emergency room visits	6,974	43,853	213,159	56,183	40,521
Outpatient visits	11,649	135,168	1,646,867	232,417	272,397
Outpatient surgeries	1,164	7,533	56,331	9,081	8,194
Medicare case mix index	1.00	1.41	2.02	1.45	0.21
Financial Performance (\$000)					
Net patient revenues	\$ 21,761	\$147,151	\$ 2,674,346	\$238,270	\$309,651
Total operating revenue	22,272	154,303	2,830,832	271,836	365,318
Interest expense	184	3,222	54,634	5,856	7,739
Depreciation and amortization expense	1,490	9,815	160,521	16,393	21,049
Total operating expenses	21,501	151,776	2,832,148	270,171	366,374
Income from operations	(78,136)	3,260	27,943	1,665	12,327
Excess of revenue over expenses	(51,362)	10,068	87,841	12,167	14,038
Net revenue available for debt service	(3,802)	23,869	263,942	34,292	37,456
Operating cash flow	(1,204)	17,996	218,849	23,791	29,822
Debt service	672	5,763	81,711	9,303	11,613
Additions to property, plant and equipment	1,146	16,257	230,966	25,663	29,777
Balance Sheet (\$000)					
Unrestricted cash and investments	\$ 1,201	\$ 79,776	\$ 1,316,753	\$130,324	\$155,135
Restricted cash and investments	33	5,083	381,928	23,998	60,454
Net fixed assets	13,475	97,031	1,374,770	150,764	186,529
Long-term debt	3,988	68,203	1,138,093	119,369	148,807
Debt service reserve and Debt service funds	(505)	5,231	700,909	18,162	62,656
Net debt	3,472	58,968	960,234	101,335	132,581
Unrestricted fund balance	14,506	132,868	1,498,430	187,402	192,899
Key Ratios					
Operating margin	-12.8%	2.6%	15.5%	2.1%	5.1%
Excess margin	-11.3%	6.2%	21.6%	6.6%	5.4%
Operating cash flow margin	-0.7%	10.8%	25.2%	10.6%	4.9%
Return on assets	-10.2%	4.8%	15.0%	5.0%	4.0%
Annual debt service coverage (x)	(3.24)	4.40	248.13	6.71	20.67
Maximum annual debt service coverage (x)	(1.36)	4.07	13.81	4.25	2.05
Current ratio (x)	0.2	2.1	8.0	2.3	1.2
Cash on hand (days)	6.0	200.5	700.4	224.0	121.9
Cushion ratio (x)	0.2	12.8	60.4	14.9	7.9
Cash-to-debt	2.8%	115.4%	2950.2%	178.6%	315.7%
Accounts receivable (days)	16.3	64.0	117.4	63.3	17.4
Average payment period (days)	8.1	63.2	193.0	67.3	21.2
Debt-to-capitalization	8.7%	35.4%	64.1%	35.1%	12.1%
Debt-to-cash flow (x)	(70.10)	3.29	86.58	4.75	7.92
Average age of plant (years)	3.7	8.5	15.5	8.6	1.7
Patient Revenue Sources By Gross Revenue (%) [2]					
Medicare	14.0	43.0	68.1	41.9	10.8
Medicaid	1.4	9.0	23.6	9.2	5.3
Blue Cross	0.8	10.0	28.7	10.9	7.1
Commercial	1.8	9.0	35.7	10.7	6.7
Managed Care	0.0	24.8	68.0	26.8	13.8
Self-pay and other	0.1	8.3	55.0	11.6	11.0

[1] Statistics are based on a sample size of 114 hospitals, excluding multi-state hospital systems.

[2] Columns do not necessarily sum to 100% because each entry is a separately calculated median.

Moody's Utilization and Financial Statistics, 1998 [1]

Below Baa	Minimum	Median	Maximum	Mean	Standard Deviation
Utilization					
Maintained beds	116	183	270	186	44
Admissions	5,145	7,062	10,375	7,324	1,628
Patient days	19,660	39,720	63,736	38,033	12,658
Average length of stay	3.8	5.2	6.1	5.1	0.8
Maintained bed occupancy	46.4%	57.7%	64.7%	55.7%	6.0%
Emergency room visits	19,914	30,946	43,321	31,697	7,252
Outpatient visits	30,653	46,388	222,785	86,554	79,279
Outpatient surgeries	2,582	4,187	7,671	4,542	1,657
Medicare case mix index	1.12	1.22	1.75	1.31	0.23
Financial Performance (\$000)					
Net patient revenues	25,107	63,657	\$456,267	\$147,994	\$156,087
Total operating revenue	33,427	65,540	479,652	155,966	166,422
Interest expense	750	2,425	15,867	5,104	5,563
Depreciation and amortization expense	515	3,755	37,421	8,780	10,659
Total operating expenses	34,424	69,961	513,386	159,956	174,860
Income from operations	(42,252)	296	3,554	(3,990)	12,080
Excess of revenue over expenses	(22,600)	1,663	3,860	(1,239)	7,163
Net revenue available for debt service	612	7,779	35,717	12,644	11,873
Operating cash flow	268	7,598	32,472	9,894	9,711
Debt service	1,304	3,117	21,634	7,177	7,369
Additions to property, plant and equipment	755	2,258	48,299	7,459	13,288
Balance Sheet (\$000)					
Unrestricted cash and investments	\$385	\$11,984	\$41,394	\$15,337	\$12,590
Restricted cash and investments	4	211	66,497	9,738	23,174
Net fixed assets	4,558	36,324	269,928	81,441	92,715
Long-term debt	10,346	31,919	301,331	90,925	110,489
Debt service reserve and Debt service funds	900	3,258	40,902	10,080	13,698
Net debt	7,411	28,704	262,215	80,845	99,855
Unrestricted fund balance	(13,212)	24,951	94,162	28,590	26,281
Key Ratios					
Operating margin	-9.0%	0.5%	6.1%	-0.6%	4.7%
Excess margin	-6.8%	1.9%	6.4%	0.7%	4.5%
Operating cash flow margin	0.8%	8.4%	16.0%	8.0%	5.0%
Return on assets	-6.2%	1.7%	8.9%	0.9%	4.9%
Annual debt service coverage (x)	0.44	2.02	3.90	1.98	1.06
Maximum annual debt service coverage (x)	0.38	1.84	4.36	2.03	1.25
Current ratio (x)	1.1	1.5	3.3	1.7	0.6
Cash on hand (days)	4.1	39.9	146.3	54.1	46.2
Cushion ratio (x)	0.5	1.8	11.4	3.3	3.5
Cash-to-debt	3.4%	22.4%	128.0%	37.4%	39.2%
Accounts receivable (days)	30.8	59.2	104.8	61.6	19.8
Average payment period (days)	37.9	70.4	103.2	70.3	20.7
Debt-to-capitalization	28.8%	63.1%	136.2%	69.7%	31.7%
Debt-to-cash flow (x)	(81.38)	6.18	182.88	10.38	61.87
Average age of plant (years)	3.8	9.8	27.9	11.8	6.4
Patient Revenue Sources By Gross Revenue (%) [2]					
Medicare	41.0	50.3	59.5	50.3	7.2
Medicaid	3.9	7.7	9.6	7.2	2.1
Blue Cross	6.0	6.6	21.2	10.1	6.4
Commercial	4.4	4.5	18.0	9.0	6.4
Managed Care	8.4	18.2	20.9	16.4	5.0
Self-pay and other	1.6	9.7	11.3	7.5	4.3

[1] Statistics are based on a sample size of 12 hospitals, excluding multi-state hospital systems.

[2] Columns do not necessarily sum to 100% because each entry is a separately calculated median.

