

The Fall Of The House Of AHERF: The Allegheny Bankruptcy

A chronicle of the hows and whys of the nation's largest nonprofit health care failure.

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PROLOGUE: The drama of the collapse of the Allegheny Health, Education, and Research Foundation (AHERF) has captured the attention of industry observers from Wall Street to the ivory towers of academe. All are eager to know who ultimately held responsibility—legal, financial, and managerial—for AHERF's decline. Part of the intrigue of the story certainly stems from the fact that so many actors, both inside and outside the company, appear to have played a part. Indeed, the diffusion of responsibility itself may have contributed to the snowballing catastrophe, for as Polish poet Stanslaw Jerzy Lec observed, "No snowflake in an avalanche ever feels responsible." There are many stories still to be told about why no one was able to stop the "avalanche," and many of them will be told only as they are revealed in the courts. Meanwhile, the health policy community waits to see whether AHERF's fall has implications for other struggling academic health centers.

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ABSTRACT: The \$1.3 billion bankruptcy of the Allegheny Health, Education, and Research Foundation (AHERF) in July 1998 was the nation's largest nonprofit health care failure. Many actors and factors were responsible for AHERF's demise. The system embarked on an ambitious strategy of horizontal and vertical integration just as reimbursement from major payers dramatically contracted, leaving AHERF overly exposed. Hospital and physician acquisitions increased the system's debt and competed for capital, which sapped the stronger institutions and led to massive internal cash transfers. Management failed to exercise due diligence in many of these acquisitions. Several external oversight mechanisms, ranging from AHERF's board to its accountants and auditors to the bond market, also failed to protect these community assets.

ON 21 JULY 1998 the nonprofit Allegheny Health, Education, and Research Foundation (AHERF) and several of its affiliate operations in Philadelphia filed for bankruptcy.¹ AHERF's filing papers revealed a \$1.3 billion debt and 65,000 creditors.² This qualified AHERF as the nation's largest nonprofit health care bankruptcy and second-largest overall.³ In addition to the enormous debt, the bankruptcy signaled the end of the largest statewide integrated delivery system in Pennsylvania; the largest medical school in the country; and the strategy of aggressive acquisitions of physicians, researchers, and hospitals in the Philadelphia area.

The AHERF story illustrates many of the problems that have plagued horizontally and vertically integrated provider systems. However, the AHERF bankruptcy is remarkable in the low degree of fiscal responsibility and accountability throughout its operations and the other sectors of the health care system with which it dealt. At the center of the saga is AHERF's top management, especially its chief executive officer (CEO) and chief financial officer (CFO). Other corporate actors could or should have recognized the financial problems, but for a variety of reasons they did not speak out or act.

In this paper we trace the history of AHERF, then outline the actions of top management that contributed to the system's demise, the tacit support for these actions given by clinicians/researchers, and the difficult market context in which these actions were taken.⁴ We conclude with a discussion of the oversight role played by the AHERF board, accountants and auditors, and the bond market.

A Brief History Of AHERF'S Growth And Collapse

AHERF was established in 1983 as a nonprofit corporation and the sole member of Allegheny General Hospital (AGH), a prosperous 670-bed hospital in Pittsburgh that had a modest teaching affiliation with the much larger University of Pittsburgh Medical Center (UPMC).⁵ The latter's growing reputation and prominence as a national referral center grated on both the board chairman of AGH,

William Penn Snyder, and AGH physicians. The situation may have been aggravated by AGH's dependence on tertiary care for revenues and thus on UPMC to maintain its research and graduate medical programs, as well as on a failed effort by the AGH board chairman to develop a partnership with his UPMC counterpart. For its part, UPMC felt threatened by AGH's market leadership in the twelve-county area, its large endowment, and its loyal medical staff. Seeking to protect its core competitive advantage (the medical school franchise), and perhaps to supply its own growing organization, UPMC pulled some residencies out of AGH. Snyder and the AGH board began to seek a new hospital executive and strategic thrust that would garner AGH a medical school, secure its residency programs, and transform it into a premier medical education and research institution.⁶ In 1986 they hired AGH's former vice-president and chief operating officer (COO), Sherif Abdelhak, as CEO.

Under Abdelhak, AHERF's overall strategy evolved as (1) developing Pennsylvania's first statewide integrated delivery system (IDS) grounded in academic medicine, (2) building regional market share to leverage managed care payers, (3) garnering capitated contracts, (4) achieving synergies and efficiencies among the assets acquired, and (5) using community/suburban hospitals to refer private-pay patients to teaching hospitals and fill their beds. AHERF rapidly expanded into both Philadelphia and Pittsburgh through acquisitions encompassing several hospitals, medical schools, and primary care physicians (PCPs). In 1987 Abdelhak acquired the Medical College of Pennsylvania (MCP) and its two affiliated hospitals in Philadelphia (MCP Hospital and Eastern Psychiatric Institute). In 1991 he acquired United Hospitals Inc., a system of four hospitals in Philadelphia. That same year he acquired Suburban Medical Associates outside the city as AHERF's first set of PCPs. In 1993 he acquired Hahnemann Medical College and its affiliated hospital in Philadelphia and merged the two medical schools into MCP-Hahnemann. In 1996 Abdelhak began to aggressively recruit clinicians and researchers from hospitals in Philadelphia and Pittsburgh to augment AHERF's research funding and stature. He also assumed management of the Graduate Health System (GHS) and its six hospitals that year and completed their acquisition in 1997. That year he also established a new division, the Allegheny University Medical Centers, to operate AHERF's new community hospital affiliates in the Pittsburgh area (Forbes, Allegheny Valley, and Canonsburg) that, in combination with AGH, would form the basis of AHERF's western Pennsylvania operations.

By the end of 1997 AHERF had transformed itself from a sole community hospital into Pennsylvania's largest statewide inte-

grated delivery system. In a January 1998 speech Abdelhak depicted his system's phenomenal growth (Exhibit 1), sprawling organization, productivity improvements, growing market share in both parts of the state, and improved physician network contribution.⁷ What Abdelhak did not disclose were the financing mechanisms used to fuel the growth (internal subsidies, hidden internal cash transfers, raids on hospital endowments, and the enormous debt piled up from all of the acquisitions) and the resulting fiscal deterioration of the system. This deterioration manifested itself in hospital layoffs and one hospital closure in Philadelphia in late 1997; spending of \$330 million more than the system brought in during July 1997–May 1998, mostly in the eastern operations; a series of downgrades in the bonds supporting AHERF hospitals; a failure to pay its hospital liability premiums; and attempts to uncouple the system's eastern operations from the western hospitals and sell them during 1998.⁸

The growing financial problems became known through due-diligence efforts of the first potential buyer, Vanguard, which originally offered \$450 million for six nonteaching hospitals in the east. Vanguard's discoveries led to a long delay in the sale and caused it to lower its offers to \$280 million for the six hospitals and \$460 million for nine others (including the two teaching institutions). The revelation of the financial problems and Abdelhak's use of hidden cash transfers to cope with them led to his ouster by AHERF's board in June 1998. By July AHERF was running out of cash to maintain operations and payroll. It found itself with no firm purchase offer from Vanguard, no ability to cut costs (for example, by renegotiating capitated contracts with insurers and employment contracts with

10

**ALLEGHENY
BANKRUPTCY**

**EXHIBIT 1
Organizational Growth Of AHERF, 1986–1997**

Measure	1986	1997
Assets	\$274 million	\$2.20 billion
Revenues	\$195 million	\$2.05 billion
Medical staff/faculty	350	10,115
Employees	4,000	31,000
Admissions	25,444	157,956
Hospitals	1	14
Beds	740	4,601
Primary care physicians/sites	0	552/304
Students and residents	170	4,522
At-risk lives	0	737,000
Funded primary investigators	55	383
Externally funded research	\$2.1 million	\$80.3 million

SOURCE: S. Abdelhak, "Allegheny Health, Education, and Research Foundation: Successful Integration Strategies for Anticipating the Managed Care 'Wave' Before It Hits the Beach" (Speech, 12 January 1998).

NOTE: AHERF is Allegheny Health, Education, and Research Foundation.

physicians), and no interim financing. The system was forced to declare bankruptcy in July 1998. It then saw a 14 percent drop in clinical activity at its Philadelphia hospitals, signaling more losses and bad news for potential buyers. AHERF finally sold its entire Philadelphia operations to Tenet in late October 1998 for \$345 million. Its western operations aligned with the Western Pennsylvania Health System in August 1999 as a preliminary step toward merger.

Managerial Decisions And Accountability

■ **Questionable strategy.** In hindsight, all five elements of AHERF's strategy were questionable. First, Pennsylvania has few statewide payers (other than Medicaid and U.S. Healthcare) or employers (other than banks) that might wish to contract with a statewide IDS. Second, few IDSs have amassed enough market share to leverage managed care payers, especially in markets such as Philadelphia, which has high payer concentration and excess provider capacity. Third, hospitals' zeal to assume capitated risk and health maintenance organizations' (HMOs') reluctance to pass it on have resulted in low capitated revenues and capitation rates as a percentage of premiums, and thus huge provider losses.⁹ Fourth, synergies and economies of scale sought through mergers are difficult and depend heavily on postmerger implementation, little of which occurred at AHERF because its expansion was so rapid.¹⁰ Fifth, academic medical centers (AMCs) in Philadelphia have had difficulty persuading wealthy suburbanites to use older teaching hospitals in the city, as well as persuading suburban hospitals not to develop revenue-generating services that attract their local patients.

As part of the IDS strategy, AHERF and other Philadelphia systems purchased PCP practices. A PCP network was deemed essential for obtaining managed care risk contracts. The PCP acquisition strategy also was consistent with the prevailing philosophy that vertical integration is necessary to obtain needed inputs such as inpatient referrals (or to at least not be locked out of the referral market). Both beliefs were incorrect. Capitated hospital risk contracts have been slow in coming from managed care payers. Because of the losses incurred, Philadelphia systems have placed a moratorium on full-risk contracting.¹¹ Moreover, these systems have found that they can command only 25–30 percent of the referrals of their community-based PCPs, not 80 percent as some executives anticipated. PCP acquisitions turned into losses rather than “loss leaders.”

