Achievement, Access, and Accountability:

Maryland’s All-Payor Hospital Payment System
Table of Contents

FOREWORD .......................................................... 2
EXECUTIVE SUMMARY .................................................. 4
FORMATION OF THE COMMISSION ...................................... 6
THE FIRST THREE DECADES ............................................ 7
Uniform Reporting
Procedural Provisions
RATE SYSTEM REDESIGN .............................................. 9
The Interim Charge-Per-Case System
The Rate Redesign Process
Methodologies
The Update Factor
Fall Rate Review– The Interhospital Cost Comparison
Partial Rate Review
Reasonableness of Charges
Labor Market Adjustment
APR-DRGs
OUTPATIENT SERVICES .................................................. 15
HOW MARYLAND HOSPITALS ARE PAID ................................. 16
PERFORMANCE OF MARYLAND HOSPITALS ............................ 18
Financial Condition
MAJOR ENVIRONMENTAL AND INITIATIVES INFLUENCES ......... 21
The Nurse Support Program
Development of a Pay-for-Performance Methodology
Hospital/Physician Economics
The Wellness Program
Maryland’s Bond Indemnification Program
Critical Litigation and Legislation
OUTLOOK FOR THE FUTURE ............................................. 25
Goals for Redesign
Issues for the Future
Overarching Issue
APPENDIX 1 — PREVIOUS METHODOLOGIES AND SIGNIFICANT ISSUES OF THE PAYMENT SYSTEM .................. 28
Development of Budget Review ......................................... 28
Uniform Reporting
The Review Process and Financial Requirements
Movement Toward Formula Regulation and Cost Containment ....... 29
The Inflation Adjustment System
The Guaranteed Inpatient Revenue System
The Total Patient Revenue System
The Screening System
Mid-1980s – Strengthening Regulatory Controls ....................... 31
Screening System Changes
The Productivity Improvement Policy
The Objective Price Standards System
Adjusting for Overly Aggressive Restraint ............................... 32
Statewide Salary Adjustment
Financial Condition Study
Changes to Certificate of Need Provisions
Response to Medicaid Program Changes
Medicare Cost Control
The 1990s ................................................................ 34
Update Factor for FY 2001-2003 ......................................... 36
APPENDIX 2 — CHRONOLOGY OF KEY EVENTS ......................... 38

Achievement, Access, and Accountability: Maryland’s All-Payor Hospital Payment System 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. July 2007.
The year 2006 marks the 35th anniversary of hospital rate regulation in Maryland. Although Maryland was the first 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: political whims; hospital nonperformance; challenges in program administration and implementation; and, opposition to regulation.

Experiences around the rest of the country give rise to a number of questions about the Maryland payment system. Can it continue? Hasn't it experienced many of the same dynamics that brought the demise of similar systems? Isn't the environment today dramatically different than 35 years ago? Is the process still relevant in the new millennium? The short answer to each question is yes, and no.

There are many reasons Maryland's payment system has survived the evolution of health care delivery, advances in medicine, and the changes in the medical marketplace. A principal reason is that the enabling legislation for the Health Services Cost Review Commission (HSCRC or Commission) - the regulatory body that sets hospital rates - established broad principles and provided discretionary latitude to accomplish its objectives of a) containing costs and b) maintaining the solvency of effective and efficient hospitals. This flexibility is essential in responding to change. It allows the Commission and the hospitals, in concert, to directly influence how the system evolves.

Executive branch leadership and support also has been a factor. Over the years, each of the six 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 35 years ago. They are significantly more technologically sophisticated and provide a greatly expanded scope of services. Management is thoroughly challenged by 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 strong pressure for efficiency from the HSCRC, payors, government, employers and hospital trustees. In the late 1990s these forces, along with outdated methodologies, federal budget cuts, and lightning-speed changes in the health care environment 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 greater predictability and stability. At the same time, it is significantly streamlined, relates Maryland's performance to hospitals nationwide, and is prospective. It also preserves the Commission's flexibility in establishing hospital rates.
Hospitals are faced with a myriad of challenges - baby boomers, "generation Xers," technology explosion, genomics, older physical plants, changing relationships with physicians, and an aging population highlight a few. Can a regulatory program, which by its very nature must comply with lengthy due process and exercise restraint, respond 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 balance effectively its statutory charge and the federal government's criteria for a state payment system with the hospitals' mandate in the new millennium? The challenge is far more difficult than 35 years ago.

Hospitals and insurers continue to give the redesigned system an opportunity to succeed. Undoubtedly, that is because they feel the principles of access, affordability, equity, and accountability remain valid. But, there are practical advantages as well: There is one set of payment rules for all payors; no unapproved discounts; an open forum for policy, methodology, and procedure development; direct interaction with decision-makers; and, no incentive for discrimination among purchasers. When the redesigned program went into operation in July 2001, many questioned if it could survive. Five years later, the issue now is whether other states once again will try to emulate Maryland.

This publication is an update of a report originally produced in 1988 for the Maryland Hospital Association (MHA) under the guidance of Edgar “Larry” Lawrence, who served as an advocate for Maryland hospitals for over 35 years before his retirement. As lead legislative liaison, then financial policy liaison, and Executive Vice President of MHA, he had a depth of knowledge and sense of perspective and leadership that fundamentally shaped the Maryland payment system. Jack Ashby, now research director for the Medicare Payment Advisory Commission (MedPAC), authored the original report, Access, Accountability and Achievement, describing the history of Maryland's hospital rate regulatory system. His diligent research and objectivity provided the historical foundation for this document.

We have designed this as an educational tool and reference guide to help newcomers understand the inner workings of today's payment system. It is geared toward new CEOs, CFOs, and hospital trustees and as a valuable resource for anyone seeking a primer on this unique payment system. For those interested in a deeper historical perspective, the Appendix examines the history of Maryland's payment system and provides a context for understanding how today's hospital rate regulations evolved.

A team of editorial advisors was assembled to guide this revision:

Rhonda Anderson, CFO, St. Agnes Hospital; Deidra Bell, CFO, Shore Health System; Harold Cohen, Ph.D., consultant; Stuart Erdman, senior director of finance, The Johns Hopkins Health System; Thomas Mullen, president & CEO, Mercy Medical Center; Robert Murray, executive director, Health Services Cost Review Commission; Bruce Ritchie, vice president of finance, Peninsula Regional Health System; Paul Sokolowski, senior vice president of finance, Maryland Hospital Association; Gary Vogan, CFO, Holy Cross Hospital; and Christine Wray, president & CEO, St. Mary's Hospital.

The Financial Policy and Communications teams at MHA were instrumental in overseeing content, development, editing, and production of the final document.

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

Cal Pierson
President
Maryland Hospital Association
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 rates hospitals charged 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.

Maryland's exemption was established by federal legislation on a permanent basis in 1980, with the proviso that the program continue to meet federal criteria. This waiver made it possible to achieve equitable pricing of hospital services for purchasers of care, creating consistent incentives for hospitals in dealing with various types of payors. According to Medicare requirements, all payors must participate in the program, which is why it 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 establishing the rates hospitals can charge during that fiscal year. Continuation of the waiver is contingent upon a computation demonstrating that the federal government's payments per case for Medicare in Maryland have risen less rapidly over time than in the rest of the country. This is known as the "waiver test."