Analysis of Historical Financial Performance: Multi-State Systems

THE PORTFOLIO

The number of multi-state system ratings declined by one credit rating from the prior year to encompass 20 Moody's-rated systems. While the net change appears to be immaterial, the multi-state system portfolio experienced significant turnover. With the issuance of refunding debt by Catholic Health Initiatives (rated Aa2), four credits were removed from our rating portfolio, including Catholic Health Corporation (formerly rated A1), Franciscan Health System (formerly rated A1), Sisters of Charity Health Care System (formerly rated Aa2), and Sisters of Charity of Nazareth Health Corporation (formerly rated A1). Additions to the portfolio include Catholic Health East (rated A1) and Adventist Health System/Sunbelt (rated Baa1). We expect to see further changes in 1999/2000 as regional systems consolidate and the multi-state systems continue to acquire additional hospitals and health systems.

The multi-state hospital systems remain some of the largest organizations within Moody's portfolio, ranging in size from two-state, two-hospital Alexian Brothers Health System (Alexian) to mega-giant CHI with over 65 acute care hospitals across 20 states. Alexian will be removed from the multi-state portfolio and placed in the freestanding hospital portfolio next year as it now operates in only one state. Fourteen of the twenty systems generate total operating revenues greater than \$1 billion, with only two of the smaller systems reporting less than \$500 million. This differs from five years ago when nine of the currently rated systems reported total operating revenues under \$1 billion. Furthermore, only eight credits included in our Freestanding Hospitals and Single-State Health Care Systems medians generate over \$1 billion in total operating revenues, all constituting multi-site single-state health systems.

This year's multi-state medians include data for 16 of the 20 systems. **Catholic Health Initiatives (CHI)**, **Catholic Health East (CHE)** and **Christus Health** (formerly SCH Health Care and Incarnate Word Health System, TX) are excluded because their corporate existence and financial reporting trend are less than the five years used in the medians for comparison purposes. Alexian Brothers is excluded because of the lack of 1998 data.

RATING CHANGES

Other than the loss of ratings due to merger activity, only two rating changes occurred in 1998 – **Catholic Healthcare West**, was downgraded to A2 (underlying) from A1 (underlying) and **Alexian Brothers Health System** was downgraded from A2 to Baa1. More recent volatility is evidenced by the fact that in the first half of 1999, three systems had their ratings revised and two others had their outlooks revised to negative. **Catholic Healthcare West**, was downgraded to Baa1 (underlying) from A2 (underlying), **Sisters of St. Francis's (IN)** rating was upgraded to Aa3 from A1 and the outlook was revised from stable to positive, and **Franciscan Health Partnership** (formerly Franciscan Sisters of the Poor in NY) was downgraded from Baa1 to Baa2. Additionally, CHI (Aa2) had its outlook revised to negative from stable, **Daughters of Charity National Health System** (Aa2) has its outlook revised from positive to stable, and **Catholic Healthcare Partners (OH)** had its outlook changed to negative from stable for its Aa3 rating.

GENERAL OBSERVATIONS FROM THE 1998 DATA

Due to the limited sample size and varied organization size, care must be taken when drawing conclusions from the medians regarding the multi-state systems. As Figure 16 demonstrates, there is high variability in this set of medians. However, some general conclusions can be made.

Figure 16**Multi-State Health Minimums, Medians, and Maximums for Select Key Measures**

1998 Select Key Measures	Minimum	Median	Maximum	Mean	Standard Deviation
Number of hospitals	8	12	25	14	6
Maintained beds	1,790	2,846	5,920	3,222	1,211
Total system admissions	64,838	120,174	201,385	121,709	48,689
Operating margin	-3.4%	1.8%	6.8%	1.3%	3.0%
Operating cash flow margin	5.6%	9.1%	15.2%	9.5%	2.5%
Maximum annual debt service coverage	1.35	2.96	7.97	3.84	1.93
Cash on hand (days)	40.5	172.8	394.8	178.0	87.4
Cash-to-debt	24.7%	104.5%	336.2%	120.7%	77.7%
Debt-to-capitalization	15.3%	36.9%	63.5%	38.2%	13.1%
Debt-to-cash flow (x)	1.16	4.27	11.87	4.95	3.08

- Aggregate debt outstanding for the multi-state systems is \$15.2 billion. The highest concentration of this debt, accounting for 49.8% of debt outstanding is attributable to five of the twenty systems: Catholic Healthcare West (\$1.73 billion), Catholic Health Initiatives (\$1.71 billion), Charity Obligated Group (\$1.43 billion), Adventist Health System/Sunbelt (\$1.38 billion), and Catholic Health East (\$1.38 billion).
- Median unrestricted cash and investments improved for the fourth consecutive year, to \$683 million in 1998 from \$614 million the prior year, although the percentage increase markedly decreased from the prior year. The variance from the minimum of \$107 million to the maximum cash position of \$2.0 billion is significant, as is the standard deviation of \$487 million. Coupled with continued growth in aggregate debt outstanding, median Cash-to-Debt ratio declined to 104.6%, reversing a four-year trend of improvement, which culminated in a median ratio of 113.7% in 1997. Again the variance between the minimum cash-to-debt statistic (24.7%) and maximum cash-to-debt ratio (336.2%) amplifies the variability of systems due to their different stages of development and size.
- Similar to the stand-alone ratios, median revenues and expenses increased in 1998, with expense growth outpacing revenue growth. For the third straight year, median total operating revenue growth rate (5.9%) lagged behind median total operating expense growth rate (8.8%).
- Median estimated maximum annual debt service coverage of 2.96 reverses a three-year trend of improvement and is below 3.0 times for the first time in five years.
- The higher rated credits continue to demonstrate stronger balance sheets and financial operations.

List Of Individual Multi-State Health Care Systems, 1998

Health Care System (Headquarters)	Rating [1]	Outlook[2]	Total Debt Outstanding (\$000) [3]
Health Care Systems Included in 1999 Medians			
Catholic Healthcare West (San Francisco, CA).....	Baa1	N	\$ 1,729,096
Charity Obligated Group (St. Louis, MO).....	Aa2	S	1,436,903
Adventist Health System/Sunbelt (Orlando, FL).....	Baa1	S	1,384,604
Catholic Healthcare Partners (Cincinnati, OH).....	Aa3	N	960,178
St. Joseph Health System (Orange, CA).....	Aa3	S	749,341
Bon Secours Health System (Marriottsville, MD).....	A3	S	694,548
Mercy Health Services (Farmington Hills, MI).....	Aa3	N	661,339
Holy Cross Health System (South Bend, IN).....	Aa3	N	636,210
Sisters of Charity of Leavenworth Health Services Corporation (Leavenworth, KS).....	Aa3	S	570,772
Sisters of Providence (Seattle, WA).....	A1	S	480,877
Sisters of Mercy Health System (St. Louis, MO).....	Aa1	S	443,880
Franciscan Health Partnership (New York, NY).....	Baa2	S	436,140
Carondelet Health System (St. Louis, MO).....	Baa1	S	368,138
IHC Hospitals (Salt Lake City, UT).....	Aa2	S	333,888
Sisters of St. Francis Health Services (Mishawaka, IN).....	Aa3	P	203,173
Ancilla Health Systems (Hobart, IN).....	Baa1	S	202,208
Subtotal:			\$ 11,291,295
Health Care Systems Excluded in 1999 Medians			
Catholic Health Initiatives (Denver, CO).....	Aa2	N	1,714,584
Catholic Health East (Newtown Square, PA).....	A1	S	1,310,957
Christus Health (Houston and San Antonio, TX).....	Aa3	N	744,010
Alexian Brothers Health System (Elk Grove Village, IL).....	Baa1	S	151,736
Total Debt:			\$ 15,212,582

[1] Ratings as of 8/16/99

[2] Positive(P), Negative (N), Stable(S)

