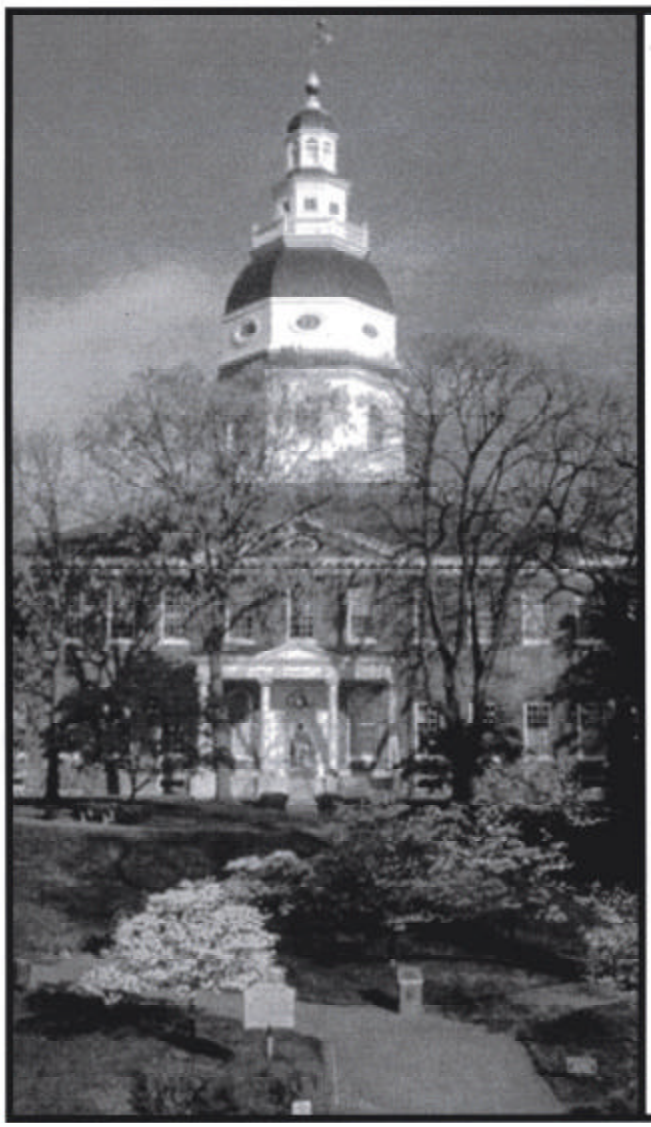


Achievement, Access & Accountability

A Guide to Hospital Rate Regulation in Maryland

MHA
The Association of Maryland Hospitals & Health Systems

Table of Contents

Achievement, Access, and Accountability: Hospital Rate Regulation in Maryland was produced by the Maryland Hospital Association, 6820 Deerpath Road, Elkridge, MD 21075-6234. Phone: 410-379-6200. Fax: 410-379-8239. Web site: www.mdhospitals.org. January 2002.

Foreword

The year 2001 marked the 30th anniversary of hospital rate regulation in Maryland. Although Maryland was the first state to enact rate regulation, a handful of states followed over the next decade. Today, all of the other programs have vanished for a variety of reasons, such as political whims, hospital nonperformance, challenges in program administration, and implementation and opposition to regulation in general.

The experiences around the rest of the country give rise to a number of questions about the Maryland payment system. Can Maryland's system continue? Hasn't it experienced many of the same dynamics that brought the demise of the other systems? Isn't the environment today dramatically different than it was 30 years ago? Is the process still relevant in the new millennium? The short answer to each of these questions is yes, and no.

There are many reasons the Maryland payment system has survived the evolution of health care delivery systems, advancements in medicine, and the changing medical marketplace. A principal reason is that the enabling legislation for the Health Services Cost Review Commission (HSCRC) – the regulatory body that sets hospital rates – set forth broad principles and provided discretionary latitude to accomplish its objectives of containing costs and maintaining the solvency of effective and efficient hospitals. This flexibility is essential in responding to change, allowing the Commission and the hospitals, in concert, to directly influence the evolution of the system.

Executive branch leadership and support also has been a factor. Over the years, each of the five gubernatorial administrations has supported the Maryland payment system, and the state legislature has been an ardent champion. Other contributing elements include: the competency of the HSCRC staff; the presence of part-time commissioners who function as a board; tacit support from the payors; and, a high level of support from hospitals.

Hospitals are profoundly more complex organizations than they were 30 years ago. They are significantly more technologically sophisticated and operate a greatly expanded scope of services. Management is thoroughly challenged due to elaborate organizational structures and operating milieu. Hospitals also employ a more highly trained workforce with much more intensive workloads. All this is coupled with the needs of a much sicker, more diverse population and the strong pressure for increased efficiency from managed care, government, employers, and hospital trustees. In the late 1990s, these forces, along with outdated methodologies, federal budget cuts, and lightning-speed environmental changes brought the program to the brink. Confidence in the system had eroded and support had become tentative. The

rate-setting methodologies developed over the years had to be modified substantially or the system would collapse.

In the spring of 2000, the HSCRC, hospitals, payors, and representatives from business and unions reached an agreement on the redesign of the Maryland payment system. The new system takes a decidedly more formulaic approach to provide more predictability. At the same time, it is significantly streamlined, reflects the changes in input costs, and relates Maryland's performance to hospitals nationwide. It also preserves the Commission's flexibility in establishing hospital rates.

Hospitals are faced with a myriad of challenges – baby boomers, "generation Xers," genomics, and the aging population – just to highlight a few. Can a regulatory program, which by its very nature must comply with lengthy due process and exercise restraint, be responsive to hospitals' needs to adapt to these challenges? Consumers and medicine will not stand for hospitals maintaining the status quo. Is it still possible for a regulatory agency to effectively balance its statutory charge and the federal government's criteria for a state payment system with the hospitals' mandate for the new millennium? The challenge is far more difficult than when rate regulation began.

Shockingly to outsiders, hospitals and insurers agreed to give the redesigned system an opportunity to succeed. Undoubtedly, that is because they feel the principles of access, accountability, predictability, and stability are still valid. But, there are practical advantages as well: There is one set of payment rules for all payors, no unapproved cost-shifting, an open forum for policy, methodology and procedure development, direct interaction with decision-makers, and no incentive for discrimination among purchasers. The redesigned program went into operation in July 2001, and will function for a minimum of three years. How long will it persist? This question will be considered more in the body of this document.

This publication is an update of a report produced in 1988, for the Maryland Hospital Association (MHA). Jack Ashby, now research director for the Medicare Payment Advisory Commission (MedPAC), was commissioned to author the first publication, entitled *Access, Accountability and Achievement*, describing the history of Maryland's hospital rate regulatory system. His diligent research and objectivity have provided the historical foundation for this publication.

The publication is designed as an educational tool and reference guide to help newcomers to Maryland hospital finance understand the inner workings of today's payment system. It is geared toward new CEOs and CFOs and is intended to be a valuable resource for anyone seeking a primer on the payment system. For those interested in a deeper historical perspective, the *Appendix* examines the history of the Maryland payment system and provides a context in which to understand how the current system evolved into what it is today.

William H. Wojcik of PricewaterhouseCoopers produced a working draft document and assembled a team of advisors to guide the development of this project. The team included: George A. Blair, CFO, Anne Arundel Medical Center; David Cohen, partner, Cohen, Rutherford, Blum, and Knight, P.C.; Harold Cohen, Ph.D., consultant; Philip B. Down, president, Doctors Community Hospital; Stuart Erdman, senior director, finance, The Johns Hopkins Health System; Richard L. Jones, CFO, Suburban

Hospital Healthcare System; Kevin Kelbly, CFO, Carroll County General Hospital; Kyle Miller, partner, Arthur Andersen; Robert Murray, executive director, Health Services Cost Review Commission; Paul Sokolowski, senior vice president, finance, Maryland Hospital Association; and, Michael Zito, senior manager, KPMG.

Gebrette Miles, director of Finance for MHA, was instrumental in overseeing content development, the editing process and production of the final document. Linda Janzik, MHA's assistant vice president for Communications, was an invaluable resource in editing drafts and the final document for publication and was responsible for the entire production process.

On behalf of the contributors to this document, we hope it is valuable to your understanding of the Maryland Payment System.

Edgar Lawrence
Executive Vice President
Maryland Hospital Association

Executive Summary

The Health Services Cost Review Commission's (HSCRC) enabling statute was enacted in 1971. After a three-year phase-in period, the Commission began setting rates in July 1974. At that time, its authority extended only to the rates hospitals charged to the nonfederal purchasers of care, since Medicare and Medicaid laws preempted state payment statutes. But in 1977, Maryland was granted a waiver by the federal government to test alternative payment approaches, exempting the state from national Medicare and Medicaid reimbursement requirements.

The Maryland exemption was established by federal legislation on a permanent basis in 1980 with the proviso that the program continue to meet federal criteria. The waiver made it possible to achieve equitable pricing of hospital services for purchasers of care, creating consistent incentives for hospitals in dealing with the various types of payors. Since, according to Medicare requirements, all payors must participate in the program, the program is known as the "all-payor system."

Base rates were approved for each hospital as a requirement for Medicare and Medicaid participation, effective July 1, 1977. Today, hospitals receive an annual "rate order" from the HSCRC that establishes the rates hospitals can charge during the fiscal year. Continuation of the waiver is contingent on a computation demonstrating that the federal government's payments per case for Medicare in Maryland have not risen more rapidly over time than in the rest of the country. In Maryland, this is known as the "waiver test."

From 1971 to 2000, the rate system evolved in virtually all areas – payment policies, rate methodologies and reporting, and compliance requirements – by virtue of a combination of innovation, experience, and experimentation. During the 1980s, as other state systems were floundering, Maryland's was considered a model of success. Indeed, Maryland hospitals have kept cost increases below the national average for 14 of the last 16 years – an impressive record. But, by the mid-1990s, the system was beginning to exhibit signs of stress.