■ **Questionable acquisitions.** In the push for horizontal integration, AHERF acquired several financially “distressed” institutions.¹² Each major acquisition had a financial millstone attached to it. Each also was looking for a capital partner.¹³ Besides bringing a

medical school with a good research focus and reputation, MCP also brought fiscal distress (\$3 million net operating loss in 1988), due in part to the small size of its affiliated AMC (379 total beds, 110 psychiatric); a high volume of walk-in patients; a heavy reliance on the local Veterans Affairs (VA) hospital, which was downsizing; an unfavorable location in Northwest Philadelphia (less access to physicians); and a low endowment.¹⁴ At the time of the takeover, Abdelhak promised that 15 percent of hospital system profits (starting with AGH) in the prior year would help to support MCP, with a floor of \$4–\$5 million over five years. This marked the beginning of the western operations' legal obligation to subsidize the eastern operations, and the joke that MCP stood for "money comes from Pittsburgh." Along with the cash, AHERF infused its own management and fund-raising assistance to endow some faculty chairs. MCP's returns improved modestly, but they still remained low.

The acquisition of United Hospitals in 1991 also was viewed as synergistic. United provided more beds over which to spread MCP's fixed costs, as well as greater system size in dealing with payers. One United hospital, St. Christopher's Hospital for Children, was especially coveted to shore up MCP's weakness in pediatric specialties. However, the system was heavily in debt (\$137 million in bonds with marginal investment ratings) and losing money (roughly 3 percent operating losses during 1989–1990), largely due to a building program at St. Christopher's. AHERF executives feared a bidding war with other local systems interested in St. Christopher's and decided to preempt the competition by purchasing the entire United system. AHERF believed that referrals from United's suburban hospitals could be redirected to AHERF facilities. As with MCP, AHERF installed its own management and achieved a small fiscal turnaround (positive margins of less than 2 percent from 1992 to 1994), which was partly due to the new children's hospital facility. The other United hospitals continued to lose money.

The 1993 purchase of Hahnemann was viewed as potentially synergistic with MCP, since each had what the other lacked. MCP enjoyed a good academic reputation, while Hahnemann enjoyed a wide range of clinical programs, a large volume of open-heart surgeries, and a large endowment. Such synergies were difficult to achieve, however, in a market dominated by larger AMCs such as the University of Pennsylvania Health System (UPHS) and the Jefferson Health System with greater market share, more desirable hospitals, and larger research portfolios. Former AHERF executives admit it was not clear what the system would do with two medical schools. MCP was acquired first, but Hahnemann was considered to be more like AGH. The acquisition was rationalized internally by economies

of scale via program consolidation. Such consolidation never extended beyond some basic science departments and the clinical laboratories of AHERF's Philadelphia hospitals; clinical faculty from the two schools were never integrated. Most importantly, Hahnemann brought with it \$123 million in debt, while its hospital had small operating margins (roughly 1–3 percent during 1991–1995).

AHERF's 1996–1997 takeover of GHS brought in six more hospitals. GHS had followed a strategy of acquiring small osteopathic hospitals in the wider community and unsuccessfully attempted to feed the downtown flagship hospital (Graduate) while making the referring hospitals more efficient. Several GHS hospitals had negative margins and a cumulative deficit of \$40 million by 1996, which AHERF had to assume. Moreover, the acquisition ultimately included GHS's bond and related debt, totaling \$174 million. Graduate Hospital referred to itself as the premier hospital in the city for providing comprehensive treatment to persons with human immunodeficiency virus (HIV). It achieved a roughly 3.5 percent return during the 1990s—not enough to subsidize the losses at the other facilities. Moreover, much of its balance-sheet strength lay in accounts receivable that were unlikely to be collected.

The final hospital acquisitions occurred in the Pittsburgh market during 1997, when AHERF assumed control of Forbes, Allegheny Valley, and Canonsburg. Forbes was a relatively healthy facility, sporting a 4–5 percent return to net operating revenue in the mid-1990s. The acquisition of the three hospitals added another \$121 million in bond debt to AHERF, however.

In the push for vertical integration, AHERF acquired lots of physicians at high prices. The acquisition of 310 PCPs in Philadelphia during 1991–1997, and an additional 136 PCPs and seventy-five other specialists in Pittsburgh, reportedly cost AHERF \$100 million. The high cost was in part the result of a bidding war with other systems in Philadelphia (UPHS, GHS, and Temple) that believed in the IDS mythology. The bidding war, along with the perceived need to expand the physician network (Allegheny University Medical Practices, or AUMP) in tandem with the hospital network, led to a reported lack of due diligence and prudence in AHERF's practice purchases. AUMP's COO was given a mandate by Abdelhak to put the physician network together quickly. He allegedly received a \$15,000 commission for each contract executed—a strong incentive to cut deals rapidly and to overpay for practices.¹⁵ AHERF paid less money for the assets than it did for those of UPHS but offered much higher salaries and more years guaranteed. Two purchase agreements filed in Common Pleas Court showed that PCPs received \$70,000–\$150,000 for their assets, an average annual salary of

\$220,000–\$250,000 for five years, and 60 percent of the revenues above \$470,000–\$570,000. This compensation exceeded the salary of UPMC’s CEO.

Every hired physician was contracted through the Allegheny University of the Health Sciences (AUHS), making it impossible to unilaterally alter their contracts. Prior to bankruptcy, AHERF officials estimated it would cost \$135 million to dismantle the PCP network, given the executory contracts. Moreover, these contracts included no means to monitor practice productivity, which might decline up to 20–25 percent postacquisition. AHERF may not have been able to capture a major portion of its PCPs’ referrals because the practices were acquired without proximity to AHERF hospitals in mind. The rich compensation and benefits also attracted an older PCP network (average age reported to be nearly fifty-six) eager to sell and less eager to continue working hard.

AHERF also tried to centrally manage all physician billing operations out of Pittsburgh. Physicians’ offices collected no cash but rather billed patients by mail for their copayments. Moreover, the hospital computer system was much less sensitive to small physician claims and typically could not determine how much a physician was owed. Only an estimated 20 percent of physicians’ billings were collected. Also, physicians lost control and oversight of billing and revenue collection, which further reduced the incentive to produce.

These decisions spelled financial disaster for AUMP: It lost \$41 million in 1996 and \$61 million in 1997. These losses required substantial cash infusions from AHERF and its Pittsburgh hospitals. Such losses proved difficult not only to control but also to forecast. Projected losses at AUMP for the first eleven months of FY 1998 were estimated at \$32 million; the final figures were \$52 million.

■ **Debt accumulation and debt financing.** During the mid-1980s AGH was considered the “Fort Knox of hospitals.” It had only \$67 million in debt and enjoyed a 15 percent margin. During the late 1980s it earned \$30–\$38 million in excess revenues over expenses annually and was one of only forty hospitals nationwide with a bond rating of Aa.¹⁶ Its financial strength served as the initial source of financing for the MCP subsidy. In the year following the MCP acquisition (1988) AGH issued \$60 million in bonds. MCP itself issued \$79 million in bonds between 1989 and 1991. After the 1991 purchase of United, AGH issued another \$60 million in bonds. The United purchase was not announced until after the bonds were sold. The acquisition of Hahnemann and its debt in 1993 was followed by another issue of \$100 million in bonds by AGH in 1995. The next year an AHERF subsidiary was formed for the MCP, Hahnemann, and United hospitals, known as the Delaware Valley Obligated

Group (DVOG). DVOG issued \$360 million in bonds and \$52 million in notes as new and replacement debt. AHERF's acquisitions and bond financings led to a staggering growth in debt, from \$67 million in 1986 to nearly \$1.2 billion in 1998.

Why did AHERF issue so many bonds and assume so much debt? There are four acknowledged reasons and several speculated motives. First, the bond debt at AGH often constituted reimbursement for capital expenditures incurred over the prior two to three years. Second, the bond debt refinanced older debt at better interest rates. Third, AHERF assumed that its takeover of distressed systems such as GHS would lead to the latter's bonds' being given a higher credit rating, thus lowering its interest expenses and improving access to capital.¹⁷ Fourth, AHERF believed that it could assume the debt of the fiscally distressed hospitals it acquired, retire that debt, and reissue it under one of its five obligated groups of hospitals.¹⁸ In this manner, AHERF refinanced debt of hospitals with lower debt ratings by pooling them with hospitals that had better balance sheets and/or higher debt ratings, to obtain better interest rates for the former.

There is speculation that AHERF issued the new debt for two other reasons. First, AGH reportedly used the proceeds from its own bond sales to free up cash flow and reserves for other purposes, such as propping up the weakened operations in the east. The system was reportedly starved for cash as early as mid-1997. AHERF appears to have deflected attention from all of its accumulated debt by organizing it into different obligated groups. Debt-rating agencies such as Moody's Investors Service had a difficult time grading each group, since it was hard to know how the fiscal and operational health of one group affected the others. Moreover, AHERF may have contravened its bond covenants by making cash transfers between its obligated groups. For example, the Centennial group made a \$111 million payment to DVOG, which was subsequently canceled without any consideration paid to Centennial. Second, AHERF may have issued debt because it was in a hurry to develop a statewide system. AHERF faced competition from other systems for at least some of the hospitals it wished to acquire, had no access to the equity market, had already begun to tap AGH's surplus, and had purchased hospitals with little or no positive cash flow. There also were plans to acquire hospitals in southern New Jersey and even in France!¹⁹

AHERF engaged in other forms of debt financing. In 1997 AHERF and affiliates began to lease rather than buy equipment, due to cash-flow problems. AHERF ultimately recorded \$430-\$500 million in noncancelable operating leases on its books for equipment, offices, and garages. Leases permitted AHERF to obtain capital at better rates than bank loans and constituted off-balance sheet financing

that benefited cash-flow figures. However, they entailed future expenses with no ability to depreciate the value of the property.

In sum, AHERF's expansion during the 1980s and 1990s was accompanied by the assumption of debt among its acquisitions and by large amounts of new and refinanced debt floated in the tax-exempt hospital bond market. AHERF hospitals managed to service their debt and even generate some cash in excess of their debt. However, the tiny margins achieved (0–3 percent) during the early and mid-1990s paled in comparison with the margins earned at competing hospitals (6–12 percent), placing AHERF at a competitive disadvantage in Philadelphia in terms of capital improvements. By the late 1990s debt-service coverage by hospitals nationwide began to worsen as a result of slower growth in cash flow.²⁰ Coupled with AHERF's higher debt, its hospitals were particularly disadvantaged. The size of the debt, the marginal profitability of many of the hospitals acquired, and the competing needs for what little cash was generated proved to be too great a strain for the system.

■ **Acquisition of clinicians and researchers.** At the same time that AHERF was purchasing PCP practices, it also was recruiting clinical and research faculty. AHERF aimed to enhance its AMC stature and compete with UPMC. Expanded programs in basic and clinical sciences would attract National Institutes of Health (NIH) funding and high-price research talent and would make cutting-edge treatments available at AHERF facilities. These would, in turn, attract paying patients, clinical trials, and new revenue sources. AHERF's enhanced clinical status, finally, would attract more medical students and low-cost physician trainees, provide a reliable supply of residents, and preserve AHERF's residency programs.