[3] As of fiscal year end 1998

Multi-State Health Care Systems: Median Comparison, 1994-1998

All Ratings	1994	1995	1996	1997	1998
Median Sample Size	16	16	16	16	16
Utilization					
Number of hospitals	13	13	13	13	12
Maintained beds	2,601	2,384	2,381	2,683	2,846
Average hospital bed size	217	206	202	203	206
Total system admissions	106,194	109,824	119,192	122,960	120,174
Financial Performance (\$000)					
Net patient revenues	\$1,046,991	\$1,137,166	\$1,236,892	\$1,268,244	\$1,204,097
Total operating revenue	1,103,632	1,185,166	1,288,587	1,340,262	1,419,567
Interest expense	23,498	24,446	25,255	27,713	29,234
Depreciation and amortization expense	63,224	68,999	83,112	80,824	89,619
Total operating expenses	1,063,281	1,135,189	1,240,734	1,298,950	1,413,053
Income from operations	42,364	39,788	46,869	39,190	23,468
Excess of revenue over expenses	57,884	60,912	73,736	82,784	71,842
Net revenue available for debt service	157,805	156,789	177,483	187,413	197,864
Operating cash flow	136,687	128,349	145,585	147,999	139,820
Debt service	35,851	39,963	37,068	45,256	49,957
Additions to property, plant and equipment	85,367	105,371	106,230	130,977	119,088
Balance Sheet (\$000)					
Unrestricted cash and investments	\$327,531	\$415,428	\$468,141	\$613,890	\$683,439
Restricted cash and investments	11,346	18,549	26,014	33,070	37,183
Net fixed assets	505,649	614,921	660,881	715,205	836,520
Long-term debt	356,262	476,364	479,601	529,768	603,491
Debt service reserve and Debt service funds	71,252	52,491	48,325	77,580	70,090
Net debt	308,262	403,088	433,321	510,567	505,256
Unrestricted fund balance	655,858	733,949	867,479	978,542	1,110,369
Key Ratios					
Operating margin	4.0%	3.9%	3.4%	3.1%	1.8%
Excess margin	5.3%	5.3%	5.3%	5.4%	3.8%
Operating cash flow margin	12.2%	11.5%	11.1%	10.5%	9.1%
Return on assets	4.9%	5.2%	5.7%	5.2%	3.4%
Annual debt service coverage (x)	4.69	4.37	4.75	4.26	3.63
Maximum annual debt service coverage (x)	3.20	3.12	3.54	3.68	2.96
Current ratio (x)	1.5	1.9	1.7	1.9	1.7
Cash on hand (days)	124.1	141.6	158.3	170.7	172.8
Cushion ratio (x)	6.9	7.7	9.2	11.1	11.1
Cash-to-debt	79.6%	103.6%	106.6%	113.7%	104.6%
Accounts receivable (days)	60.2	60.2	62.6	64.3	62.4
Average payment period (days)	68.3	67.7	68.5	69.9	68.2
Debt-to-capitalization	37.5%	38.4%	37.3%	36.9%	36.9%
Debt-to-cash flow (x)	3.35	3.01	3.02	3.32	4.27
Average age of plant (years)	8.2	8.6	8.1	8.0	9.1

Multi-State Health Care Systems: Median Comparison by Rating Category, 1998

	All Ratings	Aa	A	Baa
Median Sample Size	16	9	2	5
Utilization				
Number of hospitals	12	9	17	18
Maintained beds	2,846	2,882	2,809	3,001
Average hospital bed size	206	206	165	214
Total system admissions	120,174	106,034	160,126	111,378
Financial Performance (\$000)				
Net patient revenues	\$1,204,097	\$1,295,259	\$1,324,822	\$889,651
Total operating revenue	1,419,567	1,443,509	1,662,199	1,023,349
Interest expense	29,234	28,634	34,077	24,657
Depreciation and amortization expense	89,619	105,972	87,111	59,063
Total operating expenses	1,413,053	1,415,028	1,630,324	1,030,416
Income from operations	23,468	55,104	31,875	(27,336)
Excess of revenue over expenses	71,842	122,876	56,932	(289)
Net revenue available for debt service	197,864	230,973	178,120	79,952
Operating cash flow	139,820	142,380	153,063	73,570
Debt service	49,957	50,660	55,200	41,414
Additions to property, plant and equipment	119,088	131,252	126,438	90,748
Balance Sheet (\$000)				
Unrestricted cash and investments	\$683,439	\$876,960	\$398,847	\$235,138
Restricted cash and investments	37,183	43,202	119,407	28,078
Net fixed assets	836,520	862,095	845,689	514,631
Long-term debt	603,491	636,210	587,713	436,140
Debt service reserve and Debt service funds	70,602	70,602	78,465	64,379
Net debt	505,256	566,632	509,248	378,639
Unrestricted fund balance	1,110,369	1,270,429	874,429	457,535
Key Ratios				
Operating margin	1.8%	4.0%	1.8%	-2.5%
Excess margin	3.8%	6.0%	3.3%	0.0%
Operating cash flow margin	9.1%	10.0%	9.4%	6.8%
Return on assets	3.4%	5.2%	3.3%	0.0%
Annual debt service coverage (x)	3.63	5.12	3.18	1.93
Maximum annual debt service coverage (x)	2.96	4.37	4.43	2.36
Current ratio (x)	1.7	1.7	1.5	1.8
Cash on hand (days)	172.8	202.5	96.8	137.9
Cushion ratio (x)	11.1	13.3	3.4	6.3
Cash-to-debt	104.6%	133.9%	72.7%	57.6%
Accounts receivable (days)	62.4	66.3	65.1	59.6
Average payment period (days)	68.2	68.1	65.1	68.4
Debt-to-capitalization	36.9%	33.5%	43.0%	44.6%
Debt-to-cash flow (x)	4.27	2.66	4.77	7.60
Average age of plant (years)	9.1	9.2	7.9	9.0

Appendix

Moody's 1999 Health Care Medians are based on fiscal year 1998 audited financial statements. Financial medians for the freestanding/single-state systems were compiled from 303 entities, while the multi-state system medians were extracted from data on 16 systems.

We caution that comparisons with medians contained in previous publications are not necessarily appropriate due to differences in the composition of the two databases – the 303 hospitals whose data was utilized in this year's medians are not necessarily the same hospitals utilized in last year's publication. However, medians contained in this publication for all five historical years 1994-1998 was calculated from the same sample of 303 hospitals.

The reader will note that this year's rating categories include the following categories: Aa, A, Baa, and below Baa. The below Baa category includes only 12 hospitals and is therefore less statistically significant. We also caution that comparisons across different years may be skewed by the hospital auditors' practice of restating prior year financial statements to make applicable comparisons with the current year.

Health Care Financial Ratios

Ratio	Computation
Accounts receivable (days)	(Net patient accounts receivable x 365) / net patient revenue
Annual debt-service coverage (x)	Net revenue available for debt service / (principal payments + interest expense)
Average age of plant (years)	Accumulated depreciation / depreciation expense
Average payment period (days)	(Total current liabilities x 365) / (total operating expenses - depreciation and amortization expense)
Cash on hand (days)	(Unrestricted cash and investments x 365) / (total operating expenses - depreciation and amortization expenses)
Cash-to-debt (%)	Unrestricted cash and investments / (long term debt + short term debt)
Current ratio (x)	Total current assets / total current liabilities
Cushion ratio (x)	Unrestricted cash and investments / estimated future peak debt service
Debt-to-capitalization (%)	(Long-term debt + short term debt) / (long-term debt + short term debt + unrestricted fund balance)
Debt-to-cash flow (x)	(Long-term debt + short term debt) / (excess of revenues over expenses + depreciation and amortization expenses)
Excess margin (%)	(Total operating revenue - total operating expenses + nonoperating income) / (total operating revenue + non-operating income)
Maximum annual debt service coverage (x)	Net revenue available for debt service / estimated future peak principal payments and interest expense
Medicare case-mix index	Measurements comparing acuity of Medicare patients among hospitals
Net debt (\$000)	Total debt outstanding - trustee-held bond funds
Operating cash flow margin (%)	(Total operating revenue - total operating expenses + interest expense + depreciation and amortization expenses) / total operating revenue
Operating margin (%)	(Total operating revenue - total operating expenses) / total operating revenue
Return on assets (%)	Excess of revenues over expenses / total assets
Unrestricted cash and investments (\$000)	Unrestricted cash + short-term investments + board-designated cash and investments

Portfolio of Health Care Ratings (as of August 13, 1999)