From 1971 to 2006, the rate system evolved in virtually all areas - payment policies, rate methodologies and reporting, and compliance requirements - through 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 kept cost increases below the national average for 18 of the first 20 years - an impressive record. But, by the mid-1990s, the system was showing signs of stress.

After more than 25 years of successful operation, all parties began to recognize that constant modifications in methodologies were rendering the system dysfunctional. Maryland's position of being below the national average was eroding, and consequently, its performance on the waiver test was slipping. In 2000, Maryland's hospital payment system – the longest-running state rate-regulation program – 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. Major adjustments in overall direction are to be made every three years to allow time for trends to digest the most current national data. Primary components of the Maryland payment system include:

- an overall hospital charge-per-case target to establish payment limit;
- an annual update factor to adjust for inflation and for unique system-wide circumstances;
- unit rates for each revenue center to limit charges at the department level;
• a full rate review process to examine hospitals' rate structures;
• a full and partial rate application mechanism for hospitals to petition for rate
  increases;
• a screening methodology to identify high-charge hospitals and a spend-down
  provision to reduce the rates of high-charge hospitals;
• an audited, uniform accounting statement and reporting data to assure complete,
  accurate, and comparable financial information; and,
• a discharge data reporting system to provide detailed information on each hospital's
  patient acuity (case-mix).

These are the cornerstones of the revised system, although there are many other important
subcomponents that have a significant impact on the day-to-day financial operations of
hospitals. While the Maryland system was streamlined in the redesign effort, it continues
to be quite complex even for experts. However, the consensus in Maryland is that a
sophisticated approach is required in order to obtain 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 endeavored to
provide predictability through a number of innovations.

There also have been some unique and unconventional approaches to deal with health care
issues, from providing financial support for nurses to reducing excess hospital capacity.
State legislation and several pivotal court rulings also have shaped the playing field.

Despite best efforts and a sophisticated design, the path over the first six years since the
2000 redesign has had its ups and downs. Initially the update factor did not reflect the
inflation in expenses due to sharp changes in nursing salaries and other key workforce
personnel, in pharmaceuticals, and in medical liability insurance. This resulted in poor
financial performance for hospitals, a situation the methodology was supposed to address.
However, hospital fortunes reversed in the 2004-2006 period as additional funds were
provided to bring Maryland hospitals up to a level 2 percent below the national average by
the end of FY 2006 on a revenue-per-admission basis. To achieve this goal, hospitals
received rate increases above the national average with the additional funding directed
toward much needed recapitalization. As a result, both operating and total margins reached
or exceeded their target levels while other financial indicators improved, but not to target
levels. The additional funds enabled a number of hospitals to start to recapitalize their
balance sheets and advance capital improvement plans. Developments since the inception
of the newly-designed system gave rise to intense debate over future changes. The HSCRC
staff and payors maintained funds should be restricted so that at the end of FY 2009,
Maryland hospitals would be 3.5 percent below the national average and that this level of
funding would permit adequate recapitalization. Hospitals asserted this degree of reduced
spending would force hospitals to allocate most revenues to operations and would not -
permit hospitals to rejuvenate facilities or services. They maintained the consequence for
Marylanders would be aging facilities and a lack of new services in comparison to the rest
of the country.

In the spring of 2006, the Commission made a conservative compromise in establishing a
goal for Maryland hospitals of 3.1 percent below the national average on a revenue-per-
admission basis at the end of FY 2009. By early 2007, it became apparent that this
compromise was far from final as the Commission continued to negotiate with hospitals
and payors about the level at which hospitals should be relative to the nation by the end of
FY 2009.

Over the next several years, Maryland hospitals face many environmental and marketplace
challenges. The Commission's task, then, is to anticipate developments that will have major
significance and that necessitate adjustments in the payment system's overall direction. If
the balance among cost control, financial stability, and revitalization can be sustained, it is
likely rate regulation will continue to play a prominent role in Maryland's health care
system.
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 support from the hospital community. The Maryland Hospital Association (MHA) actively campaigned for rate regulation in the hope of recovering full financial expenses, including the costs of charity care and bad debt 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 with a comprehensive array of hospital-specific data. It also 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 required to be kept legally confidential. Published comparative analyses of hospitals extend to profit margins and uncompensated care rates as well as various costs 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 expenses. 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 at any given hospital. This creates equity among payors and is a huge benefit to payors and 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. The Commission's initial task was to develop and implement a budget review model for regulating rates. This is described in detail in Appendix 1 under the "Development of Budget Review" section. 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 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. These databases are updated continuously and serve as the foundation of the HSCRC's rate decisions.

**Procedural Provisions**

A rate review process was developed that allowed Commission staff to evaluate a hospital's budget using a standardized format to facilitate comparisons with similar hospitals. Much of this methodology continues to be applicable today. If the staff finds that the hospital proposes unacceptably high rates, the Commission may hold public hearings at which both sides can call expert witnesses. An unfavorable Commission decision can be appealed directly to the Maryland courts.

The initial 20 years of the program were characterized by initial excitement during the formation and start-up phase; development of innovative, incentive-based methodologies and sophisticated comparatives to determine the reasonableness of rates; 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.

The decade of the 1990s had many turns, changes of direction, and ended in great turmoil. It began with rate adjustments to improve wages and salaries and hospital financial conditions, but due to rapidly escalating Maryland Medicare expenditures, an intensive "save the waiver" campaign had to be mounted. This program was very successful and resulted in many lasting benefits. It was followed quickly by the state's elimination of its "state-only" program, which significantly increased bad debts. Fortunately, the HSCRC made an adjustment to alleviate this adverse impact on hospitals.
As a result of the methodology changes to compensate for poor hospital financial condition, margins increased, balance sheets improved, hospitals began to catch up on capital improvements, and more state-of-the-art technology was acquired.

This rally, however, lasted just a few years because managed care constraints and the Medicare reductions began to impact Maryland's waiver test as well as the all-payor test. The Commission began ratcheting down revenue increases, but these incremental steps failed to fully achieve the desired effect since the system unintentionally permitted a degree of uncontrolled rate increases.

Faced with increasingly onerous controls and system complexity, hospitals' support for the regulatory process waned, regulators were frustrated by 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.
The Interim Charge-Per-Case System

Although there was debate over Maryland's exact cost position in relation to the national average, it was widely recognized that state hospitals had lost ground in staying below the national average and that the waiver cushion had eroded. Without decisive action, it appeared that Maryland would not pass the waiver test, thus placing the program in jeopardy. Loss of the federal waiver would mean the system could no longer be "all-payor," and that support from hospitals or payors was unlikely to continue. Even understanding those consequences, hospitals found the prospect of further revenue reductions without a radically improved methodology unacceptable.

After considering the alternatives, it became clear that widespread support remained for the concept of a Maryland all-payor system – 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.

For that period, the Commission adopted a Charge-Per-Case (CPC) Target System. Its goal was to reduce the statewide charge-per-case by 1.25 percent over those 15 months. In reality, the reduction was even greater since the base rates were effective September 30, 1998. Each hospital was given 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 halted.

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 efficiency and re-engineering programs implemented several years earlier. 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 any incentive for "case-mix creep." No adjustment would be made to the initial CPC target for the changes in case-mix intensity within a range of -0.05 percent to +2.0 percent.