Unlike the PCP practices, the faculty practices often generated a lot of revenue. On the clinical side, AHERF recruited a cardiologist in 1996 who helped MCP to nearly quadruple its number of open-heart surgeries in two years. The cardiologist earned \$850,000 before bonuses and close to \$1 million in total compensation. AHERF also recruited three orthopedists in 1997, who collectively performed 4,000 procedures annually and generated \$40 million in business. They received guaranteed salaries of \$3.9 million per year; their patients got free valet parking.

On the research side, recruitment efforts helped to augment research funding (see Exhibit 1). AHERF recruited prominent researchers to head its Institute for Cellular Genetics and Center for Genomic Sciences, Center for Gene Therapy, Cancer Clinical Trials Research Center, and Institute for Human Oncology in Philadelphia. It ultimately sought designation from the National Cancer Institute as a comprehensive cancer center, a status enjoyed by

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UPMC in Pittsburgh and by two other AMCs in Philadelphia.

Clinicians and researchers thus were recruited not only by the lure of large salaries but also by promises of new buildings; large lab space; and paid staff in billing, support, and research. More importantly, they were lured by the promise of participating in a new growth environment. Several explained to the press that they were mesmerized by Abdelhak’s ambitious promises and plans, and the opportunity to be part of an enterprise that might dwarf other AMCs in the state. They also were taken with Abdelhak’s dream of building a “better institution for tomorrow” based on research and education, a higher caliber of physicians, and higher quality of care.

It is not clear how much these high-price faculty knew about the system’s growing financial problems prior to 1998. Some AHERF physicians claimed that nothing was known until March 1998, but there were signs of trouble before then. Promised compensation was often not paid after the first year of the contract. Promised new buildings and renovations took longer than expected, anticipated new staff were not hired, and equipment was leased rather than purchased starting in 1997. Some researchers found that their grant funds had been diverted. Research budgets were cut, and bridge support dwindled. Intramural research grants to encourage new investigators were eliminated in 1997. Yet there is no record of any public protests by prominent faculty. Some AHERF physicians stated that “colleagues didn’t really care as long as their paychecks [from guaranteed contracts] got cashed.” Newspaper reports of the bankruptcy suggest that Abdelhak intimidated both administrative and medical staff. He ended his first speech to the joint MCP-Hahnemann medical faculty by telling a stunned audience, “Don’t cross me or you will live to regret it.” He also reportedly felt that he had paid his staff so well and promised them so much that he deserved their unquestioning obedience.

■ **Competitive market context.** Although they are the paramount reasons, AHERF’s bankruptcy cannot be explained alone by high debt, questionable assumptions, poor decisions, and excessive spending. These actions took place in a Philadelphia market that quickly became totally unforgiving of such mistakes. This market was very different from the market AHERF was familiar with.

Pittsburgh, AHERF’s and AGH’s home base, had a fee-for-service, bigger-is-better mentality. In 1994 the metropolitan statistical area

(MSA) had only five health plans. The local Blue Cross plan, Highmark/Keystone, had the largest share, followed closely by Coventry's HealthAmerica. Although these two commanded 80 percent of the HMO market, total HMO penetration in Pittsburgh was only 15 percent, slightly below the national MSA average of 16 percent.²¹ The dominant provider network was UPMC, an AMC affiliated with twelve other hospitals, with 4,500 total hospital beds and \$1.65 billion in revenues in 1999. AHERF's western operations encompassed only six hospitals, 2,200 beds, and \$0.93 billion revenues. The Pittsburgh market was in essence one large AMC and a fragmented HMO community largely paying discounted fee-for-service.

Abdelhak tried to transplant this strategy of AMC-centered expansion into a Philadelphia market with a very different HMO and provider market structure. Philadelphia had double the HMO penetration (30 percent in 1994) and double the number of HMO plans (eleven in 1994). Moreover, two plans—U.S. Healthcare and Keystone/Blue Cross—dominated the HMO market with 74 percent share. They wielded enormous influence over providers, who suffered from high utilization and excess capacity. According to one report, Philadelphia was overbedded (3.6 beds per 1,000 population versus 3.0 nationally), overdoctored (296 physicians per 100,000 population versus 184 nationally), overstaffed (7.15 full-time equivalents per 100 case-mix-adjusted admissions), and overutilized (550 commercial inpatient days per 1,000 population versus 456 nationally; 3,170 Medicare days per 1,000 population versus 2,669 nationally).²² Both large HMOs became more active in managing costs via discounts than in managing care. Both also contracted with most providers using open-access plans, avoiding any exclusive contracting.

On the provider side, Philadelphia had five major AMCs vying for market share, reputation, and research funding. They also produced their own medical graduates, who, if they remained in the area as community practitioners, might favor their alma mater in referral networks over their rivals. They also were surrounded in the collar counties by large teaching hospitals (such as Crozer-Chester Medical Center and Lankenau Hospital) that attracted wealthy suburban patients. As a result, Philadelphia had a large number of tertiary facilities that lacked clear differentiation in patient services or the unique attributes they offered the area's two large payers. AHERF's decision to purchase two struggling medical schools and their city hospitals thus did not bestow any competitive advantage.

Unfortunately for providers, the Philadelphia market deteriorated rapidly and substantially. First, Philadelphia hospitals were hit by reductions in the rates paid by their three major payers: commercial insurers, Medicare, and Medicaid. On the commercial side,

the two largest HMOs (U.S. Healthcare and Keystone) began to move their members from indemnity to HMO plans. U.S. Healthcare's total HMO enrollment in the MSA skyrocketed from 640,000 in 1994 to 817,000 in 1996; Keystone/Blue Cross's enrollment jumped from 564,000 to 666,000. According to Abdelhak, these enrollment shifts led to a 10 percent decline in the weighted average payment per case.²³ Managed care penetration jumped from 30 percent to 53 percent in AHERF's eastern operations between 1993 and 1997, and from 15 percent to 48 percent in its western operations.²⁴

Nationally, commercial HMOs were competing for market share and seeking to rapidly grow enrollment by lowering their premiums. Larger enrollments motivated providers to want to contract with them; however, HMOs extracted bigger discounts from providers to offset the falling premiums. When these insurers passed on capitated risk to providers, the situation was often exacerbated. For example, AHERF signed a full-risk contract with Aetna/U.S. Healthcare at 79 percent of the premium but reportedly failed to stipulate a premium floor. When Aetna lowered its premium, AHERF received 79 percent of a smaller figure and experienced higher-than-expected losses. AHERF signed a similar agreement with HealthAmerica in Pittsburgh for 80 percent of premium. At the time of AHERF's bankruptcy, HealthAmerica claimed that AHERF owed it \$108 million to pay for medical care that was supposed to have been paid for under the fixed-price contract. In signing these contracts, AHERF assumed risk for up to half a million enrollees statewide with little managed care infrastructure in place. The book of capitated risk business led to the single biggest losses at AHERF and other AMCs signing such contracts.²⁵

On the Medicare side, hospitals were hit by changes in reimbursement from the Balanced Budget Act (BBA) of 1997, including cuts in inpatient, outpatient, and home health care services. Also, Medicare HMO enrollment in Philadelphia skyrocketed from 9 percent in 1994 to 30 percent by 1997. This growth spelled lower per capita insurance premiums and thus lower hospital payment rates for their Medicare patients. Medicare case rates for coronary artery bypass graft changed from \$40,000 for traditional Medicare patients to \$20,000 for Medicare HMO patients.²⁶ These enrollment changes also motivated Medicare HMOs to pull patients away from AMCs and seek lower-cost facilities.

On the Medicaid side, hospitals in southeast Pennsylvania witnessed the implementation of HealthChoices, a mandated managed care program, in February 1997. More than 80 percent of the area's 550,000 Medicaid recipients were quickly moved to capitated plans. The program has been criticized for giving the plans capitated rates

that were too low.²⁷ The plans in turn gave providers rates that were too low. As one CFO at a Philadelphia AMC described it, “The state takes 10 percent off the top and gives it to the HMOs; the HMOs take another 15 percent off the top and give it to the hospitals.” The four Philadelphia HMOs with HealthChoices contracts lost \$50 million during the first year of operation. Two AHERF institutions were part owners of one of these four plans and took risk at the hospital level. AHERF was particularly vulnerable to these reimbursement changes since Medicaid accounted for up to 20 percent of revenues at some AHERF hospitals and 10 percent systemwide.

As HealthChoices was being implemented, the Pennsylvania State Legislature (Act 35) cut Medicaid coverage for previously eligible adults. The result was an increase in the number of uninsured persons using hospitals they had used before, a \$75 million cut in Medicaid payments per year to those hospitals, and a 2.7 percent reduction in net patient revenues for AHERF’s Philadelphia hospitals.²⁸

After these three sudden drops in reimbursement, AHERF’s spokesman said that the system had hit the “trifecta.”²⁹ They affected all area hospitals and, with the possible exception of Medicaid, would not have disproportionately hurt AHERF’s finances. However, AHERF’s rapid expansion and cash-flow problems made it vulnerable to any sudden revenue declines. By contrast, the vice-president and controller at the University of Pittsburgh stated that the medical center had planned for cuts in Medicare and Medicaid by eliminating 3,000–4,000 jobs and consolidating services over the preceding few years. No similar steps were taken at AHERF.

A second market shift that hurt AHERF was the repeal of some protective regulation. Several community hospitals around Philadelphia successfully lobbied the state legislature to allow the state’s certificate-of-need (CON) law to sunset at the end of 1996. Two hospitals—Abington and Frankford—then started open-heart surgery programs. Frankford Hospital spent \$6.5 million on renovations and equipment to create a cardiac services program that was expected to perform 1,000 cardiac catheterizations and 250 surgeries the first year, and 1,500 cardiac catheterizations and 450 surgeries the third year.³⁰ Most of this new volume came at the expense of AHERF’s Hahnemann and GHS hospitals.

The Philadelphia market thus proved inhospitable to AHERF’s strategy. Powerful managed care market forces in the 1990s brought the system’s eleven-year expansion to a complete halt and forced a complete unbundling within a year and a half.

Failure Of External Oversight Mechanisms

■ **Problems with governance.** While the growing managed care

market succeeded in holding AHERF accountable for its managerial decisions, other oversight mechanisms did not. AHERF suffered from a weak governance structure. It had an enormous parent board whose membership varied between twenty-five and thirty-five persons, rather than the optimal thirteen to seventeen persons recommended by governance consultants.³¹ Second, it had a network of ten different boards responsible for its various operations (fifty-five different corporate entities), which had little overlap in their membership. Consequently, directors on one board reportedly were never sure what was happening elsewhere in the AHERF empire, thus making effective oversight impossible. Again, this is contrary to the recommendations of governance consultants.