State	Issuer	Issuing Authority	Rating	Outlook ¹
ALABAMA				
	Baptist Health System (Birmingham) (Underlying rating)	Birmingham Special Care Facilities Financing Authority	A2	S
	Baptist Medical Center (Montgomery) (Underlying rating)	Montgomery BMC Special Care Facilities Financing Authority	A2	S
	Charity Obligated Group, Series 1997 D and Series 1998 B	Birmingham Special Care Facilities Financing Authority	Aa2/VMIG1	S
	Cullman Regional Medical Center	Cullman Medical Clinic Board - Cullman Medical Park South	Baa2	S
	Daughters of Charity National Health System (Providence Hospital)	Birmingham Special Care Facilities Financing Authority	Aa2	S
	Daughters of Charity National Health System (St. Margaret's Hospital)	Montgomery Special Care Facilities Financing Authority	Aa2	S
	Daughters of Charity National Health System (St. Vincent's Hospital)	Birmingham Special Care Facilities Financing Authority	Aa2	S
	DCH Health Care Authority (Formerly DCH Regional Medical Center)	DCH Healthcare Authority	A1	S
	Jackson Hospital and Clinic	Montgomery Medical Clinic Board	A3	S
	Marshall Medical Center North Formerly Guntersville-Arab Medical Center)	Marshall County Health Care Authority	Baa2	P
	Marshall Medical Center South (Formerly Boaz-Albertville Medical Center)	Marshall County Health Care Authority	Baa3	P
	Medical Center East	Birmingham Special Care Facilities Financing Authority	A2	S
	Northeast Alabama Regional Medical Center (Underlying Rating)	Regional Medical Center Board	A2	S
	Thomas Hospital	Baldwin County Eastern Shore Healthcare Authority	Baa3	S
	University of Alabama Hospital at Birmingham	University of Alabama Board of Trustees	Aa3	S
	University of Alabama Hospital at Birmingham, Series 1997 (SBPA: Bank of America N.T.R.S.A.)	University of Alabama Board of Trustees	Aa3/VMIG1	S
	Walker Regional Medical Center	Jasper Medical Clinic Board	A3	S
ALASKA				
	Sisters of Providence (Providence Hospital)	Anchorage	A1	S
ARIZONA				
	Baptist Hospital System (Underlying rating)	Mohave County Industrial Development Authority	Baa1	N
	Carondelet Health System (Underlying Rating)	Pima County Industrial Development Authority	Baa1	P
	Catholic Healthcare West (Underlying rating)	Maricopa County Industrial Development Authority	Baa1	N
	Discovery Health System	Mesa Industrial Development Authority	Aa3	S
	Evangelical Lutheran Good Samaritan Society	Benson Industrial Development Authority	A3	S
	Samaritan Health Services ²	Maricopa County Industrial Development Authority	Baa1	P
	Sun Health Corporation	Maricopa County	Baa1	S
	University Medical Center (Underlying rating)	University Medical Center Corporation	A3	S
ARKANSAS				
	Baxter County Regional Hospital	Baxter County	Baa2	S
	Catholic Health Initiatives	Pulaski County Health Facilities Board	Aa2	N

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).
2. Upcoming Discovery Health System bond Issuance will provide funds to defease Samaritan Health Services outstanding bonds.

Portfolio of Health Care Ratings (as of August 13, 1999) (continued)

State	Issuer	Issuing Authority	Rating	Outlook ¹
Arkansas, continued				
	Northwest Health System (Formerly Springdale Memorial Hospital)	Springdale Residential Housing & Health Care Facilities Board	Baa3	S
	Sisters of Mercy Health (St. Louis) (St. Edward & St. Edward Mercy)	Arkansas Development Finance Authority	Aa1	S
	Sisters of Mercy Health System (St. Louis), Series 1989 B (SBPA: ABN-AMRO)	Arkansas Development Finance Authority	Aa1/VMIG1	S
	Sparks Regional Medical Center	Sebastian County Health Facilities Board	Aa3	S
CALIFORNIA				
	Antelope Valley Medical Center	Antelope Valley Hospital District	A3	S
	Catholic Healthcare West (Underlying rating)	California Statewide Communities Development Authority	Baa1	N
	Catholic Healthcare West (Formerly Catholic Health Corporation Mater Misericordiae Hospital-Mercy Hospital & Health Services) (Underlying rating)	California Health Facilities Financing Authority	Baa1	N
	Catholic Healthcare West (St. Francis Medical Center) (Underlying rating)	California Health Facilities Financing Authority	Baa1	N
	Catholic Healthcare West (St. Rose Dominican Hospital) (Underlying rating)	California Health Facilities Financing Authority	Baa1	N
	Catholic Healthcare West (Underlying rating)	California Health Facilities Financing Authority	Baa1	N
	Cedars Sinai Medical Center	California Health Facilities Financing Authority	A2	S
	Cedars-Sinai Medical Center	California Statewide Communities Development Authority	A2	S
	Citrus Valley Health Partners (Formerly Inter-Community Medical Center and Queen of the Valley Hospital)	California Statewide Communities Development Authority	Baa1	N
	City of Hope National Medical Center	Duarte	Baa2	N
	Community Hospitals of Central California	Central California Joint Powers Health Financing Authority	Baa1	S
	Eisenhower Memorial Hospital (Underlying rating)	Rancho Mirage Joint Powers Financing Authority	A2	S
	Fremont-Rideout Health Group (Underlying rating)	Marysville	A1	S
	Hoag Memorial Presbyterian Hospital, Series 1992 (SBPA: Bank of America National Trust & Savings)	Newport Beach	Aa3/VMIG1	S
	Hoag Memorial Presbyterian Hospital, Series 1996 A, B, & C (SBPA: Bank of America National Trust & Savings)	Newport Beach	Aa3/VMIG1	S
	Holy Cross Health System (St. Agnes Hospital)	Fresno	Aa3	N
	Hospital of the Good Samaritan Hospital	California Health Facilities Financing Authority	Baa2	W/D
	John Muir/Mt. Diablo Health System (Underlying rating)	California Statewide Communities Development Authority	A1	S
	Kaiser Foundation Hospitals	California Health Facilities Financing Authority	A3	N
	Kaiser Foundation Hospitals	Riverside	A3	N
	Kaiser Foundation Hospitals	Santa Rosa	A3	N
	Kaiser Foundation Hospitals	California Statewide Communities Development Authority	A3	N
	Kaiser Foundation Hospitals (Taxable)	Kaiser Foundation Hospitals	A3/P-2	N

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) (continued)