The Commission required quarterly reporting and established penalties for missing the approved target. To operate successfully under this scheme meant 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 desired performance levels were achieved (see Exhibit 1). Compliance, however, proved onerous. Although the interim CPC target appeared straightforward, the controls needed to achieve these cost savings were operationally difficult.

**The Rate Redesign Process**

With an interim system in place, the Commission and the industry began redesigning 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 Centers 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 (ProPAC), 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 future payment levels. The group also knew that simplification was essential. Over the years, the many iterations of methodologies had made the system so intricate even 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. The redesign process, though, 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 most challenging proved to be structure. Through dedicated negotiation and compromise, a consensus was reached to adopt a permanent target CPC system. The new CPC system included several modifications that minimized operational difficulties experienced under the interim program. Some important issues identified during redesign - payor denials and electronic insurance verification, claims and payment processing - remained unaddressed and required additional study. Payor denials subsided significantly with the demise of aggressive managed care; a feasibility study of electronic billing efficiency is finally under way.

One of the primary decisions was to set a three-year limit on the new agreement. This was deemed long enough for trends to develop and for changes to be made within a reasonable time frame.

The Redesign Work Group recognized the new approach required that many specifics be developed before the system became operational, so the implementation target was set for July 1, 2001. This necessitated updating rates that had been in effect from September 1, 1998 to June 30, 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 trend was seen in many technical workforce positions as well. Compounding the situation were rapidly rising drug, blood product, and energy costs. While technical aspects of the redesign were being developed, these new cost factors produced an unanticipated, nine-month confrontation among 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 hospital data were verified by external sources, the HSCRC concluded an adjustment was appropriate and that it should be wrapped into rates at the start of the new system on July 1, 2001. This confrontation over rates in FY 2001 caused much second-guessing about implementation of the redesigned system. Had appropriate adjustments not been made, the financial condition of hospitals would have worsened and base revenues for the system would have been underfunded, thus jeopardizing the success of redesign.
METHODOLOGIES

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.

The Update Factor

A key component of the redesign process was the methodology for annually adjusting most hospitals' target charge-per-case – the "update factor."

Under this approach, most hospitals receive an adequate update factor each year that recognizes inflation and 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. For such cases, there is 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.

From FY 2001-2003, the update factor was calculated using base inflation plus a factor that adjusted for the difference between actual national revenue growth and factor costs. The estimates for base inflation are based on the hospital market basket and capital projections published quarterly by Global Insights, which also produces the Centers for Medicare and Medicaid Services market basket. Annual adjustments were to be made retrospectively and prospectively, based on estimates, and those estimates were to be updated annually. All these calculations proved quite complex.

This FY 2001-2003 update factor formula was replaced for FY 2004-2009, because the initial formula understated inflation, and the adjustment that allowed for the difference between national growth and base inflation was insufficient to keep reasonable pace with the national increases.

The update factor approach for FY 2004-2006, now extended through FY 2009, was greatly simplified. It is based on: 1) the target level for Maryland net operating revenue (NOR) per admission in relation to the national NOR; 2) the CMS Hospital Inflation Index produced by Global Insights; 3) a factor for the understatement of inflation by the index; and, 4) any make-up provisions or adjustments.

The Maryland target NOR level for the period ended FY 2006 was 2 percent below national, and Maryland started at approximately minus 6.27 percent. Therefore, in the FY 2004-2006 period, Maryland hospitals were to be given increases in each year moderately above those received by hospitals nationally. The purpose was to infuse extra funding to make up for the shortfalls in FY 2001-2003, strengthen hospital financial performance, and spur recapitalization.

For FY 2007, the Commission decided to provide an update factor of 6.25 percent for inpatient services and base inflation plus 0.2 percent for outpatient.

Discussions are ongoing regarding future update factors.

Full Rate Review-The Interhospital Cost Comparison (ICC)

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 its rates are too low or it has experienced unique circumstances.
Conversely, the HSCRC can initiate a full rate review if it finds that an individual hospital's rates are too high.

The full rate review process is viewed as having two phases. The first is a formula and technical calculation and comparison. The second phase is referred to as the negotiating phase. It is the opportunity for the hospital to show what factors justify that it should be viewed outside the formula. In the full rate review process the Commission's target is at 2 percent below the peer group average. This target is rooted in the Commission's mandate to recognize hospital costs yet promote efficiency; i.e., being more efficient than the peer group average.

The calculation that is used in the rate review process is called the Interhospital Cost Comparison (ICC). There is another similar methodology used by the HSCRC to compare hospital costs, known as Reasonableness of Charges (ROC). The primary difference between the ROC and the ICC is that the ROC focuses on adjusted charges, the ICC focuses on adjusted cost, so profits are stripped from the ICC analysis.

**Partial Rate Review**

In addition to the full rate review mentioned earlier, a hospital may submit a partial rate application. Partial rate applications generally fall under two categories. First is when a hospital needs to apply for a relatively minor change to its rate structure because of operational change in one of its revenue centers. In these instances, hospitals generally are approved to charge the statewide mean for the department affected. While the departmental rate may change, the hospital's overall charge-per-case remains the same, providing predictability and consistency.

The more significant partial rate application policy deals with the partial rate application for capital. In recognition of the need for significant recapitalization in the industry, the HSCRC instituted a new partial rate application process in October 2003. This new policy, aligned with the ICC methodology which grants a hospital a capital allowance of 50 percent of its own capital needs and 50 percent of its peer group average, allows hospitals an expedited review when the only issue at hand is recapitalization. The policy acknowledges the specific hospital's need, but moderates the allowance by factoring in the peer group average as a "reasonableness" barometer. As of this date, however, there is a moratorium on these applications in connection with the transition to the APR grouper methodology (discussed later).

If a hospital is initiating a project that requires a Certificate of Need (CON) and the project is to be financed from internally generated funds, the CON may be granted if the hospital makes a commitment not to request a rate increase to fund the project in the future. This is commonly referred to as "taking the pledge."

**Reasonableness of Charges (ROC)**

The Reasonable of Charges review (also known as the screening methodology) is initiated by the Commission, and is performed in both the spring and fall of each year. Its purpose is to identify whether or not a hospital's charges have become unreasonable. The test is whether or not a hospital's adjusted inpatient charges are 3 percent or more higher than its peer group. Maryland is divided into five peer groups reflective of geography, size, and teaching status.

In order to compare hospitals fairly, each hospital's overall average charge-per-case is adjusted for known variation. First, direct medical education and nursing education costs are stripped. Then the charges are deflated by the hospital's labor market adjustor. Next, the charges are adjusted for the case-mix index. Fourthly, the charges are adjusted for IME/DSH based on a predictive regression equation. Lastly, capital costs are adjusted so as not to penalize hospitals in different phases of the capital cycle.
This final adjusted charge is then compared to the peer group average.

Hospitals that breach the 3 percent above average threshold have two options. First is to agree to reduce their charge-per-case over time to the peer group average commonly known as a "spenddown."

The second option is to file a full rate review application. Filing a full rate review application is also an option at any time for any hospital that believes it deserves or needs an increase in rates (there are abbreviated applications for certain issues—see below). Also, the HSCRC may initiate a full rate review at anytime, although this option has been used very sparingly by the Commission.