After more than 25 years of successful operation, all parties began to recognize that constant methodology modifications were rendering the system dysfunctional. Maryland's position of being below the national average was eroding, and performance on the waiver test was slipping. In 2000, Maryland's hospital payment system, the longest-running state rate-regulation program in history, underwent a major redesign.

The goals of the redesign were to provide predictability and stability; be prospective in nature; recognize input cost inflation; be streamlined; and, be reflective of the

national experience. Four major components of the Maryland payment system were established:

- an annual update formula;
- revamped full rate review process;
- unit rates for each revenue center; and,
- an overall charge-per-case target.

While there are many other important components of the system that have a significant impact on the day-to-day financial operations of hospitals, these are the cornerstones. Although the Maryland system was streamlined in the redesign effort, it continues to be quite complex for the uninitiated. However, the consensus in Maryland is that a sophisticated approach is required in order to have an equitable payment system.

Over the years, the Commission has instituted a number of initiatives that address both financial and environmental factors. In addition, the Commission has struggled to provide adequate predictability through a number of innovations. For example, the Inflation Adjustment System (IAS), implemented in 1977, was designed to give hospitals an ongoing incentive to control costs in a more predictable and timely manner, while simplifying the administrative aspects of rate regulation. The Guaranteed Inpatient Revenue System (GIR) emerged in 1978, to provide incentives to control overall costs, not simply unit rates. While these methodologies are no longer in use, they have helped shape the system into what it is today.

There also have been some unique and unconventional approaches to deal with environmental issues, from providing financial support for nurses to the reduction of excess capacity. Several pivotal court rulings and legislation also have shaped the playing field.

The redesigned system is being piloted for three years, during which its success is being closely evaluated. Over the next two years, Maryland hospitals likely will face many environmental and marketplace challenges. The Commission's challenge, then, must be to balance the mandates of the rate system – assuring reasonable rates for the public – while assuring the financial integrity of hospitals, so that high quality care can be provided to citizens. Looking to the future, if the balance between cost control and financial stability can be sustained, it is likely that rate regulation will continue to play a prominent role in Maryland's health care system.

Formation of the Commission

The legislation that brought hospital rate regulation to Maryland was enacted in 1971, after several years of debate in the Maryland General Assembly and in health policy forums. The state's interest in rate controls emerged primarily from skyrocketing hospital rates, which began after enactment of Medicare and Medicaid in 1966, but the key to passage of the enabling legislation was the support of the hospital community. The Maryland Hospital Association (MHA) actively campaigned for rate regulation in the hope of recovering full financial requirements, including the costs of charity care and bad debt – expenses that were not being reimbursed by the major payors: Medicare, Medicaid and Blue Cross.

A short while later, the Health Services Cost Review Commission (HSCRC) was created, with seven Commissioners appointed by the Governor and the authority to hire staff. The Commission has a four-part mandate to:

- publicly disclose information on the cost and financial position of hospitals;
- review and approve hospital rates;
- collect information detailing transactions between hospitals and firms with which their trustees have a financial interest; and,
- maintain the solvency of efficient and effective hospitals.

In fulfilling its public disclosure responsibility, the Commission distributes an annual report providing a comprehensive array of hospital-specific data, and makes all Commission files accessible to the public. As a result, Maryland hospitals operate with an unusual degree of openness. Only patient-specific data and certain competitive information are held legally confidential. Published comparative analyses of hospitals extend to profit margins and uncompensated care rates, as well as to various cost and utilization measures.

In conducting rate reviews, the Commission is to assure that:

- total costs of all services offered by a hospital are reasonable;
- the aggregate rates of the hospital are reasonably related to the aggregate costs of the hospital; and,
- rates are set equitably among all purchasers of services.

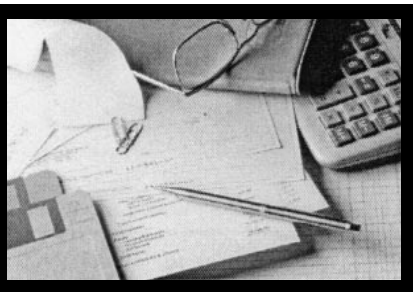
It is worth noting that in the early 1970s, the nation's hospitals generally faced none of these constraints. Cost-based reimbursement of the Medicare and Medicaid programs provided virtually no incentive to hold down costs. Hospitals set prices according to what an imperfect market would bear, causing enormous losses in some services and substantial surpluses in others. Prices for self-pay and commercial

insurance patients were routinely set high enough to cover sizable discounts for Medicare, Medicaid, and Blue Cross patients.

Maryland is the only state in which all payor groups share the burden of uncompensated care equally. They, in turn, pay basically the same price for hospital services. This creates equity among payors and is a huge benefit to payors, as well as to self-pay patients.

The Commission's jurisdiction extends to short-term acute-care hospitals, several private psychiatric hospitals, and a few chronic care facilities. This is still the case today.

Development of Budget Review



The first phase of Commission activity from 1972 to 1977 was to develop and implement a budget review model of rate regulation. Rate review authority began in July 1974, when the published payment rates of all third-party payors were frozen, pending approval of an initial schedule of rates for each hospital.

Uniform Reporting

To support budget review as well as public disclosure, a Uniform Accounting and Reporting System (UARS) was implemented in 1973, requiring that direct costs, revenue, and prescribed output measures be submitted according to a uniform set of cost centers. In 1977, this reporting requirement was expanded to include a standardized discharge abstract for each patient, termed "case-mix" data. The combination of financial and case-mix data, collected according to audit standards, resulted in one of the most complete and accurate hospital databases in the country.

The Review Process and Financial Requirements

A rate review process was developed that allowed the Commission staff to evaluate the hospital's budget, using a standardized format to facilitate comparisons with similar hospitals. If the staff found that the hospital had proposed unacceptably high expenditures, the Commission would hold one or more public hearings to consider special circumstances and justifications. Both sides could call expert witnesses. An unfavorable Commission decision could be appealed directly through the Maryland courts.

Operating costs were to be reviewed on a departmental basis, with the "standard of reasonableness" based on a group of comparison hospitals. The theory behind the approach was that the same service should cost the same at similar hospitals. In practice, a reasonable overage was allowed in some departments as long as aggregate costs were in line with group averages.

For capital costs, the traditional approach of reimbursing depreciation plus interest on a "pass-through" basis was replaced by formulas for physical plant and two classes of equipment. This fixed payment approach, termed the Capital Facilities Allowance (CFA), was intended to constrain overall capital expenditures and to encourage the most economical labor/capital trade-off. Over time, Commission practice evolved into provision of actual cash requirements for approved expenditures.

An allowance for bad debts and charity care based on a hospital's past experience was added to approved costs. To assure that the hospital had an incentive to conduct

effective collection procedures, a limit on the allowance for each hospital was established, using a sophisticated statistical technique called the "predictive regression model."

Another allowance was added to cover two types of uniform payor differentials. The first was a discount to any third-party payor willing to provide hospitals with working capital according to a prescribed formula, or to any individual making payment upon discharge. The second discount of 4 percent was made available to commercial payors meeting certain criteria calculated to reduce hospital uncompensated care. The primary criterion was the offer of open enrollment. Another discount – a contractual discount equivalent to the above two discounts – was given to Medicare and Medicaid. Medicaid was granted a 4 percent discount because, by the program's very purpose, it reduces uncompensated care. It or its subordinate managed care organizations must earn the 2 percent discount by making working capital advances. These discounts were initially estimated in anticipation of a major study of the costs of services provided to various categories of patients.

A payor differential study initiated in 1974 attempted to measure payor cost differentials not only in working capital requirements and underwriting practices averting bad debts, as identified in the initial payment system, but for patient care costs and actual bad debt experience as well. The analysis turned out to be an involved process. The study took several years, during which comprehensive hearings were held and the Health Insurance Association of America filed a lawsuit. When the Commission finally issued its decision in 1986, the policy changes were modest, and payor differentials based on patient care costs and bad debt experience were not implemented.

Very early on, the Commission adopted the policy that nonpatient revenues (such as earnings on endowment funds, parking lots, etc.) may not be used to support inefficiency as evidenced by group comparisons. Rather, such monies were used to reduce the rates required to cover approved costs. After these original methodologies were implemented, the Commission continued to develop more sophisticated approaches. (*See Appendix*.)

All of this resulted in the issuance of a rate order establishing the anticipated revenue authority, expected budgeted utilization, and a set of approved unit rates. These rates must be charged by the recipient hospital over the budget period covered by the rate order.

The initial 20 years of the program were characterized by excitement about the formation and start-up of the Commission, development of innovative methodologies, and the impressive track record of cost containment. During this journey, there were several controversial, landmark court cases that interpreted aspects of the Commission's statute. And, in the mid-1980s, there was a major effort to strengthen the Commission's regulatory authority. By the end of the second decade, strong concern arose about hospitals' financial performance and stability. A major study was undertaken to determine the magnitude of the problem and corrective measures were implemented. This work set the stage for the third decade. (See *Outlook for the Future* for details on the Commission's most recent financial condition study.)

The 1990s

During the early 1990s, evidence showed that the regulatory process was achieving significant success in managing the cost per admission in Maryland at a point well below the national average. In 1993, Maryland's cost per admission was 14 percent below the national average.

At the same time, overt policy changes the Commission made to correct for the poor financial condition of hospitals began to add revenue into the system, which began to appear in hospitals' fiscal performance. The increased revenue authority generated by these adjustments allowed Maryland hospitals to improve operating margins significantly. For the first time since the regulatory effort was initiated, the margins at Maryland's hospitals approximated those for hospitals nationwide. Considerable funds were immediately reinvested for capital replacement that had been deferred from the lean 1980s. As a result, the average age of plant decreased appreciably to match the national profile. (*See Exhibit 1.)* As of 1999 (the latest national data available), Maryland's average age of plant was 9.3, while the national average was 9.5. The adjustments to Maryland's regulatory model were having the intended effect of increasing margins, improving balance sheets, catching up on capital improvements, and enabling state-of-the-art technology acquisition.