AHERF also suffered from weak board composition. Many board members were Pittsburgh's captains of industry, but there were several inherent conflicts of interest. In April 1998, three months prior to filing for bankruptcy, AHERF's CEO ordered the repayment of an \$89 million loan to a bank consortium including Mellon Bank without board discussion or approval. Five board members were current/former directors or executives with Mellon, including its former chairman (who was AHERF's chairman). The bankruptcy trustee charged in a September 1999 lawsuit that Mellon officials used their influence as AHERF directors to pressure AHERF to repay the obligation, even though the lenders had made no formal notice of default. For its part, Mellon may have been pressured by the other banks in the consortium.

The Official Committee of Unsecured Creditors also claims that there was substantial overlap between AHERF's officers and the officers of both the debtor hospitals (eastern operations) and the nondebtor hospitals (western operations). This overlap created conflicts of interest between their fiduciary duties to the creditors of the debtor estates and their duties to the nondebtor hospitals.³²

Perhaps the greatest reported problem was Abdelhak's domination of all board decisions and his protection by AGH Chairman Snyder. Board meetings were described as scripted affairs, intentionally staged to limit oversight and participation by other board members. For example, board members (many of whom were busy executives) might receive as many as 1,000 pages of paper to be discussed at board meetings that might last only a short time. As one former member explained, "Half of the people didn't even open the book. They didn't have the time." As a result, board members relied on Abdelhak's and Snyder's judgment. Moreover, the elderly Snyder may have relied on Abdelhak, who reportedly made Snyder feel he was involved in managing AGH, even though he could not keep pace.

Snyder also protected Abdelhak. The two men discouraged board

members from asking tough questions. When Vincent Sarni, CEO of PPG Industries and AHERF board chairman in the late 1980s, questioned AHERF's expansion into Philadelphia, Snyder and Abdelhak lobbied (and mildly pressured) other board members to remove him as chair. Sarni reportedly found himself subject to a new "three-year term limit" that had just expired. Snyder also sat on the board's compensation committee, which developed rich compensation and benefit packages for AHERF's top management. Board members did not want to be seen as "anti-team players." Many shared Abdelhak's and Snyder's vision of AGH as a prestigious AMC. As in other non-profit entities, membership on AHERF's board may also have been more a social activity or community service than a fiduciary duty.

This atmosphere might help to explain how many critical strategic decisions could be made by Abdelhak and his senior management without formal board approval. Board members had little effective oversight of management and none in board meetings. Several key decisions were relayed to the board after they were made or were never relayed at all. These included the acquisition of GHS, the assumption of existing debt at United Hospitals and GHS, the restatement of financial losses at AGH in the mid-1990s, and the controversial decision made by the compensation committee shortly before bankruptcy to grant top executives \$8 million in bank loans (on favorable terms with AHERF jointly liable) and allow them to cash out their deferred compensation plans.

Moreover, the information that the board needed to govern was held by a small group. Former AHERF executives have chided the board for failing to ask the tough questions at critical times, such as AHERF's entrance into full-risk contracts with payers. They also claim that Abdelhak actively presented himself as the key decision-maker and thus shielded the board from its responsibility. During the negotiations with Vanguard for the purchase of the eastern hospitals, Abdelhak negotiated directly with Vanguard's CEO, who was surprised by his lack of access to AHERF's board. Abdelhak reportedly told him, "When you are talking to me, you are talking to the board. I have the authority to make this happen."

At the same time, AHERF took steps to shield the board from the financial risk of lax oversight by taking out a \$50 million liability policy for directors and officers. In March 1998 (three months prior to bankruptcy) that policy was doubled to \$100 million; in June it was doubled again. These premiums were paid while provider malpractice premiums went unpaid.

Finally, there were serious problems with AHERF's corporate bylaws and enforcement. The bylaws allowed AHERF to move cash around in a two-step process: from one operating unit (donor) to

AHERF, and from AHERF to another operating unit (recipient). As in other corporations, this permitted some flexibility to redistribute funds to units that needed cash. However, AHERF's retained powers did not require the consent of the donor unit. Moreover, these cash transfers could be made by AHERF management without knowledge of the board and without explicit rationales. The lack of board oversight and control led to top management's transfer of funds from AGH to subsidize the eastern operations. The board discovered this in late 1997 as Abdelhak clarified the 1997 financial statements, and responded by instituting a board-level loan committee to review and approve any such future transfers. Abdelhak reportedly repeated the offense in April 1998 by using funded depreciation accounts from the Forbes and Allegheny Valley Hospitals to help repay the Mellon obligation. This time the board fired him.

In sum, AHERF's board failed to act as a countervailing force against the overly ambitious plans of its senior management. As a nonprofit corporation, there was also no countervailing force of shareholders to hold managers accountable. In partial recognition of its ineffective oversight, AHERF's board has been subjected to legal action. On 22 June 1999 the Committee of Unsecured Creditors sued ten AHERF officers and directors for \$1 billion in damages on three counts of breach of fiduciary duty, gross negligence and management, and corporate waste.³³ Attorneys for the creditors state that their liability may be as high as \$1.5 billion.

■ **Oversight by accountants and auditors.** While the community at large depends on a board to oversee a nonprofit corporation, board members tend to rely (to some degree) on a corporation's accountants and external auditors for oversight. Such reliance presumes ethical financial reporting and no negligence. Just like management, however, these parties have an incentive to state results in a positive light. Such reports please executives, to whom the accountants report and on whom the auditors rely for the business account. They also please stockholders and Wall Street analysts, who are looking for growth in earnings. Unfortunately, there has been a reported increase in "managed earnings" (cooking the books) by accountants to impress investors and keep stock prices up.³⁴

In the case of AHERF, there is some question about the CFO's integrity. The CFO worked closely with Abdelhak in most of the major acquisitions and financial decisions; according to AHERF executives, they were the two key decisionmakers. According to Patrick Hurst, the "chief forensic accountant" hired by creditors to sift through AHERF's finances, financial management was deliberately "placed in boxes" so that each person or entity within AHERF could see only one piece of the overall financial position. In fact,

“The year of AHERF’s bankruptcy (1998) marked all-time record sales of bonds by hospitals and health systems.”

AHERF did not compile a consolidated financial report for all of its subsidiaries until 1998. When these figures were compiled, it led to a restatement of prior years’ results that produced a \$15 million reduction in operating results for 1996 and elimination of a line item for operating income that would have reflected losses of \$40 million.

Moreover, the revenues and endowment funds from AHERF’s scattered operations were commingled in a “Byzantine structure” that reportedly permitted the two top executives to transfer funds between units as needed and manipulate final results to make units look as favorable as possible. In acquiring GHS, for example, the board was promised that GHS would be taken through an intermediate step, sanitized, and improved so it would not have a deleterious effect on AHERF finances. This step was a shell corporation formed by the CEO, CFO, and corporate counsel. The CFO told the board that it could take advantage of the Medicare depreciation recapture, which would result in the influx of \$100 million in needed cash. Only part of these monies were realized.³⁵

As for the external auditors, AHERF used Coopers and Lybrand, AGH’s auditor for a century. It gave AHERF a clean bill of health in its last audit (June 1997), which the AHERF board accepted and relied on. Included in this audit was a large, improperly recorded loan and financial statements that were later retracted, precipitating an investigation by the Securities and Exchange Commission (SEC). The firm’s positive report may have reflected the incompleteness of the information AHERF supplied to them. AHERF dropped the auditor shortly before filing for bankruptcy. An AHERF attorney told the bankruptcy judge that it needed to change accountants because “there are some concerns about the [firm’s] audit procedures.” Others have expressed similar concerns, as Coopers has been involved as auditor in several prior scandals. The Pittsburgh office of Coopers and Lybrand was found guilty by a federal jury in 1996 of negligence in the fraud and embezzlement scheme at Phar-Mor, a regional, discount drugstore chain.

■ **Oversight by bond-rating agencies.** Hospitals and other health care firms are heavily financed by long-term debt. This has become more important in the past two decades as prospective payment reduced hospital revenues and internal sources of cash, as expensive medical technology proliferated, and as managed care and competition cut margins. The year of AHERF’s bankruptcy (1998)

marked all-time record sales of bonds by hospitals and health systems (\$32.9 billion).³⁶ Hospital consolidation and the desire to take advantage of low interest rates have driven this growth. Refinancing of old debt accounted for only one-quarter of the total.

Investors who purchase health care bonds rely on rating services to evaluate the risk of their investment. Three companies rate most of the health care bonds that are issued: Moody's Investors Service, Standard and Poor's (S&P), and Fitch IBCA.³⁷ Health firms pay an application fee to one or more of these services to review and assess their operations. Banks and financial institutions rely on these ratings to evaluate the creditworthiness and set interest rates on the debt issues. Higher credit ratings translate into lower interest rates and thus lower interest expenses for the health care firm issuing the bonds. Lower credit ratings require a premium paid to investors. Bonds with a Moody's rating of Baa3 or better (S&P rating of BBB- or better) are considered investment grade; those with ratings below these levels are considered junk bonds.³⁸

AHERF's bond debt was rated by both Moody's and S&P.³⁹ Moody's covered debt issued by five sets of AHERF hospitals: AGH, Forbes, GHS (later Allegheny University Hospitals-Centennial), Zurrugg Memorial Hospital in New Jersey, and DVOG. For some of these hospitals, Moody's publicly reported downgrades on their debt during 1996-1998 as AHERF's financial problems mounted.⁴⁰ For example, when AHERF took over management of GHS in the spring of 1996, GHS bonds had the lowest investment grade rating by Moody's (Baa). Abdelhak mistakenly expected this rating to improve, given GHS's new affiliation with AHERF. Instead, Moody's downgraded its bonds to junk-bond status (Ba2) at the end of the year, citing GHS's weak operations, concern over the length of time required for AHERF to stabilize its operation, and the overall strength of AHERF itself.⁴¹ Throughout 1998 GHS's bonds were repeatedly downgraded. Moody's also issued warnings about bond-rating volatility and risk (June 1997) and negative forecasts about AHERF's financial health (January and May 1998).