State	Issuer	Issuing Authority	Rating	Outlook ¹
California, continued				
	Lucille Salter Packard Children's Hospital (Guaranteed by Stanford Health System)	ABAG Finance Authority for Nonprofit Corporations	A1	N
	Memorial Health Services, Series 1991	Long Beach	A1/VMIG1	N
	Memorial Health Services, Series 1994	California Health Facilities Financing Authority	A1/VMIG1	N
	Sharp Healthcare (Underlying rating)	California Health Facilities Financing Authority	Baa1	S
	Sisters of Charity of Leavenworth Health Services Corporation (St. John's Hospital)	California Statewide Communities Development Authority	Aa3	S
	Sisters of Providence (Providence Hospital)	California Health Facilities Financing Authority	A1	S
	St. Joseph Health System	California Health Facilities Financing Authority	Aa3	S
	St. Joseph Health System (Mission Hospital Regional Medical Center), Series 1994	California Statewide Communities Development Authority	Aa3/VMIG1	S
	St. Joseph Health System, Series 1985 A, B	California Health Facilities Financing Authority	Aa3/VMIG1	S
	St. Joseph Health System, Series 1991 B	California Health Facilities Financing Authority	Aa3/VMIG1	S
	St. Joseph Health System, Series 1994	California Statewide Communities Development Authority	Aa3/VMIG1	S
	St. Joseph Health System, Series 1996A (Taxable)	St. Joseph Health System	Aa3/VMIG1	S
	Summit Medical Center	California Health Facilities Financing Authority	Baa3	U
	Sutter Health (Formerly Marin General Hospital) (Underlying rating)	Modesto	A2	S
	Sutter Health (Underlying rating)	California Statewide Communities Development Authority	A2	S
	Sutter Health (Underlying rating)	California Health Facilities Financing Authority	A2	S
	Torrance Memorial Medical Center	Torrance	A1	P
	UCSF - Stanford Health Care	California Health Facilities Financing Authority	A1	N
	Washington Hospital Health Care System	Washington Township Hospital District	A2	P
COLORADO				
	Catholic Health Initiatives	Colorado Health Facilities Authority	Aa2	N
	Catholic Health Initiatives (Formerly Catholic Health Corporation)	Colorado Health Facilities Authority	Aa2	N
	Catholic Health Initiatives (Formerly Sisters of Charity Health Care System (Cincinnati) - Mercy Highlands Ranch Medical Building)	Douglas County	Aa2	N
	Catholic Health Initiatives (Formerly Sisters of Charity Health Care System (Cincinnati))	Colorado Health Facilities Authority	Aa2	N
	Catholic Health Initiatives (Formerly Sisters of Charity Health Care System (Cincinnati), Series 1992 A, B, C (SBPA: Toronto Dominion Bank; Deutsche Bank))	Colorado Health Facilities Authority	Aa2/VMIG1	N
	Catholic Health Initiatives (Formerly Sisters of Charity Health Care System (Cincinnati), Series 1995 (SBPA: Toronto Dominion Bank))	Colorado Health Facilities Authority	Aa2/VMIG1	N
	Catholic Health Initiatives, Series 1997 B			

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) (continued)

State	Issuer	Issuing Authority	Rating	Outlook ¹
Colorado, continued				
	(SBPA: Toronto Dominion Bank)	Colorado Health Facilities Authority	Aa2/VMIG1	N
	Catholic Health Initiatives, Series 1997 C (SBPA: Morgan Guaranty Trust Company of New York) (Taxable)	Catholic Health Initiatives	Aa2/VMIG1	N
	Craig Hospital	Colorado Health Facilities Authority	A2	S
	Denver Health and Hospitals	Denver Health and Hospital Authority	Baa2	S
	Exempla, Inc. (Formerly Lutheran Medical Center)	Colorado Health Facilities Authority	A1	N
	Kaiser Foundation Hospitals	Colorado Health Facilities Authority	A3	N
	Longmont United Hospital	Boulder County	Baa1	S
	Lutheran Health System	Larimer County	Aa3	S
	Lutheran Health System	Logan County	Aa3	S
	Memorial Hospital (Colorado Springs) (Underlying rating)	Colorado Springs	A2	S
	National Benevolent Association	Colorado Health Facilities Authority	Baa2	S
	National Benevolent Association (Village at Skyline Project) Series 1995 A	Colorado Health Facilities Authority	Baa2/VMIG1	S
	Parkview Episcopal Medical Center	Colorado Health Facilities Authority	Baa1	S
	PorterCare Adventist Health System (Formerly Rocky Mountain Adventist Healthcare)	Colorado Health Facilities Authority	Baa3	W/D
	Sisters of Charity of Leavenworth Health Services Corporation (Saint Joseph Hospital)	Colorado Health Facilities Authority	Aa3	S
	Sisters of Charity of Leavenworth Health Services Corporation (Underlying rating)	Colorado Health Facilities Authority	Aa3	S
CONNECTICUT				
	Griffin Hospital	Connecticut Health & Educational Facilities Authority	Baa2	N
	Hill Health Corporation	New Haven	B1	S
	Hospital for Special Care	Connecticut Health & Educational Facilities Authority	Baa2	P
	Middlesex Memorial Hospital (Underlying rating)	Connecticut Health & Educational Facilities Authority	A3	S
	St. Mary's Hospital	Connecticut Health & Educational Facilities Authority	Baa1	S
	Windham Community Memorial Hospital	Connecticut Health & Educational Facilities Authority	Baa3	S
DELAWARE				
	Beebe Medical Center Hospital	Delaware Health Facilities Authority	Baa1	S
	Catholic Health Initiatives, Series 1997 B (SBPA: Toronto Dominion Bank)	Delaware Health Facilities Authority	Aa2/VMIG1	N
DISTRICT OF COLUMBIA				
	MedStar Health (Formerly Mediantic Healthcare and Helix Health) (Underlying rating)	Maryland Health & Higher Educational Facilities Authority	A3	N
FLORIDA				
	Adventist Health System Capital Trust I Capital Security, Series A (Guaranteed by Adventist Health System Obligated Group)	Orange County Health Facilities Authority	Baa2	S
	Adventist Health System/Sunbelt (East Pasco Medical Center) (Underlying rating)	Pasco County Health Facilities Authority	Baa1	S
	Adventist Health System/Sunbelt (Florida Hospital) (Underlying rating)	Altamonte Springs Health Facilities Authority	Baa1	S

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) (continued)

State	Issuer	Issuing Authority	Rating	Outlook ¹
Florida, continued				
	Adventist Health System/Sunbelt (Medical Center Hospital) (Underlying rating)	Punta Gorda Health Facilities Authority	Baa1	S
	Adventist Health System/Sunbelt (Walker Memorial Hospital) (Underlying rating)	Highlands County Health Facilities Authority	Baa1	S
	Adventist Health System/Sunbelt	Highlands County Health Facilities Authority	Baa1	S
	Adventist Health System/Sunbelt Obligated Group (Underlying rating)	Orange County Health Facilities Authority	Baa1	S
	Baptist Hospital, Inc., & The Baptist Manor, Inc.	Escambia County Health Facilities Authority	A3	S
	Bay Medical Center (Underlying rating)	Board of Trustees for Bay Medical Center	Baa2	S
	Bon Secours Health System (Underlying rating)	Venice	A3	S
	Bon Secours Health System, Series 1992 A, B (Underlying rating)	Charlotte County	A3/VMIG1	S
	Catholic Health East (Underlying rating)	Tampa	A1	S
	Charity Obligated Group	Escambia County Health Facilities Authority	Aa2/VMIG1	S
	Charity Obligated Group - Baptist/St. Vincent's Health System, Inc.	Jacksonville Health Facilities Authority	Aa2	S
	Cleveland Clinic Florida (Guaranteed by the Cleveland Clinic Health System Obligated Group), Series 1999	Collier County Health Facilities Authority	Aa3/VMIG1	N
	Daughters of Charity National Health System (Sacred Heart Hospital of Pensacola)	Pensacola Health Facilities Authority	Aa2	S
	Daughters of Charity National Health System (St. Vincent's Medical Center)	Jacksonville Health Facilities Authority	Aa2	S
	Evangelical Lutheran Good Samaritan Society	Osceola County Health Facilities Authority	A3	S
	Flagler Hospital (Underlying rating)	St. John's County Industrial Development Authority	A2	S
	H. Lee Moffitt Cancer Center	Tampa	A3	S
	Holmes Regional Medical Center	Brevard County Health Facilities Authority	A1	S
	Jackson Memorial Hospital	Miami-Dade County	A2	S
	Lee Memorial Hospital (Underlying rating)	Lee County Hospital Board	A1	S
	Lee Memorial Hospital, Series 1985 C, D (SBPA: Sun Bank, N.A.)	Lee County Hospital Board	A1/VMIG1	S
	Lee Memorial Hospital, Series 1992 B (SBPA: Sun Bank, N.A.)	Lee County Hospital Board	A1/VMIG1	S
	Lee Memorial Hospital, Series 1995 A (SBPA: Sun Bank, N.A.)	Lee County Hospital Board	A1/VMIG1	S
	Lee Memorial Hospital, Series 1997 B (SBPA: Sun Bank, N.A.)	Lee County Hospital Board	A1/VMIG1	S
	Leesburg Regional Medical Center Hospital	City of Leesburg	A3	S
	Memorial Health System (Formerly South Broward Hospital)	South Broward Hospital District	A2	S
	Mercy Hospital (Underlying rating)	Miami Health Facilities Authority	Baa1	S
	Munroe Regional Health System	Marion County Hospital District	A2	S
	National Benevolent Association (Cypress Village)	Jackson Health Facilities Authority	Baa2	S
	North Broward Hospital District (Underlying rating)	North Broward Hospital District	A2	S
	Orlando Regional Healthcare System (Underlying rating)	Orange County Health Facilities Authority	A2	N
	Sarasota Memorial Hospital (Underlying rating)	Sarasota County Public Hospital District	A1	N