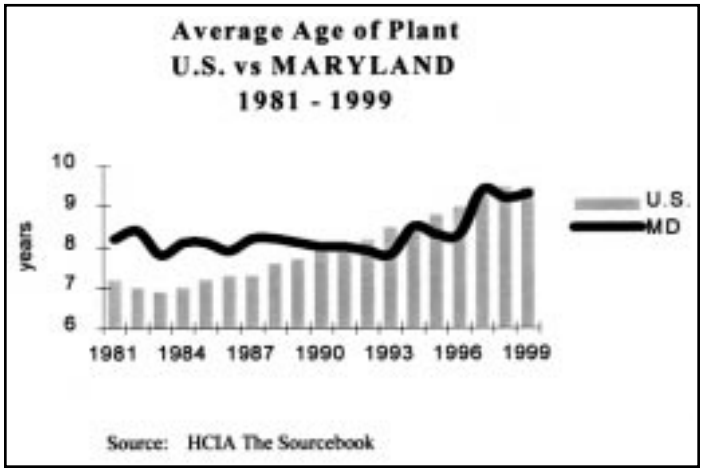


Exhibit 1

Ironically, the rest of the country began to experience significant market pressures, which reduced margins. Managed care was maturing and sweeping the nation. Enrollment grew rapidly by offering the prospect of reduced administrative burdens and lower insurance premiums, especially in markets dominated by younger, healthier populations. Nationally, managed care payors developed effective gate-keeping techniques that slowed access to care and restricted hospital revenues by demanding and winning significant discounts from charges in return for access to their managed lives.

Maryland hospitals were doing well financially, but just as managed care was ratcheting down private payments for hospitals nationally, Congress enacted the Balanced Budget Act of 1997 (BBA '97). This severely limited Medicare revenues paid to

hospitals elsewhere around the country. It was estimated that BBA '97 would reduce net Medicare spending by $115 billion and Medicaid spending by $14.6 billion between 1998 and 2002. Actual experience was double the forecast. Just as Maryland's revenues and expenses were increasing, severe restraints were being imposed nationwide. The consequence was that Maryland's Medicare "waiver cushion" – the difference between national cumulative growth and Maryland cumulative growth – eroded quickly (s*ee Exhibit 2*), as did Maryland's position below the national average on a charge-per-case basis. Concern emerged at the HSCRC that the waiver could be in jeopardy and that a major hallmark of the Maryland program – being below the national average on an all-payor basis – had been exceeded.

Meanwhile, because of its large metropolitan population and significant number of government workers, Maryland surged to one of the most heavily penetrated managed care states in the region, and HMO penetration reached 40 percent. (*See Exhibit 3.)* Even though Maryland hospitals were insulated from managed care demands for deep discounts (the all-payor system does not permit unearned discounts), a new program was developed to respond to the significant penetration of managed care – Alternative Rate Methodologies (ARMs).

Under the ARM approach, third-party payors contract with a related entity, which pays the hospital HSCRC-approved rates. The related entity bears any contractual risk. These alternative agreements were intended to encourage innovative and cost-saving patient care arrangements. At the outset, hospitals were supportive of the ARM concept because it provided the ability in the rate system to "go at risk." By the beginning of the millennium, managing actuarial risk had proven difficult, and risk contracts were often disadvantageous to providers. As a result, many of the approved ARMs were not implemented, applications for new ARMs were nearly halted, and some existing applications were not being renewed.

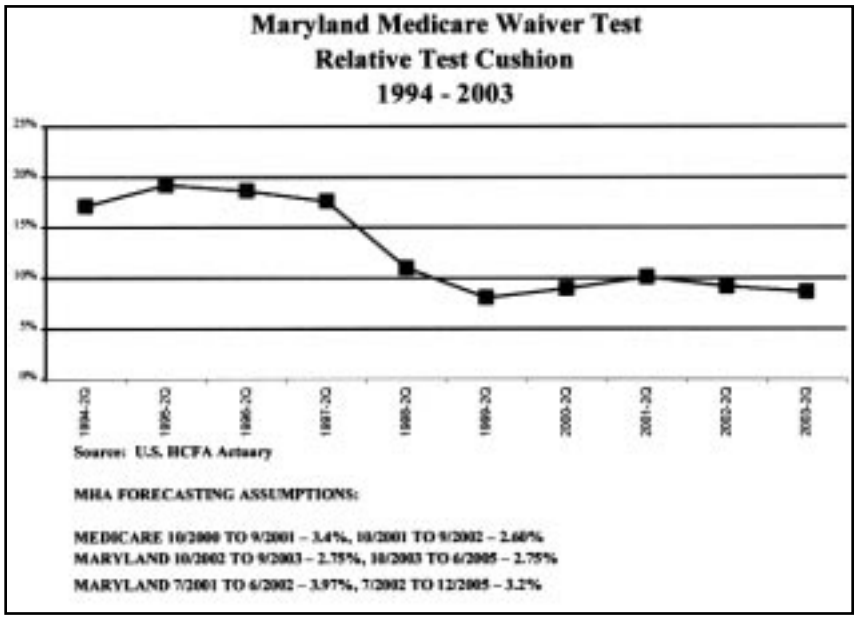


Exhibit 2

From 1996 through 1998, frequent modifications to the basic rate-setting methodologies (the Inflation Adjustment System and Guaranteed Inpatient Revenue Program) were made to constrain hospital rate increases so they would more closely parallel the national experience. *(See Appendix for an explanation of these methodologies.)* However, these incremental steps to curtail revenue growth failed to fully achieve the desired effect since the system unintentionally permitted a degree of uncontrolled rate increases, known as "slippage." By 1998, Maryland failed to outperform the nation in rate of growth for the fifth consecutive year, despite hospitals' implementation of cost containment efforts to respond to the HSCRC's revenue limits. Further, there was a significant error in the 1997 data, which greatly exacerbated the state's performance problem. While the regulatory process imposed constraints, payors dramatically increased payment denials, further reducing net revenues.

Faced with increasingly onerous controls and system complexity, hospitals' support for the regulatory process waned, regulators were frustrated with their inability to stem the rate of revenue increases, and hospitals were incensed with the continuous regulatory adjustments and lack of predictability. Not surprisingly, confrontation between the hospitals, the Commission, and the payors became commonplace. Clearly, if the regulatory process was to survive in Maryland, significant system redesign was necessary.

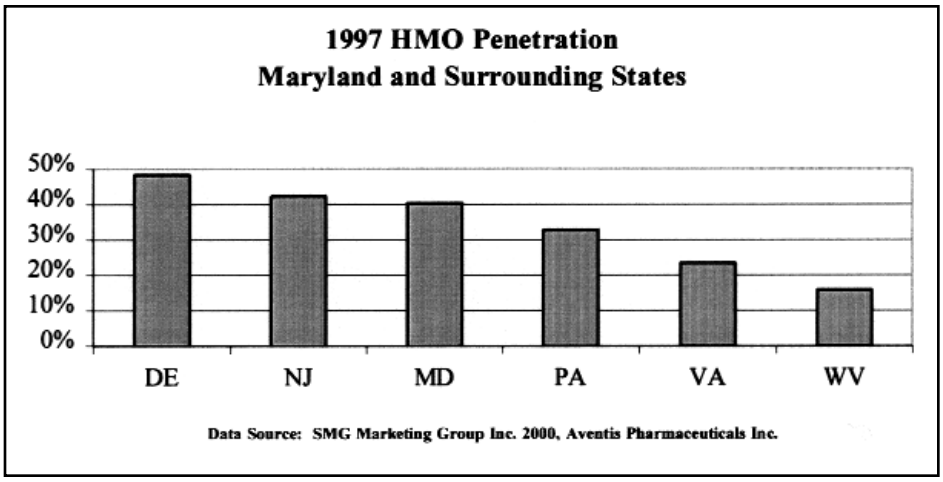


Exhibit 3

Rate System Redesign

The Interim Charge-Per-Case System

Although Maryland's exact cost position in relation to the national average was debated, it was widely recognized that its position below the national average had eroded and the waiver cushion was low. Unless decisive action was taken, it was probable that the waiver test would be exceeded, putting continuation of the program into a state of uncertainty. Without the waiver, the system could no longer be "all-payor" and, therefore, would not have the support of hospitals or payors that was essential for its survival. Even understanding those consequences, the prospect of further revenue reductions without the prospect of a radically improved methodology was unacceptable to hospitals.

After considering the alternatives, it became clear that widespread support for the concept of a Maryland all-payor system remained, but only if it was "reinvented." So, a compromise was forged. Hospitals agreed to a fixed interim system for 15 months – from April 1999 to June 2000 – while the payment system was redesigned.

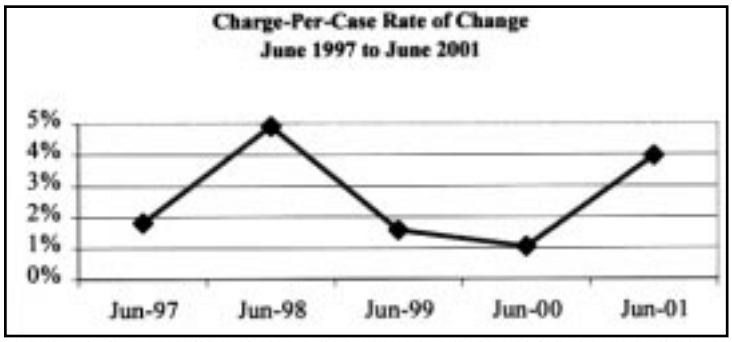
The interim system was a Charge-Per-Case (CPC) Target System. Its goal was to reduce the statewide charge per case by 1.25 percent over the 15-month period. In reality, the reduction was even greater since the base rates were effective September 30, 1998. Each hospital was set on a case-mix-adjusted charge-per-case target for the period. All agreed that if this objective was realized, continued deterioration of the waiver cushion could be avoided.

At the same time, hospitals had to make dramatic cost reductions. Nearly all hospitals immediately imposed hiring freezes or layoffs. To make matters worse, these cost reductions came on the heels of the efficiency and re-engineering programs implemented several years before. There was a significant price to be paid for this austerity.