The case of DVOG is different. Three DVOG hospitals had bonds separately rated prior to 1996 as Aaa insured (highest rating possible), Baa (barely above investment grade), and Ba (below investment grade). In June 1996 AHERF took steps that are increasingly popular among hospitals experiencing bond downgrades (and hospitals in general): They called the bonds, refinanced and reissued them under DVOG, and insured them. The underwriter they used was MBIA Insurance Corporation, the largest health care bond insurer. Some interpreted this as a signal that the insurance companies were beginning to approve AHERF's business strategy.⁴² By insuring

the debt, AHERF garnered an Aaa rating for DVOG's debt. This highest rating had nothing to do with an improvement in the underlying financial health of the system issuing the bonds; rather, the rating reflected the underlying health of the insurance company (MBIA's rating by Moody's) to insure that debt. The financial troubles at DVOG thus remained hidden from the public.⁴³

Although Moody's conducted an internal assessment of the strength of AHERF overall and noted weak operations, the common practice at the time was not to publish the underlying ratings unless requested by the issuer. The company's policy was that if an organization had public debt that was rated publicly, and then that organization refunded out all of that debt with insured debt, the organization could select either Moody's underlying rating or the insured Aaa rating. AHERF obviously chose the latter.

Moody's changed this policy in January 1997. If an organization had publicly rated debt without insurance ("unenhanced debt") for which Moody's had a public underlying rating, and then the organization went to insure that debt, Moody's would maintain its underlying rating. However, the new policy did not apply to two groups: any system with no debt previously rated by Moody's that issued insured debt, and any hospital with outstanding insured bonds at the time of the policy change. Moody's would not force the underlying rating on them. Although the three DVOG hospitals had previously rated unenhanced debt, they were grandfathered in with no publication of Moody's internal evaluation of their underlying rating due to the use of insurance in 1996. So despite mounting troubles at AHERF's eastern hospital operations, DVOG debt continued to be rated as Aaa (the intended consequence of insurance). Internally, Moody's continued to monitor DVOG and downgrade its internal rating but did not publish it. It was not until the summer of 1998, just prior to the bankruptcy filing, that Moody's came under pressure from the investment community to release its underlying rating of DVOG. On 8 July debt previously rated Aaa suddenly had a publicized underlying rating below investment grade (B3). On the day of the bankruptcy (21 July), it fell even further (Caal).

This history suggests that the companies rating health system bonds are constrained in how much financial oversight they provide the public. Insurance masks the underlying credit quality of the bonds issued by health systems. To this day, Moody's cannot publish underlying ratings where it has not previously rated the debt on systems that issue insured bonds.

To be sure, bond insurance increases investors' confidence in the bonds and lessens fears about not getting paid interest and principal. It also augments the marketability and lowers the interest costs

of the bonds for the issuer. However, insurance does not improve the underlying creditworthiness of the issuer. Moreover, systems can reduce investors' scrutiny of their underlying ratings by purchasing insurance coverage for their bonds. With the AHERF debacle, other health systems have witnessed how public these ratings can become. Finally, research shows that hospitals suffering downgrades, and thus having incentives to insure their debt, exhibit worsening cash flow and debt-service coverage (ability to pay interest on the debt).⁴⁴ Consistent with this evidence, hospitals that purchase full insurance coverage earn lower returns on their net patient revenue and net fixed assets, have lower debt-service coverage, and have a higher ratio of long-term debt to total assets.⁴⁵

Financial oversight becomes more critical as risks in the municipal bond market increase. In 1998 Moody's downgraded more bonds (fifty-three) than they upgraded (thirty-eight).⁴⁶ The downgrades involved \$11.2 billion of debt, while the upgrades involved only \$1.8 billion of debt. As a result of consolidation, a small number of hospital systems with the largest outstanding debt account for a larger share of the debt affected.⁴⁷ Moreover, 7 percent of the nonprofits covered by Moody's have debt (\$2 billion) rated as junk-bond status. Between January 1998 and August 1999 there was also a surge in "multinotch downgrades," where the bond ratings fell two or more notches. Many of these occurred in Philadelphia (GHS and University of Pennsylvania) and Pittsburgh (Forbes and AGH).⁴⁸

Bond insurance became much more commonplace in the 1990s (at least until AHERF's bankruptcy), in part as a result of these increased risks and low premiums that stimulated hospital demand, as well as the increase in bond volume. According to analysts at Fitch IBCA, 54 percent of new tax-exempt bond issues now carry insurance, thus raising the public credit rating to that of the insurer.⁴⁹ This may reduce investors' caution in purchasing tax-exempt health care bonds and scrutiny of financial statements.

This is troubling, because the municipal bond industry was largely self-regulating prior to 1995 and only loosely governed by the Municipal Securities Rulemaking Board. In 1995 the SEC adopted new rules that required hospitals and other firms issuing tax-exempt debt to make annual financial statements available to bondholders within ninety days of the close of their fiscal years. These rules also required the timely disclosure of events that could undermine the value of the bonds (such as missing interest payments).

AHERF violated both of these rules. It released its 1997 audited financial statements seven months after the fiscal year's end, blaming the delay on the decision to consolidate the financial activities of all of its subsidiaries. On 2 September 1998 AHERF officials re-

“Moody’s developed a new risk-analysis model that puts health care in the riskiest industry category.”

ported that these statements contained errors and should not be used. These statements originally claimed that AHERF earned \$21.9 million during the fiscal year. However, \$117 million in intracompany loans to the Philadelphia operations were found to be classified as “investments” in the financial statements. Other accounting irregularities began to surface. Losses on the acquired PCPs were reportedly treated by the CFO not as hits to the income statement but rather as “asset write-downs,” in which the practices were revalued each year to account for their losses. In FY 1996 AGH ceased to separate out operating results from investment and interest income, thereby hiding an operating loss of \$20 million. AGH’s consolidated 1996 financial statements indicated that it earned a \$16.8 million profit, while its Singer Research Institute suffered a \$14.2 million loss; separate statements submitted to the Internal Revenue Service (IRS) showed the opposite (a \$20 million loss at AGH and a \$7.8 million gain at Singer). All of this has fueled speculation that AHERF’s CEO and CFO maintained different sets of books for different external stakeholders. It also suggests that AHERF was under pressure to portray the system’s fiscal health in the best light possible in order to issue bonds and obtain bank loans.

On 11 September the SEC asked three national bond-rating companies for all records relating to \$605 million in bonds AHERF sold in Philadelphia and New Jersey. They announced an informal inquiry into possible violations of federal securities laws, including misleading financial statements in its bond documents and the updating of those statements to reflect changes in the health of its hospitals. There is some speculation that the SEC may make AHERF a “test case” to show its ability to enforce its new rules.

There is also the question of whether investors understand bond ratings. Rating companies assess the firm’s (and its management’s) ability to manage change, the firm’s response to technological and market changes in the past, the quality and depth of human capital at several organizational levels, modernity of equipment, future financing requirements, and financial measures of past performance.⁵⁰ Moody’s states that it “evaluates companies but does not regulate or provide accountability.” Indeed, S&P is reportedly ready to ask bond issuers who want to hire it to assess the creditworthiness of their debt to agree that S&P ratings are nothing more than opinions protected under the First Amendment and that any liability is lim-

ited to the total amount of the rating fees paid to the ratings company.⁵¹ This action, along with the AHERF bankruptcy, suggests that certain sectors of the municipal market have risks on a par with corporate debt. Indeed, Moody's developed a new risk-analysis model that puts health care in the riskiest industry category.⁵²

Complicating this murky picture even further is the fact that bond insurance companies frequently reinsure a percentage of the debt to lay off some of the risk they are now assuming. Fitch IBCA analysts estimate that 18 percent of all premiums written for tax-exempt bond insurance are now backed by reinsurance.⁵³ Reinsurance is not used extensively by insurers because risk management is their business. It is a fundamental risk-management tool to diversify the risk assumed and allows insurers to increase their underwriting capacity (which is limited by the minimum capital requirements set by state insurance regulations and the ratings agencies). Although reinsurance does not motivate risky diversification, it does serve to partially buffer the insurer from bad underwriting decisions.⁵⁴ As competition for business increases, insurers like MBIA may grow and diversify into riskier businesses.⁵⁵ Like other for-profit firms driven by growth, MBIA has been an aggressive underwriter trying to increase the firm's book of business.

One major issue concerns MBIA's assessment of the DVOG bonds it agreed to insure in 1996. According to its SEC 10-K Form, MBIA has two internal divisions to manage its growth and risk: a Public Finance Division to handle underwriting and grow the revenue base (similar to an HMO's sales and marketing department), and a Risk Management Group to monitor and periodically review the former's underwriting decisions (similar to an HMO's actuarial department).⁵⁶ According to MBIA officials, the underwriting and surveillance sides work together with several checks and balances within and between their spheres of operation. Every deal they insure must meet a "no loss" underwriting standard. At the time of the DVOG bond insurance decision, MBIA knew the low margins at the associated hospitals and the low underlying credit rating that Moody's had assigned to DVOG. They had also insured debt at several AHERF affiliates for some time. MBIA officials are reluctant to discuss how they reached the conclusion that DVOG qualified as a "no loss" transaction. They have stated that "as a bond insurer, it is inconsequential to them if the ratings on the underlying bonds go down" (as long as they do not fall below investment grade). Moody's, on the other hand, recently stated that MBIA insured DVOG at a time in the guarantors' history when they were under financial pressure (narrower spreads, lower profits) in their core markets (investment-grade U.S. tax-exempt) and strayed from core

fundamentals to write more business elsewhere. According to Moody's, "MBIA's large exposure on DVOG's borderline credit raises questions about the diligence in MBIA's underwriting process." Some Moody's officials also believe that MBIA may have relied on DVOG ratings developed by other rating agencies or themselves and thus felt more comfortable with DVOG. They also suspect that MBIA, like the wider investment community, had trouble evaluating the entire AHERF system of which DVOG was just a part, and felt that DVOG was a stronger organization than it was.⁵⁷

When AHERF declared bankruptcy in July 1998, MBIA was liable for \$256 million of debt outstanding on DVOG. It had initial reinsurance contracts to cover part of this risk. As a result, MBIA did not anticipate that its exposure to the insured credit would affect its ratings or earnings, or would reduce its unallocated loss reserve of \$75 million. However, the two companies dominating the municipal bond reinsurance market, handling a large portion of MBIA's overall reinsurance and the initial reinsurance on DVOG's debt—Capital Reinsurance (Cap Re) and Enhance Reinsurance—incurred losses of \$15 and \$16 million, respectively. Moreover, one of the bond-rating agencies downgraded Cap Re, the first downgrade of a triple-A-rated financial guaranty insurer, and began reviewing Enhance for a possible downgrade. Moody's stated that, like MBIA, both were diversifying into more risky business lines.