**Labor Market Adjustment**

The labor market adjustor is a key component of both the ROC and the ICC. In October 2003, the HSCRC radically changed the way in which the adjustor is calculated.

Previously, the methodology presumed a hospital’s labor market was its county. Aggregated job classifications then were used to calculate a statewide average index and a county-specific index. All hospitals in a county would have the same index.

The county base became outdated as the mobility of the workforce increased. This was especially evidenced by the willingness of nurses to pursue higher salaries offered as a result of the nursing shortage. Also, the summary job classification information was seen as "unsophisticated" because the desktop computer’s capability now permitted the HSCRC to work with a database that included each employee’s detailed information.

A revised methodology makes use of individual employee salary and zip code data. Each hospital files its individual employee payroll data in late spring of each year. The data period for all hospitals is a two-week block of time in late winter.

In calculating the index, each employee is assigned the average wage rate for the job classification for the zip code in which the employee resides. Then a weighted average rate is calculated for each hospital. This weighted average is then compared to the statewide average to produce the index.

The new methodology is considered a vast improvement over the prior one. The effect is a “smoothing” of the index across geography rather than the sharp changes caused by the former county boundaries.

**APR-DRGs**

In order to compare hospitals and reflect changes in severity and case-mix more accurately in payment, hospitals in Maryland recognized a need to shift to a case mixing methodology more sophisticated than the one currently employed by Medicare. In the early 2000s, the three major teaching hospitals in Maryland adopted 3M’s All-Payer Refined Diagnosis-Related Group (APR-DRG) system for payment purposes.

Several years later, in 2003, the Maryland rate regulatory program became the first in the nation to adopt a severity-based grouping system, APR-DRGs, for reimbursement of inpatient services for all payors in all acute care hospitals. The hospital community in general strongly advocated statewide adoption of APR-DRGs in the belief that a severity-based grouper would lead to more equitable payment. Once the HSCRC approved the decision to adopt the APR-DRG, they identified FY 2006 as the year to implement the new system, with a one-year base period in FY 2005.
The transition to the new grouping system required a substantial investment of hospital resources in order to update systems and personnel. While the Medicare DRG system that was used previously required accurate coding, the level of coding required was not as sophisticated as that needed by the APR-DRG to capture the severity level of a given patient accurately. Each APR-DRG has four severity levels, and sorting a given patient into those levels requires comprehensive documentation of secondary diagnoses. In order to ensure that their data were as accurate as possible, hospitals embarked on a multi-year process to improve their coding processes beginning in FY 2005.

At the same time, the HSCRC expressed reservations regarding case-mix growth associated with the newly-adopted APR-DRG. Their primary concern was that case-mix would grow rapidly and result in payments exceeding budgeted targets. This would limit the amount remaining for the annual update. In addition, the HSCRC also felt strongly that a hospital should be reimbursed for case-mix increases associated with actual changes in patient mix or severity. As a result of these concerns, the HSCRC negotiated with hospitals case-mix governors more stringent than the existing governor that allowed hospitals only 85 percent of case-mix growth after the first one percent. The governor did not provide any protection to hospitals that experienced case-mix declines and restricted case-mix growth as follows:

- 0 - 1 percent:    80 percent
- 1 - 2 percent:    50 percent
- 2 - 4 percent:    25 percent
- > 4 percent:    10 percent

In response to hospitals' concerns that there may be special instances in which changes in case-mix were not accounted for, the HSCRC developed a process in FY 2006 whereby hospitals could receive funding for these changes.
While the primary 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 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, free-standing 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 recover those losses. Currently, the ambulatory surgery marketplace has stabilized. As a result, hospitals have converted from procedure-based pricing back to unit rates, which allow hospitals to receive their actual supply costs plus mark-up.

Outpatient revenue has risen significantly, recently, 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. Various regulatory approaches currently are under consideration, but data reliability and case-mix measurement remain issues. In 2007, the Commission adopted a “Guaranteed Outpatient Revenue” methodology meant to control and stabilize outpatient growth.
Maryland's regulatory system creates a unique process for hospital payment that differs from the rest of the nation. Reimbursements for hospitals outside of Maryland are to a large extent determined by the third-party payors with whom hospitals contract. For ease of illustration, payors can be grouped into three main categories: government programs (i.e., Medicare and Medicaid), commercial payors (i.e., Aetna, BlueCross, etc.), and self-pay patients.

In the rest of the nation, Medicare reimburses hospitals through use of a flat rate stated by Diagnosis Related Group (DRG) regardless of the resources dedicated to the patient. The DRG payment is determined by Medicare and is set forth in regulations. Many Medicaid programs also follow a similar methodology. The positive aspect to the DRG payment system is that it creates an incentive for hospitals to become more efficient and avoid over-utilization of services. Further, it is relatively simple to administer for the nation’s 4,800 hospitals. The down side to this approach is payments are not closely tied to the services provided to a particular case. Instead payment is based on nationwide averages with some adjustments.

Payment rates by commercial payors outside of Maryland are determined by contracts negotiated between the hospital and the insurance company. Commercial insurance methods could be fee-for-services, whereby payment is specified according to a fee schedule for each service provided; or could take the per-case approach similar to Medicare's methodology, or a capitation approach in which the hospital is paid an amount per covered life. The reasonableness of commercial insurance payment is generally determined by the respective negotiating leverage between the hospitals and the payors. At times significant inequities occur. Self-pay patients pay for services at the full charges, which are significantly higher than cost to compensate for the discounts negotiated by the commercial payors to maintain acceptable profit margins in light of government programs, which frequently do not cover the full cost of providing services, and to cover uncompensated care expenses. This cost shifting from the other payors creates inequitable pricing, and results in self-pay patients paying the highest prices for services rendered.

In Maryland, the HSCRC, not the payor, determines payment and all payors, including governmental payors, pay the same amount for the same services delivered at the same hospital. The price inequality between self-pay patients and insured patients that exists in other states does not occur in Maryland.

A summary of the Maryland payment process is:

- The HSCRC approves unit rate for each hospital department. Since there are multiple services provided in each department, the average of the various charges for the services, at the end of the rate year, must equal the approved unit rates. In practice, rates may vary from the approved unit rate by a small percentage, without a penalty being assessed. An adjustment is made in the subsequent rate year for the deviation.
• The rates for all of the services provided to a given patient are billed to him/her or his/her insurance company.
• The billed charges, less any HSCRC approved discount, are by law to be paid by the patients or their insurer.
• Additionally, at the beginning of the fiscal year, each hospital has a Charge-Per-Case (CPC) limit established by the Commission.
• At the end of the year, the actual CPC is calculated: total revenue divided by admissions.
• An adjustment is made in the subsequent year's CPC for any overage or shortfall which occurs.

Note: In practice, hospitals must monitor their actual CPC closely throughout the year to be sure it stays within standard limits pre-set by the Commission. These limits guard against dramatic adjustments being required at the start of the next year.

Although the regulation of rates enhances the predictability of revenue, it does not save Maryland hospitals from the arduous and costly task of coding, billing, and collecting charges for services rendered. Insurance plans differ from one another and require different amounts of co-pays and deductibles to be paid by the patient. Moreover, government and commercial payors alike have stringent requirements on how to submit a claim for payment and what can be included on the invoice. If just one requirement is overlooked by the hospital, the claim will be denied and payment will not be made until the error is corrected. The effort the hospital must place toward adhering to strict guidelines and documentation, differing by each payor, creates a significant financial burden on 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 2 displays the trend of cost per equivalent inpatient admissions (EIPA) for hospitals in Maryland and the nation. The EIPA 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.