Statewide, the reported case-mix intensity had been increasing rapidly, so the Commission adopted a mechanism to eliminate the incentive for "case-mix creep." No adjustment would be made to the initial CPC target for the changes in case-mix intensity within a corridor of -0.05 percent to +2.0 percent.

Narrow compliance corridors were established. The Commission required quarterly reporting and established penalties for missing the approved target. Successfully operating under this scheme required careful utilization monitoring, accompanied by frequent adjustments to unit rates to maintain compliance with the CPC target. Almost immediately upon implementation, the rate of growth in charge per case

slowed and performance levels were achieved (*see Exhibit 4*); however, compliance was onerous. Although the interim CPC target appeared straightforward, the controls put in place to achieve the cost-saving objective were operationally difficult.



Source: Health Services Cost Review Commission, Monitoring Maryland Performance

Exhibit 4

The Rate Redesign Process

With the interim system in place, the Commission and industry began to redesign the regulatory process, a daunting task to accomplish in such a short time frame. The Commission formed a Redesign Work Group comprised of HSCRC commissioners and staff, the hospital community, payors, Medicaid representatives, businesses, unions, and others. Two prestigious consultants further augmented the work – Bruce C. Vladeck, Ph.D., former administrator of the Health Care Financing Administration (now the Center for Medicare and Medicaid Services) from 1993 to 1997, and Stuart Altman, Ph.D., who, among his many credits, is the former chair of the Prospective Payment Assessment Commission, which advises Congress on the Medicare payment system.

The primary goals of the redesign effort were to revise the existing rate regulation structure, select appropriate performance measurement standards, and develop a mechanism for determining payment levels in future years. The group also knew that simplification was essential. Over the years, the many iterations of methodologies had made the system so intricate that even the full-time experts had difficulty understanding all the facets. This situation was partially an unintended consequence of striving to improve equity, and many of the provisions were initiated by hospitals. However, the redesign process offered an opportunity for streamlining.

The system redesign process began with five months of debate, intensive analysis, and testimony. There was controversy over each of the major issues: level of payment, performance standards, and structure. The latter was the most challenging. However, through dedicated negotiation and compromise, a consensus was reached to permanently adopt a target CPC system. The new CPC system included several modifications that minimized operational difficulties experienced under the interim program. Several important issues identified during redesign – namely payor denials and electronic insurance verification, claims and payment processing – remained unaddressed and required additional study.

The Redesign Work Group recognized that the new approach required that many specifics be developed before the system became operational, so the target for

implementation was set for July 1, 2001. This necessitated updating the rates in effect from April 1, 1998 to June 30, 2000 for the fiscal year beginning on July 1, 2000. A 2.5 percent inflation adjustment for FY 2001 was negotiated in January/February of 2000.

As this second interim period (FY 2001) began, a nursing shortage gripped the hospital community and nursing salaries soared. This extended to many technical positions as well. A compounding factor was rapidly rising drug, blood, and energy costs. While technical aspects of redesign were being developed, this situation produced an unanticipated nine-month confrontation between hospitals, the HSCRC, and payors.

Initially, the Commission and payors were adamant that the negotiated rate adjustment should not be modified. However, as conditions related to the shortages and inflation worsened and hospitals' data were verified by external sources, the HSCRC concluded that an adjustment would be appropriate and that it would be included in the rates beginning with the start-up of the new system on July 1, 2001. Although this confrontational scenario in FY 2001 may not have enduring significance, it caused much second-guessing about implementation of the redesigned system. Had appropriate adjustments not been made, hospitals' financial conditions would have worsened and base revenues for the system would have been underfunded, thus jeopardizing the success of redesign.

The Update Factor

From a policy perspective, five goals emerged from the redesign process:

- provide predictability and stability;
- be prospective in nature;
- recognize input cost inflation;
- be streamlined; and;
- be reflective of the national experience.

A key component of the redesign process was the methodology by which the preponderance of hospitals' target charge per case would be adjusted annually. This mechanism is called the "update formula."

The update formula provides the majority of hospitals with an adequate update factor each year; it includes recognition of inflation and the rates paid in the national marketplace. However, no formula is foolproof. There likely will be instances in which the update factor does not meet the needs of a particular hospital. In such cases, the HSCRC developed a safety net mechanism through which a hospital can request a "full rate review" to justify to the Commission why a further adjustment is needed.

In the spring of 2000, the update factor for FY 2001 was negotiated at a specified amount while the details of the conceptual formula were developed over the next year. The objective of the update formula is to provide hospitals with a base of anticipated inflation as well as a provision for the national net revenue per admission. Since a goal for the redesigned system is to be prospective, estimates need to be

made for these components. Adjustments to this base formula will be required when more accurate estimates or actual data are available. The annual update factor is calculated as follows:

Update Factor = Factor Costs + 1/2 (National Net Patient Revenue/Adjusted Admission – Factor Costs) +/– Adjustments

The estimates for factor costs are the hospital market basket and capital projections published quarterly by DRI.WEFA, Inc., (which also produces the Center for Medicare and Medicaid Services market basket). It is important to mention that a reliable basis to forecast national net patient revenue per adjusted admission has not been determined as of this writing, so this element of the update formula was not used for FY 2002. It will be added later.

There are two categories of adjustments – one-time and permanent. One-time adjustments (also referred to as retroactive adjustments or "retros") "fix" forecasting errors for the previous year. Permanent adjustments (also referred to as price leveling) reset the future base to correct for any error of the estimate in the previous year. Forecast adjustments will be made on an interim basis, rather than waiting until actual values are known, in an effort to make the formula as real-time as possible.

THE UPDATE FORMULA
"Cash" and "Accrual" Aspects

Cash Impact = Vertical
Accrual Impact = Horizontal

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	Accrual Result:
FY 2001							
FY 2002		DRI FC+ Est. Bonus		(FC - DRI) + (TGR - ACT)	(ACT Bonus)		FC + ACT Bonus/Liab
FY 2003			DRI FC + Est. Bonus		(FC - DRI) + (TGR - ACT)	(ACT Bonus)	FC + ACT Bonus/Liab
FY 2004				DRI FC + Est. Bonus		(FC - DRI) + (TGR - ACT)	FC + ACT Bonus/Liab
FY 2005					DRI FC + Est. Bonus		FC + ACT Bonus/Liab
FY 2006						DRI FC + Est. Bonus	FC + ACT Bonus/Liab
Cash Result:		DRI for 02 Bonus Est. 02	DRI for 03 Bonus Est. 03	DRI for 04 Bonus Est. 04 FC Adj. 02	DRI for 05 Bonus Est. 05 FC Adj. 03 Bonus Adj. 02	DRI for 06 Bonus Est. 06 FC Adj. 04 Bonus Adj. 03	

Abbreviations

DRI: Estimate for Factor Costs (hospital market basket and capital projections)
FC: Factor Cost
TGR: Target Growth Rate
ACT: Actual
Liab: Liabilities
Est.: Estimate
Adj.: Adjustment

As shown in the diagram, actual factor costs cannot be obtained for two more years, and the time lag for actual national net revenue per admission data is three years. The update factor formula adjustments – due to their sheer number and timing – contribute significantly to the complexity of the system. But, taken individually, these adjustments are straightforward mathematical calculations. All the adjustments taken cumulatively, however, can result in substantial differences from estimated inflation for the year. These adjustments were debated thoroughly, and the consensus was that the resulting complexity is the price to be paid for accuracy and predictability.

As illustrated in the update formula, Maryland hospitals receive half the difference between national net revenue per admission and factor costs if national net revenue per admission exceeds factor costs. Conversely, if factor costs exceed national net revenue per admission, a liability situation could occur, meaning Maryland would be receiving revenue increases that are not occurring nationally. To mitigate the potential of generating large liabilities, the concept of using cumulative national net revenue increases as a "binding constraint" was developed. Therefore, when increases from factor costs have exceeded national net revenue increases on a cumulative basis, the update formula for that year would be limited to the amount up to cumulative national net revenue. There also is an exception provision that allows a minimum 1 percent increase in any given year.

A final adjustment to the formula, called "true-up," is to be made for "slippage" – the amount that the actual charge per case differs from the target for the year. The difference between actual and target is adjusted by "truing up." This calculation addresses approved or unknown rate changes that are unaccounted for, which make the statewide result higher or lower than the overall target charge per case. As a result, the system has a "zero-sum" aspect. If hospitals get rate increases through full rate applications and these increases are not offset by rate reductions, then the truing-up adjustment will be applied to offset the increases. The implications of this zero-sum aspect are discussed in the section entitled *Outlook for the Future*.

The Interhospital Cost Comparison

The full rate review methodology is called the Interhospital Cost Comparison (ICC). It can be initiated by an individual hospital submitting a full rate application, typically when the hospital believes that its rates are too low or it has experienced unique circumstances. Conversely, the HSCRC also can initiate a full rate review if it finds that an individual hospital's rates are too high.

The ICC compares the relationship of an individual hospital's charge per case to its peer group. These comparisons are based on estimated costs of the individual hospital to that of the peer group. The peer groups, referred to as Interhospital Comparison Groups (ICGs), are established by the HSCRC with input from hospitals and payors. Hospital groupings are based on a number of factors including size, location, indirect medical education expenses, and level of uncompensated care.

While the ICC methodology is formulaic, it gives the HSCRC the flexibility and authority to recognize a hospital's unique circumstances. It is conducted in two phases. Phase I compares a hospital's calculated cost per case to the average of its peer group. Phase II is a negotiation process whereby the hospital may assert that its cost

structure is different than its particular peer group for a justifiable reason. The burden of proof lies with the hospital.

Currently, the "standards" for Phase I peer group comparisons are:

- 2 percent below average cost when hospitals apply for relief, and
- average adjusted charge for "spenddowns." (A spenddown is the HSCRC's plan to reduce a hospital's rates over time. When the Commission determines that a hospital's charges are high, a plan to reduce them is negotiated. Implementation of the rate reduction is called a "spenddown agreement.")