In September 1998 MBIA announced it had obtained an additional \$170 million of reinsurance with different companies to cover a major portion of these losses and spread their effects into the future.⁵⁸ Why did reinsurers enter such agreements with MBIA after the bankruptcy with the full expectation that losses were likely? According to company representatives, MBIA reached "an unusual agreement" with its reinsurers in which the latter received not only a percentage of the AHERF insurance premium but also a long-term reinsurance contract. MBIA may cede more business to these reinsurers than it otherwise would and thus lower its current losses by paying those losses out on the back end (that is, by giving reinsurers a portion of its future insurance premiums).

■ **Oversight by government.** A final oversight mechanism is state government. In this case, the lack of oversight was due to ambiguity regarding the powers of the state attorney general (AG), state politics, an initial lack of resources, and jurisdictional issues with federal bankruptcy court. Pennsylvania law is ambiguous regarding the AG's power over transactions between nonprofits. As a result, the AG reviewed none of AHERF's acquisitions in Philadelphia. Although state law requires that charitable assets be set aside for charitable purposes in sales to for-profits, it is not clear that transac-

tions between nonprofits involve any diversion of charitable assets.

Other states have passed legislation to regulate conversions, but such legislation has languished in Pennsylvania's Republican-controlled House. A bill was introduced in June 1997 by a Democrat to establish a review process for hospital ownership conversions from nonprofit to for-profit, and to require Department of Health approval. That bill had not been acted upon at the time of AHERF's bankruptcy. Following bankruptcy, legislators from both parties called for greater state oversight. The original bill's sponsor sought to expand it to include transactions between nonprofits. The Republican governor, however, took no position on legislation to enhance the AG's authority to oversee mergers of nonprofits, and the state hospital association opposed giving the AG more authority.

State law did give the AG authority to review "fundamental change transactions" involving nonprofits to ensure that the public interest in the charitable assets is protected and make recommendations to the Orphans Court. The AG developed a procedure to review such transactions, but because there were no definite provisions, hospitals were not required to put the AG on notice. The AG also requested funding to establish an oversight unit to review the growing number of hospital mergers occurring in the market.⁵⁹ The legislature did not include the requested additional funding in the 1998-1999 state budget but did so the following year.⁶⁰

The bankruptcy filing allowed the sale to Vanguard (and then to Tenet) to proceed without intervention of the AG and the Orphans Court in Philadelphia, which has jurisdiction where the assets to be disposed are located. Bankruptcy law, which protects the interests of creditors, takes precedence over regulations involving charitable assets.⁶¹ The AG was responsible for determining what portion of the bankrupt AHERF assets were charitable and was especially concerned by reports that AHERF misused endowments restricted for research, education, and patient care. The AG first sought to use the bankruptcy court to investigate AHERF's actions regarding these assets. The bankruptcy court judge, however, did not allow the AG to intervene. According to the judge, if restricted funds were misused at an earlier date, the AG should have noticed then. The AG then wanted an interim trustee appointed for AHERF's western operations through Pittsburgh's Orphans Court to protect the non-bankrupt charitable assets. The AG was opposed by the Official Committee of Unsecured Creditors, who argued that this would strip AHERF of its membership interest. The bankruptcy judge ruled in the latter's favor. The AG also asked the court to allow it to review any bids to explore all possible nonprofit buyers before AHERF's assets were sold to an investor-owned corporation. The judge refused.

Conclusions

■ **Restoring accountability and oversight.** The AHERF bankruptcy suggests a lack of accountability, responsibility, and oversight exercised by AHERF's executives, trustees, and external stakeholders. The basic issue is, "Who is guarding the guards?" The community relies on the trustees and/or the state to protect the system's charitable assets. The trustees rely on auditors to verify the system's financial figures. The auditors rely on the executives for accurate information. The executives rely on the CFO and legal staff to keep within the law, and on bond investors for financing. The investors rely on bond-rating agencies to evaluate bond risks and on the SEC to oversee financial reporting by the firms issuing the bonds. Breakdowns occurred at each of these interfaces.

AHERF's board failed to act as a countervailing force. There were conflicts of interest, a ruling inside clique, a strong alliance between the board chairman and CEO, and no shareholders to hold managers accountable. Nonprofit boards also may be less adept than their for-profit counterparts are at reviewing complex financial matters and statements. This case illustrates that parties may misrepresent financial statements and accounting entries and then transmit them to an unsuspecting board and external auditor, both of whom may trust senior management for accurate information. AHERF management apparently failed to practice a well-recognized dictum in the accounting world of segregating the duties of control, authorization, and recording of transactions. AHERF's auditors failed to detect the accounting irregularities practiced by AHERF's CEO and CFO, perhaps as a result of inaccurate information provided them by these executives or the desire to maintain a favorable relationship with the system and keep its business. The AHERF experience, as well as the emerging problem of "managed earnings" in corporate America, has fostered a growing recognition of the need for board members and their audit committees to more actively engage the external auditors.

The bond-rating agencies and insurers likewise had difficulty discerning the financial health of the institution they were rating, because of AHERF's use of different obligated hospital groups and financial manipulations. Moreover, unlike the stock market, municipal debt is not traded actively and is rated at issuance. Bond ratings may be reviewed as the company's financial health changes, but such reviews are not performed continuously and may be masked by the use of debt insurance. Nevertheless, the bond insurance industry has demonstrated some resiliency following the AHERF bankruptcy, as MBIA has guaranteed its insured bondholders that they will receive all of their principal and interest payments when due. There also is a

heightened awareness of risks in the municipal bond market, which may lead to tighter underwriting standards. Tighter bond covenants would permit lenders to have a preferred position in the event of a bankruptcy (ahead of the unsecured creditors). MBIA has announced that it will no longer accept Baal or lower-rated hospitals, has placed more stringent limits on its exposure to large single risks, and will increase its use of reinsurers. MBIA will also require additional security on higher-rated credit risks, such as a fully funded debt-service reserve fund, first mortgage loans, and a gross receipts pledge.⁶² Bond insurers have begun to raise their premiums. There is now a widening spread on average bond yields (that is, a bigger gap in basis points) for bonds rated BBB+ to BBB-.⁶³ Finally, bond insurers are beginning to pressure hospitals by demanding quarterly audited financial statements and telling hospitals to merge to pay off the bonds, to cut their costs or take other radical measures, and/or to make inspections for performance improvements.⁶⁴ Bond-rating agencies also are doing quarterly and monthly reviews to provide earlier warning signals of distress.

■ **General lessons.** At the risk of oversimplifying an extremely complex case, we draw five lessons from the AHERF bankruptcy. First, growing the business seems to have trumped fiscal restraint and responsible investment. In its quest to quickly build a statewide system, AHERF acquired several marginally performing hospitals, which (after servicing the associated debt) could not throw off enough cash to support improvements and physician acquisitions. Moreover, there is no evidence of any master management plan for what to do with all of the acquisitions. AHERF erroneously assumed that economies of scale and other efficiencies would flow automatically from its system-building efforts. In fact, such economies typically result from the consolidation of physical capacity and the channeling of larger volumes of output at faster rates of speed through that consolidated capacity.⁶⁵ Such measures were not taken systemwide. Growth at any cost does not appear to be the answer for America's hospitals (or, perhaps, any other enterprise). Instead, hospitals may be better off forming systems at the local market level where, according to recent case evidence, they can achieve some countervailing market power over managed care and sufficient purchasing power to direct contract with large suppliers.⁶⁶

Second, AHERF expanded using common strategies—horizontal consolidation, vertical integration, and assumption of capitated risk—with which other hospitals are having problems. More hospitals and health systems are likely to edge toward bankruptcy in the near future and certainly face greater pressures on their margins and credit ratings. This deteriorating financial condition is partly the

result of market competition and managed care forces, but it is also the sad result of hospitals' hopping on managerial bandwagons that lacked documented efficacy or any research base.

Third, changing market conditions can affect the collapse of a hospital chain. The rapid changes in managed care and competition overwhelmed the hospital strategies of consolidation and integration. The former did not provide enough money to support the latter. Developments in Philadelphia, while sudden and concurrent, are occurring in other markets. A similar situation now faces Detroit Medical Center (with its large Medicaid patient base), UPHS, and other AMCs. Significantly, many of the mult notch bond downgrades occurred among Pennsylvania hospitals, where managed care has increasingly penetrated the market and concentrated power in a small number of large plans. Such markets may be particularly hostile climates for the provider strategies noted above.

This point suggests a fourth lesson.⁶⁷ If AHERF's troubles were simply the product of managerial decisions that initially succeeded but then failed in the face of new market forces, its bankruptcy is not necessarily an undesirable outcome. AHERF's demise might then be chalked up to a failed consolidation/integration strategy and excessive risk taking, which the market punished. If, however, AHERF's troubles were more the product of unethical behavior, a lack of due diligence, and the presence of rigid institutional forces, then bankruptcy may not be desirable. The poor performance of its integration strategies was cloaked by inaccurate, misleading financial results and certain institutional structures that limited the scrutiny and efficient response of the tax-exempt financial markets. Moreover, other institutional forces (for example, government efforts to find a buyer) may have intervened to preserve the bankrupt hospital assets in a market environment of excess capacity.

Fifth, the AHERF case suggests that the use of insurance and reinsurance vehicles allows financial and market risk to diffuse throughout the health care system and into the future. As the risk is diffused, so is the responsibility. In AHERF's case, these diffused to the point where they seemed to disappear. From a policy perspective, it becomes less clear whether actors beyond AHERF's management team and board are responsible for the collapse of the system.

Postmortem

Who were the losers in the AHERF bankruptcy? Creditors were owed \$1.3 billion at bankruptcy filing. This included \$605 million in bond debt, \$497 million of unsecured debt, and \$200 million in loans to the eastern AHERF operations. Because of the use of insurance through MBIA, at least \$256 million of the bond debt (in Phila-

delphia) seems to be recoverable. Some bond debt on Pittsburgh hospitals also was insured through MBIA. The Committee of Unsecured Creditors is suing the officers and directors for \$1 billion to recover their losses, while the \$200 million loan has been written off. The Philadelphia communities in which AHERF's hospitals resided were also losers. The hospitals were once valued at \$500–\$550 million, based on various bids received from Vanguard in 1998. The final sale of AHERF's eastern facilities to Tenet for \$345 million suggests, as part of the downward bidding war, a potential welfare loss of \$200 million. The deputy AG for the State of Pennsylvania stated that the eight area hospitals had \$206 million of charitable assets over which the state had jurisdiction. The vast majority of these assets were endowments and other restricted accounts, built up over years by gifts and tax-exemption, that now appear to have been raided. Moreover, control over these hospitals has been transferred to Tenet, an investor-owned corporation. The City of Philadelphia and the state had little say in the transaction since AHERF filed for bankruptcy in federal bankruptcy court (Pittsburgh), which oversaw the disposition of AHERF's assets.