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) (continued)

State	Issuer	Issuing Authority	Rating	Outlook ¹
Florida, continued				
	Sarasota Memorial Hospital, Series 1991 and 1993A	Sarasota County Public Hospital District	A1/VMIG1	N
	Sarasota Memorial Hospital, Series 1996 A (SBPA: Sun Trust Bank)	Sarasota County Public Hospital District	A1/VMIG1	N
	Shands Teaching Hospital and Clinics (Underlying rating)	Alachua County Health Facilities Authority	A1	S
	South Lake Hospital (Guaranteed by Orlando Regional Healthcare System)	South Lake County Hospital District	A2	N
	Tallahassee Memorial Regional Medical Center (Underlying rating)	Tallahassee	A2	S
	University Community Hospital	Hillsborough County Industrial Development Authority	Baa1	S
GEORGIA				
	Adventist Health System/Sunbelt Obligated Group (Underlying rating)	Gordon County Hospital Authority	Baa1	S
	Carondelet Health System (St. Joseph Hospital) (Underlying rating)	Augusta Hospital Authority	Baa1	P
	Catholic Health East (Underlying rating)	Fulco Hospital Authority	A1	S
	Medical Center of Central Georgia (Underlying rating)	Macon-Bibb County Hospital Authority	Aa3	S
	Piedmont Hospital	Fulco Hospital Authority	A1	S
	Southeast Georgia Regional Medical Center (Underlying rating)	Glynn-Brunswick Memorial Hospital Authority	A2	S
	Southern Regional Medical Center (Underlying rating)	Clayton County Hospital Authority	A2	S
	St. Joseph's/Candler Health System (Underlying rating)	Savannah Hospital Authority	A3	P
	Wellstar Health System (Formerly Northwest Georgia Health System)	Cobb County Kennestone Hospital Authority	Aa3	S
	Wellstar Health System (Formerly Northwest Georgia Health System)	Cobb County Hospital Authority	Aa3	S
	Wellstar Health System (Formerly Northwest Georgia Health System) Series 1999 (SBPA: SunTrustBank, Atlanta)	Cobb County Kennestone Hospital Authority	Aa3/VMIG1	S
HAWAII				
	Kaiser Foundation Hospitals	Hawaii Department of Budget & Finance	A3	N
	Kapi'olani Health	Hawaii Department of Budget & Finance	A2	S
	Queen's Health System	Hawaii Department of Budget & Finance	A1	S
	Queen's Health System, Series 1998 A (SBPA: Morgan Guaranty Trust Company)	Hawaii Department of Budget & Finance	A1/VMIG1	S
IDAHO				
	Bannock Regional Medical Center	Idaho Health Facilities Authority	Baa1	S
	Carondelet Health System (St. Joseph Hospital) (Underlying rating)	Idaho Health Facilities Authority	Baa1	P
	Holy Cross Health System (St. Alphonsus Regional Medical Center)	Idaho Health Facilities Authority	Aa3	N
	Holy Cross Health System (St. Alphonsus Regional Medical Center), Series 1995 (SBPA: Morgan Guaranty Trust Company)	Idaho Health Facilities Authority	Aa3/VMIG1	N
	Magic Valley Regional Medical Center	Idaho Health Facilities Authority	Baa1	P

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) (continued)

State	Issuer	Issuing Authority	Rating	Outlook ¹
ILLINOIS				
	Adventist Health System/Sunbelt Obligated Group (Underlying rating)	Illinois Development Financial Authority	Baa1	S
	Advocate Health Care Network	Illinois Health Facilities Authority	A1	S
	Advocate Health Care Network, Series 1998 A, B	Illinois Health Facilities Authority	A1/VMIG1	S
	Alexian Brothers Health System (Underlying rating)	Illinois Health Facilities Authority	Baa1	S
	Ancilla Systems (Underlying rating)	Illinois Health Facilities Authority	Baa1	S
	Anderson Hospital	Southwestern Illinois Development Authority	Baa2	S
	BJC Health System (Formerly Barnes-Jewish/Christian Health Services)	Alton	Aa2	N
	Blessing Hospital	Illinois Health Facilities Authority	A2	S
	Blessing Hospital	Quincy	A2	S
	Catholic Health Initiatives (Formerly Catholic Health Corporation (Addolorata Villa)) (Underlying rating)	Illinois Health Facilities Authority	Aa2	N
	Decatur Memorial Hospital (Underlying rating)	Illinois Health Facilities Authority	A3	S
	Edward Hospital (Edward Obligated Group)	Illinois Health Facilities Authority	A2	S
	Elmhurst Memorial Hospital	Illinois Health Facilities Authority	A2	S
	Elmhurst Memorial Hospital, Series 1993 B (SBPA: Rabobank Nederland)	Illinois Health Facilities Authority	A2/VMIG1	S
	Evanston Hospital, Series 1985 B, 1987 A-E, 1988, 1990A, 1992, 1995, 1996	Illinois Health Facilities Authority	A2	S
	Evanston Northwestern Healthcare Corporation, Series 1998	Illinois Health Facilities Authority	Aa2/VMIG1	S
	Galesburg Cottage Hospital	Illinois Health Facilities Authority	Baa2	S
	Holy Cross Hospital	Illinois Health Facilities Authority	Baa1	S
	Illinois Masonic Medical Center	Illinois Health Facilities Authority	A3	P
	Loyola University Health System (Underlying rating)	Illinois Health Facilities Authority	A3	N
	MacNeal Memorial Hospital Association	Berywn	A2	S
	Masonic Homes, Series 1996 (SBPA: First Union National Bank)	Lancaster County Hospital Authority	A1/VMIG1	S
	Mercy Hospital and Medical Center (Chicago)	Illinois Health Facilities Authority	Baa2	S
	Methodist Medical Center of Illinois	Illinois Health Facilities Authority	Baa1	S
	National Benevolent Association (Barton West Stone Christian Home)	Illinois Development Finance Authority	Baa2	S
	Northwest Community Hospital, Series 1995 (SBPA: National Bank of Chicago)	Illinois Health Facilities Authority	A1/VMIG1	S
	Northwest Community Hospital, Series 1997 (SBPA: National Bank of Chicago)	Illinois Health Facilities Authority	A1/VMIG1	S
	Northwestern Medical Faculty Foundation (Underlying rating)	Illinois Health Facilities Authority	Baa2	S
	Northwestern Memorial Hospital	Illinois Health Facilities Authority	Aa2	S
	Northwestern Memorial Hospital, Series 1995 (SBPA: Northern Trust Company)	Illinois Health Facilities Authority	Aa2/VMIG1	S
	OSF Healthcare System (Formerly Sisters of the Third Order), Series 1989 C	Illinois Health Facilities Authority	A2/VMIG1	N
	OSF Healthcare System (Formerly Sisters of the Third Order), Series 1995 (SBPA: Bank of America; Rabobank Nederland)	Illinois Health Facilities Authority	A2/VMIG1	N