A top-down approach is used to establish the ICC cost basis. Beginning with the hospital's charges, the Commission makes a number of adjustments to arrive at the hospital's cost. Profits and a 2 percent offset are subtracted to arrive at an adjusted cost for the hospital. A similar methodology is used for spenddowns, but the calculation does not strip out profits or the 2 percent adjustment. With a spenddown, the Commission's intent is to bring a hospital's charge-per-case target to the group average. The difference between the "full rate application" target level and the "spenddown" target level is both philosophical and practical. The full rate application target is rooted in the Commission's mandate to recognize hospital costs yet promote efficiency. The 2 percent below-average target is a policy level determined by the HSCRC to give fair relief while holding the applicant hospital to some promise of efficiency. The average-charge target for spenddowns recognizes that this review is based on what a hospital charges the public. In that regard, average charge is seen as a practical target for a high-charge hospital.

The balance between full rate reviews for relief and spenddowns is significant. If the amount of relief granted in a year exceeds the amount of savings generated by spenddowns, "slippage" occurs. Ultimately, this "slippage" must be recovered from all hospitals by an adjustment to the update factor – a "true-up" adjustment, as described in the *Update Factor* section.

Outpatient Services

While most of the focus of the Maryland payment system is on inpatient services because of the Medicare waiver, outpatient services are a vital part of the system. Outpatient revenue accounts for approximately 27 percent of total hospital revenue in the state. Historically, the Commission has taken a conventional approach to outpatient services. Hospitals traditionally charged on a service-by-service basis according to HSCRC-approved unit rates. This means that hospitals get paid for the services they provide based on their relative HSCRC-predetermined value (i.e., relative value units or RVUs). There is no revenue constraint.

In the mid-to-late 1990s, many Maryland hospitals used a procedure-based pricing mechanism and received a fixed, bundled rate for ambulatory surgery services. Procedure-based pricing was developed in response to payors moving their business from hospital-based outpatient centers to freestanding centers. As unregulated, freestanding outpatient centers developed, they offered services at lower rates to obtain contracts with payors. Procedure-based pricing enabled hospitals to lower their ambulatory surgery prices to meet the competition. However, input supply costs essentially were frozen, and hospitals were not able to shift those losses to inpatients. Currently, the ambulatory surgery marketplace is stabilizing and some of the low-cost providers have exited the market. As a result, many hospitals now are converting from procedure-based pricing back to unit rates, which allows hospitals to receive their actual supply costs plus markup.

Outpatient revenue recently has risen significantly, the result of dramatically increasing outpatient volumes in the last several years, plus the return to using unit rates rather than procedure-based pricing. This has prompted the Commission to look at approaches to ensure the reasonableness of outpatient rates.

Performance of Maryland Hospitals

Two of the principal goals of the Maryland rate regulatory system are to constrain hospital costs and maintain the industry's financial ability to provide quality hospital services and access to care. Assessing the outcome of these goals requires analysis of cost performance and financial position.

Exhibit 5 displays the trend of cost per equivalent inpatient admissions (EIPA) for hospitals in Maryland and the nation. The measurement combines inpatient admissions and outpatient visits to capture the impact of rate regulation on all patient services. A steady progression moved the cost per equivalent admission from 24 percent above average in 1976, to 11 percent below average in 1992.

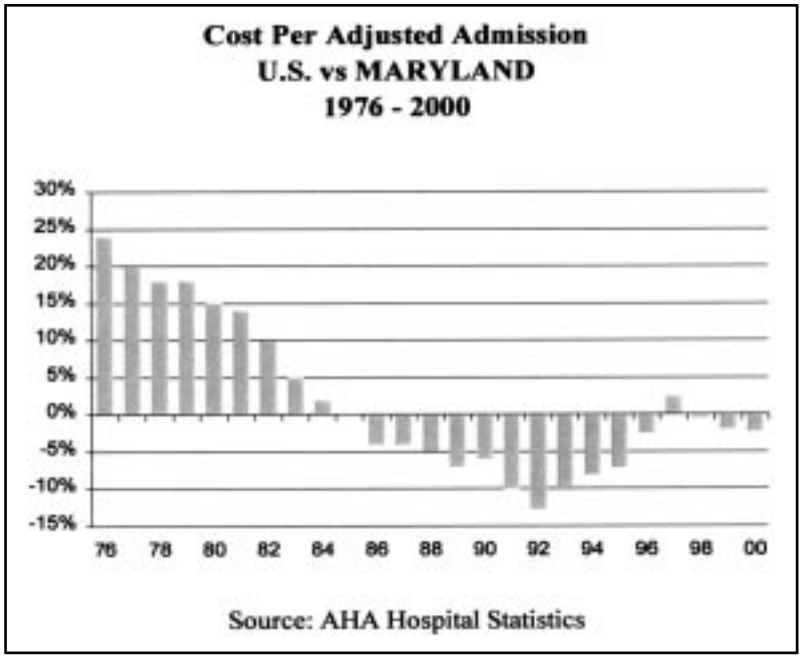


Exhibit 5

While there was strong industry consensus that cost revenue performance improvement relative to hospitals nationally was necessary in the 1970s and 1980s, by the late 1980s hospitals believed continued aggressive restraint was no longer appropriate. There were widespread concerns that the constraints had gone too far, thus undermining financial stability. This was based on the fact that during the first two decades of rate regulation, hospital margins were very low, balance sheets became weak, and hospitals were highly debt leveraged. The HSCRC's response, with thorough input from interested parties, was to craft a methodology to add revenue authority to the system. As hospital margins began to improve, the regulatory model began to imitate national financial results. After several years, Maryland's cost/

revenue per admission began to increase significantly faster than did the nation's hospitals. At first, this direction was not alarming since building financial strength was the goal, but as this recapitalization was happening in Maryland, managed care began to severely limit private revenue increases nationally.

Further, as mentioned earlier, Congress enacted the Balanced Budget Act (BBA), causing Medicare payments to plummet as well. In response to this performance nationally, the HSCRC, through incremental adjustments, began to throttle back on Maryland hospitals' rates. The result was that Maryland's cost per admission exceeded the national average in 1997, and the waiver cushion reached a low point of 8 percent in the first quarter of 1999. (*See Exhibit 2.)* Although the cost containment performance in the 1990s was not impressive, there was a convergence of overt Maryland policy decisions and national marketplace dynamics that produced this result. Dr. Stuart Altman observed, "Maryland's performance was not out of line. Instead, history demonstrates that the national performance was unrealistically low." This conclusion was confirmed by Congress, which acknowledged its reductions were excessive by approving relief measures in 2000 and 2001.

Exhibit 6 shows that a key variable influencing cost and savings is length of stay. Due to incentives imparted by the regulatory system, length of stay since 1976 fell over 52 percent – from 8.5 days to 4.7 days in 2000. Of course, with the emphasis on utilization review and the incentive of the Medicare Prospective Payment System to reduce days of care, length of stay has been declining nationally as well. But, Maryland has achieved greater reductions than hospitals nationally, moving from 12 percent above the national average in 1977 to almost 10 percent below average in 2000.

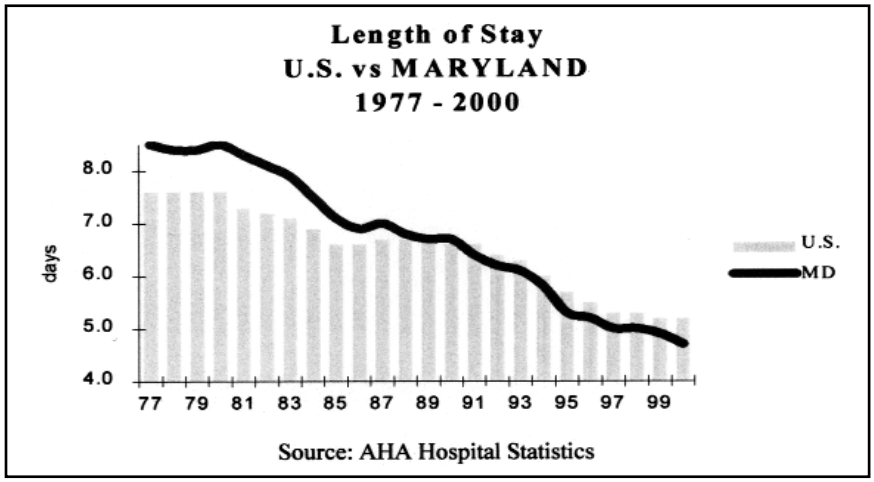


Exhibit 6

Monitoring admission rates in Maryland is imprecise since many patients from two heavily populated counties, Montgomery and Prince George's, travel into neighboring Washington, D.C. for hospital care. In 1976, Maryland's admissions per 1,000 were 27 percent below the national average, a difference undoubtedly influenced by this out-migration. Over the next decade, however, the Maryland admission rate grew faster than the national rate. During this period, three new hospitals opened in Washington's Maryland suburbs and two others added large numbers of beds, causing a significant decline in the flow of Maryland residents to Washington. Certificates of Need (CONs) for these capacity expansions were granted specifically to offer Maryland residents hospital services in their own communities.

Although it was acknowledged that the rise in admissions was due, in part, to the approval of new hospitals, primarily in the Washington suburbs, the Commission's methodology was modified to include an incentive to constrain admissions. It instituted a policy of limiting payment for increased units of service to variable costs. Moreover, most prospective payment designs (other than capitation) provided full variable costs, so the Maryland system would have had a stronger brake on admission volume than other prospective payment systems. In the 1990s, the Maryland methodology was changed to a 100 percent variable cost approach on the premise that utilization control programs would limit admissions. When the utilization constraint was achieved, greater savings resulted from the 100 percent variable provision. (Ironically, in 2000 and 2001, admissions increased nationally and in Maryland, but the nursing shortage appears to be consuming marginal revenues, so the resulting increase in revenues has not had a major positive impact on hospital margins.)

Exhibit 7 traces the comparative trend in total margins. It shows that margins in Maryland hospitals are consistently well below the national average. This has adversely affected hospitals' liquidity and required them to use greater debt to finance capital assets. It also has resulted in weakened balance sheets.

In 1992, cost per admission was 11 percent less than the national average; charges per admission were 34 percent below the national average. This is partly attributed to the positive features of a more equitable distribution of uncompensated care expenses among payors, lower contractual discounts provided to the major third-party payors, and smaller markups. However, it is also due to Maryland hospitals' lower profit margins.