While there was strong industry consensus that cost and 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 to the system. As hospital margins began to improve, the regulatory model began to imitate national financial results. After several years, Maryland's cost 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. By 1996, Maryland's cost per admission exceeded the national average.

Further, as mentioned earlier, Congress enacted the Balanced Budget Act (BBA), causing Medicare payments to plummet as well. In response to these factors, the HSCRC imposed incremental adjustments in an attempt to throttle back on Maryland hospitals' rates. However, 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 on next page.) 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. Subsequent to redesign of the system in 2000, the waiver cushion has been consistently above 8 percent, which provides a reasonable margin of safety, and, from 1999 through 2004, Maryland’s cost per admission has been close to or in the HSCRC’s target range of 3 to 6 percent below the national average.

Exhibit 4 shows that length of stay exercises a key influence on cost and savings. Due to changing medical practices and incentives imparted by the regulatory system, length of stay since 1976 fell over 49 percent – from 8.5 days to 4.3 days (as of June 2005). 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. Maryland has achieved greater reductions than hospitals nationally, moving from 12 percent above the national average in 1977 to 16 percent below average in 2004.

Monitoring admission rates in Maryland is imprecise because 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 D.C. hospitals. 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 have consumed marginal revenues, so the resulting increase in revenues did not have a major positive impact on hospital margins.)
Exhibit 5 traces the comparative trend in total margins. It shows that margins in Maryland hospitals are consistently well below the national average. This adversely affected hospitals’ liquidity and required them to use greater debt to finance capital assets.

**Financial Condition**

Exhibit 6 is a chart showing hospitals’ financial condition. In 2002, a comprehensive financial condition study was completed by the HSCRC. Based upon discussions with financial institution representatives, the bond rating agencies, and financial consultants, the hospital financial targets were updated to reflect current requirements of the marketplace. The targets for operating and total margin were increased to 2.75 and 4.0 percent respectively. The age of plant target was increased from 8.0 to 8.5 years. Although 8.0 years was considered more desirable, the change was made to reflect a more reasonable objective over the next five years. The debt to capitalization ratio remained unchanged at 0.40 percent, and a days of cash target of 115 days was established. This cash level is considerably below that required for "A" rated bonds nationally, but reflected that additional cash is generally retained in the obligated group and is utilized when Maryland hospitals access the bond markets.

<table>
<thead>
<tr>
<th>Financial Condition</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Margin</td>
<td>0.80</td>
<td>1.40</td>
<td>2.00</td>
<td>1.70</td>
<td>2.50</td>
<td>3.20</td>
<td>2.75</td>
</tr>
<tr>
<td>Total Margin</td>
<td>2.50</td>
<td>2.10</td>
<td>2.40</td>
<td>2.30</td>
<td>2.90</td>
<td>4.10</td>
<td>4.00</td>
</tr>
<tr>
<td>Cash on Hand (days)</td>
<td>93.0</td>
<td>121.8</td>
<td>93.2</td>
<td>87.0</td>
<td>109.0</td>
<td>116.0</td>
<td>115.0</td>
</tr>
<tr>
<td>Debt to Capitalization</td>
<td>30.3</td>
<td>31.6</td>
<td>31.2</td>
<td>43.0</td>
<td>46.0</td>
<td>46.0</td>
<td>40.0</td>
</tr>
<tr>
<td>Average Age of Plant (in yrs)</td>
<td>9.1</td>
<td>9.3</td>
<td>9.5</td>
<td>10.4</td>
<td>10.0</td>
<td>10.3</td>
<td>8.5</td>
</tr>
</tbody>
</table>

Although a goal of redesign was to enhance hospitals’ financial condition, because of a variety of factors discussed elsewhere, significant improvement did not occur until 2004-2005. By the end of 2005 operating, total margins, and days of cash reached the target levels. The debt to capitalization ratio actually deteriorated somewhat, and age of plant only began to move toward the target, but remains below ten years.

The improvements manifest the revenue infusion for recapitalization that began in 2004. However, the financial condition indicators also reflect that target level profitability or greater has to be sustained over time in order for the age of plant and debt to capitalization ratio to attain the desired levels. Clear improvement has been made, but further progress has to be achieved. With the massive rebuilding of physical plants underway and the need for information technology, the financial condition will need to be monitored carefully.
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 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 mandates, and frequently they came from the Commission itself. Examples of these initiatives follow.

**The Nurse Support Program**

The Nurse Support Program (NSPI) was originally developed in the late 1980s to help address the nursing workforce shortage. This program was ended in the 1990s, but restarted in 2001 in response to the current nursing shortage. Under NSPI each rate regulated hospital is eligible for a 0.1 percent rate increase to help pay for programs to recruit and/or retain nurses. To qualify for the rate increase, each hospital is required to submit a proposal, which is reviewed by HSCRC staff and a committee of nursing and hospital representatives who make recommendations to the full Commission. This funding is non-competitive. Hospitals collect "grant" funds in rates and allocate them to the approved project as part of the budgeting process.

Almost every eligible hospital has participated in NSPI, and a wide variety of projects are undertaken. They include nursing student scholarships, RN to BSN scholarships, work-study incumbent worker programs such as Projects LINC and STEP, mentoring of new graduates, consultant-led productivity improvement programs, skills labs, distance education programs, high school career awareness, and staff on loan to nursing education programs to increase the number of students enrolled. NSPI also provides for collaborative projects including the Maryland Healthcare Education Institute (MHEI) Nurse Manager Leadership Institute.

In 2005, in response to the growing faculty shortage in nursing higher education, the HSCRC approved a second grant program, NSPII. Although similarly named, NSPII differs markedly from NSPI. It has two major components:

- Competitive grants to expand Maryland's nursing education capacity by increasing the number of faculty, expanding program size, increasing student retention, and increasing BSN completion for community college graduates. The competitive grants require collaboration between hospitals and schools. A limited number of grants will be awarded.

- Statewide funding for graduate nursing scholarships and living expense grants, fellowships for new nursing faculty hired by Maryland schools of nursing, and state scholarships and living expense grants for undergraduate nursing students. The students themselves apply and receive funding.
All NSPII funds are pooled and administered by the Maryland Higher Education Commission (MHEC). All hospitals receive a 0.1 percent rate increase paid into the pool. At this time, there is no direct connection between NSPI and NSPII. The commonality is that they are each funded by HSCRC-approved rate increases to help address the ongoing nursing shortage.

**Development of a Pay-for-Performance Methodology**

The HSCRC began to develop its quality-based reimbursement system (pay-for-performance) in earnest in FY 2005. According to the HSCRC, the intention is "to use the Commission's authority over hospital rates and revenue to improve the quality of patient care and the efficiency and effectiveness of services provided at Maryland hospitals by providing financial support and incentives." A Steering Committee comprised of hospital leadership and leaders in the health-care quality arena set the following goals for the HSCRC:

- to work with Maryland hospitals to enhance the quality of patient care by providing financial support and incentives consistent with evidence-based health services research;
- to select and maintain a set of measures that appropriately reflect the delivery of quality health care services provided at Maryland hospitals;
- to collect data that will support the generation of accurate and reliable quality measures;
- to better understand the relationship between quality and cost; and,
- to become a model for enhancing health care quality in the hospital setting while remaining consistent with broader quality initiatives.