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) *(continued)*

State	Issuer	Issuing Authority	Rating	Outlook ¹
Illinois, continued				
	OSF Healthcare System (Formerly Sisters of the Third Order)	Illinois Health Facilities Authority	A2	N
	Palos Community Hospital	Illinois Health Facilities Authority	Aa3	S
	Proctor Community Hospital	Illinois Health Facilities Authority	Baa3	N
	Provena Health	Provena Health Commercial Paper	P-1	—
	Provena Health (Underlying rating)	Illinois Development Finance Authority	A2	U
	Resurrection Health Care System	Illinois Health Facilities Authority	A1	S
	Resurrection Health Care System, Series 1993 (SBPA: First Chicago)	Illinois Health Facilities Authority	A1/VMIG1	S
	Riverside Health System	Illinois Health Facilities Authority	A3	S
	Sherman Hospital (Underlying rating)	Illinois Health Facilities Authority	A2	S
	Sisters of St. Francis Health Services, Inc.	Illinois Development Finance Authority	Aa3	P
	St. Elizabeth Medical Center	Granite	Ba3	N
	St. Margaret's Hospital	Illinois Health Facilities Authority	Baa3	N
	Trinity Medical Center Hospital	Illinois Health Facilities Authority	Baa2	S
	Victory Memorial Hospital	Illinois Health Facilities Authority	A3	S
	West Suburban Hospital Medical Center	Illinois Health Facilities Authority	A3	N
INDIANA				
	Ancilla Systems	Fort Wayne Hospital Authority	Baa1	S
	Ancilla Systems (Underlying rating)	Indiana Health Facilities Financing Authority	Baa1	S
	Bedford Medical Center	Lawrence County Hospital Authority	Caa3	S
	Catholic Healthcare Partners (Formerly Mercy Health System (Cincinnati))	New Albany	Aa3	N
	Charity Obligated Group, Series 1997 D, E, F	Indiana Health Facilities Financing Authority	Aa2	S
	Charity Obligated Group, Series 1999 D	Indiana Health Facilities Financing Authority	Aa2	S
	Charity Obligated Group/St. Vincent's Health System, Series 1998	Indiana Health Facilities Financing Authority	Aa2/VMIG1	S
	Clarian Health Partners	Indiana Health Facilities Financing Authority	Aa3	S
	Clarian Health Partners, Series 1996 B, C (SBPA: NBD Bank)	Indiana Health Facilities Financing Authority	Aa3/VMIG1	S
	Daughters of Charity National Health System (St. Mary Medical Center), Series 1983	Evansville Hospital Authority	Aa2/VMIG1	S
	Daughters of Charity National Health System (St. Mary's Medical Center of Evansville & Warrick Hospital)	Indiana Health Facilities Financing Authority	Aa2	S
	Daughters of Charity National Health System (St. Vincent Hospital)	Indiana Health Facilities Financing Authority	Aa2	S
	Daughters of Charity National Health System (St. Vincent's Hospital & Medical Center)	Marion County Hospital Authority	Aa2	S
	Daughters of Charity National Health System (St. Vincent's Medical Center)	Hamilton County Hospital Authority	Aa2	S
	Daughters of Charity National Health System (St. Vincent's Medical Center), Series 1983	Hamilton County Hospital Authority	Aa2/VMIG1	S
	Elkhart General Hospital	Elkhart County Hospital Authority	A1	S
	Greater Lafayette Health Services (Formerly Lafayette Home Hospital)	Indiana Health Facilities Financing Authority	A1	S
	Holy Cross Health System (Holy Cross Parkview Hospital)	Marshall County Hospital Authority	Aa3	N

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) (continued)

State	Issuer	Issuing Authority	Rating	Outlook ¹
Indiana, continued				
	Holy Cross Health System (St. Joseph Hospital Medical Center)	St. Joseph County Hospital Authority	Aa3	N
	Holy Cross Health System (Underlying rating)	Indiana Health Facilities Financing Authority	Aa3	N
	La Porte Hospital	La Porte County Hospital Authority	Baa1	P
	Memorial Hospital (Jasper)	Indiana Health Facilities Financing Authority	Baa2	S
	Methodist Hospital (Merrillville)	Indiana Health Facilities Financing Authority	A2	S
	National Benevolent Association (Robin Run Village)	Indianapolis	Baa2	S
	Parkview Health System	Fort Wayne Hospital Authority	A1	S
	Riverview Hospital	Indiana Health Facilities Financing Authority	Baa1	P
	Sisters of St. Francis Health Services, Inc.	Marion County Hospital Authority	Aa3	P
	Sisters of St. Francis Health Services, Inc.	Indiana Health Facilities Financing Authority	Aa3	P
IOWA				
	Catholic Health Initiatives	Polk County	Aa2	N
	Catholic Health Initiatives (Formerly Catholic Health Corporation (Mercy Health Center of Central Iowa)) (Underlying rating)	Iowa Finance Authority	Aa2	N
	Catholic Health Initiatives (Formerly Mercy Hospital Medical Center)	Polk County	Aa3	N
	Catholic Health Initiatives, Series 1997 B (SBPA: Toronto Dominion Bank)	Polk County	Aa2/VMIG1	N
	Genesis Medical Center (Underlying rating)	Iowa Finance Authority	A1	P
	Keokuk Area Hospital	Keokuk	Baa3	S
	Mercy Health Services (Formerly Sisters of Mercy Health Corporation St. Joseph Mercy Hospital) (Underlying rating)	Mason City	Aa3	S
	Mercy Health Services (Formerly Sisters of Mercy Health Corporation)	Dubuque County	Aa3	S
	Mercy Health Services (Formerly Sisters of Mercy Health Corporation)	Sioux City	Aa3	S
	Mercy Health Services (Formerly Sisters of Mercy Health Corporation) (Underlying rating)	Iowa Finance Authority	Aa3	S
	Mercy Hospital	Hills City	A2	S
	National Benevolent Association (Ramsey Home Project)	Iowa Finance Authority	Baa2	S
	Northwest Iowa Health Center (Guaranteed by Sioux Valley Hospital & Health System)	Sheldon	Aa3	S
	University of Iowa Hospital and Clinics	Iowa State Board of Regents	Aa2	S
KANSAS				
	Catholic Health Initiatives	Kansas Development Finance Authority	Aa2	N
	Catholic Health Initiatives (Formerly Catholic Health Corporation (Central Kansas Medical Center)) (Underlying rating)	Larned	Aa2	N
	Catholic Health Initiatives (Formerly Catholic Health Corporation) (Underlying rating)	Garden City	Aa2	N
	Evangelical Lutheran Good Samaritan Society	Winfield	A3	S
	Hays Medical Center (Underlying rating)	Kansas Development Finance Authority	A2	S
	Lawrence Memorial Hospital	Lawrence	A3	S
	Med-Map L.L.C. (Guaranteed by Sisters of Charity of Leavenworth Health Services Corporation)	Med-Map L.L.C.	Aa3	S