It has been five years since the last hospital financial condition study. A comprehensive examination similar to that undertaken in 1989 is underway. Preliminary data suggest Maryland may once again have issues with liquidity, operating margins, and high debt levels. The rate program will have to grapple with these elements again, but the rest of the environment is very different than it was in the late 1980s. As a result, the remedies may be distinctly different as well.

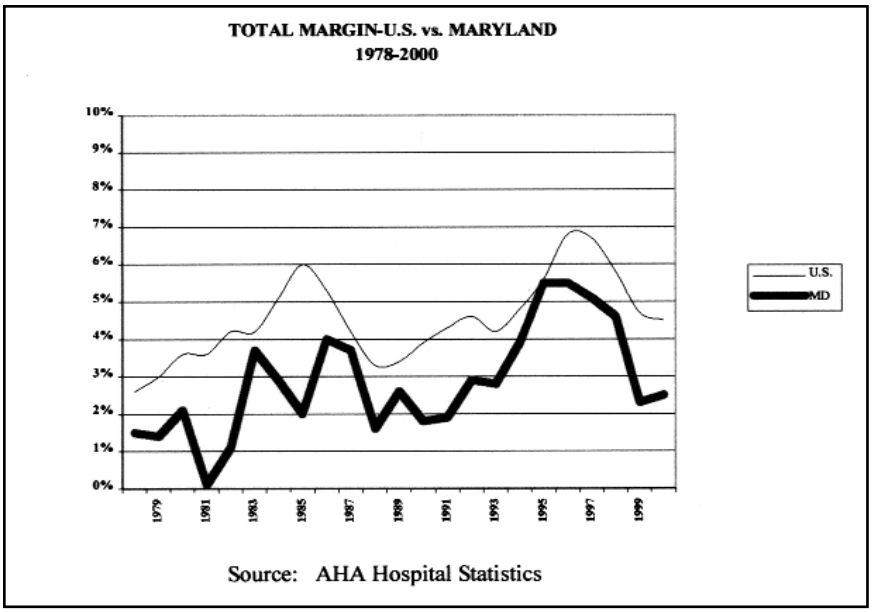


Exhibit 7

Major Initiatives and Environmental Influences

The Maryland regulatory experiment of the past three decades succeeded to the degree that it did largely because it remained responsive to the environment in which it operated. The ability to find consensus and compromise allowed it to achieve a remarkable track record where other regulatory initiatives have failed.

Over time, the regulatory system has evolved in an effort to meet the challenges of a dynamic delivery model and a changing marketplace. Sometimes change came at the encouragement of the hospitals; sometimes they were the result of legal or legislative changes; and, frequently they came about by the Commission's own initiatives. Examples of some of these initiatives follow.

The Nurse Support Program

In 1986, in response to a nursing shortage, the HSCRC initiated nurse education support funding through the collaborative efforts of hospitals, nursing representatives, and payors. Thirty-seven hospitals have participated in the project since its inception, and more than $7 million in funding has been allocated. The program focused on scholarship support and hospital-based educational programs for registered nurses. In 1993, the Commission enhanced the program to include tuition funds for the Maryland Hospital Association's Project LINC, which focused on training minorities in health professions.

In spring 2001, the Commission enthusiastically began a new Nurse Support Program (NSP). The NSP funds recruitment and training programs for nurses and encourages innovative efforts to address the spectrum of workplace issues. Participants who receive funding from the program must commit to serving in Maryland hospitals for two years. The Commission views the NSP as part of an important long-term solution to the latest nursing shortage.

The program is capped at 0.1 percent of total patient revenue for the state – currently about $6 million per year. Hospitals apply for support through a request-for-proposal process, which, in effect, permits funds to flow through the hospital as a rate increase. But, unlike a traditional rate increase, these funds are not included in the target charge-per-case calculation.

The Wellness Program

In 1985, a program was implemented to encourage wellness initiatives by hospitals. This program provides seed money in the form of a rate increase for up to three years, by which time the hospital is expected to find an alternative funding source. The hospital's project must be reviewed annually for funding.

To date, 28 hospitals have participated in the Wellness Program. Approved projects have included screening programs for hypertension, cancer, and other illnesses; health

education programs in areas such as burn prevention, teen pregnancy prevention, and lifestyle alteration programs such as weight reduction and asthma management.

Maryland's Bond Indemnification Program

In 1985, the Maryland General Assembly enacted comprehensive legislation for the reduction of hospital excess capacity in the Maryland health care system. One element was the Hospital Bond Indemnification Program. It was created to preserve hospital access to tax-exempt bond financing by providing for the payment of certain public-body obligations of a closed or delicensed hospital that meets specific criteria.

Under this program, the Commission assesses a fee on all Maryland hospitals in an amount sufficient to pay the principal and interest on public-body obligations not covered by the closed or delicensed hospital's insurance, or to pay bonds or notes issued to refinance such public-body obligations. The program was amended in 1992, to permit the use of the Bond Indemnification Program to provide for the payment of certain closure costs of a closed or delicensed hospital. Insured bonds are not covered.

The Bond Indemnification Program has paid for the public-body obligations of several Maryland hospitals that have closed since the creation of the program. Without it, these hospital closures may not have occurred, leaving the system with excess capacity.

Critical Litigation and Legislation

Several court rulings have been instrumental in shaping the rate regulation system as it stands today. Four of these cases – Franklin Square Hospital Center, AMI Doctors Hospital of Prince George's County, Lutheran Hospital of Maryland, and the Maryland Association of Health Maintenance Organizations – pertained to the Commission's general rate regulatory authority. Two others – Holy Cross Hospital and Harford Memorial Hospital – played an important role in formulating the current methodology for hospital-based physician payments.

Franklin Square was joined by 23 other hospitals in filing for a declaratory judgment against the Commission's regulations and guidelines less than six months after its review authority began in 1974. The key questions were whether the enabling legislation authorized the Commission to force the hospital to accept its formula-based Capital Facilities Allowance (CFA) in lieu of depreciation, and whether the Commission must accept a "reasonable" rate structure proposed by the hospital. In finding for the Commission, the Maryland Court of Appeals supported the CFA methodology but, more importantly, made it clear that the Commission was solely empowered to determine the rate structures that would most effectively achieve the purposes of the enabling statute. The Court of Appeals rejected the hospitals' argument that the Commission is required to defer to the hospitals' view of reasonableness in considering proposed rates.

Doctors Hospital went to court in 1982, after the Commission approved rates substantially below those requested. Along with several specific contentions regarding the rate-setting methodology, the hospital argued that its requested rates were necessary to maintain solvency and that the Commission did not have the authority to order refunds for rates charged in excess of the approved schedule. The Maryland Court of Appeals found in favor of the Commission in this case as well, affirming the principle that only Commission-approved rates can be charged in Maryland and that the Commission's responsibility was to establish rates sufficient to allow an *efficient* hospital to stay solvent.

Further, in affirming the methodologies the Commission used in its review of Doctors Hospital, a legal basis was established for the Commission's use of experimental rate methodologies. This decision applied to the HSCRC's Guaranteed Inpatient Revenue (GIR) system, which had not been promulgated as official Commission policy after more than a decade of use. Most hospitals volunteered for the GIR because of the rewards it provided for improved performance. The GIR was discontinued with the redesigned system.

Lutheran Hospital, in its 1981 suit, appealed many aspects of the Commission's decision regarding its rate application, specifically several components of its rate-review methodology. Most important, the hospital contended that the market basket (peer groups in the Interhospital Cost Comparison) formulation was subject to prejudicial manipulation. The Baltimore Circuit Court found in favor of the hospital on all counts. This ruling was instrumental in bringing about the fixed and more scientifically selected groupings of the ICC methodology. More generally, the case established that the Commission's rate orders, and by implication its methodologies, must be supported by "competent, material, and substantial evidence."

The payor community challenged the Commission's authority in a 1999 case. The Maryland Association of Health Maintenance Organizations (MAHMO), et. al., claimed that the Commission exceeded its statutory authority by implementing the Inflation Adjustment System (IAS) and by allowing excess revenue to be used toward community service programs. The Maryland Hospital Association was later added as a party to the case, siding with the Commission. The court ruled that the development and implementation of the IAS was fully within the Commission's authority. The court also ruled that the Commission was not required to place limitations on hospitals to prevent the use of resources for community services once it had set reasonable rates related to costs in the aggregate. Allowing hospitals to use excess revenue to serve their respective communities is consistent with the Commission's authority to consider the public interest.

Originally, the Commission intended to include payments to hospital-based physicians at approved rates, but in 1977, Holy Cross Hospital challenged the Commission's statutory authority to regulate payments for non-salaried physicians. After two court cases lasting several years, the legal finding was that fees billed directly by physicians were outside the Commission's jurisdiction; whereas, any arrangement in which the hospital pays the physicians – whether on a salary or a percentage-of-revenue basis – would be subject to regulation.

Believing that legal constraints prevented effective regulation of physician earnings, the Commission adopted a narrow interpretation of the Holy Cross case and issued a policy in 1981, limiting its regulation to salaried physician payments. Harford Memorial Hospital, et. al., contended that payments made to hospital-based physicians on a percentage-of-revenue basis were within the Commission's jurisdiction and challenged the HSCRC's policy. The court found in favor of the hospital.

As a result of this case, the 1985 legislature adopted compromise legislation. The new legislation prohibited inclusion of any new physician payment arrangement in hospital rates after July 1, 1985. Even with the grandfather clause, over the next several years, most hospitals elected to remove hospital-based physician payments from Commission-approved rates. Ironically, the Governor's Cost Containment Task Force recommended that the Commission regulate the rates of all hospital-based physicians, but the Governor's legislative package never included this recommendation.

Outlook for the Future

There is little argument that, with the successful redesign of Maryland's rate regulatory process, there is widespread support for local rate setting, and that it will continue into the foreseeable future. The consensus plan developed through the efforts of regulators, hospitals, payors, and others continues the trend of involvement and cooperation that defines the Maryland experience. Maryland's preference for local management, leadership, and control has avoided some of the difficulties experienced elsewhere where the regulatory process has been abandoned. Additionally, it has illuminated the benefits of the Medicare waiver.