With these goals in mind, the HSCRC is working to develop a system that provides payments to hospitals if they exceed performance thresholds and also if they demonstrate improvement in performance. As of this writing, the HSCRC is testing various statistical methodologies on which scoring and comparisons could be made. The planned start of the program is FY 2010.

**Hospital/Physician Economics**

The economic relationships of physicians and hospitals are in flux. Historically, nearly all physicians except hospital-based physicians (e.g., anesthesiologists, pathologists, radiologists, etc.) were in private practice and were paid by insurance carriers not hospitals. Physicians were willing to volunteer time for "on call" services, to serve on medical review and other hospital committees, and to take uninsured patients on a pro bono basis.

In the last half decade, physicians have found their net income static or declining due to direct payment reductions by commercial and government insurers or indirectly through increased administrative requirements. At the same time, hospitals have had difficulty providing physician services in certain specialties, such as obstetrics and neurosurgery, and have had to retain physicians directly to continue the services. Further, the creation of hospitalists and intensivists has dramatically reduced the on-site presence of many physicians who previously would be available to lend assistance.

These situations have resulted in a number of physician specialties demanding "on call" payment, a number of physicians seeking salaried employment with a hospital, and some hospitals being forced to retain physicians to continue hospital services. Consequently, hospitals are incurring tens of millions of dollars in expenses, which, by law, cannot be included in the hospital rate structure. The situation is most acute for hospitals with high uncompensated care loads and a high Medicaid payor mix.

It is anticipated that this phenomenon will continue and will require the development of alternative solutions by the hospitals and the Commission.
The Wellness Program

In 1985, a program was implemented to encourage wellness initiatives by hospitals. This program provided 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.

Twenty-eight hospitals have participated in the Wellness Program. Approved projects 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. To focus on other priorities, this program was concluded in 1999.

Maryland's Bond Indemnification Program

In 1985, the Maryland General Assembly enacted comprehensive legislation to reduce excess hospital capacity in the 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 met 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 for 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. Without this program, these hospital closures might not have occurred, leaving the system with excess bed capacity.

Critical Litigation and Legislation

Several court rulings have been instrumental in shaping the rate regulation system. Four of these cases – involving Franklin Square Hospital Center, AMI Doctors Hospital of Prince George's County, Lutheran Hospital of Maryland, and the Maryland Association of Health Maintenance Organizations (MAHMO) – pertained to the Commission's general rate regulatory authority. Two others – involving Holy Cross Hospital and Harford Memorial Hospital – played an important role in the formulation of the current approach 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 the Commission's 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. More important, the court made it clear that the Commission was solely empowered to determine the rate structures that 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 its requested rates were necessary to maintain solvency and the Commission did not have authority to order refunds for rates charged in excess of the Commission approved schedule. The Maryland Court of Appeals found in favor of the Commission, 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 (ICC)) 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 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.
As the next three-year iteration (2007-2009) of the redesigned payment system begins, there is widespread support for local rate regulation and confidence that it will continue in 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. Since redesign, the focus has shifted from "should Maryland continue to have rate regulation" to "how can the system best and most equitably meet its dual mandate of assuring the public that hospital rates are reasonable while providing adequate resources for effective hospital care."

The objectives of redesign were to provide needed improvements to the payment system so the mandates could better be achieved. We will briefly consider the progress being made; look at the issues rate regulation face in the near and intermediate future; and finally, comment on the overarching issue of "can or should rate regulation continue."

**Goals for Redesign**

At the end of the FY 2006, there was general consensus that the redesign goals are being met to a reasonable degree and more progress has been made on some than others. Meeting these goals to a very significant degree is essential to maintain support for the system. They have become de facto criteria for evaluating the system. The extent to which they are not achieved continuously will undermine support dramatically. There will be little tolerance for returning to the zigzag instability and lack of predictability of the late 1990s. Methodologies such as charge-per-case and the three-year target objectives relative to national performance are in place and should provide much of the needed direction and control. But, failure to anticipate profound future events could prove disastrous.

Experience has shown Maryland can perform well in comparison to hospitals nationally, but it has also shown Maryland cannot be far out of step with national experience. When Maryland hospitals have resources significantly less than their national counterparts, workers' wages and benefits suffer and/or investments in new programs, facilities, or services are sacrificed. There may be circumstances when it is appropriate for Maryland to be above that national average for a time, and this condition should not be considered taboo. The goal of reflecting the national experience, over time, must be given high priority so equilibrium is maintained.

For now there appears to be adequate achievement of the redesign goals. Yet, that could change quickly without constant vigilance.

**Issues for the Future**

New issues and challenges face the Maryland payment system. A few of the readily apparent ones are discussed on the next page:
National Medicare Correction-The Medicare program increases are threatening the solvency of the Medicare trust fund. Although the prescription drug benefit drives a large portion of the increases, most observers believe there will be an effort to tighten Medicare payments to hospitals as part of any corrective measures. There is much speculation about when this might happen, but most believe after the next presidential election at the latest (2009).

Physician Costs-Costs for physician clinical services are, by Maryland law, not recognized in rate setting. However, the dynamics of physician reimbursement from both commercial and governmental insurers is causing physicians to demand payments for providing "on call" and other clinical services. Some hospitals also are finding that to offer certain services, such as obstetrics and neurosurgery, they must hire physicians to perform them. Hospitals are incurring more and more of these costs and are forced to absorb them because they are not included in the rate base. This situation is expected to increase in magnitude and may have to be factored into the payment system.

Basis of Payment-Historically hospitals have been paid on some unit of services rendered. A new concept is emerging that payment should be based, in part, on non-quantitative factors such as quality, patient safety, patient satisfaction, etc. Pay-for-performance is the most widely recognized of these approaches. As mentioned earlier, the HSCRC is developing a pay-for-performance program. Bringing accuracy, reliability, and equity to quality-based payment plans will be a significant challenge for the HSCRC. It also will require new focus by hospitals as they implement these new programs. These approaches have the potential to revolutionize not only payments systems, but patient care as well. It certainly will introduce new dynamics to the payment system.

The Uninsured-Although Maryland has the best system in the nation for providing health care to the uninsured, as the level of uninsured grows the existing payors, at some point, will find the amount factored into hospital rates for these services unacceptable. Consequently, if supporters of the all-payor system want to continue including uncompensated care in rates – as well as equal access to care without regard to a patient's ability to pay – it is incumbent on them to help find better ways to deal with Maryland's large uninsured population. Clearly hospitals and the Commission cannot afford to wait for others to solve this problem.

Adequate Recapitalization-There is a window of opportunity for recapitalization to occur before cuts in Medicare payments happen. Financial condition has been improving for hospitals, but as new facilities are put into service, profitability and cash will diminish. Also, debt-to-capital ratios will increase unless the rate system responds. Providing sufficient funding levels that ensure stability during the recapitalization process will be a major test of the system.