Of the proceeds from the Tenet sale, \$110 million was set aside to fund the operations of AUHS and its medical school, which now is independent. Another \$100 million was used to repay the interim "debtor-in-possession financing," which allowed AHERF to continue operations to meet its payroll while strapped for cash during the bankruptcy period. An unrestricted grant of \$50 million was allocated to the endowment of Drexel University to induce it to take over management of the medical school. This represented a 33 percent increase in Drexel's total endowment and 50 percent of its five-year capital campaign. Tenet received a \$40 million credit to handle the anticipated cost of "tail" insurance to cover unpaid medical malpractice insurance premiums. Other costs included the transactions fees, cure payments on executory contracts, and fees to cover the bankruptcy proceedings. Unsecured creditors thus reaped very little from the sale, with estimates ranging from \$45 million (according to the lawyer for the bankruptcy trustee) to less than \$40 million (according to the June 1999 lawsuit). In March 1999 the financial firm Bear Stearns sent letters to some of the 65,000 creditors offering to buy their claims for five cents on the dollar of face value.⁶⁸

Several ripple effects of AHERF's collapse will increase health care costs for employers and consumers in the state. First, AHERF canceled its risk contract with HealthAmerica in Pittsburgh, leaving the plan with \$55–\$60 million in one-time charges to cover medical services that were supposed to have been paid for under the contract. Coventry, HealthAmerica's parent, saw its stock price fall

nearly by half during July 1998. As a result, Coventry was expected to raise its prices to employers in the region. This was a bad omen to employers, which hoped that capitation would reduce costs. Second, the threat of hospital closure and the resulting loss of thousands of jobs motivated the governor of Pennsylvania and the mayor of Philadelphia to solicit a buyer for AHERF and broker a deal to persuade Drexel to manage AUHS (which Tenet did not want to do). Health care accounted for 13 percent of private employment in the area and was the primary source of new jobs from 1982 to 1995. Consequently, a lot of excess hospital capacity was left standing. Third, the sale of AHERF's Philadelphia hospitals required termination of its pension plans. However, AHERF was \$40 million short in funds needed to terminate plans in its Philadelphia operations (and may be as much as \$100 million short overall). The shortfall was to be made up by the Pension Benefit Guaranty Corporation (PBGC), a federal agency that rescues troubled pension plans (and is financed by healthy pension plans). AHERF's liability is one of the fifteen biggest claims since the PBGC began operating in 1975. Fourth, hospital bonds in Philadelphia have become unpopular, both new issues and the secondary market. It will now be more difficult and expensive for hospitals to upgrade their existing plant and capacity as they compete. On the other hand, the collapse permitted the first entry of an investor-owned system (Tenet) into the market. With its large revenue base and access to the equity market, Tenet may inject some new price competition with the AMCs.

Finally, AHERF's bankruptcy spelled the demise of its western hospitals in Pittsburgh, including its flagship AGH. By December 1998 AGH was under siege to find a buyer or file for bankruptcy. The hospital had suffered as much as \$80 million in operating losses over four years, draining its financial reserves down to a mere \$17 million. It was financing \$250–\$370 million in bond and bank debt accumulated over eleven years, along with \$100 million in lease payments. Finally, it had to write off \$200 million in loans to the Philadelphia operations. As an alternative to bankruptcy, AGH and the other western hospitals (AUH-West) were transferred to the West Penn system in 1999 in exchange for a \$25 million payment to the creditors, who agreed to release AGH and AUH-West from liability for all claims. The smaller hospitals in AUH-West (Forbes and Canonsburg) found themselves transferred to yet another system. Ironically, they decided to link with AHERF and AGH in 1996 because they believed that smaller hospitals could not stand alone.

THE HOSPITAL SYSTEM KNOWN AS AHERF no longer exists. The legal case against AHERF's officers and directors continues. In June 1999 the unsecured creditors sued ten AHERF officers and directors for \$1 billion in damages. In addition, two grand juries (one in Pittsburgh, one in Philadelphia), the SEC, the state AG, and the PBGC are investigating various charges. In September 1999 the AG filed a \$78.5 million claim in Federal Bankruptcy Court, arguing that AHERF transferred funds restricted for charitable uses to a general operating account. Lawyers for the Committee of Unsecured Creditors are also soon expected to file a lawsuit against the auditor, now part of PricewaterhouseCoopers.

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NOTES

1. AHERF and its affiliates filed under Chapter 11 of the federal bankruptcy code. The affiliates included eight Philadelphia hospitals, organized into two divisions (Allegheny University Hospitals–Centennial, Allegheny University Hospitals–East); its physician practice network known as Allegheny University Medical Practices (AUMP); and its Allegheny University of the Health Sciences (AUHS), which included the combined Medical College of Pennsylvania/Hahnemann Medical School.
2. The bankruptcy trustee has reestimated the debt to be \$1.5 billion. Creditors have challenged the amounts AHERF has listed as owing them.
3. According to the American Bankruptcy Institute, the 1992 filing by Charter Medical was the largest bankruptcy in health care.
4. The research on which this paper is based draws on interviews with AHERF executives and physicians in Pittsburgh and Philadelphia. Information also was gleaned from interviews with Moody's Investors Service; Municipal Bond Investors Assurance Corporation (MBIA); Duff and Phelps Credit; Pennsylvania Attorney General D. Michael Fisher; and local health care consultants. Virtually all of those interviewed wished to remain anonymous. The research also draws heavily on published stories on AHERF taken from the *Pittsburgh Post-Gazette* and the *Philadelphia Inquirer*. Writers at the *Pittsburgh Post-Gazette* include (in alphabetical order) Len Boselovic, Katy Buchanan, Joyce Gannon, Pamela Gaynor, Joann Loviglio, Steve Massey, Jim McKay, Michael Newman, Frank Reeves, Peter Shelly, Christopher Snowbeck, Byron Spice, and Lynda Guydon Taylor. Writers at the *Philadelphia Inquirer* include Andrea Gerlin, Josh Goldstein, Donna Shaw, Karl Stark, and Marian Uhlman. Each newspaper also released an excellent overall summary of the AHERF bankruptcy. We also relied on other published reports on AHERF in trade magazines and the *Philadelphia Business Journal* and on speeches by AHERF officials, as cited below.
5. AGH had roughly 180 residents in twelve residencies. In 1986 the University of Pittsburgh operated Western Psychiatric Institute and Clinic, Clinical Eye and Ear Hospital, and the outpatient Faulk Clinic. It was affiliated with Presbyterian University Hospital (568 beds), which it subsequently controlled and then complemented with Montefiore Hospital (408 beds). The result was a large medical enterprise with four hospitals, a medical school, a cancer

- center, and an outpatient facility.
6. John Westerman, brought in as CEO in 1982 from the University of Minnesota Hospitals, pursued a slow pace of change that failed to elevate AGH's stature and led to his termination prior to 1986.
 7. S. Abdelhak, "Allegheny Health, Education, and Research Foundation: Successful Integration Strategies for Anticipating the Managed Care 'Wave' Before It Hits the Beach" (Speech delivered to the Symposium on Governing Integrated Healthcare Systems, Naples, Florida, 12 January 1998).
 8. 1998 bankruptcy court documents reveal that actual losses in FY 1998 in the eastern operations and the AHERF parent totaled \$385 million, or more than \$1 million a day.
 9. Hospitals have failed to garner more than 10 percent of revenues from capitated contracts and have lost money on the contracts they have won. Much of this problem stems from a lack of managed care infrastructure. L.R. Burns and D.P. Thorpe, "Physician-Hospital Organizations: Strategy, Structure, and Conduct," in *Integrating the Practice of Medicine*, ed. R. Connors (Chicago: American Hospital Publishing, 1997), 351-371.
 10. M.L. Sirower, *The Synergy Trap* (New York: Free Press, 1997). An examination of 300 hospital mergers and affiliations found that most have failed for a wide variety of reasons. G. Colon, A. Gupta, and P. Mango, "M&A Malpractice," *McKinsey Quarterly* (February 1999): 62-77. Academic research suggests that hospital mergers typically do not result in economies of scale or lower prices, except for small hospitals and competitive markets, respectively. See E.B. Keeler, G. Melnick, and J. Zwanziger, "The Changing Effects of Competition on Non-Profit and For-Profit Hospital Pricing Behavior," *Journal of Health Economics* 18, no. 1 (1999): 69-86; and R.A. Connor et al., "Which Types of Hospital Mergers Save Consumers Money?" *Health Affairs* (Nov/Dec 1997): 62-74.
 11. There is evidence that vertical integration into primary care through PCP acquisitions leads to losses of \$50,000-\$100,000 per physician per year. Coopers and Lybrand, *Owning Physician Practices: Challenges and Critical Success Factors* (Chicago: Coopers and Lybrand, 1997).
 12. Such hospitals have low returns to net operating revenues, which results in little working capital, low ability to upgrade the facility, and little ability to support other activities. T.R. Prince, *Strategic Management for Health Care Entities* (Chicago: American Hospital Publishing, 1998). According to Prince, investment-grade securities require a minimum return of 6 percent for several years. AHERF's hospital acquisitions in Philadelphia consistently fell below this.
 13. MCP and GHS approached AHERF. AHERF initially approached United and Hahnemann, but nothing was consummated. Both of these institutions later approached AHERF when their financial condition worsened.
 14. Financial data on AHERF's acquisitions come from two sources: Official Statements issued in conjunction with each of the system's bond issues, and the Merritt System, a credit analysis and database management system supporting comparative financial, operational, and bond-issue data on not-for-profit hospitals. The Merritt System is a national database containing data from more than 1,700 hospitals and 160 health care systems. It is the product of Van Kampen American Capital Management, Inc., and its affiliates, a division of Morgan Stanley located in Oakbrook Terrace, Illinois. Copyright 1990 by Van Kampen Merritt Investment Advisory Corp; all rights reserved.
 15. Information provided anonymously by Philadelphia market informants.
 16. M. Cohen, "Child of the Revolution," *Philadelphia Magazine* (February 1998): 78-105.
 17. When Moody's declined to upgrade GHS's debt in 1996, AHERF executives admonished Moody's, which then downgraded the GHS debt later that year.