Over the years, Maryland has witnessed the struggles of our neighbors in the Northeast – New York, New Jersey, and Massachusetts – transitioning from a regulatory setting to a market-driven environment, complicated by massive disruptions from consolidations. Recent MedPAC reports reveal that, from 1988 to 1999, these states recorded among the lowest hospital margins in the nation. Few expect this trend to change in the near future, although consolidation may prove beneficial since these states had substantial excess capacity.

Elsewhere in the nation, despite some legislative relief, many hospitals continue to struggle with the impact of changes brought about by the Balanced Budget Act of 1997. While the intent of the legislation was to reduce Medicare spending by approximately $115 billion over five years, it is estimated that the actual reduction will be closer to $227 billion. Furthermore, managed care was successful through 1999 in further constraining hospital private payor revenues. In the past year, there have been anecdotal reports supported by the Bureau of Labor Statistics' Hospital Producer Price Index that show hospitals are increasing payments from private payors. In addition, the Medicare market basket update factor for FY 2002 is 2.75 percent. FY 2003 Medicare updates are to be calculated as hospital inflation (market basket) less 0.55 percent.

All this suggests that conditions are improving for hospitals nationwide. Since Maryland's allowable performance is benchmarked against the nation's hospitals – both on an all-payor basis and for Medicare specifically – there is reason for optimism. However, if payments to U.S. hospitals actually are more stringent than these data indicate, the future Maryland update factor will be parsimonious.

As this report went to print, the HSCRC staff's draft report, "The Financial Condition of Maryland Hospitals," was released. Final adoption is expected in January 2002. The report finds that Maryland hospitals have certain financial deficiencies. When compared to hospitals nationally, the primary areas include: Older

physical facilities, greater technology deficits, higher debt-to-capitalization ratios, and lower cash positions. These circumstances resulted from lower profitability over time.

Below is a table showing the current indicators and targets, as well as those proposed to correct the situation.

TABLE OF CURRENT AND PROPOSED FINANCIAL TARGETS

Indicator	Current Target	Proposed Target
Operating Margin	1.75%	2.75%
Excess Total Margin	3.45%	4.00%
Average Age of Plant	8.0 years	8.5 years
Debt to Cap Ratio	0.40	0.40
Days of Cash	N/A	115 Days
Efficiency	8-12% Below National	3-6% Below National

The original 1990 targets were considered minimum. In this assessment, the target levels are those desirable (neither maximum nor minimum) to have Maryland hospitals achieve relative financial stability. This objective is for the targets to be achieved over a 3-to-5-year time frame with the recognition that the profitability targets will have to be achieved continuously to address capitalization and cash needs without incurring higher relative levels of debt.

Interestingly, the recommendations of the payors, the HSCRC staff, and hospitals were all close so it is likely the final targets will be similar to those proposed. Also, all parties recognized that for the desired outcomes to be achieved, a collaborative effort would be necessary. The payors and the Commission would have to provide adequate revenue, and hospitals would have to achieve continuous marginal efficiency improvements.

The study found that many hospitals have good access to capital, but that there is a subset that are seeing diminished access as the result of the combined effect of the financial markets' consolidation and more conservative approach, as well as the increased risk in health care. The report has specific recommendations to address this condition.

Ultimately, the desire expressed in the report is to have a financially stable hospital delivery system that is capable of providing consistent high-quality services to the citizens of Maryland.

The following outlines the pros and cons that can influence the success or failure of the redesigned Maryland rate regulation system.

Favorable

- ✓ The new update factor formula was designed to provide predictability and stability.
- ✓ Maryland citizens have saved billions of dollars.
- ✓ Uncompensated care is included in rates.
- ✓ Access to hospital care is unparalleled.
- ✓ All purchasers are charged equitable amounts (no approved cost-shifting).
- ✓ There is one set of payment rules for all payors.
- ✓ Hospitals and payors can interact directly with regulators.
- ✓ Overall, the system has been streamlined.
- ✓ A panel of citizens (the commissioners) makes the ultimate regulatory decisions, providing a balance between the technical and the practical.
- ✓ There is an appeals process through the courts.
- ✓ The hospital community and payors are involved in methodology design and policy formulation.

Unfavorable

- ✓ The system has not been predictable or stable over the last seven years.
- ✓ The confluence of change factors and the old methodology resulted in uncertainty, cynicism, confrontation, and distrust. These conditions continue to affect organizational positions.
- ✓ The methodologies were, and continue to be, complex.
- ✓ The more formulaic approach may be less flexible.
- ✓ Success in U.S. health care now depends on the ability to adapt. Rapid change is difficult for regulatory bodies.
- ✓ The HSCRC staff's draft report, "The Financial Condition of Maryland Hospitals," reveals liquidity, capitalization, and profitability deficiencies.

Although the favorable aspects are more numerous, the unfavorable ones are permeated by intangibles and emotions, which have strong influences:

- Hospitals nationally have the ability to cost-shift. If this practice becomes prevalent again, will Maryland hospitals find themselves highly disadvantaged under the update formula?
- Is another round of significant cost limits in store for U.S. hospitals?
- The success of Maryland rate regulation has been closely equated to the quality of the commissioners and staff. A number of HSCRC seats will turn over in the next several years and there will be a new gubernatorial administration. Will the new appointees be as committed?
- Will the zero-sum aspects of the revised methodology create dynamics that pit hospitals against each other, creating animosity that prevents cooperation and causes support to unravel?

The vast scope of variables makes a concrete prediction foolhardy. The relief valve for all parties is that the system is to be reevaluated in several years.

Appendix – History of the Maryland Payment System

This *Appendix* contains excerpts from the original edition of this publication prepared in 1988 by John Ashby for MHA. Some sections have been updated by MHA to reflect changes that have occurred since 1988. For context, some of this section restates material mentioned in the section on the review process. This was summarized earlier under the *Development of Budget Review* section. The development of the Inflation Adjustment System, described below, followed the development of the budget review process.

MOVEMENT TOWARD FORMULA REGULATION AND COST CONTAINMENT

In the early years, the commission worked to develop and implement a budget review model of rate regulation, culminating in the establishment of a rate order for each hospital. The commission adopted a number of uniform reporting requirements to standardize financial and case-mix data submitted by hospitals, and developed a review process to evaluate hospitals' budgets and financial requirements.

The Inflation Adjustment System

The first round of budget reviews succeeded in establishing an appropriate rate base for each hospital. Then, the Commission sought to streamline the review process by adopting a methodology for updating rates on an annual basis.

Known as the Inflation Adjustment System (IAS), the new system was developed to provide:

- a systematic inflation adjustment that would give hospitals an ongoing incentive for cost control; and,
- an overall system that would be less burdensome, more predictable, and more timely than regular budget review for hospital and Commission staff alike.

The IAS was implemented in late 1977, as a voluntary alternative to the rigorous budget review process required to adjust hospitals' established rate base. Each year, hospitals could request an adjustment to their rates that reflected inflationary increases measured by predetermined cost indices. From time to time, the Commission and the hospital industry agreed to modify the selected cost index when it was believed the alternate measure more appropriately reflected actual costs experienced in the marketplace.

Several other cost adjustments were combined with the inflation adjustment, the most important being an adjustment applied both prospectively and retroactively for volume changes. The purpose of this adjustment was to cover only the variable costs associated

with volume changes. Over time, the variable cost percentage was changed to reflect revised estimates of variable costs or to affect other policy objectives.

The Guaranteed Inpatient Revenue System

Maryland's budget review system, even with the addition of the IAS, used departmental outputs as the unit of payment. This provided a strong incentive for efficiency in producing all output units, from days of nursing care to laboratory tests, but provided no incentive for constraining utilization. Rather, hospitals could add to their profitability under the system by increasing length of stay and use of ancillary services. The several rate review systems in effect as of 1977, all shared this perverse incentive. The HSCRC was the first state rate regulatory program to propose a system, known as Guaranteed Inpatient Revenue (GIR), to address this issue.

The GIR system involved a prospectively set inpatient charge per admission; hospitals were at full risk for exceeding their targets and were allowed to keep all savings derived from beating them. The Commission, however, wanted to introduce the incentives of a prospective limit per admission without actually charging on an admission basis, as was later done in the Medicare Prospective Payment System (PPS) and in the New Jersey regulatory model. The PPS and others like it were inconsistent with the HSCRC goal of equitable pricing. For instance, patients who receive few services would be charged the average admission price, as would those receiving many services. The advantage of the GIR system was that it used the existing approved rate structure of unit rates to charge for the services actually received. Average revenue generated in excess of the allowed average per admission was repaid by a reduction in allowed revenue the next year. Average revenue shortfall was added to the allowed revenue authority in the next year.

After the introduction of the GIR in 1978, Maryland hospitals compiled a remarkable record of responding to the system's incentives. There were only a few occasions when the target revenue per admission was exceeded. Further, the average reward grew steadily over the years. Efforts to control utilization were successful.

The Total Patient Revenue System (Capitation)

Although the GIR system provided a strong incentive to control the days of care and ancillary service consumption per admission, it did not constrain the volume of admissions and outpatient services. The policy of limiting payment for volume increases to variable costs was intended to serve this purpose, as discussed in the IAS description. To strengthen the incentive to limit growth in the number of admissions and outpatient visits in single-hospital jurisdictions, the Commission developed an alternative to the GIR, known as the Total Patient Revenue (TPR) system.

Under the TPR system, the entire revenue base of the hospital was established prospectively as a product of revenue per admission and an assumed number of admissions for a given population (thus capitation). It took a similar approach for outpatient services.

Several rural hospitals elected the TPR system, but some are changing to the update formula as of FY 2002. In addition to the advantages of the redesigned approach, many jurisdictions are now gaining population, making the historical TPR constraint too limiting.