Ability to Adapt-As the pace of change escalates, it is more difficult for a regulatory system to keep up since it is by nature grounded in complex rulemaking processes, lengthy due process requirements, and intricate methodologies. In the last two years the Commission has begun a number of innovative approaches including:

• Transitioning from case-mix methodology to a severity-adjusted approach;
• Developing a "home grown" pay-for-performance system;
• Providing funds for the Maryland Patient Safety Center to reduce errors, improve patient outcomes, and save money;
• Approving funds to assist hospitals with process improvement;
• Proposing regulations to provide funds for a Regional Health Information Organization; and,
• Earmarking funds over the next three years for health information technology.
This is an impressive set of initiatives. It suggests that the Commission is taking numerous actions to adapt to a changing health care environment. A critical issue is whether they will be implemented in a timely way without major flaws.

**Overarching Issue**

Can and should the Maryland payment system be continued? For the foreseeable future it is positioned well. In fact, hospitals nationally are experiencing significant problems with cost shifting, transparency, and accountability. This system has addressed these issues very effectively and is being looked to as a model in dealing with them.

As long as uncompensated care is not spread evenly across communities, as long as the majority of hospital bills are paid by insurance companies, thus insulating patients from the true cost of care, and as long as insurers have inordinate marketplace leverage, there will be a need for a payment system in Maryland similar to the one that is in place.
This Appendix contains excerpts from earlier original editions of this publication so that readers can become familiar with methodologies and significant issues in the evolution of the Maryland "all-payor system," but are no longer applicable today.

**DEVELOPMENT OF BUDGET REVIEW**

The first phase of Commission activity from 1972 to 1977 involved development and implementation of a budget review model for rate regulation. Rate review authority began in July 1974, when published payment rates of all third-party payors were frozen pending approval of an initial rate schedules 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 the submission of direct costs, revenue, and prescribed output measures using 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 a hospital's budget using a standardized format to facilitate comparisons with comparable hospitals. If the staff found 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 to the Maryland courts.

Operating costs were to be reviewed on a departmental basis, with the "standard of reasonableness" based on operating costs at comparable hospitals. The theory behind this 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 for 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 providing actual cash requirements for approved expenditures.

An allowance for bad debts and charity care based on a hospital's past experience was added to the list of approved costs. To assure that every hospital had an incentive to conduct effective collection procedures, a limit on the bad-debt allowance for each hospital was established, using a sophisticated statistical technique called "predictive regression modeling."
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 study initiated in 1974 attempted to measure payor cost differentials in working capital requirements and underwriting practices that avert bad debts, as identified in the initial payment system. It also examined payor cost differentials in patient care costs and actual bad debt experience. The analysis turned out to be an involved process over several years during which time 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 a policy that non-patient 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 could be used to reduce the rates required to cover approved costs. After these original methodologies were implemented, the Commission continued to develop more sophisticated approaches.

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

**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. Subsequently, a number of innovative methodologies were developed to improve cost control and to make administration less labor intensive.

*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;
- an overall system that would be less burdensome, more predictable and more timely than regular budget reviews for both hospital and Commission staff.

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 achieve other policy objectives.

**The Guaranteed Inpatient Revenue System**

Maryland's budget review system, even with the addition of the IAS, used departmental rates 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 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**

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 all but one changed to the update factor because the TPR constraint proved too limiting in the jurisdictions that were gaining population.
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 were based on inpatient revenue per admission after a series of adjustments to reflect factors that were 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 "spend-down agreement" with the Commission. Under this arrangement, 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 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 implementation of the Medicare Prospective Payment System (PPS). As PPS entered its second year, it became clear 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 spend-down 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 spend-down agreements.

The Productivity Improvement Policy

In 1985, the Commission proposed a cost containment approach called the Productivity Improvement Policy. The Commission believed 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 rewarded further for their performance. An initial formula would have removed approximately $8 million from 24 hospitals. This was revised so 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.

ADJUSTING FOR OVERLY AGGRESSIVE RESTRAINT

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, or initiate new community programs. Their debt-to-equity ratios had increased to levels threatening 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, including an incentive program. With the incentive program, hospitals could receive a 1 to 3 percent add-on to the IAS for technology, new services, or increased intensity if 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. This incentive program supported capitalization in the mid-1990s, and demonstrated how the regulatory process has been flexible and responsive to the needs and concerns of the provider industry. The development of specific financial targets (see "Financial Conditions Study" below) 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:

- A 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 Condition 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 HSCRC and MHA staff. 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, representing 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 be issued annually.

The task force established the following financial and operating ratios, along with their respective targets. As discussed in the body of the report, the targets were updated in 2002 to reflect current marketplace expectations.

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

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

**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 a proposed project does not require a CON if it involves a capital expenditure for construction or renovation of more than $1.25 million, and does not require an increase in hospital rates of more than $1.5 million 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 hospitals with high Medicaid volumes.

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 a hospital was “Medicare-screened,” it was required to reduce its Medicare charge variance against the state average by 25 percent over 18 months. This negative incentive program was implemented in September 1990. Improving Medicare performance by the introduction of a positive incentive was accomplished through targeting new service monies over a base amount of 2 percent, later changed to 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, as part of the redesign.

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 7.) 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.
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 (see Exhibit 8), 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. 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 hospitals. As a result, many of the approved ARMs were not implemented, applications for new ARMs were nearly halted, and many existing applications were not being renewed.

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. 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 1997, Maryland failed to outperform the nation in rate of growth, 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. This situation precipitated a redesign of the system in 2000.

**UPDATE FACTOR FOR FY 2001-2003**

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 was 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 was to be prospective in nature, estimates needed to be made for these components. Adjustments to this base formula were required when more accurate estimates or actual data became available. The update factor for 2001-2003 was:

\[
\text{Update Factor} = \text{Factor Costs} = \pm 1/2 \left( \frac{\text{National Net Patient Revenue}}{\text{Adjusted Admission}} - \text{Factor Cots} \right) +/\text{- Adjustments}
\]

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 were made on an interim basis, rather than waiting until actual values were known, in an effort to make the formula as real-time as possible. Actual factor costs were not available for two years, and the time lag for actual national net revenue per admission data was three years. The update factor formula adjustments – due to their sheer number and timing – contributed greatly to the complexity of the system. Also, all the adjustments taken cumulatively, frequently resulted in substantial differences from estimated inflation for the year. These adjustments were debated thoroughly. Initially, the consensus was that the resulting complexity was the price to be paid for accuracy and predictability; however, by 2003, the complexity was a significant factor in changing the formula.

As illustrated in the update factor formula, Maryland hospitals received half the difference between national net revenue per admission and factor costs if national net revenue per admission exceeded 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 was to be limited to the amount up to cumulative national net revenue. There also was an exception provision that allowed a minimum 1 percent increase in any given year.