18. The five obligated groups were DVOG, Centennial, AGH, Forbes and Allegheny Valley Hospitals, and Canonsburg Hospital. Moody's rating policies actually encouraged this use of obligated groups.
19. Some Philadelphia observers surmise that Abdelhak was seeking to amass enough hospital capacity in the market to sell the Philadelphia operations to Columbia/HCA (which was still aggressively acquiring hospitals). Former AHERF executives in Pittsburgh state that there was no such strategy.
20. The 1998 median level of maximum annual debt-service coverage dropped, reflecting a lower ability of hospital borrowers to apply their most recent historical net revenue available for the debt service to the largest future annual principal and interest payment. P. Federbusch et al., *Not-for-Profit Health Sector: 1999 Outlook and Medians* (New York: Moody's, September 1999).
21. HMO data on these markets were obtained from InterStudy, courtesy of Douglas Wholey at the University of Minnesota.
22. Pennsylvania Economy League, *Greater Philadelphia's Challenge: Capitalizing on Change in the Regional Health Care Economy*, Report no. 683 (Philadelphia: Pennsylvania Economy League, Eastern Division, 1996).
23. S. Abdelhak, "Our Organization's Commitment to Creating and Achieving Goals" (Presentation to the 1997 Duke Private-Sector Conference), in *Beyond Managed Health Care: The Role of the Academic Health Center*, ed. R. Snyderman and V. Saito (Durham, N.C.: Duke University Medical Center and Health System, 1997).
24. Abdelhak, "Allegheny Health, Education, and Research Foundation."
25. In its bankruptcy filing, AHERF listed its top three creditors as U.S. Healthcare (\$19.8 million), HealthAmerica (\$16 million), and Independence Blue Cross (\$8.1 million). HealthAmerica disputed the amount.
26. Abdelhak, "Allegheny Health, Education, and Research Foundation."
27. R.E. Hurley et al., "Adapting to Mandatory Medicaid Managed Care: A Painful and Unproven Pursuit of Value" (Report prepared for the Pew Charitable Trusts, January 1999).
28. Ibid.
29. S. Hensley, "System Slashes Jobs, Pay," *Modern Healthcare* (20 October 1997): 2, 8. The trifecta is a feat achieved in racetrack gambling when one picks the top three finishers (in order) in a given race.
30. J. George, "Slicing Up Cardiac Surgery Market," *Philadelphia Business Journal* (27 February/5 March 1998): 3, 28.
31. D.D. Pointer, "Value-Added Governance" (Presentation to Integrated Healthcare 2000 Annual Symposium on Governing Integrated Healthcare Systems, Aspen, Colorado, 30 August 1999).
32. *The Official Committee of Unsecured Creditors of AHERF v AHERF*, U.S. Bankruptcy Court for the Western District of Pennsylvania, Case no. 98-25773 MBM through 98-25777 MBM inclusive, 17 November 1998.
33. *The Official Committee of Unsecured Creditors of AHERF v AHERF, AUHS, AUMP, Allegheny Hospitals-Centennial, and Allegheny University Hospitals-East*, U.S. Bankruptcy Court for the Western District of Pennsylvania, Case no. 98-25773 MBM through 98-25777 MBM inclusive, Motion no. 99-2844, 22 June 1999.
34. C.J. Loomis, "Lies, Damned Lies, and Managed Earnings," *Fortune* 140, no. 3 (1999): 74-92.
35. According to the Unsecured Creditors, the CEO and CFO redeployed the accounting entries to boost reported operating income and reduce reported operating costs, to yield one-time financial statement benefits of \$100 million. *The Official Committee of Unsecured Creditors of AHERF v AHERF, AUHS, AUMP, Allegheny Hospitals-Centennial, and Allegheny University Hospitals-East*.
36. R. Haugh, "The Ratings Slide: Are We Headed for a Capital Crisis?" *Modern Healthcare* (9 August 1999): 40-43; and K. Pallarito, "1998 Bond Sales Shatter

- Record,” *Modern Healthcare* (18 January 1999): 37, 39.
37. Prince, *Strategic Management for Health Care Entities*.
 38. The coding system for rating bonds differs between Moody’s and S&P. Moreover, these rating systems change over time, making time comparison difficult. As a quick primer, we illustrate the Moody’s system. The highest rating is triple-A, denoted Aaa, followed by Aa, A, Baa, Ba, B, Caa, Ca, C, and so forth. Within each of these grades, bonds can be further differentiated by a number, such as Aa1, Aa2, and Aa3. The lowest investment-grade rating is Baa. See Prince, *Strategic Management*, 512, Exhibit 22-1, for more details.
 39. We focus on Moody’s rather than S&P in this section, because of their more frequent reports and indications of problems at AHERF and its affiliates.
 40. Moody’s Investors Service, “Allegheny Health, Education, and Research Foundation: Fundamental Rating History” (New York: Moody’s, 1999).
 41. Moody’s internal rating of AHERF was “very, very low,” and lower than the ratings maintained by other ratings agencies, according to Moody’s officials. Yet Moody’s policy did not allow it to go public with this “underlying rating.”
 42. Cain Brothers, “The AHERF Bankruptcy and Its Aftermath: Implications for Managers and Trustees, Part I,” *Strategies in Capital Finance* (Summer 1997): 1–27.
 43. Moody’s bond ratings for other AHERF hospitals remained high and unchanged over time. AGH had a high credit rating of Aa during 1986–1988, reflecting its high margins. In 1989, however, its margins began to shrink (due to an “unusual event” resulting in a \$6 million write-off in the annual report). The margins dropped further in 1990 to one-quarter of the average for 1986–1988, while its net operating revenue had increased two-thirds. As the system expanded into Philadelphia, AGH’s bonds retained their Aa rating until 1995, after which they were slightly downgraded (to A1, A2, and A3) until early 1998. Why did they retain high ratings? First, AGH avoided negative cash flow by using nonoperating revenues (for example, through its research institute). Second, AGH purchased debt insurance from MBIA for roughly one-third of the \$60 million in bonds issued in 1991.
 44. T. Prince and R. Ramanan, “Bond Ratings, Debt Insurance, and Hospital Operating Performance,” *Health Care Management Review* 19, no. 1 (1994): 64–73.
 45. Prince, *Strategic Management*.
 46. K. Pallarito, “Paying for Innovation,” *Modern Healthcare* (21–28 December 1998): 2–3, 12; and J. Asplund, “Uncertainties in Hospital Field Keep Pressure on Bonds,” *AHA News* (25 January 1999): 7.
 47. Federbusch et al., *Not-for-Profit Health Sector*.
 48. *Ibid.*
 49. D. Aubin, “Municipal Bond Reinsurance Climbing Despite Rating Doubts,” *Dow Jones Newswires* (9 April 1999).
 50. Prince, *Strategic Management*.
 51. C. Gasparino, “S&P’s Caveat on Ratings: Don’t Blame Us,” *Wall Street Journal*, 20 August 1999, C1, C10.
 52. Cain Brothers, “The AHERF Bankruptcy and Its Aftermath.” This has become evident with other recent events. See Haugh, “The Ratings Slide.” AHERF’s largest competitor in Philadelphia, UPHS, likewise engaged in horizontal consolidation with area hospitals and vertical integration with PCPs, and full-risk contracting. In 1998 and 1999 UPHS incurred operating deficits of \$90 million and \$198 million, respectively, prompting a Moody’s mult notch downgrade. Because the health system represented a large share of the University of Pennsylvania parent’s revenue base and borrowed \$123 million from the university in 1998, Moody’s downgraded the latter’s debt twice in 1999.
 53. Aubin, “Municipal Bond Reinsurance Climbing.” MBIA reinsured 15 percent of its gross debt service as of 31 December 1998.

54. Risky diversification threatens the bond insurer's Aaa rating with Moody's and may harm the insurer's business partners (the reinsurers), who often receive a fixed percentage of all the business underwritten.
55. A June 1998 Moody's report, "The Changing Face of Healthcare May Impact Guarantors' Exposure," documents an increase in insurers' activity in "health care paper," which started becoming more risky in the early 1990s. Insurers' retrenchment from this increasingly risky business (which only started after the AHERF bankruptcy) lagged behind the changing risk profile.
56. MBIA has a third division, Insured Portfolio Management, which is "responsible for monitoring outstanding issues insured by MBIA Corp. This group's first function is to detect any deterioration in credit quality or changes in the economic or political environment which could interrupt the timely payment of debt service on an insured issue" (MBIA Form 10-K, Securities and Exchange Commission, 30 March 1999).
57. "Moody's October 1999 Financial Guaranty Industry Outlook."
58. In its SEC 10-K Form, MBIA states that as of 31 December 1998, \$163 million had been set aside as a "loss reserve" for a health care facility in Pennsylvania (presumably AHERF). Between 1997 and 1998 MBIA's loss ratio (losses incurred divided by premiums earned) skyrocketed from 1.2 percent to 8 percent. MBIA had previously dealt with the firms reinsuring the \$170 million, but the latter's involvement in this market was more cyclical. They were multiline reinsurers that become more active in the guaranty market when their traditional markets become softer.
59. Between 1990 and 1996 the AG reviewed four mergers; in 1997 the AG reviewed twenty-one mergers. As the transactions became larger and more complex, the reviews became more time-intensive.
60. The AG's office said it took AHERF's bankruptcy to convince legislators that AG review was not governmental interference or an "intellectual" exercise.
61. The AG has challenged this point, which has not yet been absolutely determined in bankruptcy court.
62. Cain Brothers, "The AHERF Bankruptcy and Its Aftermath."
63. K. Pallarito, "Investors Aren't Sold on Healthcare Bonds," *Modern Healthcare* (31 May 1999): 36-37. Of course, the higher rates are now associated with the higher risks, reversing what some analysts refer to as the "artificial narrowing of spreads." Cain Brothers, "The AHERF Bankruptcy and Its Aftermath."
64. K. Pallarito, "Bond Insurers Put the Squeeze on Strapped Hospitals," *Modern Healthcare* (15 March 1999): 48-52. Bond insurers have always had these rights and remedies at their disposal. However, they are now exercising them, as the credits they insure have deteriorated. Insurers typically have quantifiable measures of deterioration ("trigger points") for when they can step in.
65. A.D. Chandler Jr., *Scale and Scope: The Dynamics of Industrial Capitalism* (Cambridge, Mass.: Belknap Press of Harvard University Press, 1990).
66. Local systems that have recently contracted with large HMOs on more of a level playing field include Allina (Twin Cities), Sutter (Bay Area), and Columbia/HCA (Florida). Hospital systems now forming their own group-purchasing organizations include Continuum Health Partners (New York City) and Lee Memorial Health System/Sarasota Memorial Hospital (Florida).
67. The authors thank Mark Pauly for his insights here.
68. New sources of funds to help repay AHERF creditors include \$25 million from the sale of AUH-West. Creditors are also suing to recover the \$89 million in loans repaid to the bank consortium in spring 1998 and may recover monies from the directors and officers insurance policies. Tenet is collecting up to \$65 million in accounts receivable, for which it receives a 10 percent fee. Cain Brothers estimates that creditors will get thirteen to fifteen cents on the dollar.