The Screening System

In 1982, the Commission introduced a screening system designed to identify hospitals for the HSCRC's full rate review efforts. The screening methodology ranks hospitals relative to each other. The rankings are based on inpatient revenue per admission after a series of adjustments to reflect factors that are either beyond the control of management (such as labor market differences) or that the Commission chose to finance (such as bad debt, charity expenses, and the NSP). In the 1990s, an outpatient screen was developed and, together, the combined inpatient and outpatient screens were used to identify hospitals for review. Hospitals identified for review by the screens were ineligible for an IAS adjustment and, in order to justify revenue authority above the standard, were required to file a rate application and undergo a full rate review.

Hospitals that failed the screening test and wanted to avoid the time and costs of a full rate review could elect to negotiate a "spenddown agreement" with the Commission. Under these arrangements, a combination of full- or partial-loss-of-inflation adjustments over a two- to five-year period was established until the desired level of performance was reached.

MID-1980s – STRENGTHENING OF REGULATORY CONTROLS

In 1985, in response to suggestions from the Governor's Task Force on Health Care Cost Containment in Maryland, the Commission began to increase pressure on hospitals judged to have unacceptably high costs. Primarily out of concern for the steadily increasing size of health care's share of the total economy, the Governor's task force endorsed the rate regulation program, but suggested that Maryland rate setting may need to improve performance in the future. Based on task force recommendations, legislation was enacted in 1985, giving the Commission authority to "take into account objective standards of efficiency and effectiveness in determining the reasonableness of rates." This mandate set the stage for stricter cost containment, while steering away from across-the-board ratcheting down of the inflation factor.

Another important factor that influenced the Commission to bear down on hospitals was the implementation of the Medicare Prospective Payment System (PPS). As PPS entered its second year, it became clear that it would produce lower federal outlays for Medicare, introducing the possibility that inflation rates for Medicare payments in Maryland would rise above rates for the rest of the nation. In that event, Maryland might be in jeopardy of losing the waiver.

A series of regulatory efforts were initiated to respond to these concerns:

Screening System Changes

Given the success of the screening methodology and the resulting spenddown arrangements, the Commission began to make extensive use of screening as a cost containment tool. The Commission used screens more aggressively, with an ever-tightening threshold, to limit access to the Inflation Adjustment System and roll back revenue authority through spenddown agreements.

The Productivity Improvement Policy

In 1985, the Commission proposed a cost containment approach called the Productivity Improvement Policy. The Commission believed that costs often were too high, even when below the standard for the screening system, and that hospitals at the low end of the cost continuum should be further rewarded for their performance. An initial formula would have removed approximately $8 million from 24 hospitals. This was revised so that the aggregate revenue deducted statewide was $5.6 million. Hospitals adamantly opposed this policy, which was discarded after one year.

The Objective Price Standards System

In 1986, another major regulatory methodology was proposed – an experimental formula for conducting full rate reviews known as Objective Price Standards (OPS). The primary goal of this methodology was to impose a rigorous standard of efficiency and effectiveness in the rate regulatory process or, in the words of the Commission staff, to base payments on what they believed to be "achievable costs" rather than strictly "achieved costs" of other hospitals. The Commission also wanted OPS to provide improved coordination of rate review components: full rate review, GIR, and inflation adjustment. While several hospitals underwent a full rate review using the OPS formula, OPS was discontinued due to widespread industry concern over the basic case-mix scheme, a critical component of the OPS computation. As a result, the HSCRC returned to the Interhospital Cost Comparison (ICC) methodology for rate setting.

RESPONDING TO ENVIRONMENTAL CHANGES

By late 1987, Maryland hospitals' operating margins had eroded to the extent that they were unable to adequately modernize physical plants, add state-of-the-art technology, and initiate new community programs. Their debt-to-equity ratios had increased to levels that threatened their access to capital markets. In addition, Maryland hospitals were finding it more difficult to compete with their neighbors in surrounding states and the District of Columbia for skilled labor (particularly for registered nurses).

As a result of issues raised by the Maryland Hospital Association and the concerns of the Commission and its staff, a series of short- and longer-term initiatives was developed. These initiatives included one-time salary adjustments, movement to the Hospital Workers Index as the basis for labor adjustments, and enhancements to the new service provision for an incentive program. With the incentive program, hospitals could receive a 1-3 percent add-on to the IAS for technology, new services, and increased intensity if the all-payor performance standards were met. The pool of monies available for the new service provision was calculated annually by comparing Maryland's rate of increase to the national rate over a three-year period. While this incentive program is no longer in effect, it did support re-capitalization in the mid-1990s and demonstrates how the regulatory process has been flexible and responsive to the needs and concerns of the provider industry. The development of specific financial targets to provide better monitoring of Maryland hospitals' financial performance was another component of these initiatives.

Statewide Salary Adjustment

In the fall of 1986, Maryland hospitals, seriously concerned about their ability to keep pace in the wage and salary marketplace, initiated a series of studies to determine how well they compete with their neighboring jurisdictions. Based on the studies' results, in December 1987, the MHA requested a 3 percent permanent statewide rate increase to address the marketplace deficiency.

After an intensive analysis of data, the Commission approved these initiatives:

- 1.5 percent across-the-board rate increase, effective March 1, 1988;
- the establishment of a task force to formulate the structure and issues to be considered regarding the financial status of Maryland hospitals; and,
- the establishment of a nurse retention and recruitment program.

Financial Conditions Study

In the fall of 1988, a joint HSCRC/MHA task force was convened to assess the financial condition of Maryland hospitals, the effect of excess capacity, and the effect of hospital reorganization. The task force included representatives from hospitals, third-party payors, the business community, and health care consulting firms, as well as the staffs of the HSCRC and MHA. The task force issued a report to the Commission in June 1989. The report identified a series of parameters whereby the HSCRC could assess the financial performance of the system on an ongoing basis and determine the extent to which adjustments should be made. In addition to identifying financial indicators and an operating indicator, standards were established for each indicator that represented minimum target performance for hospitals statewide.

The Commission adopted the task force's "financial vital signs" and, beginning in 1990, annually evaluated the performance achieved against the established targets. However, this report was discontinued after 1997. Legislation enacted in 2001 requires financial condition reports to be issued annually.

The task force established the following financial and operating ratios, along with their respective targets:

INDICATOR	DEFINITION	MINIMUM TARGET
Operating Margin	Total Operating Revenue - Operating Expense / Total Operating Revenue	1.75 percent
Total Margin	Total Revenues - Total Expenses / Total Operating Revenue + Non-Operating Revenue	3.45 percent
Return on Total Assets	Total Revenues - Total Expenses / Total Assets	3.55 percent
Average Age of Plant	Accumulated Depreciation / Depreciation Expense	8 years
Debt Service Coverage	Profit + Depreciation + Interest / Interest + Principal Payment	3.66
Cost per EIPA	Total Expenses / EIPAs	8-12 percent below the U.S. average

Note: These indicators and targets were used in the 1997 report and will be reevaluated in the 2001 Financial Condition Study.

Technical Modifications to the Inflation Adjustment System

As an adjunct to the Financial Conditions Study, a special joint HSCRC/MHA Inflation Adjustment Task Force addressed a series of technical issues. This task force concluded that the Inflation Adjustment System had effectively ratcheted the Maryland hospital cost per admission to a point that the HSCRC agreed was a reasonable level of efficiency. It was understood that unless the IAS was modified, ratcheting would continue. There was general agreement that the intended reductions had been appropriate in the past, but that more stringent cost and revenue controls were no longer appropriate for the future.

In response to the conclusions expressed by the task force, technical adjustments were made to the IAS to neutralize the cost ratcheting and allow additional revenue to flow into the system, as described earlier.

Changes to Certificate of Need Provisions

In 1989, the Maryland Health Resources Planning Commission (HRPC), now part of the Maryland Health Care Commission (MHCC), modified Certificate of Need (CON) regulations for health care facilities. These changes significantly reduced the requirements for most acute care hospital projects to obtain CON approval. Specifically, the new regulations stated that a proposed project does not require a CON if it involves a capital expenditure for construction or renovation of more than $1,250,000, and does not require an increase in hospital rates of more than $1,500,000 over the entire period of the debt-service schedule. This notification and review process is known as a CON "waiver request." Hospitals that "pledge" not to request additional rates to support their project are exempt from the CON process for that particular project.

Many hospitals used their additional GIR rewards and new service revenue to fund new debt-service requirements. As a result, until FY 2002, few hospital expansions, renovations, or other capital projects went through the formal CON process.

Response to Medicaid Program Changes

Throughout the late 1980s and early 1990s, the Maryland Medicaid program experienced budget difficulties. Consequently, it was compelled to retrench on covered services. Specifically, Medicaid imposed – in several phases – length-of-stay (LOS) limits and, in 1991, eliminated a "state only" program that provided health care to some populations not covered by the federal Medicaid program. This reduction in Medicaid payments had a dramatic impact on certain Maryland hospitals.

The rate methodology permitted hospitals to gradually include in rates the shortfall from the Medicaid limits on LOS. This was achieved through a bad debt adjustment. However, the HSCRC responded to the Medicaid elimination of the "state only" program through direct rate adjustments to each hospital's approved rate provision for uncollectible accounts. The HSCRC responses were made to maintain the financial viability of Maryland hospitals, as well as to assure continued provision of the same level of services to those individuals previously covered by the Medicaid program.

Medicare Cost Control

In 1989, it was learned that Medicare charges in Maryland were increasing dramatically. If unchecked, the waiver could have been jeopardized. In response, the Commission implemented a series of Medicare performance improvement initiatives, which included both positive and negative incentives.

A Medicare screening mechanism was established in conjunction with the screening policy to identify high-charge Medicare providers. If "Medicare-screened," the hospital was required to reduce its Medicare charge variance against the state average by 25 percent over the 18 months following. This negative incentive program was implemented in September 1990. Improving Medicare performance by the introduction of a positive incentive was accomplished through the targeting of new service monies over a base amount of 2 percent, later 1.75 percent. The allocation system (scaling) is based on a comparison of hospitals' screening performance and their Medicare LOS performance. The Medicare screening mechanism was abandoned, along with the screening methodology, as part of the redesign.