A final adjustment to the formula, called "true-up," was 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 was 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 had a "zero-sum" aspect. If hospitals got rate increases through full rate applications and these increases were not offset by rate reductions, then the truing-up adjustment would have been applied to offset the increases.
This FY 2001 - 2003 update factor formula was replaced for FY 2004 - 2006 since inflation was understated by the index and the component of the formula providing Maryland with one-half the difference between national net patient revenue – factor cost was insufficient to keep reasonable pace with the increases being experienced nationally, as well as the complexity mentioned above. (See update factor in pages 10 and 11 in body of the text for the approach being used for FY 2004 - 2009.)
1971 • HSCRC enabling legislation enacted.
  • Chairman and Commissioners appointed.
1972 • Harold A. Cohen, Ph.D. appointed as HSCRC Executive Director.
1973 • Initial Uniform Accounting and Reporting Manual adopted.
1974 • Initial regulations governing rate review adopted.
  • Rates paid by commercial insurers frozen and the HSCRC began setting
    individual hospital rates for non-governmental insurers.
  • Franklin Square Hospital, et. al., filed a lawsuit challenging the rate-setting
    regulations.
1976 • Maryland Court of Appeals rules in the Franklin Square Hospital case that the
  HSCRC has the authority to establish the most reasonable rates for each
  hospital.
1977 • The HSCRC develops the Inflation Adjustment System, to annually adjust rates
  for inflation, so all hospitals would not have to file rate applications annually.
  • The federal Health Care Financing Administration (HCFA), now the Centers for
    Medicare and Medicaid Services (CMS), granted Maryland its first waiver from
    Medicare principles of reimbursement, enabling the HSCRC to set the rates for
    Medicare and Medicaid payments in addition to the commercial insurers. The
    Medicare Waiver enabled Maryland to have an "All-Payor System."
1979 • The Guaranteed Inpatient Revenue System (GIR) was introduced, providing
  incentives to control utilization as well as price per unit.
1980 • Congress enacts the "Mikulski Amendment" requiring the federal Secretary of
  Health and Human Services (HHS) to continue the Maryland Medicare waiver
  unless Maryland fails to meet specified conditions.
  • Legal findings from the Holy Cross Hospital in 1977 establish that fees billed
    directly by physicians were outside the Commission's jurisdiction, though any
    arrangement in which the hospital pays the physicians – whether on a salary or
    a percentage-of-revenue basis – would be subject to regulation. This was fur-
    ther narrowly defined to only salaried physicians.
1981 • The Court of Appeals ruled in favor of Lutheran Hospital in their appeal of their rate application. This was instrumental in bringing about the fixed and more scientifically selected groupings of the ICC methodology and also established that the Commission's rate orders, and by implication its methodologies, must be supported by "competent, material and substantial evidence."

1982 • The concept of a screening methodology was introduced, which was a tool for the HSCRC to compare hospital rates to determine their reasonableness and provide a mechanism to reduce hospital rates that were determined to be unreasonably high.

1984 • Legislation enacted:

– Giving the HSCRC the authority to adopt objective price standards, which permitted the Commission to consider factors in addition to hospitals' costs in establishing rates.

– Creating the Bond Indemnification Program.

– Prohibiting physician clinical services, other than those grandfathered, from being included in hospital rates.

1987 • Harold A. Cohen, Ph.D. resigned, and John Colmers was appointed HSCRC Executive Director.

1988 • The HSCRC and MHA conducted a joint wage and salary study concluding that Maryland hospitals were paying below market resulting in an exodus of nurses and other clinicians. This study led to an infusion of funding.

1989 • The HSCRC and MHA conducted the first Financial Condition Study, which concluded with targets for profitability, cash, age of plant, debt financing, and system-wide efficiency as measured in cost per equivalent inpatient admission (EIPA).

1989 • The Financial Condition Study and Wage and Salary Study led to a recapitalization program whereby overall increases were matched to those experienced nationally on a three-year rolling average.

1991 • Maryland Medicare increases dramatically exceeded those of Medicare nationally, threatening the waiver. A comprehensive "save the waiver program" was initiated, which rapidly brought the system back under control.

• An innovative approach termed "Scaling" was initiated to provide incentives for hospitals to improve their Medicare utilization. This mechanism would also be used later as a reward for good performance.

1992 • The Maryland Medicaid Administration discontinued the "state only" program. This was a program for beneficiaries for which no federal match was received. The HSCRC adjusted hospitals' bad debt to offset the anticipated losses.

1993 • John Colmers resigned to become executive director of a newly established state agency, and Robert Murray was appointed Executive Director of the HSCRC.
• Procedure Based Pricing (PBP). Due to competition from the freestanding ambulatory surgery centers (and the payors moving business to them), the HSCRC approved an approach whereby hospitals could combine a group of related ambulatory care services at a bundled rate. This enabled hospitals to provide these services at a competitive rate, but the methodology prohibited hospitals from subsidizing the reduced outpatient rates through inpatient charges. Although nearly one-half of the hospitals moved to some amount of PBP, nearly all hospitals discontinued this approach by 2002.

• Alternative Rate Methodology (ARMs)

With the advent of managed care risk-taking by providers in the delivery of services was expected. However, the HSCRC's regulations required commission-approved rates to be charged and unapproved discounting or subsidization was prohibited. ARMs were an approach whereby a third party such as a physician group could assume the risk by selling to insurance carriers hospital care, for a defined group of beneficiaries, at a pre-established amount and paying the hospital HSCRC-approved rates. The HSCRC regulations required that all ARM contracts be approved to protect against subsidization of the third-party group by the hospital.

Although accounting for up to 10-15 percent of hospital revenue in the late 1990s, these arrangements generally ended by the end of the century with the demise of managed care. However, a few continue to exist with the academic medical centers and other large systems. These are primarily for providing care to out-of-state patients or for care at "centers-of-excellence" for national insurance contracts.

• “The Systems Correction Factor” was put in place.

This term described a system-wide rate reduction that brought tremendous animosity and confrontation between the HSCRC, hospitals, and the payors. The adjustment was made because Congress mandated Medicare "cuts" in the 1977 Deficit Reduction Act, which was seen to jeopardize the Medicare waiver. Managed care was also reducing payments of the commercial insurers nationally.

The SCF, along with other system problems and adjustments, gave rise to redesign of the system.

• Payment System Redesign was the first overall reform since the system’s inception. Many of the former methodologies were replaced with a Charge-Per-Case system. The system had five goals: provide predictability and stability, be prospective in nature, recognize input cost inflation, be streamlined, and be reflective of the national experience.

• HSCRC Financial Condition Study was conducted. The results of a financial condition study indicated hospitals’ profitability was low. Balance sheets were weak and physical facilities were older than desirable.

• HSCRC establishes a partial rate application for capital to assist with the recapitalization objective. A streamlined methodology to apply for rates to support capital projects was adopted.

• HSCRC also adopts scaling of the update factor as part of its “reasonableness of charges” comparison methodology.
2004 • The second three-year arrangement under redesign had a target of Maryland being 2 percent below the national average by 2006, in contrast to being 6 percent below at the end of 2003. This target was viewed as providing substantial funds for the needed recapitalization.

2005 • The HSCRC adopted APR-DRGs on a statewide basis to take into account severity in measuring case-mix.

• Moratorium on rate applications and “reasonableness of charges” methodologies were put on hold pending stabilization of case-mix with the adoption of the APR-DRGs.

2006 • A target level of 3.1 percent below the nation was initially adopted by the HSCRC. The HSCRC believed this level of funding would be adequate to continue recapitalization and maintain adequate profitability, but improve affordability. Hospitals believed the level needed to be closer to 2 percent below the national average. This was later eliminated and a fixed 6.25 percent rate increase adopted, with the provision to re-evaluate what the target level should be.