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) *(continued)*

State	Issuer	Issuing Authority	Rating	Outlook ¹
Kansas, continued				
	Rural Health Resources of Jackson Co., Inc. (Guaranteed by Sisters of Charity of Leavenworth Health Services Corporation)	Kansas City	Aa3	S
	Sisters of Charity of Leavenworth Health Services Corporation	Kansas City	Aa3	S
	Sisters of Charity of Leavenworth Health Services Corporation	Kansas Development Finance Authority	Aa3	S
	Sisters of Charity of Leavenworth Health Services Corporation (St. Francis)	Shawnee	Aa3	S
	Sisters of Charity of Leavenworth Health Services Corporation (Underlying rating)	Kansas Development Finance Authority	Aa3	S
	Stormont-Vail Healthcare (Underlying rating)	Kansas Development Finance Authority	A2	S
KENTUCKY				
	Catholic Health Initiatives (Formerly Catholic Health Corporation)	Kentucky Economic Development Finance Authority	Aa2	N
	Catholic Healthcare Partners (Lourdes Hospital)	McCracken County	Aa3	N
	Catholic Healthcare Partners (Formerly Mercy Health System (Cincinnati))	Davies County	Aa3	N
	Catholic Healthcare Partners, Series 1998A	Kentucky Economic Development Finance Authority	Aa3/VMIG1	N
	Franciscan Health Partnership (Formerly Franciscan Sisters of the Poor Health System)	Russell	Baa2	S
	Jewish Hospital Health Care Services (Formerly JH Systems)	Jefferson County	A1	S
	King's Daughters' Medical Center	Kentucky Economic Development Finance Authority	A1	S
	Murray-Calloway County Hospital	Murray-Calloway County Hospital Corporation	Baa1	S
	T.J. Samson Community Hospital	Glasgow	A2	S
	University of Kentucky Hospital	University of Kentucky	Aa2	S
LOUISIANA				
	Christus Health (Underlying rating)	Louisiana Public Facilities Authority	Aa3	N
	Franciscan Missionaries of Our Lady Health System, Inc.	Louisiana Public Facilities Authority	A1	P
	Franciscan Missionaries of Our Lady Health System, Inc., Series 1998 B (Taxable/Tax-exempt Convertible SAVRS)	Franciscan Missionaries of Our Lady Health System, Inc.	A1	P
	Franciscan Missionaries of Our Lady Health System, Inc., Series 1998 D (Taxable)	Franciscan Missionaries of Our Lady Health System, Inc.	A1	P
	Lincoln Health System	Louisiana Public Facilities Authority	Baa2	S
	Pendleton Memorial Methodist Hospital	Louisiana Public Facilities Authority	Baa3	S
	Sisters of Mercy Health System (Mercy Hospital (St. Louis))	Louisiana Public Facilities Authority	Aa1	S
	Thibodeaux Regional Medical Center (Formerly Thibodeaux Hospital)	LaFourche Parish hospital Service District No. 3	A3	S
	Touro Infirmary	Louisiana Public Facilities Authority	Baa1	S
	West Jefferson Medical Center (Underlying rating)	Jefferson Parish Hospital Service District No. 1	A2	S
	Woman's Hospital Foundation	Louisiana Public Facilities Authority	A3	P

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) (continued)

State	Issuer	Issuing Authority	Rating	Outlook ¹
MARYLAND				
	Adventist Healthcare Mid-Atlantic (Formerly Shady Grove Adventist Hospital)	Gaithersburg	Baa1	S
	Adventist Healthcare Mid-Atlantic (Formerly Washington Adventist Hospital)	Takoma Park	Baa1	S
	Bon Secours Health System (SAVRS) (Underlying rating)	Bon Secours Health System	A3	S
	Bon Secours Health System (Underlying rating)	Maryland Industrial Development Financing Authority	A3	S
	Calvert Memorial Hospital	Maryland Health & Higher Educational Facilities Authority	A2	S
	Catholic Health Initiatives, Series 1997 B (SBPA: Toronto Dominion Bank)	Maryland Industrial Development Financing Authority	Aa2/VMIG1	N
	Charity Obligated Group, Series 1997 D, E, F	Maryland Health & Higher Educational Facilities Authority	Aa2/VMIG1	S
	Dimensions Health Corporation	Prince George's County	Baa1	N
	Doctors' Community Hospital	Maryland Health & Higher Educational Facilities Authority	Baa1	S
	Doctors' Community Hospital (Taxable)	Doctors' Community Hospital	Baa1	S
	Francis Scott Key Medical Center (Guaranteed by Johns Hopkins Hospital)	Maryland Health & Higher Educational Facilities Authority	Aa3	N
	GBMC Medical Arts Limited Partnership (Guaranteed by Greater Baltimore Medical Center) (Taxable)	GBMC Medical Arts Limited Partnership	A1	S
	Greater Baltimore Medical Center	Maryland Health & Higher Educational Facilities Authority	A1	S
	Greater Baltimore Medical Center, Series 1995 (SBPA: First National Bank of Maryland)	Maryland Health & Higher Educational Facilities Authority	A1/VMIG1	S
	Greater Southeast Healthcare System	Prince George's County	Caa3	S
	Holy Cross Health System (Holy Cross Hospital of Silver Spring)	Maryland Health & Higher Educational Facilities Authority	Aa3	N
	Holy Cross Health System (Holy Cross Hospital of Silver Spring)	Maryland Industrial Development Financing Authority	Aa3	N
	Howard County General Hospital (Underlying rating)	Maryland Health & Higher Educational Facilities Authority	Baa2	S
	Johns Hopkins Hospital	Maryland Health & Higher Educational Facilities Authority	Aa3	N
	Kaiser Foundation Hospitals	Maryland Health & Higher Educational Facilities Authority	A3	N
	Kennedy Krieger Institute	Maryland Health & Higher Educational Facilities	Baa1	N
	Mercy Medical Center (Underlying rating)	Maryland Health & Higher Educational Facilities Authority	A3	S
	Montgomery General Hospital (Underlying rating)	Maryland Health & Higher Educational Facilities Authority	A3	S
	Peninsula Regional Medical Center	Maryland Health & Higher Educational Facilities Authority	A2	S
	Suburban Hospital	Maryland Health & Higher Educational Facilities Authority	A1	S
	Union Hospital of Cecil County	Maryland Health & Higher Educational Facilities Authority	A3	S
	Upper Chesapeake Health System (Formerly Harford Memorial Hospital & Fallston General Hospital)	Maryland Health & Higher Educational Facilities Authority	Baa1	N

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) (continued)

State	Issuer	Issuing Authority	Rating	Outlook ¹
MASSACHUSETTS				
	Addison Gilbert Hospital (now dba Beverly Hospital)	Massachusetts Health & Educational Facilities Authority	A3	N
	Anna Jaques Hospital	Massachusetts Health & Educational Facilities Authority	Baa1	S
	Bay Cove Human Services	Massachusetts Industrial Finance Agency	Ba2	S
	Baystate Medical Center	Massachusetts Health & Educational Facilities Authority	A1	S
	Boston Regional Medical Center (Formerly New England Memorial Hospital)	Massachusetts Health & Educational Facilities Authority	Ca	S
	Brigham & Women's Hospital	Massachusetts Health & Educational Facilities Authority	A1	S
	Brockton Hospital	Massachusetts Health & Educational Facilities Authority	A2	S
	CareGroup, Inc. (Underlying rating)	Massachusetts Health & Educational Facilities Authority	Baa1	S
	Caritas Christi	Massachusetts Health & Educational Facilities Authority	Baa2	S
	Catholic Health East (Underlying rating)	Massachusetts Health & Educational Facilities Authority	A1	S
	Children's Hospital (Boston)	Massachusetts Health & Educational Facilities Authority	Aa3	S
	Concord Assabet Family & Adolescent Services	Massachusetts Industrial Finance Agency	Ba2	P
	Dana-Farber Cancer Institute	Massachusetts Health & Educational Facilities Authority	A1	S
	East Boston Neighborhood Health Center	Massachusetts Health & Educational Facilities Authority	Caa1	S
	Good Samaritan Medical Center (Formerly Cardinal Cushing and Goddard Memorial Hospital)	Massachusetts Health & Educational Facilities Authority	Baa3	S
	Health Alliance (Formerly Central New England Health Alliance)	Massachusetts Health & Educational Facilities Authority	Baa3	S
	Holyoke Hospital	Massachusetts Health & Educational Facilities Authority	Baa3	N
	Home for Little Wanderers (Underlying rating)	Massachusetts Health & Educational Facilities Authority	A2	S
	Lawrence General Hospital	Massachusetts Health & Educational Facilities Authority	Baa2	S
	Lowell General Hospital (Underlying rating)	Massachusetts Health & Educational Facilities Authority	A3	S
	Massachusetts Biomedical Research Corporation (Guaranteed by Massachusetts General Hospital)	Massachusetts Health & Educational Facilities Authority	A1	S
	Massachusetts Eye and Ear Infirmary	Massachusetts Health & Educational Facilities Authority	Baa3	S
	Milford-Whitinsville Regional Hospital	Massachusetts Health & Educational Facilities Authority	Baa2	S
	New England Center for Children	Massachusetts Health & Educational Facilities Authority	Ba2	S
	Newton-Wellesley Hospital (Underlying rating)	Massachusetts Health & Educational Facilities Authority	A3	U
	Partners Healthcare System	Massachusetts Health & Educational Facilities Authority	A1	S
	Saints Memorial Medical Center	Massachusetts Health & Educational Facilities Authority	Ba2	S

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).